The politics of the green energy transition in developing countries

Cleo O'Brien-Udry*

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Abstract

As the global harms of climate change continue to grow, efforts to mitigate the causes of global warming by transitioning from fossil fuels to renewable energy sources have proved politically challenging at best. In rich, developed countries, scholars have found strong backlash against politicians' decarbonization efforts from communities most tied to fossil fuel use. Yet, much less is known about how the energy transition affects politics in the Global South, where 95% of emissions growth is concentrated. What are the political effects of the green energy transition in developing countries? I argue that a central political aspect of decarbonization in the Global South is the funding for green energy provided by international actors, which generates backlash against the international community's domestic allies. As international donors increasingly support renewable energy projects in developing countries—where such projects rely heavily on external funding—domestic opponents of the green energy transition mobilize against both the renewable initiatives and the international funders behind them. Leveraging the withdrawal of World Bank funding for coal in Kosovo, I use a spatial difference-in-differences design to estimate the effect of the internationally funded energy transition on voter support for political allies and adversaries of the international community. I find that coal communities punish parties allied with the international community – and reward pro-coal parties – when international funding for coal is withdrawn. Extensions with cross-national data show similar patterns across the developing world. The results have implications for international influence in climate politics in developing countries.

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*Assistant professor, Department of Political Science, University of Illinois Urbana-Champaign, coudry@illinois.edu. I am thankful for feedback from Kate Baldwin, Sarah Bush, Gemma Dipoppa, Lauren Ferry, Michael Goldfien, Ryan Brutger, Dan Honig, Kelly Matush, Katerina Michaelowa, Christina Schneider, Dana Stuster, Matt Winters, seminar participants at Villanova University, University of Illinois Urbana-Champaign, Marquette University, Cornell University, the University of California, Santa Barbara, and the University of Wisconsin, Madison, the participants of PEIO 2020 and 2024, the German Development Economics Conference 2022, the Environment and Politics Group workshop, the International Political Economy Society meeting 2022, the Virtual Workshop on Aid Withdrawals and Suspensions 2021, the Climate Pipeline Project 2023, APSA 2023, and the Mini-Conference on the Political Economy of Climate and the Environment 2023. This project was approved by the Yale Internal Review Board.

1 Introduction

Addressing climate change is one of the most significant political and economic challenges of the modern world. While scientific consensus on the causes and consequences of climate change is strong, the global energy transition from fossil fuel to renewable energy has encountered strong resistance from entrenched political interest groups, particularly in rich, developed countries (Colgan *et al.*, 2021). Barriers to meaningful progress on climate change across countries in the form of collective action dilemmas are second only to barriers *within* countries due to the uneven political distributional effects of reducing reliance on oil and gas (Aklin & Mildenberger, 2020). Fossil fuel industries, communities, and their allies have mobilized against the economic dislocation of the energy transition, creating political barriers for governments hoping to implement climate action (Bosetti *et al.*, 2025; Stokes, 2020).

The majority of scholarship on climate change mitigation focuses on the industrialized world, particularly the countries responsible for the vast majority of historical emissions. Job losses and perceived threats to established ways of life in fossil fuel communities have inspired political resistance against the green energy transition and its supporters (Bolet *et al.*, 2024; Colgan *et al.*, 2021; Egli *et al.*, 2022; Gaikwad *et al.*, 2020; Gazmararian, 2025; Stokes, 2020). The rise of renewable energy and global attention towards the harms of continued fossil fuel production threaten to eliminate the coal, oil, and gas industries that have long employed geographically concentrated communities in the United States, Germany, and the United Kingdom. Parallel work on globalization shocks to manufacturing in rich, industrialized countries has shown that the resulting local economic downturns have driven citizens towards conservative, isolationist policies (Autor & Dorn, 2013; Baccini & Weymouth, 2021; Ballard-Rosa *et al.*, 2021; Margalit, 2011; Walter, 2021). The necessity of deindustrialization – shuttering high-pollution factories and energy-inefficient processing facilities – for addressing climate change links the global energy transition to the economic dislocation of entire towns

and communities across the US and Europe.

However, in the twenty-first century, developing countries are quickly increasing their carbon output as their economies grow (Olivier *et al.*, 2017). A 2023 McKinsey & Company report states that, "it is likely only possible to limit warming and achieve the Paris Agreement goals if developing countries achieve a green growth, low-carbon development" pathway. [1] Research on the politics of decarbonization in developing countries, however, has lagged behind. A notable exception is work by Gaikwad *et al.* (2020) and Gaikwad *et al.* (2025), who find that coal communities in India are broadly in favor of a just energy transition that compensates "losers" for job losses and uses international funding to support decarbonization. As in rich, industrialized countries, the green energy transition will create winners and losers in developing countries. The concentrated geography of fossil fuels and low-level industrialization will lead some areas in the Global South to bear the economic consequences of decarbonization more severely than others. What are the domestic political distributional consequences of the green energy transition in developing countries; and are these dynamics different from those in developed countries?

I argue that a key political feature of decarbonization in developing countries, funding for green energy provided by international actors, changes the domestic politics of the energy transition. Efforts to slow and reverse the effects of climate change using international economic interventions have increased dramatically in the last two decades (Kono & Montinola, 2019; Roberts *et al.*, 2009); and a large emerging literature on climate financing aims to understand the politics of rich country efforts to promote climate mitigation in poor countries (Clark & Zucker, 2022; Graham & Serdaru, 2020; Michaelowa & Namhata, 2022). For developing countries, internationally driven funding for renewable investment and divestment from fossil fuels could drive geographically concentrated backlash that affects the

[1] "Solving the climate finance equation for developing countries." *McKinsey & Company.* December 6, 2023. `https://www.mckinsey.com/capabilities/sustainability/our-insights/solving-the-climate-finance-equation-for-developing-countries`

pro-climate domestic constituencies that the international community sought to cultivate in the first place. This dynamic creates a political environment where communities most affected by the withdrawal of fossil fuel support may punish parties aligned with international donors, while rewarding those that advocate for continued fossil fuel use.

Empirically, I illustrate this dynamic in the case of Kosovo, where international actors unexpectedly withdrew their support from a coal plant a year prior to the country's national elections. I use a spatial difference-in-differences design to estimate the effect of the internationally funded energy transition on voter support for political allies and adversaries of the international community. Novel geocoded polling station data shows that voters who live close to coal production have a five-percentage-point-higher vote share for parties that support the development of fossil fuels – a finding that aligns with existing scholarship on the energy transition in rich, industrialized countries – but punish parties with pro-international allegiances with a two-percentage-point decrease in vote share. In communities near renewable energy plants, the pattern reverses: pro-international party gains two percentage points and the pro-coal party loses four percentage points. Extensive robustness tests increase the internal validity of the causal interpretation of these estimates.

While the difference-in-differences design used in Kosovo provides strong internal validity, I rely on cross-national data from developing contexts to test the generalizability of the findings on three dimensions: the correlation between pro-environmental and pro-international attitudes among citizens, the alignment of political party platforms with these attitudes, and the frequency of donor withdrawal from energy projects globally. Public opinion data from Europe, Asia, and Africa consistently show an association between support for environmental issues and international cooperation. Pro-environmental and pro-international policies in political party platforms in low- and lower-middle income countries are also highly correlated; international funding for renewable energy increases the strength of this association. A new dataset on World Bank energy projects indicates that withdrawal of donor

funding, particularly from fossil fuel projects, is relatively common and has increased during the Bank's shift away from coal, often replaced by renewable energy initiatives. These elements collectively support the relevance of the Kosovo case for understanding the political dynamics of international climate finance in developing countries.

Finally, I discuss the implications of these results for the domestic political economy of foreign aid. While international aid organizations have made adding additional climate mitigation aid a priority, I demonstrate that failure to consider the distributional consequences of energy interventions in the political economy of recipient states may cost international actors allies in prospective recipient countries. The recent withdrawal of funding by the United States Agency for International Development (USAID) under the second Trump administration demonstrates how shifts in foreign aid policies can disrupt ongoing projects and political alliances. Such abrupt changes not only undermine the stability of energy transitions but also risk alienating local political actors who depend on international support, thereby complicating efforts to build durable coalitions for climate action in developing countries.

This finding notably unites the foreign aid and climate transition literatures by illustrating the link between lost economic potential and lower support for climate change mitigation amongst energy transition "losers" (Bolet *et al.*, 2024; Gaikwad *et al.*, 2020, 2025; Scoville-Simonds *et al.*, 2020; Zucker, 2021)–as well as increased support for the international community amongst those exposed to renewable energy generation. This is both substantively and theoretically significant as backlash against international allies poses significant barriers to international, top-down efforts for policy changes, particularly climate change mitigation. However, I also show that investing in alternative energy sources may boost local economies and reverse this pattern. The spatial and economic distribution of these costs and benefits may alter the domestic balance of power in recipient countries, potentially shifting environmental and energy policy as a result. This paper offers caution and hope for internationally led climate policy by drawing close attention to the distributional consequences of donor

funding.

2 Foreign aid and the green energy transition

Industrialized countries bear responsibility for the vast majority of carbon emissions historically and currently (Meng *et al.*, 2023). Decarbonization in the developing world is often seen as coming at a cost of economic development (Gaikwad *et al.*, 2020). Energy poverty in the Global South is a major driver of underdevelopment (Adom *et al.*, 2021) and ramping up energy production in developing countries has been a major priority of international development financing for decades (Munyanyi & Churchill, 2022). Even as foreign aid donors have sought to purse more environmentally friendly policies (Hicks *et al.*, 2008; Michaelowa & Michaelowa, 2011; Michaelowa & Namhata, 2022; Wade, 1997), the growing energy needs of developing countries led aid donors to support the power sector with fossil fuel projects.

The power sector is highly visible, economically significant, and, in recent years, highly contested. The need for electricity in developing countries to power industrialization, urbanization, and general development efforts has established power generation as a major priority for donors and recipients alike. For decades, internationally funded fossil fuel plants were the cheapest and most economically beneficial means of recipient country power generation; not only did countries establish stable power grids, but the energy sector provided steady employment for local populations (Rafey & Sovacool, 2011). The infrastructure of power plants is a visible signal of government investment and capacity (Marx, 2017)– as is the pollution and health effects generated by fossil fuel plants.

The global turn towards renewable energy offers an alternative power generation strategy in development. The rise in affordability of solar and wind power makes these energy sources a viable option for developing nations. International funding for the energy sector is shifting from fossil fuel investment and maintenance towards renewable energy generation (Hicks

et al., 2008). In 2013, the World Bank officially stated that it would limit its financing of coal, citing both its climate impacts and the decreasing cost of alternative renewable energy (Bank, 2013).

Figure 1 show changes in World Bank energy funding from 1955 to 2024. [2] The five-year rolling average for energy project funding shows a distinct shift away from fossil fuels and towards renewable energy sources, particularly in the last two decades.

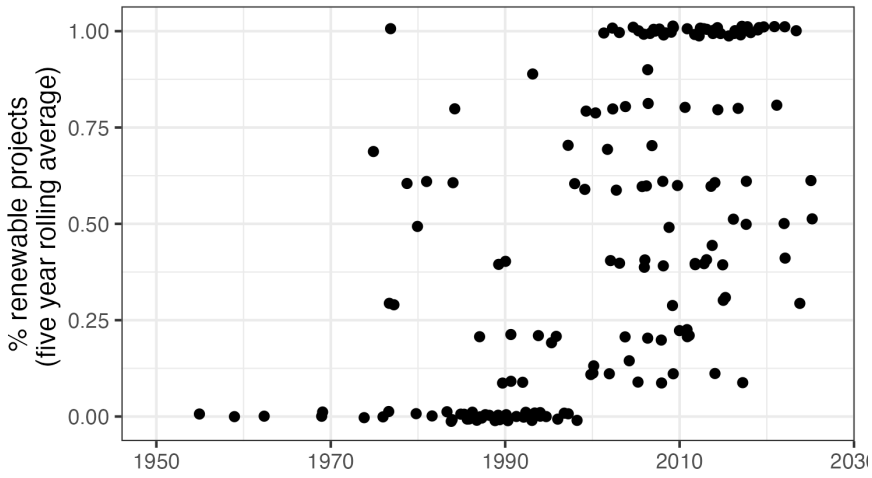


Figure 1: *Proportion of World Bank energy projects using renewable sources, five year rolling average:* Country-level measures of the proportion of energy projects using renewable sources (compared to fossil fuels) by year; five year rolling average. Data on World Bank energy projects collected by author.

While existing work aims to document the increase in international investments in environmentally friendly projects (Kono & Montinola, 2019; Michaelowa & Michaelowa, 2011; Roberts *et al.*, 2009), less is known about how reduced international funding for fossil fuels affects international and domestic politics in developing countries. Some domestic dynamics parallel those in rich countries: entrenched fossil fuel interests resist the energy transition

[2] I code each project individually to ensure that the measure captures projects aimed at the source of energy generation. Projects focusing more generally on the power sector, for example, projects that focus on rehabilitating a country's energy grid or more energy-efficient insulation for housing, are excluded from this particular analysis. See Appendix **??** for the coding scheme.

(Bolet *et al.*, 2024; Egli *et al.*, 2022; Gazmararian, 2025; Goetz *et al.*, 2019). International funding to increase renewable energy production in Indonesia, for example, has stalled, according to the solar industry, because the government "has a price cap that keeps coal prices artificially low."[3] In addition, an international deal to wean Indonesian's economy off of coal plants has created opportunities for political selection of which plants are still allowed to operate as many of the country's elite have close ties to coal.[4] Other dynamics are more acute in developing contexts: energy poverty is a huge retardant for economic growth. As poorer countries face stricter budget constraints, these countries are less likely to have the political will to decommission existing fossil fuel plants or abandon local fossil fuel resources given dire needs for energy generation (Bos & Gupta, 2019).

In aid-dependent contexts, recipients are closely attuned to the presence (or absence) of aid projects (Baldwin & Winters, 2020; Clark *et al.*, 2023). Citizens have preferences for both aid delivery mechanisms (Baldwin & Winters, 2020) and political conditions of aid (Clark *et al.*, 2023) that come from exposure to and knowledge of aid projects. Almost a third of all press articles in Senegal, for example, addressed the topic of development; of these, seventy percent focused on non-governmental and/or international development initiatives (Lemke, 2018). Politicians advertise their involvement with aid projects, heightening general public awareness, to claim additional credit for the provision of these goods (Baldwin & Winters, 2023; Dolan, 2020; Ijaz, 2020; Young, 2009).

Party incentives to shift blame towards the international community may delegitimize donor actions among citizens affected by aid withdrawal (Grossman *et al.*, 2018; Gruffydd-

[3] *NPR.* "Despite billions to get off coal, why is Indonesia still building new coal plants?" Julia Simon. 5 February 2023. `https://www.npr.org/2023/02/05/1152823939/despite-billions-to-get-off-coal-why-is-indonesia-still-building-new-coal-plants`

[4] "The green park that plans to build new coal plants is a project of coal billionaire Garibaldi Thohir, whose brother, Erick Thohir, is Minister of State Owned Enterprises." *NPR.* "Despite billions to get off coal, why is Indonesia still building new coal plants?" Julia Simon. 5 February 2023. `https://www.npr.org/2023/02/05/1152823939/despite-billions-to-get-off-coal-why-is-indonesia-still-building-new-coal-plants`

Jones, 2019; Terman, 2019). This, in turn, may pose difficulties for international action in recipient countries if citizens object to the presence of donors. Pro-environmental donors may face additional challenges in promoting this agenda if blame dynamics close off their ability to influence political outcomes in recipient states. The delegitimization of one donor may also open the door to influence from other donors with varying levels of commitment to environmental issues (Blair *et al.*, 2022; Dunning, 2004; Kohno *et al.*, 2021).

When donors use aid to induce policy change in recipient countries in line with donor priorities (Morgenthau, 1962), recipient country citizens respond to the shifts in line with their own best interests. In aid-dependent countries, while continuing investment in fossil fuels may require forgoing support the international community, parties and politicians supporting renewable energy are likely to need international support to achieve their policy goals. Citizens who bear costs of the climate transition will vote against these parties and move towards regressive parties with fewer international ties (Voeten, 2024). In the same manner, citizens who benefit from the green energy transition may align more closely with green parties, but, importantly, they also are likely to support parties closely linked to international donors.

Prior to the green energy transition, internationally affiliated parties had incentives to claim credit or support for fossil fuel projects funded by actors like the World Bank and the United States. However, as the international community shifts its attention towards renewable energy, political parties with and without international ties may also shift their policy priorities on energy issues. In aid-dependent countries, investment in greater energy capacity is likely to rely on external funding. Any shift in donor priorities for large infrastructure projects such as power plants likely alters the type of projects countries are able to move forward. If parties have different policy responses to donor priority shifts, voters should respond by rewarding the parties in line with how they expect to benefit, or lose, from the shift in priorities. Individual exposure to aid withdrawal should increase support

for parties that oppose the international community's decision to withdraw. In contrast, exposure to emerging donor priority sectors should increase support for parties that support the international community's shift.

Particularly in the case of climate transitions, communities that are in proximity to existing renewable energy or are environmentally well-suited for investments in solar, wind, hydropower, or other renewable energy sources may expect to disproportionately benefit from international disinvestment in fossil fuels. Reversals in international support not only signal a change in donor priorities, but alter the competition between beneficiaries' potential policies. If donors discontinue funding for one project, this opens up space for rival projects to capture greater market share. Two hypotheses emerge from these theoretical expectations.
H1: Energy transition "losers" decrease (increase) support for parties linked to international donors (support for anti-international actors).

H2: Energy transition "winners" increase (decrease) support for parties linked to international donors (support for anti-international actors).

3 Study context

Kosovo, a small Balkan country with a population of 1.2 million and a history of economic and security dependence on the United States and European Union, was the site of a proposed coal plant that posed what international outlets called "the real test" of the World Bank's

2013 pledge to stop funding coal in developing countries.[5] In 2018, twelve years after first pledging to support the coal plant in Kosovo, the World Bank officially withdrew its funding for the plant as the falling costs of renewables undermined the long-term economic viability of coal in the country. The sudden and exogenous reversal of international funding for energy production serves as a quasi-natural experiment that allows us to understand the effects of international funding for the green energy transition on domestic politics in recipient countries.

In the wake of the withdrawal, the three major political parties in Kosovo diverged on their approaches to the withdrawal of international support for the power plant. The incumbent party, Partia Demokratike e Kosovës, campaigned on promises of moving forward with the project despite lack of international support (henceforth *pro-coal party*). The party, which emerged from the Kosovo Liberation Army in the wake of the country's independence from Serbia, has long touted the importance of energy independence as a national security issue (Visoka & Richmond, 2017). A pro-Western, internationally supported party, Lidhja Demokratike e Kosovës , tacitly accepted the withdrawal while pledging future investment in renewable energy (Visoka & Musliu, 2019) (henceforth, *pro-international party*). The international party has historically appealed to international donors from its initial nonviolent resistance to Serbian aggression to its support from the Kosovar diaspora. A third party, Vetëvendosje, emerged from a wartime coalition called the "Movement for Self-Determination" and known for its anti-elite and anti-international rhetoric, opposed building

[5] "The one major test of the new policy will come in Kosovo, which wants to build a new 600-megawatt plant fired by lignite coal, a particularly carbon-intensive fuel. The bank needs to decide whether to offer loan guarantees, and Kim has signaled before that Kosovo may be an exception to the coal ban." *The Washington Post.* "The World Bank cuts off funding for coal. How big an impact will that have?" Brad Plumer. 17 July 2013. https://www.washingtonpost.com/news/wonk/wp/2013/07/17/the-world-bank-cuts-off-funding-for-coal-how-much-impact-will-that-have/; "The real test of the strategy may come next year, when the World Bank should decide whether to provide loan guarantees for the Kosovo power plant fired by coal." *Reuters.* "World Bank to limit financing of coal-fired plants". Anns Yukhananov and Valerie Volcovici. 16 July 2013. https://www.reuters.com/article/us-worldbank-climate-coal/world-bank-to-limit-financing-of-coal-fired-plants-idUSBRE96F19U20130716.

the plant even before the international community withdrew its support (Visoka & Musliu, 2019) (henceforth *non-aligned party*).[6] The parties' positions on energy in Kosovo became salient in 2019 when the governing coalition collapsed and parliamentary elections were set for October, roughly one year after the World Bank's announced funding withdrawal.

The 2019 election did not center on energy concerns; while these were noted in party platforms, corruption and institutional reform were the primary focus of political debate in the lead-up to the elections. The non-aligned party handily won the 2019 election – primarily at the expense of the pro-coal party – and formed a ruling coalition with the pro-international party.[7] In 2020, the company contracted with building the coal plant withdrew from the project, citing lack of government support as a primary reason.(**??**) While the current national energy strategy aims to increase the share of energy generated from renewables to 35% in the next decade, two coal plants remain operational in the country and face both political and economic barriers to decommissioning; in the words of one Kosovan climate expert, "If we want to shut down [the coal plant], there will be many workers saying 'you're taking our jobs, where will electricity come from?'"[8] This political and economic context sets the stage for understanding how the World Bank's withdrawal of support for the coal plant acts as an external shock influencing local political dynamics.

3.1 Identification strategy

I use a spatial difference-in-differences design to identify the causal effect of international funding for energy on the domestic politics in recipient states. The units of analysis are

[6]While Kosovo has dozens of political parties, I focus on those which were most competitive during and immediately prior to the time period of interest.

[7]"Kosovo Final Election Result Confirms Vetevendosje Victory." *Balkan Insight.* 7 November 2019. `https://balkaninsight.com/2019/11/07/kosovo-final-election-result-confirms-vetevendosje-victory/`

[8]Xharra, Jeta and Ardita Zeqiri. "From Coal to Renewables: Kosovo's Long Energy Transition Journey." *Prishtina Insight.* 4 June 2024. `https://prishtinainsight.com/from-coal-to-renewables-kosovos-long-energy-transition-journey-mag/`

polling station-election. People in communities close to energy sources are considered treated while communities further from energy are considered the control group; the treatment is activated in 2018 when the World Bank withdraws its support for the coal plant.

I put together a novel dataset of geolocated polling stations in Kosovo from 2010-2021.[9] In total, I observe 921 polling stations across five national elections (2010, 2014, 2017, 2019, and 2021). I geolocate each polling station using the stated name of the municipality, town or city, and physical building where the poll is located. Polling stations for rural voting areas are often located in the closest city; I attain the coordinates for the location (town, city neighborhood) of the population in these cases rather than the physical building. This method captures the proximity of the population voting in a given polling station in relation to industrial sites of interest. All polling stations are depicted in a map of Kosovo on Figure 2.

Data on the location of energy plants and energy-industry-adjacent mines are sourced from domestic and international official documents. Locations from renewable energy plants (wind and solar) are sourced from a report commissioned by USAID in 2021[10] and the annual reports of Kosovo's Energy Regulatory Office.[11] Mine locations were derived from a United States Department of Interior geological survey from 2022; the survey includes values and weights of mineral production from 2016 to 2020.[12] Figure 2 shows the location of each energy source and mine by type of energy; Appendix Table 8 details each of the plants. Descriptive statistics in Table 1 show polling station and municipal-level characteristics.

[9]Polling station-level electoral results are only available from 2010 onwards from the Kosovo Central Election Commission.

[10]"Kosovo Energy Security of Supply. Jo 27: Assessment of PV Generators in Kosovo." January 2021. https://reskosovo.rks-gov.net/wp-content/uploads/2022/05/Assessment_of_PV_Generators_in_Kosovo.pdf

[11]"Annual Report 2015". Energy Regulatory Office. 2015. http://ero-ks.org/2016/Raportet/Raporti_Vjetor_2015_ZRRE_shq.pdf

[12]Hastorun, Sinan. "The Mineral Industry of Kosovo." U.S. Department of the Interior; U.S. Geological Survey 2022. https://pubs.usgs.gov/myb/vol3/2019/myb3-2019-kosovo.pdf

The analyzed sample includes all polling stations in Kosovo, manually geolocated by the author, and covariates from the Kosovo Central Election Commission.[13] Data on municipal covariates, including `Temperature`, `Particulates`, `Population`, and `Nighttime lights`, come from Goodman *et al.* (2019).

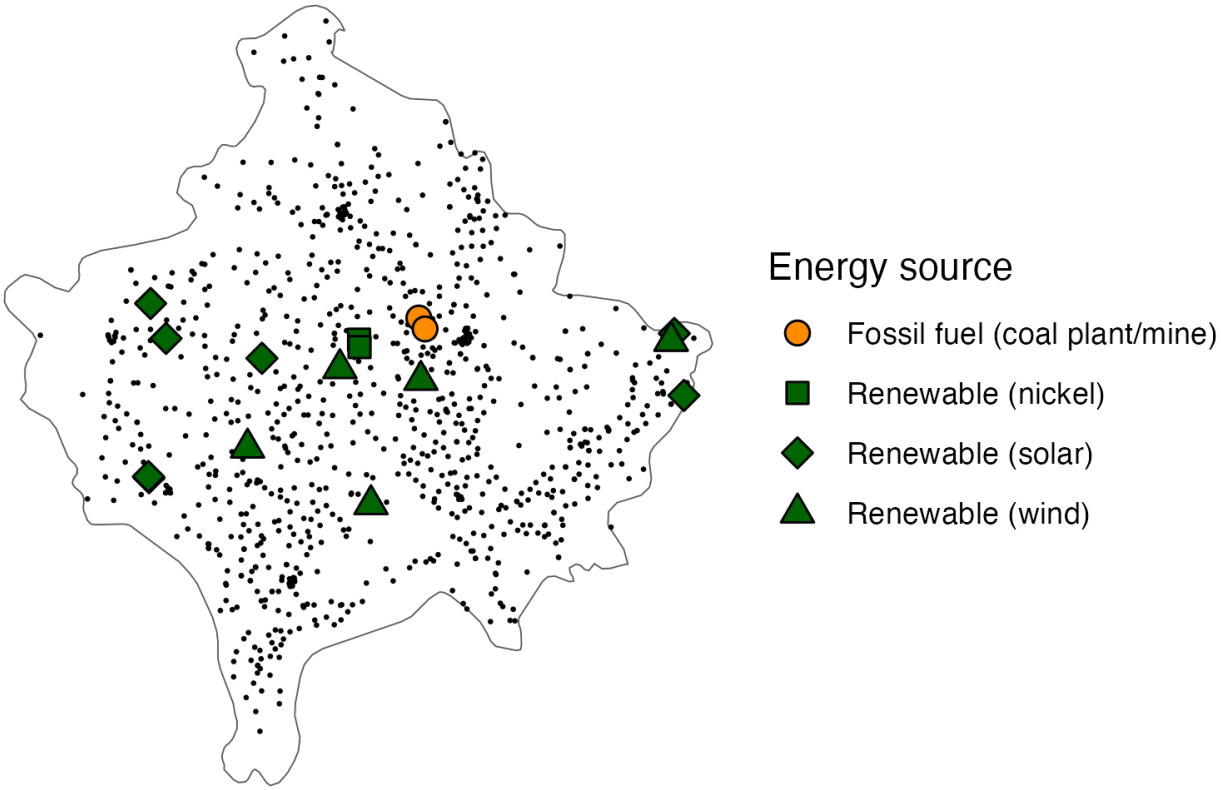


Figure 2: *Energy source and polling station locations in Kosovo active in 2019:* Small black dots indicate polling station locations. Orange circles represent coal mining and refining plants, green squares nickel mining, green diamonds solar plants, and green triangles wind.

The World Bank's withdrawal of support for the coal plant offers an exogenous shock to the political environment in Kosovo. I rely on two sources of variation to leverage this

[13]A number of polling stations were added for the 2017 elections. These polling stations are included in the main specifications but results are robust to their exclusion (see Appendix Table 5).

Polling station covariates	Min	Max	Mean	N
Vote share: Pro-international party	0	0.7340426	0.2145138	3731
Vote share: Pro-coal party	0	0.9798206	0.271589	3731
Vote share: Non-aligned party	0	0.7931034	0.1898546	3731
Total votes	0	7810	1041.413	3731
# elections	1	5	4.113561	921
Distance from coal	0.862	193.472	43.667	921
Distance from renewable	0.575	199.711	60.119	921
Municipal covariates				
Temperature	273.267	281.3909	278.9486	190
Particulates	14.84199	27.10273	20.50494	190
Population	1795.07	224318.1	82332.61	190
Nighttime lights	0.05903931	9.083917	1.114262	190

Table 1: Descriptive statistics

shock: 1) voter proximity to energy sources and 2) political party platforms concerning energy and international cooperation. Prior to the World Bank's withdrawal from the coal plant, voters close to and far from energy sources did not expect changes in Kosovo's energy policy. The World Bank's funding assured voters and politicians that the lowest-cost energy source would be coal. The loss of coal funding creates energy insecurity for the entire country and constitutes a betrayal of contract by the World Bank, which had previously assured the nation of its commitment to funding. All voters are treated by both the *information content* and the *energy costs* from the loss of the future power plant. However, people close to energy sources are disproportionately affected by the changing employment opportunities offered in the wake of the plant's defunding.

The loss of guaranteed funding suddenly made relevant cleavages in party platforms that previously had not been salient. The pro-international party pledged to solve the country's energy crises with internationally funded renewable energy while the pro-coal party aimed to find additional funding to complete the coal plant. The non-aligned party supported renewable energy, but not the international cooperation required to fund it. These party

platforms are uniform across the country: parties do not make different promises about national energy policy in different municipalities. The parties also differ on a number of other dimensions; for example the non-aligned party campaigned on an anti-corruption platform while the pro-coal party touted its historic representation of war heroes from the Kosovo Liberation Army. [14]

An important assumption in the empirical strategy is that these two sources of variation are insignificant prior to the treatment (World Bank withdrawal of funding). Parallel trends in voting behavior for each party in voters close to energy projects in comparison to voters further from energy projects prior to World Bank withdrawal assures us that we are comparing like to like. Theoretically, I assert that parties' energy policies will be more salient for people living in proximity to energy sources than those far from these sources. This spatial disaggregation is commonly used in the political economy literature in developing and advanced economies to proxy for differential exposure to policies (e.g. Baccini & Weymouth (2021); Isaksson (2020); Jablonski (2014); Knutsen *et al.* (2017)).

Party	Party position		Expected effect of withdrawal (vote share)	
	Support coal	Support intl community	Coal community	Renewable communities
Pro-coal	✓	-	Increase	Decrease
Pro-international	-	✓	Decrease	Increase
Non-aligned	-	-	No change	No change

Table 2: *Party positions:* Support for coal and international cooperation by political party.

Theoretically, I expect voters for whom changes in energy production are salient to be particularly attentive to the loss of coal funding. Voters reliant on coal for jobs should disproportionately support parties that aim to continue with fossil fuel production. As the international community no longer funds fossil fuel development, these voters are likely to

[14] See Bami, Xhorxhina. "Kosovo Elections: Education, Health, Environment and Rights." *Balkan Insight.* 3 October 2019. `https://balkaninsight.com/2019/10/03/kosovo-elections-education-health-environment-and-rights/` for more on the electoral platforms of these three parties.

oppose parties with close ties to the international community. In contrast, voters who expect to benefit from renewable energy should be more likely to support the international party given its support for renewables and its backing by the international community–and should oppose pro-coal parties. The non-aligned party, which does not support coal but also does not align with the international community, is unlikely to receive support from renewable voters given the party's inability to secure funding from donors and also unlikely to gain ground with coal voters given its anti-fossil fuel position. Table 2 depicts the positions of each party with regard to the withdrawal of the plant and the international community as well as empirical expectations.

I estimate the following model for each party vote share separately:

$$Vote\_share_{it} = {}_1\, Close_i + {}_2\, Post2018_t + {}_3\, Close * Post2018_{it} + \alpha_i + \delta_t + \mathbf{X}_{it} + \epsilon_{it} \qquad (1)$$

where i is an individual polling station and t is an election year. Our coefficient of interest is ${}_3$ for the interaction term of close polling stations in the years after the withdrawal of World Bank funding. ${}_i$ and δ_t are polling station and time fixed effects, specifically. $\mathbf{X}_{it}$ is a vector of covariates measured at the municipal level. I control for `Nighttime lights` to account for a municipality's level of development, `Particulates` for pollution, `Precipitation` for variation in potential agricultural shocks, `Night_temperature` for exposure to climate change, and `Population`. All variables extracted from Goodman *et al.* (2019). Close is defined as 15 kilometers from an energy source in the main models.[15]

[15]Kosovo occupies an area of 10,887 kilometers (roughly the size of Connecticut). A circle with a radius of 15 kilometers covers about 6% of the surface area of the nation. Additionally, this is a stricter restriction on geographic exposure compared to the existing literature, which applies a 50km bandwidth (Briggs, 2019), but one that more appropriately approximates the exposure of individuals to energy projects. The modal distance that an individual travels by bus, car, and taxi, the predominant means of commuting to work, in Pristina, the capital of Kosovo, is 1-5 kilometers (Humolli *et al.*, 2020). For more rural areas, this distance increases. The initial bandwidth of 15 kilometers balances exposure to energy projects with statistical power, as fewer polling stations are included in a lower (5km) bandwidth.

3.2 Results

I estimate the difference in the change in vote share for each major political party after the World Bank's 2018 withdrawal of support from the power plant for polling stations close to and far from 1) fossil fuel production and 2) renewable energy production.[16] Table 3 displays the main results. Models 1-6 show the effects of withdrawal on party vote share for polling stations within 15 km of fossil fuel production. Models 7-12 show the effects amongst polling stations within 15km of renewable energy. The second set of results replicates these findings excluding polling stations within 15km of the rival energy source – fossil fuel communities are compared to non-renewable communities in Models 13-18 and vis-a-versa for Models19-24. Models shown include the least restrictive (no covariates or year fixed effects) and most (full covariates and year fixed effects). All models include polling station fixed effects and cluster standard errors at the municipal level. Robust standard errors reported in parentheses; Conley standard errors reported in brackets.

Table 3 supports the primary argument of the paper: communities close to fossil fuel disproportionately support pro-coal parties and oppose pro-international parties. The opposite is true for communities close to renewable sources, who oppose pro-coal and support pro-international parties. The party with cross-cutting platforms–anti-coal and anti-international–sees no change in vote share in either community. The lack of effect for the non-aligned party suggests that environmental policies alone do not explain voting patterns. Instead, it is the combination of pro-environmental and pro-international cooperation stances that reflects parties' commitment and capacity to advance renewable energy initiatives in developing countries.

One potential threat to inference is the existence of pre-election coalitions in Kosovo's na-

[16]When major parties run in coalitions with other parties, I use the vote share of the coalition as the outcome. This reporting only occurs when coalitions are formed prior to the election, not post-electoral coalitions. In all other circumstances, the party's vote share is reported.

Panel A: Full	Fossil fuel						Renewable					
	Pro-Intl.	Pro-Coal	Non-aligned	Pro-Intl.	Pro-Coal	Non-aligned	Pro-Intl.	Pro-Coal	Non-aligned	Pro-Intl.	Pro-Coal	Non-aligned
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Post-2018 ×	−0.029***	0.055***	0.017	0.168**	0.019	−0.050	0.022***	−0.042***	−0.018*	0.005	−0.048***	−0.001
Proximity	(0.007)	(0.006)	(0.012)	(0.060)	(0.073)	(0.056)	(0.005)	(0.006)	(0.009)	(0.004)	(0.006)	(0.006)
	[0.0008]	[0.0012]	[0.0151]	[0.0010]	[0.0003]	[0.0002]	[0.0002]	[0.0001]	[0.0001]	[0.0145]	[0.0000]	[0.0087]
Poll fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	-	-	-	✓	✓	✓	-	-	-	✓	✓	✓
Covariates	-	-	-	✓	✓	✓	-	-	-	✓	✓	✓
Num.Obs.	5131	5118	5072	5131	5118	5072	5131	5118	5072	5131	5118	5072
R2	0.838	0.869	0.678	0.887	0.894	0.866	0.837	0.869	0.679	0.887	0.894	0.866
R2 Adj.	0.803	0.841	0.608	0.863	0.871	0.837	0.802	0.841	0.609	0.862	0.871	0.837

Panel B: Subsets	Fossil fuel						Renewable					
	Pro-Intl.	Pro-Coal	Non-aligned	Pro-Intl.	Pro-Coal	Non-aligned	Pro-Intl.	Pro-Coal	Non-aligned	Pro-Intl.	Pro-Coal	Non-aligned
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Post-2018 ×	−0.058***	0.072***	0.057***	−0.039***	0.099***	−0.002	0.016**	−0.044***	−0.006	0.001	−0.074***	0.007
Proximity	(0.010)	(0.006)	(0.017)	(0.009)	(0.010)	(0.012)	(0.005)	(0.007)	(0.010)	(0.005)	(0.007)	(0.007)
	[0.0007]	[0.0013]	[0.0011]	[0.0003]	[0.0001]	[0.0002]	[0.0090]	[0.0000]	[0.0150]	[0.0001]	[0.0001]	[0.0002]
Poll fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	-	-	-	✓	✓	✓	-	-	-	✓	✓	✓
Covariates	-	-	-	✓	✓	✓	-	-	-	✓	✓	✓
Num.Obs.	3283	3263	3251	3283	3263	3251	4312	4311	4255	4312	4311	4255
R2	0.832	0.848	0.683	0.884	0.863	0.875	0.829	0.846	0.676	0.882	0.881	0.860
R2 Adj.	0.795	0.814	0.613	0.858	0.832	0.846	0.791	0.813	0.603	0.856	0.854	0.829

Table 3: *Difference-in-differences results:* DiD estimates for the effects of proximity (15km) to renewable or fossil fuel plants after the World Bank's withdrawal of support for coal. Robust standard errors in parentheses; Conley standard errors in brackets. Panel A show results for the full sample of polling stations. Panel B subsets the sample to polling stations not in proximity to the alternative energy source (for renewables, no fossil fuel proximity; for fossil fuel, no renewable proximity) to avoid overestimating the effects of withdrawal.

tional elections. I use a synthetic difference-in-differences model (Arkhangelsky *et al.*, 2019) to adjust for this issue. The synthetic difference-in-differences method is appropriate here because of its ability to differentially weight time periods (using time period fixed effects). Three parties formed a pre-election coalition in the third time period in the study (2017), with the internationalist party and a third party forming a second pre-election coalition, and therefore the parties individually in this period receive a much higher vote share, as we should expect from a coalition of the top parties. [17] Mechanically, we should expect these coalitions to receive fewer votes due to smaller constituent bases; the drop in the incumbent party's vote share in 2019 and 2021 overall may be related to both their performance and the absence of coalition partners. With synthetic differences-in-differences, we can algorithmically upweight periods in the pre-trends that are more similar to the post-treatment period and down-weight exceptionally different periods. This method is more appropriate than the synthetic control method for the study at hand because the synthetic control uses unweighted treatment period averages which are helpful in the case at hand due to the aforementioned changes in electoral coalitions.

The synthetic difference-in-differences substantively replicate the results of the main tests: the pro-international party sees a relative increase in vote share amongst renewable communities and decrease amongst fossil fuel communities. The pro-coal party sees the opposite effect: fossil fuel communities increase their relative support for the pro-coal party and renewable communities decrease their support, relative to other communities. The non-aligned party does not have substantive or significant difference in support in the renewable community but does see a decrease in support within the fossil fuel community. Across all specifications, the results are consistent with voter awareness of the distributive effects of the energy transition and the international community's new role in funding renewable energy.

Figure 4 shows placebo tests for the main models. I randomly select sets of coordinates

[17] See Appendix Table E for a full accounting of pre- and post-electoral coalitions.

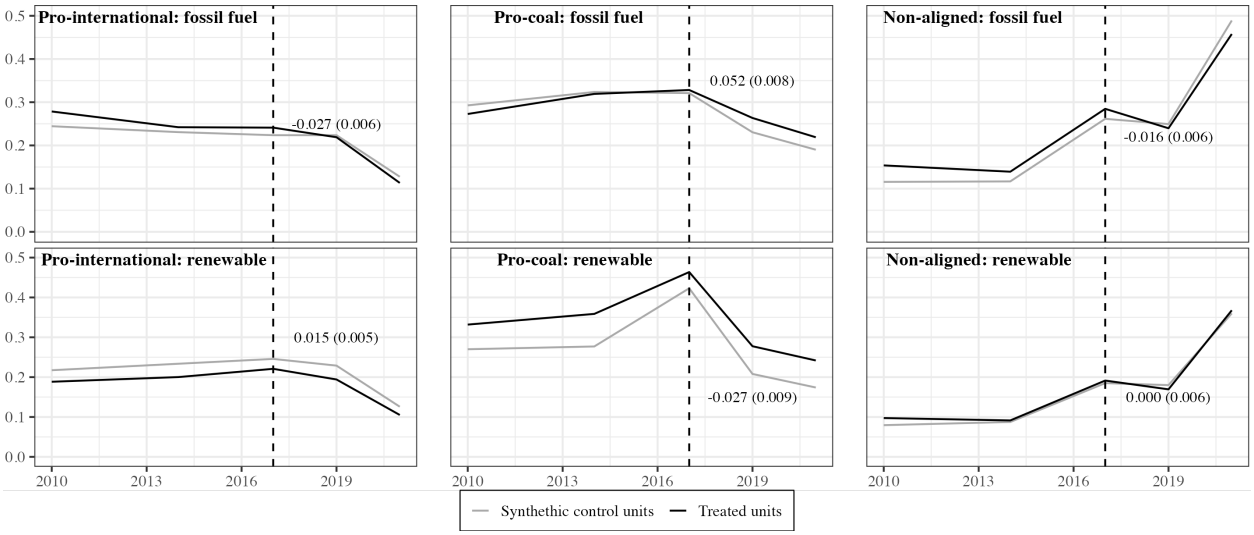


Figure 3: *Synthetic difference-in-differences:* Coefficients for the interaction term, **Post-2018*Proximity**, using a 15km bandwidth of exposure (**Proximity**). 90, 95, and 99% confidence intervals depicted. Six separate models estimated by party and energy source.

within Kosovo as placebo locations for fossil fuel plants (two locations) and renewable plants (eleven locations) and rerun OLS regressions for vote share of polling stations near these locations, compared to further locations, for each political party. The placebo tests evaluate the possibility of spurious geographic correlation driving the results: if a substantial number of geographic areas in Kosovo produce the same estimated effect as the actual fossil fuel or renewable communities, the main models would be incorrect. Instead, the placebo tests are consistent with the theory that the fossil fuel and renewable communities responded distinctly to the political parties' positions in response to the loss of the coal plant.

The results are robust to a number of different specifications. Appendix Figure 8 reruns both the fossil fuel and renewable models with additional smaller and larger bandwidths–the results remain substantively the same across exposure distances. Alternative models using total number of votes for a party, rather than party vote share, as an outcome, replicate the main results substantively and significantly (see Appendix Table 4). Removing polling stations closest to energy plants–creating a ring of polling stations between 5km and 15km from the plants–also replicates the main results; see Appendix Table 6. The results for renewable

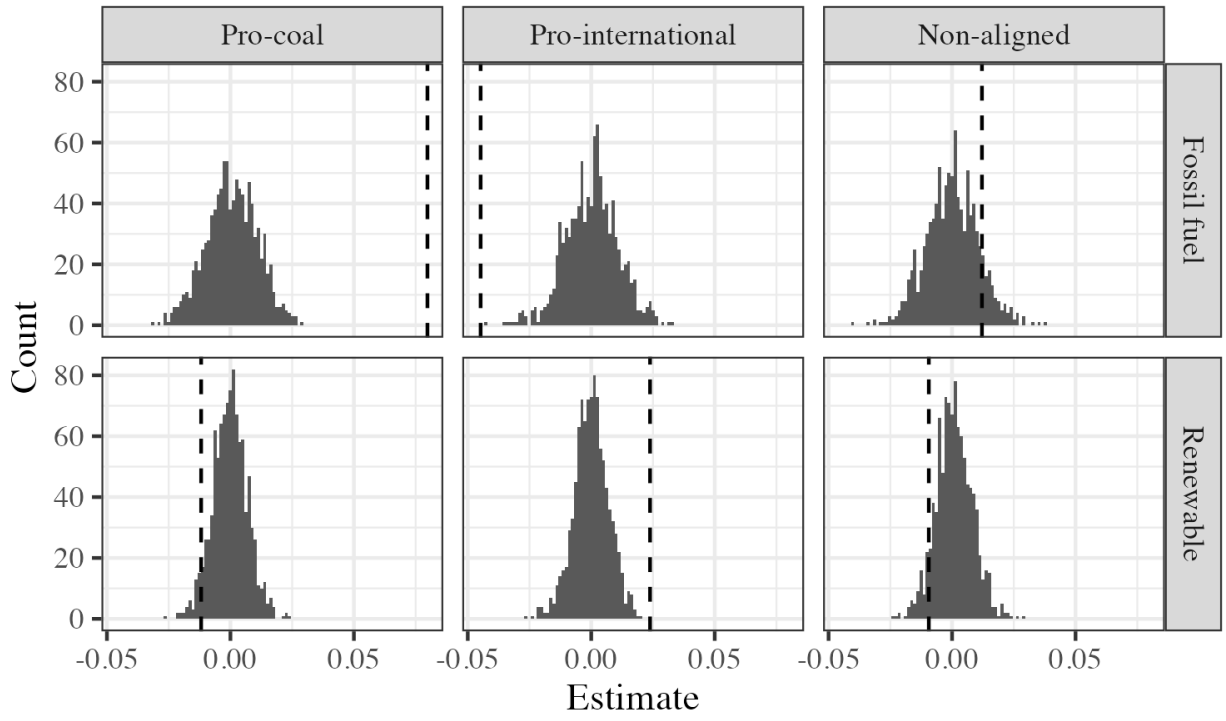


Figure 4: *Placebo tests:* Histograms for 1000 randomly selected sets of coordinates as treatment groups; coefficients for the interaction term, **Post-2018*Proximity**, using a 15km bandwidth of exposure (**Proximity**) and OLS with polling station fixed effects. Three separate models estimated by party: Pro-coal is the leftmost column, pro-international the center, and non-aligned the rightmost. Top panel estimates models where (placebo) fossil fuel communities are the treated group; bottom panel (placebo) renewable communities. Vertical dashed line shows main model coefficient.

energy plants replicate when considering future investment in renewable energy: municipalities with higher suitability for solar energy (via higher levels of photovoltaic output) follow the same patterns as locations close to existing renewable energy plants (see Appendix 7). Appendix Table 8 decomposes the energy sources into individual plants and specific energy sources.

3.3 Alternative mechanisms

The results are consistent with a theory of developing country energy transitions in which voters care about both the *direction* of political representatives towards renewable energy and the *linkages* to an international community with the funds to implement the proposed energy policies. The material interests of voters in poor countries are deeply tied with support from international actors – and I argue that it is through these economic links to energy generation that voters respond to donor shifts towards renewable investment.

However, there exist several alternative mechanisms through which donor withdrawal from fossil fuels could affect domestic politics. First, pollution from the coal plant could drive political behavior. While the coal plant was expected to produce significantly more environmental damage than comparable renewables, the plant was also intended to replace the existing Kosovo B plant, renowned as one of Europe's dirtiest coal plants. It is possible that voters close to the coal plant disproportionately support pro-coal party in order to prevent further environmental damage from the continuation of the existing plant.However, if environmental concerns were driving the support for the new plant, we would expect that citizens close to renewable sources would also support the pro-coal party's efforts. Instead, results from polling stations in the vicinity of renewable energy plants show clear increased support for the pro-international party, the party associated with no further continuation of the 'Kosova e Re' project. In an additional test of concern about environmental standards, I use media data from two major newspapers in Kosovo, *Kosovo Sot* and *Prishtina Insight*,

to identify the prevalence of articles referring to the coal plant, renewable energy, and environmental issues across the country. Appendix F shows that the area around the coal plant sees disproportionate coverage of the coal plant, but not of renewable energy or pollution.

Second, fossil fuel withdrawal could create pressure on the energy grid, increasing energy prices.[18] High-energy consumers might then be more likely to vote for the pro-coal party and against the pro-international party in order to restore energy prices. Appendix Figure 9 shows that, in the aggregate (across all cities), the results mirror those for the coal municipality–city centers are more likely to vote for the pro-coal and against the pro-international party in the wake of withdrawal–though individual cities differ substantially in the magnitude and direction of their estimates. This mechanism is consistent with voters most reliant on coal production (in the form of electricity dependency) shifting towards the party supporting coal and against the party supporting renewables with international support.[19]

Third, the polling station results could be affected by other labor and political decisions endogenous to the economic promise of the coal plant. In Appendix B, I show that individuals in the coal county commute to work in less than 20 minutes on average; they are unlikely to work outside of the municipality. Additionally, the population of the coal municipality sees less than 100 people move in or out of the area in a given year. The location of polling stations themselves does not change over time, reducing the likelihood that polls are endogenously (re)located around energy projects based on political interference (see Appendix Figure 24).

Fourth, Kosovo's long conflict with Serbia might affect voter preferences. Serbian citizens of Kosovo could differ in their support for energy independence due to loyalty to the Serbian

[18]As Kosovo has a single electrical grid connecting the country, there are no geographic differences in accessibility of energy that would be driven by the decommissioning of the coal plant or installation of renewable energy. While some parts of the country may have more or less reliable electricity, this is orthogonal to the source of the energy itself.

[19]Importantly, these results are not a consequence of a sudden increase in energy demand overall or in particular sectors (see Appendix B)–rather, they are in line with expectations of *future* energy generation from coal and renewables.

state and its leverage over Kosovo's energy supply. The geographically concentrated Serbs in Northern Kosovo also have had a peculiar relationship to Kosovan energy authorities: until 2022, residents in Northern Kosovo did not pay electricity bills due to the difficulty of revenue collection in this part of the country. I test for the potentially confounding effect of Serbian voters in Appendix Table 9 and find that the results substantively and significantly hold in models that control for or remove Serbian municipalities from the analysis.

Fifth, the presence of alternative international financing for fossil fuel plants could fundamentally alter donor decisions to withdraw support for coal and recipient country domestic politics post-withdrawal (Cheeseman *et al.*, 2024; Kohno *et al.*, 2020; Swedlund, 2017). Donor competition for projects undermines the capacity of an individual funder to make unilateral decisions about recipient country policies (Blair *et al.*, 2022; Beiser-McGrath & Bernauer, 2020; Dunning, 2004). However, the unique geopolitical position of Kosovo insulates the country from rival donor politics: China, Russia, and the Gulf States do not have a strong presence in the country due to the influence of and reliance on the European Union, the United Kingdom, and the United States (**?**). The Western international funders guarantee the physical security of Kosovo from its rival, Serbia, and have a long history of extreme influence on domestic politics in Kosovo (**??**). Even the anti-international political parties in the country do not claim a willingness or ability to entertain alternative international influence from China and Russia (Yabanci, 2016). Additionally, the alternative donors, primarily China, have recently pledged to follow the World Bank and Western countries in putting a moratorium on overseas coal funding (Wang *et al.*, 2024).[20] The rapid growth of China's renewable energy industry also shifts the economic calculus for Chinese support of fossil fuels globally: cultivating developing country reliance on renewables sourced from China im-

[20]Thought the credibility of this pledge has been undermined by China's continued investment in Indonesia's coal industry, see "China still backs overseas coal plants despite 2021 pledge, research shows." *Reuters*. April 28, 2025. `https://www.reuters.com/sustainability/cop/hold-china-still-backs-overseas-coal-plants-despite-2021-pledge-research-shows-2025-04-29/`

proves the country's geopolitical standing.[21] A third explanation for the lack of additional funding for Kosovo's coal plant is the economic inviability of the plant. The World Bank's final calculus of withdrawal relied on the falling costs of renewable substitutes compared to coal, particularly when factoring in the environmental and health costs of the project. The long-term return on investment for the new coal plant was deemed unacceptable to the most favorable lender; private and alternative lenders were therefore unlikely to step in.

Finally, information about donor withdrawal from the coal plant could lead to public backlash in an ideational story. Observationally, this mechanism cannot be ruled out as this could lead to geographically unconstrained vote shifting across the country. The models estimate the differences in vote share across Kosovo, not between Kosovo and other states. However, even in the case of informational effects, the geographic winners and losers from the withdrawal disproportionately vote for the pro-international and anti-coal party, respectively. Ideational backlash would also be more likely to increase support for the non-aligned party, which explicitly blamed the World Bank for its failure to follow through with the project– empirically the non-aligned party sees no change in its vote share. Additionally, the *direction* of backlash in response to aid withdrawal does bear out empirically: blame for withdrawal directed at the incumbent party should result in a lower vote share for this party amongst areas most affected by the withdrawal. Instead, the incumbent (pro-coal) party *gains* vote share in this population.

3.4 Generalizability

The case of the World Bank's withdrawal from coal in Kosovo is uniquely suited to test the effects of international donor funding for the green energy transition in aid-dependent nations. However, the internal validity of the difference-in-differences design could come

[21]Ma, Ziyi and Yu Ma. "What's After Coal? Accelerating China's Overseas Investment in Renewables." *World Resources Institute*. January 31, 2023. `https://www.wri.org/insights/whats-after-coal-accelerating-chinas-overseas-investment-renewables`

at a cost to the applicability of the findings beyond a single country. I ensure that the Kosovo case is not overly specific by examining how key features of the design apply to other contexts: first, the salience and correlation between pro-environment and pro-international attitudes in other developing contexts, second, the translation of these concerns into political platforms for parties in developing countries, and finally, the frequency of donor withdrawal from energy plants globally.

First, is the link between pro-environmental attitudes and pro-international attitudes unique to Kosovo? Existing research suggests that the two are often bundled together in rich, industrialized nations (Voeten, 2022), but less is known about their association in developing contexts. Drawing from three cross-national surveys fielded across Europe (Life in Transition Survey, or LITS), Africa (Afrobarometer), and Asia (Asian Barometer) from 2005 to 2022, I compare individual respondents' attitudes towards climate change and international cooperation. Appendix Table 11 reports details of the questions used to identify pro-climate and pro-international attitudes as well as listing the sample of countries in each survey-year. Figure 5 shows the association between pro-climate attitudes (primarily proxied by concern about climate change's impacts) and pro-international cooperation attitudes (proxied primarily by pro-non-governmental organization sentiment). To account for differences in question phrasing and outcome scale over surveys and time, I transform all estimates into standard deviations for comparability.

Across all surveys in all years, pro-climate attitudes are positively associated with pro-international attitudes. These results align with existing work on pro-environmental and pro-non-governmental attitudes as determinants of pro-climate action in China, India, Germany, and the United States (Cristina *et al.*, 2017). The consistency of the relationship between environmentalism and internationalism across survey contexts suggests that the empirical patterns in Kosovo generalize to other developing countries.

Second, do politicians in developing countries link cooperation with the international

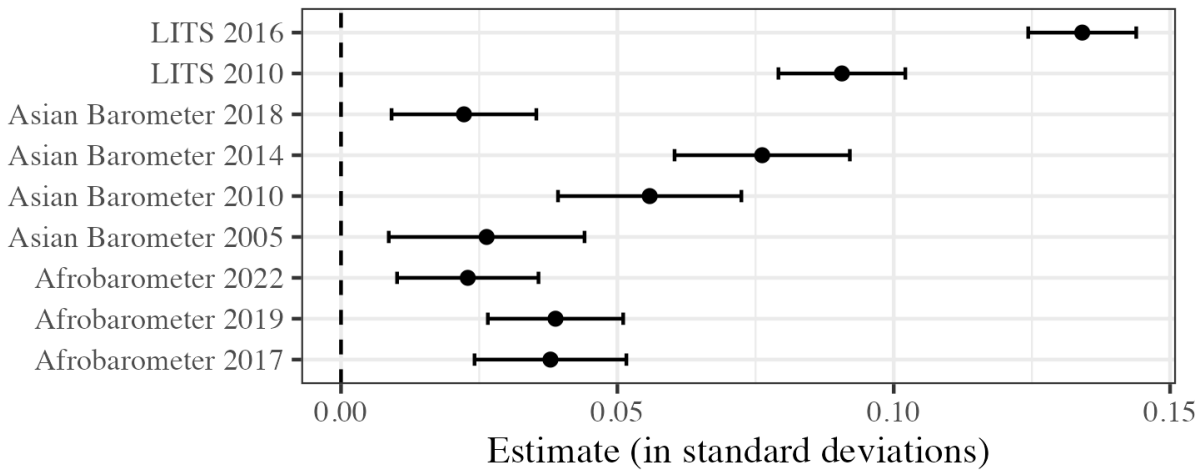


Figure 5: *Public opinion on climate change and pro-international orientation:* OLS estimates for association between climate concern and pro-international orientation.

donor community and environmental policies? The history of international development and environment is not straightforward. The environmental disruption of fossil fuels inspired local resistance to international organizations throughout the latter half of the twentieth century (Hadden, 2015; Nielson & Tierney, 2003; Wade, 1997; Weaver, 2008). International support for extractive industries in the name of industrialization for developing countries often forgave environmental crimes–the World Bank's Narmada Dam project in India was infamously cancelled after local populations rallied against the deforestation, displacement, and environmental damage planned by the dam's construction.[22] While the Bank approved a large loan for South Africa to decommission its coal sector in 2023, it also approved almost three billion dollars for the construction of a new coal plant in the country in 2010.[23] Political parties that support international cooperation could be more or less likely to have pro-environmental platforms depending on their exposure to international funding for dirty

[22]Weaving, Rachel. "Leaning from Narmada." *World Bank*. 1 May 1995. `https://documents1.worldbank.org/curated/en/777211468249297544/pdf/28514.pdf`

[23]Goldenberg, Suzanne. "World Bank Approves $3.75B for South Africa Coal Plant, Despite Environmental Criticism." *InsideClimateNews*. 10 April 2010. `https://insideclimatenews.org/news/09042010/world-bank-approves-375b-south-africa-coal-plant-despite-environmental-criticism/`

and clean energy.

Drawing from data on political party platforms from the Comparative Manifesto Project (Lehmann, 2024), Figure 6 shows the association between political parties' stances on environmentalism (higher values = pro-environment) and positive stances on international cooperation. Parties that score high on environmentalism are generally "in favour of protecting the environment, fighting climate change, and other "green" policies" (Lehmann, 2024, 18); positive internationalism represents parties that support the "need for international co-operation," which may additionally include support for aid to developing countries, support for the UN or other international organizations, and generally positive attitudes towards global governance (Lehmann, 2024, 12). The Comparative Manifesto Project collects the electoral policy platforms of over 1000 parties in fifty countries from 1945 to present. Geographic coverage of the dataset favors rich, industrialize countries but contains a number of historically low and lower-middle income countries. Subsetting the data to only these countries of interest, I find that parties in low and lower-middle income countries highly correlate on measures of pro-environmental and pro-international policy preferences: a Welch Two Sample t-test of the relationship between the two variables produces a t-statistic of 7.0314, indicating a strong correlation between the two variables.

In Appendix Figure 15, I show that the association between parties' environmental and pro-international preferences has grown stronger over time (by 0.05 standard deviations per year). Additional exploratory tests show an association between party platforms and countries receiving energy projects from international actors (specifically the World Bank): parties in countries that have received fossil fuel projects in the prior five years are not particularly likely to link pro-environmental to pro-international attitudes ($t - statistic = 0.98$) while parties in countries with renewable projects have a strong association between the two policy platforms ($t - statistic = 2.27$) (see Appendix Figure 16). These data show a link between how political parties situate their environmental and international preferences and the

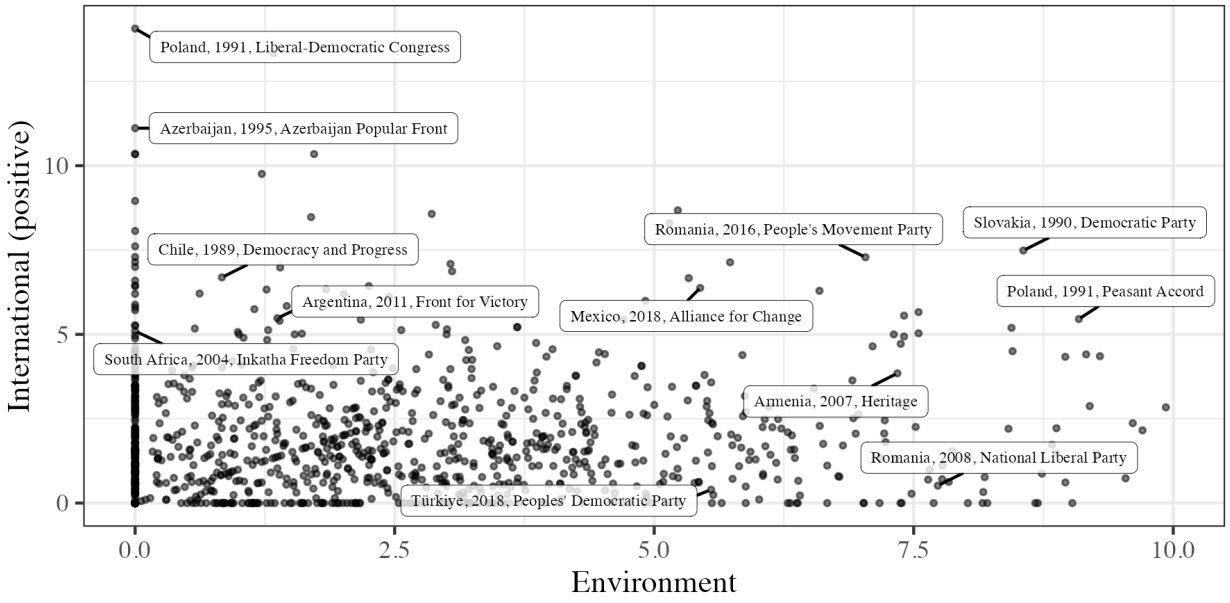


Figure 6: *Internationalism and environmentalism by party:* Association between political party stances on international actors and environmentalism. Points represent party platforms on two dimensions. Select party-years labeled. Data on party platforms from Lehmann (2024); only parties in low- and low-middle income countries with greater than 10% of national vote share included; excludes two outlier parties (Romania's 1990 Romanian Ecological Party and Mexico's 2012 Mexican Green Ecologist Party).

types of aid projects they receive. The relationship is not causal but reflects underlying conditions that may encourage politicians to shift preferences towards friendlier environmental policies if they are internationally aligned, or against environmental concerns when they oppose international cooperation. This association may be made stronger when international actors are likely to or have already funded energy projects that support environmentally sensitive policies.

Finally, how often are internationally funded energy projects abandoned? A challenge in studying donor withdrawal from energy projects is selection into withdrawn projects; often donors withdraw funding for projects in part because of the political or economic situation in a recipient country. While the strategic value of aid withdrawal has been noted (Asongu

& Nwachukwu, 2017) [24], fluctuations in fiscal support for aid projects may have little to do with donors' strategic aims towards developing countries, as the recent shuttering of the United States Agency for International Development by the second Trump administration shows. I collect novel data from the World Bank's Monthly Operational Summaries (MOS) to provide a lower bound of the frequency of withdrawal from energy aid.[25] With these data, which include details on projects in progress but not yet approved by the World Bank, I show the first evidence of the rate at which specifically energy aid projects are withdrawn in Figure 7. Withdrawn projects are not evenly spread across World Bank sectors; energy projects are particularly likely to be withdrawn (see Appendix D). On average, ten percent of proposed World Bank projects are withdrawn. For energy projects, this rate increases dramatically from 3% in 2004 to over 15% in 2013, in the midst of the World Bank's transition away from coal funding. The majority of these projects supported fossil fuel production and were subsequently replaced by renewable energy projects (see Appendix D).

4 Conclusion

The green energy transition affects the domestic politics of recipient countries by altering the distributional benefits of energy investment. In countries where the ability to implement policies is tied to international funding, voters look not only to the policy position of parties but their ties to the international community. As donors withdraw their support for fossil fuel projects in favor of renewable energy, the economic benefits to voters depends on their representatives' links to foreign funding.

Evidence from the World Bank shows high rates of discontinuation of energy projects even

[24]See also the 2023 special issue of *World Development* on Aid Withdrawals and Suspensions: Why, Why and Are They Effective? (Cheeseman *et al.*, 2024), including Attia & Grauvogel (2023); Corwin (2023); Dasandi & Erez (2023); Iannantuoni (2023); Kohno *et al.* (2020); Mertens (2021)

[25]For a full description of these data, see Appendix D

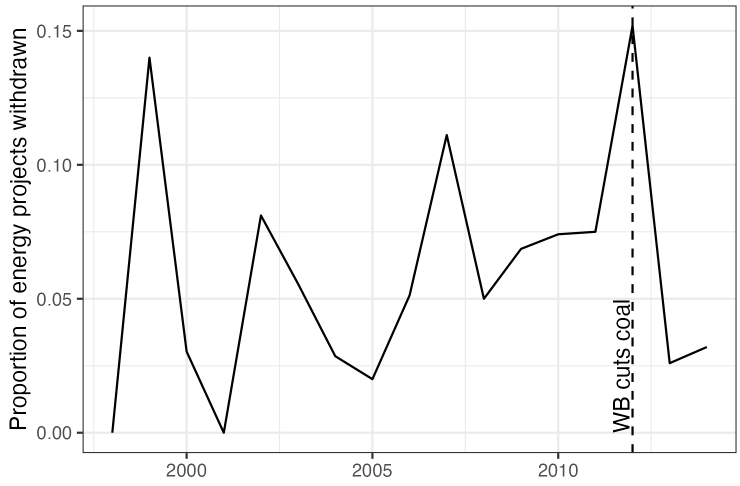


Figure 7: *Aid withdrawal rates in energy sector:* Proportion of projects from 1998 to 2015 withdrawn. Black line represents proportion of projects last reported on in a given year that were withdrawn. Dotted horizontal line at 2013 shows the year in which the World Bank pledged to remove funding for coal plants. Data collected by author from World Bank Monthly Operational Summaries.

in the years before the Bank pledged to stop supporting coal. The causal effects of withdrawal depend on the distributional costs (and benefits) of the policy, which in turn depend on the likelihood of international support for projects. In Kosovo, while expectations of economic benefits define voting in coal and renewable communities in the wake of aid withdrawal, a key distinguishing feature between parties is their closeness to the international community. Fossil fuel communities punished pro-renewable parties with international ties but not pro-renewable parties without them; the reverse holds for renewable communities. Withdrawing from fossil fuels allows pro-environmental donors to align their future commitments to their new priorities, but these actions may have longer-term costs on international influence in developing countries when donors' domestic allies lose ground.

While parties in the global north have struggled in recent years to keep their campaign promises in an increasingly globalized world (Schneider & Thomson, 2024), the policies and promises of politicians in aid-dependent states in the global south have long been subject

to the changing preferences of outside actors. Countries with limited funds are reluctant to decommission power plants that are still able to generate power in favor of spending additional funds to invest in new power sources, particularly when these promises may be fickle.

However, dollar for dollar, it is often cheaper to transition countries with less established fossil fuel infrastructure to renewable sources. For both economic and normative reasons, several partnerships between donor and recipient countries have emerged to ease the shift from fossil fuel production to renewable energy use. As of 2024, Just Energy Transition Partnerships (JETPs) sponsored by major bilateral and multilateral donors have been signed with South Africa, Senegal, Indonesia, and Vietnam. JETPs aim to rectify the international and internal inequities in the energy transition by subsidizing renewable investment and the decommissioning of fossil fuels. The JETPs aim to compensate energy transition "losers" across countries (by allocating funds from rich to poor countries) and within them (by subsidizing jobs in renewable energy in the same locations as former fossil fuel plants).

The ability of international donors to maintain influence via their domestic allies through the green transition depends on their promises to invest in new projects, particularly in renewable energy. However, the credibility of international donors even *within* the context of commitments to renewable energy threatens the green transition (Michaelowa & Namhata, 2022). The almost complete withdrawal of United States development aid at the beginning of 2025 leaves a giant fiscal hole in the budgets of developing countries worldwide; any prior US pledges to support renewable energy, amongst all other pledges, have been effectively wiped from the ledger. Other rich, industrialized countries undercut their commitments to an international green energy transition through their own energy demands: South Africa saw an increase in coal exports to Europe in the wake of Russia's invasion of Ukraine [26],

[26]Burkhardt, Paul. "Top African Coal Port's Snags Are No Match for European Demand." *Bloomberg*. 6 February 2023. https://www.bloomberg.com/news/newsletters/2023-02-06/supply-chain-latest-south-african-coal-shipments-to-europe-surged-in-2022

undermining donors' ability to push the country to decommission its coal plants.[27] Vietnam's JETP saw setbacks due to the reorganization of financing as concessional loans rather than grants, making the transition riskier and more expensive for the country. [28] The viability of renewable energy development within aid-dependent countries is also in flux as domestic investments in renewable energy production in Europe, Canada, and Australia undermine the competitiveness of renewable energy in the Global South. The chief economist of the Asian Development Bank noted of the new green industrial policies, "We just think all of that is terrible for the world. You're going to slow the green transition."[29]

Climate-concerned donors may be their own worst enemy in the energy transition, but they also face challenges from an evolving landscape of donors. As nontraditional actors such as China and Saudi Arabia play a larger role in global international development, competition between these states and traditional Western donors could alter the dynamics of aid withdrawal and the energy transition.[30] Environmentally progressive donors face particular challenges as their own withdrawal from fossil fuels could lead to replacement with even less climate-friendly policies as other donors step in. The Kosovo study, then, represents an upper bound of the threat to pro-climate international influence.

This study has clear implications for international involvement in mitigating climate change in developing countries. International commitment to climate change mitigation and

[27]Germany itself halted the decommissioning of its coal due to disrupted fuel pipelines, further reducing its ability to credibly encourage the energy transition. Sguazzin, Antony and Paul Burkhardt. "How 60 Million South Africans Are Being Failed by Global Climate Politics." *Bloomberg*. 25 April 2023. https://www.bloomberg.com/news/features/2023-04-25/load-shedding-today-south-africa-green-energy-plan-fails-first-test

[28]Civillini, Matteo. "Vietnam charts uncertain coal path as finance falls short." *Climate Change News*. 12 March 2023. https://www.climatechangenews.com/2023/12/03/vietnam-charts-uncertain-coal-path-as-finance-falls-short/

[29]McCormick, Myles, Amanda Chu and Miguel Johnson"'Green nationalism' endangers the global energy transition." *Financial Times*. 6 July 2023 https://www.ft.com/content/17808f45-adb9-4006-8d1a-dce1822add1e

[30]Shukman, David. "China-backed coal projects prompt climate change fears." *BBC* 22 November 2018. https://www.bbc.co.uk/news/science-environment-46310807

adaptation is reshaping international institutions, and foreign aid, both bilateral and multilateral, follows these same trends (Kono & Montinola, 2019; Michaelowa & Michaelowa, 2011; Roberts *et al.*, 2009). In the energy sector, donors and recipients balance the humanitarian and development concerns of recipients in coal-, oil-, and natural gas-abundant nations against the environmental costs of burning fossil fuels. Environmental groups have successfully instituted policies for development agencies to evaluate the environmental risks of development projects, requiring implementors to assess the potential pollution or agricultural degradation that may result from implementing projects.

This dynamic points to the limits of international coercion on climate change mitigation and adaptation in developing contexts. While foreign aid can be a tool for environmental progress, new commitments to climate-friendly policies may fail to take into consideration the costs of transitioning from fossil fuel projects. International aid agencies must decide between poisoning the well literally with continued support for polluting projects and metaphorically by losing domestic political support for themselves and their allies in recipient polities.

References

Adom, Philip Kofi, Amuakwa-Mensah, Franklin, Agradi, Mawunyo Prosper, & Nsabimana, Aimable. 2021. Energy poverty, development outcomes, and transition to green energy. *Renewable Energy*, **178**, 1337–1352.

Aklin, Michaël, & Mildenberger, Matto. 2020. Prisoners of the wrong dilemma: why distributive conflict, not collective action, characterizes the politics of climate change. *Global Environmental Politics*, **20**(4), 4–27.

Arkhangelsky, Dmitry, Athey, Susan, Hirshberg, David A, Imbens, Guido W, & Wager, Stefan. 2019. *Synthetic difference in differences*. Tech. rept. National Bureau of Economic Research.

Asongu, Simplice A, & Nwachukwu, Jacinta C. 2017. Is the threat of foreign aid withdrawal an effective deterrent to political oppression? Evidence from 53 African countries. *Journal of Economic Issues*, **51**(1), 201–221.

Attia, Hana, & Grauvogel, Julia. 2023. Monitoring the monitor? Selective responses to human rights transgressions. *International Studies Quarterly*, **67**(2), sqad014.

Autor, David H, & Dorn, David. 2013. The growth of low-skill service jobs and the polarization of the US labor market. *American economic review*, **103**(5), 1553–1597.

Baccini, Leonardo, & Weymouth, Stephen. 2021. Gone for good: Deindustrialization, white voter backlash, and US presidential voting. *American Political Science Review*, **115**(2), 550–567.

Baldwin, Kate, & Winters, Matthew S. 2020. How do different forms of foreign aid affect government legitimacy? Evidence from an informational experiment in Uganda. *Studies in Comparative International Development*, **55**, 160–183.

Baldwin, Kate, & Winters, Matthew S. 2023. Foreign Aid and Political Support: How Politicians' Aid Oversight Capacity and Voter Information Condition Credit-Giving. *World Politics*, **75**(1), 1–42.

Ballard-Rosa, Cameron, Malik, Mashail A, Rickard, Stephanie J, & Scheve, Kenneth. 2021. The economic origins of authoritarian values: Evidence from local trade shocks in the United Kingdom. *Comparative political studies*, **54**(13), 2321–2353.

Bank, World. 2013. *Toward a sustainable energy future for all: directions for the World. Bank Groups energy sector*.

Beiser-McGrath, Liam F, & Bernauer, Thomas. 2020. How do pocketbook and distributional concerns affect citizens' preferences over costly policies? evidence from experiments on support for carbon taxation.

Blair, Robert A, Marty, Robert, & Roessler, Philip. 2022. Foreign aid and soft power: Great power competition in africa in the early twenty-first century. *British Journal of Political Science*, **52**(3), 1355–1376.

Bolet, Diane, Green, Fergus, & Gonzalez-Eguino, Mikel. 2024. How to get coal country to vote for climate policy: The effect of a "Just Transition Agreement" on Spanish election results. *American Political Science Review*, **118**(3), 1344–1359.

Bos, Kyra, & Gupta, Joyeeta. 2019. Stranded assets and stranded resources: Implications for climate change mitigation and global sustainable development. *Energy Research & Social Science*, **56**, 101215.

Bosetti, Valentina, Colantone, Italo, De Vries, Catherine E, & Musto, Giorgio. 2025. Green backlash and right-wing populism. *Nature Climate Change*, 1–7.

Briggs, Ryan C. 2019. Receiving foreign aid can reduce support for incumbent presidents. *Political Research Quarterly*, **72**(3), 610–622.

Cheeseman, Nic, Swedlund, Haley J, & O'Brien-Udry, Cleo. 2024. Foreign aid withdrawals and suspensions: Why, when and are they effective? *World Development*, **178**, 106571.

Clark, Richard, & Zucker, Noah. 2022. Climate Cascades: IOs and the Prioritization of Climate Action. *American Journal of Political Science Forthcoming*.

Clark, Richard, Dolan, Lindsay R, & Zeitz, Alexandra O. 2023. *Accountable to Whom? Public Opinion of Aid Conditionality in Recipient Countries*. Tech. rept. Working paper. URL: https://bit. ly/44TOmMJ.

Colgan, Jeff D, Green, Jessica F, & Hale, Thomas N. 2021. Asset revaluation and the existential politics of climate change. *International Organization*, **75**(2), 586–610.

Corwin, Hillary. 2023. Coercive and catalytic strategies for human rights promotion: State violence and foreign assistance. *World Development*, **167**, 106227.

Cristina, Davino, Esposito Vinzi, Vincenzo, Santacreu-Vasut, Estefania, & Vranceanu, Radu. 2017. An Attitude Model of Environmental Action: Evidence from Developing and Developed Countries.

Dasandi, Niheer, & Erez, Lior. 2023. The flag and the stick: Aid suspensions, human rights, and the problem of the complicit public. *World Development*, **168**, 106264.

Dolan, Lindsay R. 2020. Rethinking Foreign Aid and Legitimacy: Views from Aid Recipients in Kenya. *Studies in Comparative International Development*, **55**(2).

Dunning, Thad. 2004. Conditioning the effects of aid: Cold War politics, donor credibility, and democracy in Africa. *International organization*, 409–423.

Egli, Florian, Schmid, Nicolas, & Schmidt, Tobias S. 2022. Backlash to fossil fuel phase-outs: the case of coal mining in US presidential elections. *Environmental Research Letters*, **17**(9), 094002.

Gaikwad, Nikhar, Genovese, Federica, & Tingley, Dustin. 2020. Creating Climate Coalitions: Mass Preferences for Compensating Vulnerability in the World's Two Largest Democracies. *Available at SSRN 3742987*.

Gaikwad, Nikhar, Genovese, Federica, & Tingley, Dustin. 2025. Climate action from abroad: Assessing mass support for cross-border climate transfers. *International Organization*, **79**(1), 146–172.

Gazmararian, Alexander F. 2025. Sources of partisan change: Evidence from the shale gas shock in American coal country. *The Journal of Politics*, **87**(2), 601–615.

Goetz, Stephan J, Davlasheridze, Meri, Han, Yicheol, & Fleming-Muñoz, David A. 2019. Explaining the 2016 vote for president trump across us counties. *Applied Economic Perspectives and Policy*, **41**(4), 703–722.

Goodman, Seth, BenYishay, Ariel, Lv, Zhonghui, & Runfola, Daniel. 2019. GeoQuery: Integrating HPC systems and public web-based geospatial data tools. *Computers & geosciences*, **122**, 103–112.

Graham, Erin R, & Serdaru, Alexandria. 2020. Power, control, and the logic of substitution in institutional design: The case of international climate finance. *International Organization*, **74**(4), 671–706.

Grossman, Guy, Manekin, Devorah, & Margalit, Yotam. 2018. How sanctions affect public opinion in target countries: Experimental evidence from Israel. *Comparative Political Studies*, **51**(14), 1823–1857.

Gruffydd-Jones, Jamie J. 2019. Citizens and condemnation: Strategic uses of international human rights pressure in authoritarian states. *Comparative Political Studies*, **52**(4), 579–612.

Hadden, Jennifer. 2015. *Networks in contention*. Cambridge University Press.

Hicks, Robert L, Parks, Bradley C, Roberts, J Timmons, & Tierney, Michael J. 2008. *Greening aid?: Understanding the environmental impact of development assistance*. OUP Oxford.

Humolli, Fitim, Çinaj, Nevila, & Kelmendi, Naim. 2020. The Typology of Travels in Pristina in Relation to Purpose, Time and Distance. *Quaestiones Geographicae*, **39**(1), 79–91.

Iannantuoni, Alice. 2023. Foreign Aid Volatility and Institutional Development in Recipient Countries.

Ijaz, ShahBano. 2020. Voter Preferences and Foreign Aid: Evidence from Pakistan. *Working Paper*.

Isaksson, Ann-Sofie. 2020. Chinese aid and local ethnic identification. *International Organization*, **74**(4), 833–852.

Jablonski, Ryan S. 2014. How aid targets votes: the impact of electoral incentives on foreign aid distribution. *World Politics*, **66**(2), 293–330.

Knutsen, Carl Henrik, Kotsadam, Andreas, Olsen, Eivind Hammersmark, & Wig, Tore. 2017. Mining and local corruption in Africa. *American Journal of Political Science*, **61**(2), 320–334.

Kohno, Masaru, Montinola, Gabriella R, Winters, Matthew S, & Kato, Gento. 2020. Donor Competition and Public Support for Foreign Aid Sanctions. *Political Research Quarterly*, 1065912919897837.

Kohno, Masaru, Montinola, Gabriella R, Winters, Matthew S, & Kato, Gento. 2021. Donor competition and public support for foreign aid sanctions. *Political Research Quarterly*, **74**(1), 212–227.

Kono, Daniel Yuichi, & Montinola, Gabriella R. 2019. Foreign aid and climate change policy: what can ('t) the data tell us? *Politics and Governance*, **7**(2), 68–92.

Lehmann, Pola et al. 2024. Manifesto Project Dataset.

Lemke, Jeslyn. 2018. Setting the agenda on development: A content analysis of how Senegalese newspapers report on local and foreign aid. *African Journalism Studies*, **39**(2), 61–74.

Margalit, Yotam. 2011. Costly jobs: Trade-related layoffs, government compensation, and voting in US elections. *American Political Science Review*, **105**(1), 166–188.

Marx, Benjamin. 2017. *Elections as incentives: project completion and visibility in African politics*. Tech. rept. Working Paper.

Meng, Jing, Huo, Jingwen, Zhang, Zengkai, Liu, Yu, Mi, Zhifu, Guan, Dabo, & Feng, Kuishuang. 2023. The narrowing gap in developed and developing country emission intensities reduces global trade's carbon leakage. *Nature Communications*, **14**(1), 3775.

Mertens, Claas. 2021. "The Effectiveness of Different Types of Economic Coercion: Foreign Aid Withdrawals vs. Financial and Trade Sanctions. *Working Paper*.

Michaelowa, Axel, & Michaelowa, Katharina. 2011. Coding error or statistical embellishment? The political economy of reporting climate aid. *World Development*, **39**(11), 2010–2020.

Michaelowa, Katharina, & Namhata, Chandreyee. 2022. Climate finance as development aid. *Pages 62–82 of: Handbook of international climate finance*. Edward Elgar Publishing.

Morgenthau, Hans. 1962. A political theory of foreign aid. *American Political Science Review*, **56**(2), 301–309.

Munyanyi, Musharavati Ephraim, & Churchill, Sefa Awaworyi. 2022. Foreign aid and energy poverty: Sub-national evidence from Senegal. *Energy Economics*, **108**, 105899.

Nielson, Daniel L, & Tierney, Michael J. 2003. Delegation to international organizations: Agency theory and World Bank environmental reform. *International organization*, **57**(2), 241–276.

Olivier, Jos GJ, Schure, KM, Peters, JAHW, *et al.* 2017. Trends in global CO2 and total greenhouse gas emissions. *PBL Netherlands Environmental Assessment Agency*, **5**(1).

Rafey, William, & Sovacool, Benjamin K. 2011. Competing discourses of energy development: The implications of the Medupi coal-fired power plant in South Africa. *Global Environmental Change*, **21**(3), 1141–1151.

Roberts, J Timmons, Parks, Bradley C, Tierney, Michael J, & Hicks, Robert L. 2009. Has Foreign Aid Been Greened? *Environment: Science and Policy for Sustainable Development*, **51**(1), 8–21.

Schneider, Christina J, & Thomson, Robert. 2024. Globalization and Promissory Representation. *American Journal of Political Science*, **68**(1), 304–318.

Scoville-Simonds, Morgan, Jamali, Hameed, & Hufty, Marc. 2020. The hazards of mainstreaming: Climate change adaptation politics in three dimensions. *World Development*, **125**, 104683.

Stokes, Leah Cardamore. 2020. *Short circuiting policy: Interest groups and the battle over clean energy and climate policy in the American States*. Oxford University Press, USA.

Swedlund, Haley J. 2017. Is China eroding the bargaining power of traditional donors in Africa? *International Affairs*, **93**(2), 389–408.

Terman, Rochelle. 2019. Rewarding Resistance: Theorizing Defiance to International Shaming. *Chicago: University of Chicago. Accessed January*, **15**, 2021.

Visoka, Gëzim, & Musliu, Vjosa. 2019. *Unravelling liberal interventionism: Local critiques of statebuilding in Kosovo*. Routledge.

Visoka, Gëzim, & Richmond, Oliver. 2017. After liberal peace? From failed state-building to an emancipatory peace in Kosovo. *International Studies Perspectives*, **18**(1), 110–129.

Voeten, Erik. 2022. The Energy Transition and Support for the Radical Right: Evidence from the Netherlands. *Available at SSRN 4215909*.

Voeten, Erik. 2024. The energy transition and support for the radical right: Evidence from the Netherlands. *Comparative Political Studies*, 00104140241237468.

Wade, Robert. 1997. Greening the Bank: the struggle over the environment, 1970-1995. *The World Bank: its first half century*, **2**, 611–734.

Walter, Stefanie. 2021. The backlash against globalization. *Annual Review of Political Science*, **24**(1), 421–442.

Wang, Ying, Liu, Chuyu, & Sun, Yixian. 2024. No more coal abroad! Unpacking the drivers of China's green shift in overseas energy finance. *Energy Research & Social Science*, **111**, 103456.

Weaver, Catherine. 2008. Hypocrisy trap. *In: Hypocrisy Trap*. Princeton University Press.

Yabanci, Bilge. 2016. Populism and anti-establishment politics in Kosovo: a case study of Lëvizja Vetëvendosje. *Contemporary Southeastern Europe*, **3**(2), 17–43.

Young, Daniel J. 2009. Is Clientelism at Work in African Elections?: A Study of Voting Behavior in Kenya and Zambia.

Zucker, Noah. 2021. Group Ties amid Industrial Change: Historical Evidence from Fossil Fuel Industry. *Manuscript, Columbia University.*

A Robustness

Panel A: Party votes	Fossil fuel			Renewable		
	Pro-Coal	Pro-Intl.	Non-aligned	Pro-Coal	Pro-Intl.	Non-aligned
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2018 × Proximity	38.848**	−38.641*	217.269***	−80.180***	16.519*	−22.237
	(14.178)	(16.268)	(45.514)	(8.700)	(8.420)	(26.338)
	[2.2979]	[0.93637]	[6.5923]	[1.4554]	[0.99447]	[6.2583]
Poll fixed effects	✓	✓	✓	✓	✓	✓
Num.Obs.	5119	5132	5073	5119	5132	4164
R2	0.897	0.932	0.671	0.899	0.931	0.6644
R2 Adj.	0.875	0.917	0.599	0.877	0.916	0.5913
Panel B: Party votes (log)	Fossil fuel			Renewable		
	Pro-Coal	Pro-Intl.	Non-aligned	Pro-Coal	Pro-Intl.	Non-aligned
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2018 × Proximity	0.332***	0.095+	0.093	−0.185***	0.090*	0.062
	(0.047)	(0.053)	(0.059)	(0.036)	(0.041)	(0.049)
	[0.006]	[0.005]	[0.005]	[0.005]	[0.007]	[0.007]
Poll fixed effects	✓	✓	✓	✓	✓	✓
Num.Obs.	3504	3519	3479	3504	3519	3479
R2	0.946	0.954	0.927	0.946	0.954	0.927
R2 Adj.	0.938	0.947	0.915	0.937	0.947	0.915

Table 4: *Difference-in-differences results with polling station votes as outcome:* DiD estimates for the effects of proximity (15km) to renewable or fossil fuel plants after the World Bank's withdrawal of support for coal. Robust standard errors in parentheses; Conley standard errors in brackets. Top panel uses party votes as an outcome; bottom panel logs the party votes.

B Labor characteristics

C Scope conditions

Survey	Countries	Climate Q	International Q	Estimate	SE	N

Life in Transition Survey II (2010)	Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Macedonia, France, Georgia, Germany, Hungary, Italy, Kazakhstan, Kosovo, Kyrgyzstan, Latvia, Lithuania, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Sweden, Tajikistan, Turkey, Great Britain, Ukraine, Uzbekistan	To what extent do you trust the following institutions... NGOs (Complete distrust .... Complete trust)	Would you be willing to give part of your income or pay more taxes, if you were sure that the extra money was used to combat climate change (No...Yes)	0.038 [0.037]	0.002 [0.002]	29139 [29105]
Life in Transition Survey III (2016)	Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herz., Bulgaria, Croatia, Cyprus, Czech Rep., Estonia, FYR Macedonia, Georgia, Germany, Greece, Hungary, Italy, Kazakhstan, Kosovo, Kyrgyz Rep., Latvia, Lithuania, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovak Rep., Slovenia, Tajikistan, Turkey, Ukraine, Uzbekistan	To what extent do you trust the following institutions... NGOs (Complete distrust .... Complete trust)	Would you be willing to give part of your income or pay more taxes, if you were sure that the extra money was used to combat climate change (No...Yes)	0.055 [0.051]	0.002 [0.002]	40259 [40226]
Afrobarometer 7 (2017)	Benin, Botswana, Burkina Faso, Cabo Verde, Cameroon, Côte d'Ivoire, eSwatini, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe	Do you think climate change is making life in [COUNTRY] better or worse, or haven't you heard enough to say? (Much worse ... much better)	How many of the following people do you think are involved in corruption, or haven't you heard enough about them to say? Non-governmental organisations (None ... All of them)	0.026 [0.013]	0.005 [0.005]	20358 [20327]
Afrobarometer 8 (2019)	Algeria, Angola, Benin, Botswana, Burkina Faso, Cabo Verde, Cameroon, Côte d'Ivoire, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe	Do you think climate change is making life in [COUNTRY] better or worse, or haven't you heard enough to say? (Much worse ... much better)	Which of the following statements is closest to your view? Statement 1: People living in East Africa should be able to move freely across international borders in order to trade or work in other countries. Statement 2: In order to protect their own citizens, governments should limit the cross-border movement of people and goods.	0.050 [0.050]	0.008 [0.008]	25631 [25598]
Afrobarometer 9 (2022)	Angola, Benin, Botswana, Burkina Faso, Cabo Verde, Cameroon, Congo-Brazzaville, Côte d'Ivoire, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe	Do you think climate change is making life in [COUNTRY] better or worse, or haven't you heard enough to say? (Much worse ... much better)	How many of the following people do you think are involved in corruption, or haven't you heard enough about them to say? Non-governmental organisations (None ... All of them)	0.016 [0.006]	0.004 [0.005]	23478 [23440]
Asian Barometer 2 (2005)	Japan, Hong Kong, Korea, Mainland China, Mongolia, Philippines, Taiwan, Thailand, Indonesia, Singapore, Vietnam, Cambodia, Malaysia	In your opinion, what are the most important problems facing this country that government should address? (Food shortage/famine; Natural disaster (drought, flood, earthquake, hurricane, etc; Land; Environment; Natural resources; Water supply)	To what extent do you trust the following institutions... NGOs (Complete distrust .... Complete trust)	0.041 [−0.006]	0.014 [0.014]	12252 [12244]
Asian Barometer 3 (2010)	Japan, Hong Kong, Korea, Mainland China, Mongolia, Philippines, Taiwan, Thailand, Indonesia, Singapore, Vietnam, Cambodia, Malaysia	In your opinion, what are the most important problems facing this country that government should address? (Mining exploration; Food shortage/famine; Drought; Land; Environmental protection; Natural resources)	To what extent do you trust the following institutions... NGOs (Complete distrust .... Complete trust)	0.250 [0.013]	0.0380 [0.037]	13963 [13953]
Asian Barometer 4 (2014)	Japan, Hong Kong, Korea, Mainland China, Mongolia, Philippines, Taiwan, Thailand, Indonesia, Singapore, Vietnam, Cambodia, Malaysia, Myanmar	In your opinion, what are the most important problems facing this country that government should address? (Environment/pollution/protection; Food shortage/famine; Drought; Land)	To what extent do you trust the following institutions... NGOs (Complete distrust .... Complete trust)	0.096 [0.005]	0.010 [0.010]	15281 [15270]
Asian Barometer 5 (2018)	Japan, Hong Kong, Korea, China, Mongolia, Philippines, Taiwan, Thailand, Indonesia, Singapore, Vietnam, Cambodia, Malaysia, Myanmar, Australia, India	In your opinion, what are the most important problems facing this country that government should address? (Natural calamities - floods, drought; (Environment) within this Paradigm but no clear answer; Environmental degradation/protection of environment; Climate Change; Pollution/Air Quality; Wildlife protection; Waterrelated problem; Hunger, starvation, Lack of food and Nutrition; Environment issues; Climate change; Forest fire in Goseong area; Environmental issues; Environment/pollution/protection; Water supply)	To what extent do you trust the following institutions... NGOs (Complete distrust .... Complete trust)	0.051 [0.053]	0.015 [0.016]	22393 [22380]

Table 11: *Public opinion on climate change and pro-international orientation:* OLS estimates for association between climate concern and pro-international orientation (proxied by NGO and freedom of movement); estimates with country fixed effects in brackets.

D World Bank Monthly Operational Summaries

These data report progress on proposed projects in recipient countries each month. The frequency and consistency of reporting on project progress allows me to pinpoint exact dates at which projects are withdrawn or approved. Once the projects are officially approved by the World Bank, they are removed from reporting. The projects enter the data in the preparation stage; the average project remains in the preparation stage for four years. A substantial amount of bureaucratic labor and capital are expended on project preparation by both the Bank and recipient countries. Both sides have clear incentives to move forward with proposed projects. Figure **??** shows the text of withdrawn projects in the MOS.

E Coalitions

	Fossil fuel			Renewable		
	Pro-Coal	Pro-Intl.	Non-aligned	Pro-Coal	Pro-Intl.	Non-aligned
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2018* Proximity	0.051***	−0.033***	0.027+	−0.032***	0.037***	−0.018+
	(0.006)	(0.008)	(0.014)	(0.006)	(0.006)	(0.011)
	[0.0008]	[0.0010]	[0.0017]	[0.0009]	[0.0012]	[0.0017]
Poll fixed effects	✓	✓	✓	✓	✓	✓
Num.Obs.	3504	3519	3479	3504	3519	3479
R2	0.857	0.850	0.662	0.856	0.851	0.662
R2 Adj.	0.834	0.826	0.606	0.833	0.827	0.606

Table 5: *Difference-in-differences results with long-standing polling stations:* DiD estimates for the effects of proximity (15km) to renewable or fossil fuel plants after the World Bank's withdrawal of support for coal. Robust standard errors in parentheses; Conley standard errors in brackets. Excludes polling stations opened after 2010.

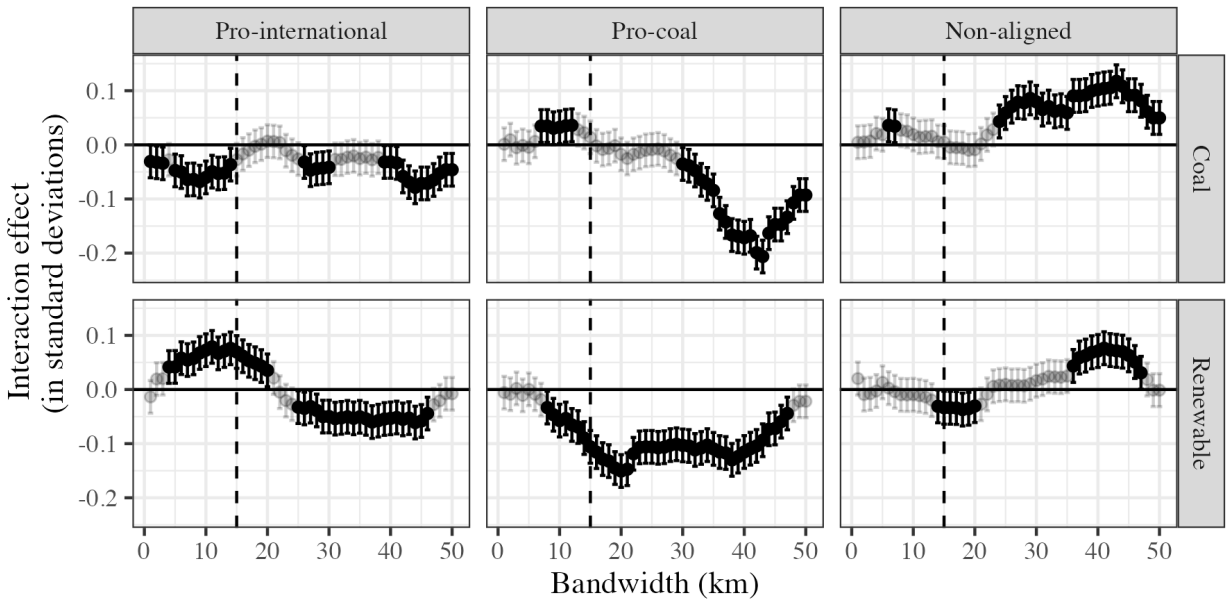


Figure 8: *Difference-in-differences results by distance from energy:* DiD estimates for the effects of proximity to renewable or fossil fuel plants after the World Bank's withdrawal of support for coal by distance from energy source. Confidence intervals constructed with robust standard errors.

	Fossil fuel			Renewable		
	Pro-Coal	Pro-Intl.	Non-aligned	Pro-Coal	Pro-Intl.	Non-aligned
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2018 x Proximity	0.063***	−0.029***	0.022+	−0.049***	0.020***	−0.024*
	(0.006)	(0.007)	(0.013)	(0.007)	(0.005)	(0.009)
	[0.0012]	[0.0009]	[0.0011]	[0.0006]	[0.0008]	[0.0015]
Poll fixed effects	✓	✓	✓	✓	✓	✓
Num.Obs.	5019	5032	4974	4766	4783	3869
R2	0.869	0.838	0.679	0.862	0.839	0.6794
R2 Adj.	0.841	0.803	0.609	0.832	0.803	0.6084

Table 6: *Difference-in-differences results with donuts:* DiD estimates for the effects of proximity (15km) to renewable or fossil fuel plants after the World Bank's withdrawal of support for coal excluding polling stations within 5km of energy plants. Robust standard errors in parentheses; Conley standard errors in brackets.

	Photovoltaic potential			Wind power density		
	Pro-Intl.	Pro-Coal	Non-aligned	Pro-Intl.	Pro-Coal	Non-aligned
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2018* Suitability	0.054+	−0.289***	−0.142**	0.000	0.0001*	−0.000 000 01***
	(0.028)	(0.042)	(0.052)	(0.000)	(0.000)	(0.000)
Poll fixed effects	✓	✓	✓	✓	✓	✓
Num.Obs.	5131	5118	5072	5131	5118	5072
R2	0.836	0.870	0.679	0.836	0.868	0.681
R2 Adj.	0.801	0.842	0.609	0.801	0.839	0.611

Table 7: *Renewable potential:* One unit increase in solar potential (kilowatt hours per day) on vote share for a given party in a polling station in a given municipality (Models 1-3). One unit increase in mean wind power density (watts per square meter) on vote share for a given party in a polling station in a given municipality.

		Vote share		
Energy plant	Material	Pro-intl	Pro-coal	Non-aligned
Kosovo Energy Corp	Coal	-0.03 (0.01)	0.05 (0.01)	0.01 (0.01)
Newco Ferronikeli	Nickel (Ore)	0.03 (0.01)	-0.01 (0.01)	-0.05 (0.01)
Glogovac	Nickel (Metal)	0.03 (0.01)	-0.02 (0.01)	-0.06 (0.01)
LED Light Technology Kosova	Solar	0.03 (0.01)	-0.09 (0.01)	-0.08 (0.01)
ONIX Spa	Solar	0.03 (0.01)	-0.00 (0.01)	-0.01 (0.02)
Birra Peja	Solar	0.02 (0.01)	-0.07 (0.02)	-0.01 (0.02)
Eling	Solar	0.03 (0.01)	-0.01 (0.01)	-0.03 (0.02)
Frigo Food Kosova	Solar	0.02 (0.01)	-0.07 (0.02)	-0.01 (0.02)
Solar Green Energy	Solar	-0.01 (0.01)	0.03 (0.01)	-0.01 (0.02)
Kitka	Wind	-0.01 (0.01)	0.02 (0.01)	-0.01 (0.02)
Era Energija	Wind	-0.01(0.01)	0.02 (0.01)	-0.01 (0.02)

Table 8: *List of energy plants and mines in Kosovo:* Names of plants and type of material produced. Coefficients for the interaction term, **Post-2018*Proximity** using 15km bandwidth of exposure (**Proximity**) around individual plant, robust standard errors in parentheses. Fossil fuel sources highlighted in grey; renewable sources unhighlighted.

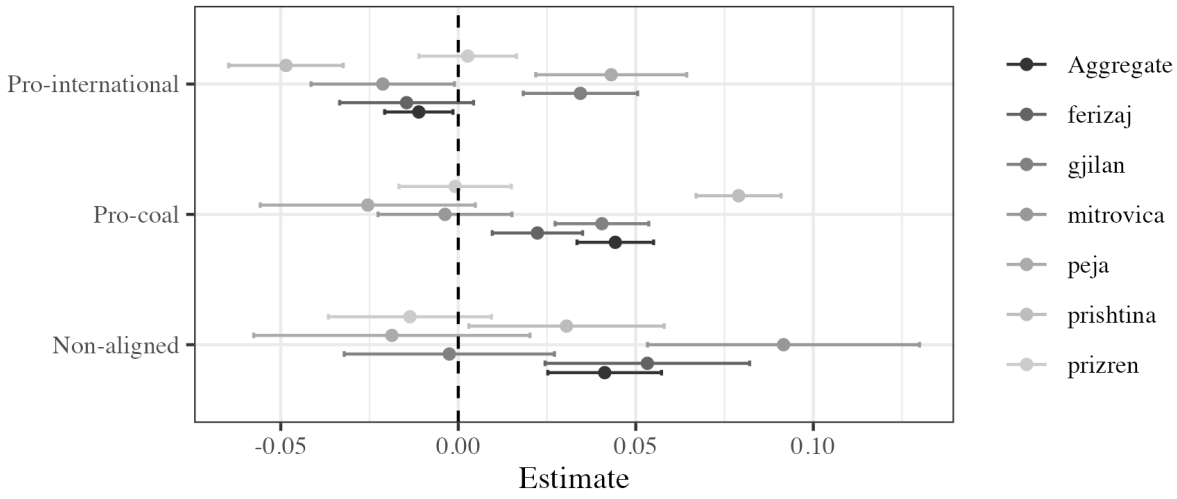


Figure 9: *Aggregate and decomposed:* Coefficients for the interaction term, **Post-2018*Proximity**, using 15km bandwidth of exposure (**Proximity**) around major city centers. 95% confidence intervals depicted.

	Serb municipality controls					
	Fossil fuel			Renewable		
	Pro-intl.	Pro-coal	Non-aligned	Pro-intl.	Pro-coal	Non-aligned
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2018* Proximity	−0.029***	0.055***	0.017	0.022***	−0.042***	−0.018*
	(0.007)	(0.006)	(0.012)	(0.005)	(0.006)	(0.009)
Poll fixed effects	✓	✓	✓	✓	✓	✓
Num.Obs.	5131	5118	5072	5131	5118	5072
R2	0.838	0.869	0.678	0.837	0.869	0.679
R2 Adj.	0.803	0.841	0.608	0.802	0.841	0.609

	Excluding Serb municipalities					
	Fossil fuel			Renewable		
	Pro-intl.	Pro-coal	Non-aligned	Pro-intl.	Pro-coal	Non-aligned
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2018* Proximity	−0.030***	0.061***	0.015	0.027***	−0.034***	−0.031***
	(0.007)	(0.006)	(0.012)	(0.005)	(0.006)	(0.009)
Poll fixed effects	✓	✓	✓	✓	✓	✓
Num.Obs.	4779	4769	4723	4779	4769	4723
R2	0.822	0.862	0.671	0.822	0.861	0.672
R2 Adj.	0.786	0.833	0.603	0.786	0.832	0.605

Table 9: *Estimates accounting for Serb municipalities:* Panel A shows main models measuring effect of coal withdrawal on vote share for three parties in fossil fuel (left three models) and renewable (right three models) communities, controlling for whether polling stations are in Serbian-majority municipalities. Panel B depicts the same models excluding polling stations in Serb municipalities. All models include polling station fixed effects and robust standard errors.

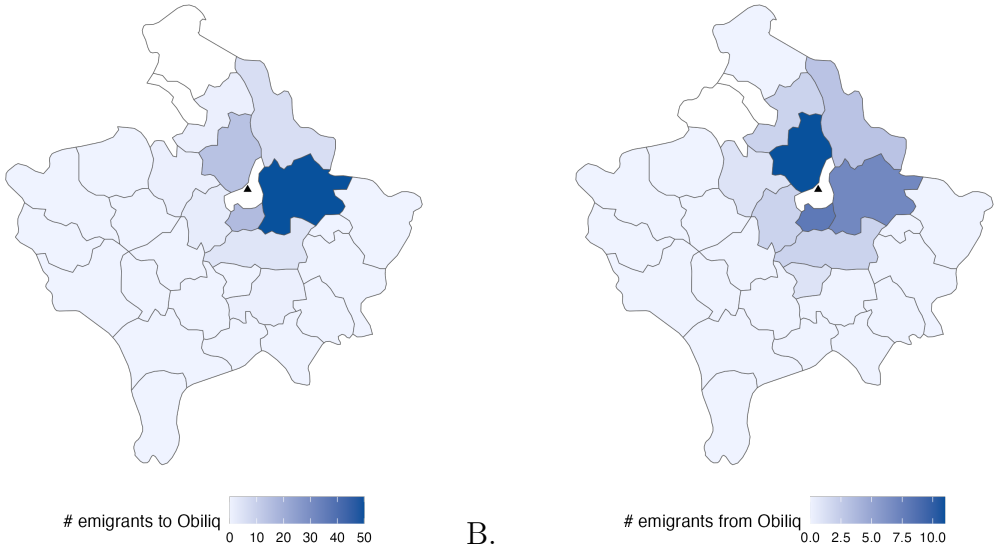


Figure 10: Migration to and from mining area (2014): Panel A shows number of emigrants to municipality with coal; Panel B shows number of emigrants from municipality with coal. Coal plant location indicated by black triangle.

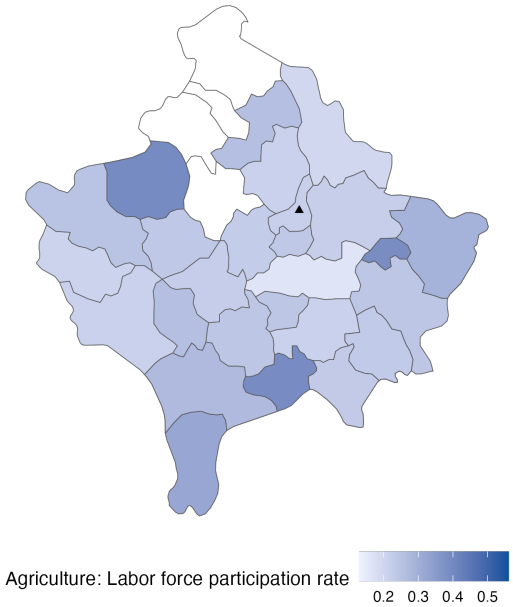


Figure 11: Labor force participation rate in agriculture by municipality. Coal plant location indicated by black triangle.

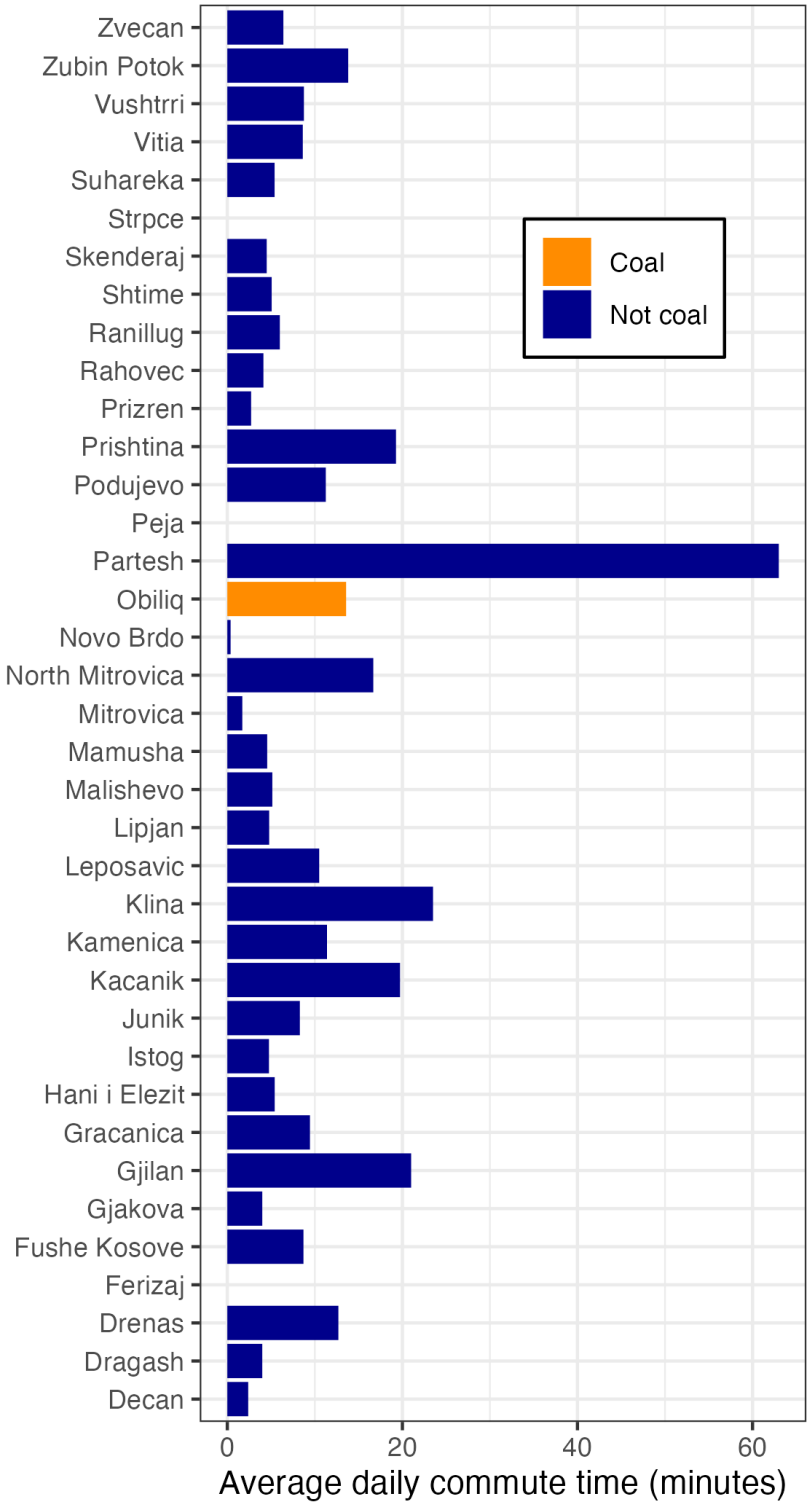


Figure 12: *Average commute times:* Average commute time in a given municipality. Data from the Kosovo Time Use Survey.

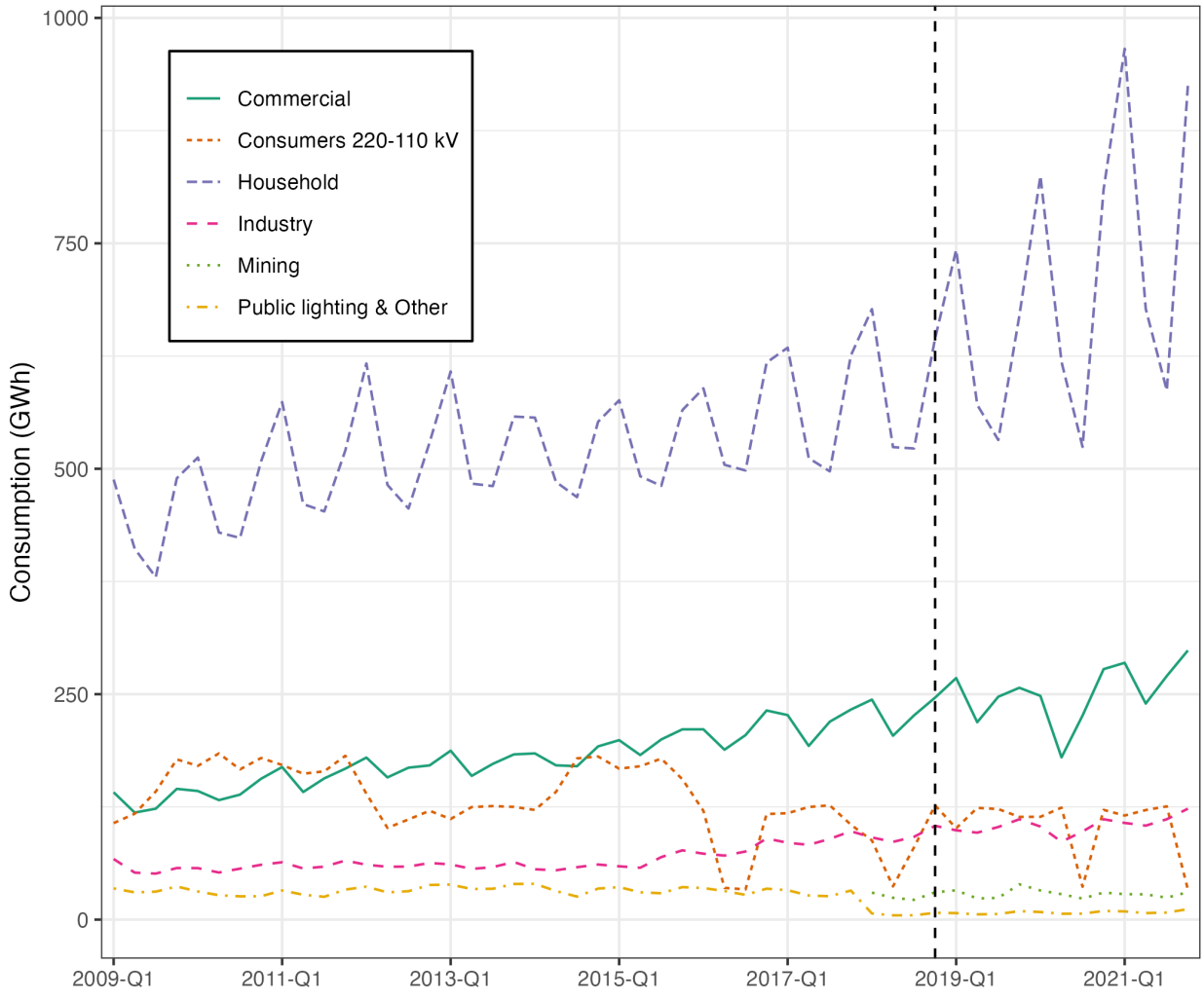


Figure 13: *Kosovo energy use:* Consumption of energy over time. Data from the Kosovo Agency for Statistics. Horizontal line indicates date of coal plant withdrawal.

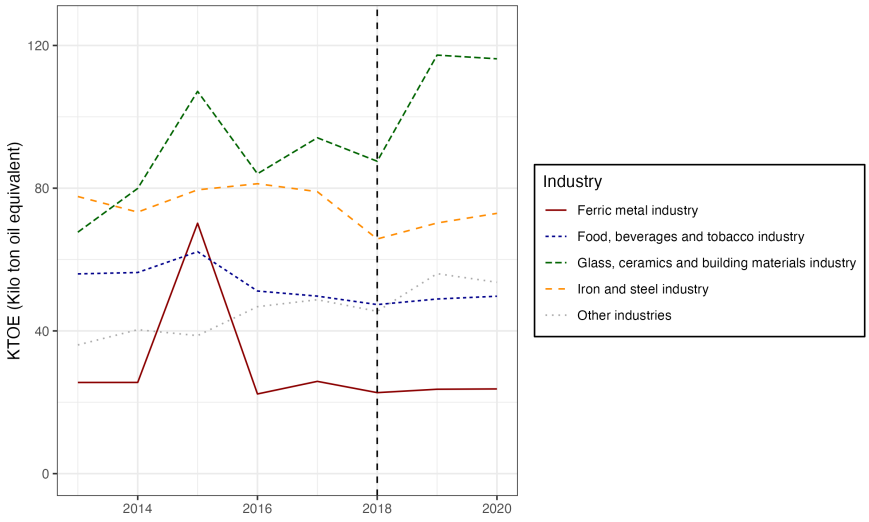


Figure 14: *Kosovo energy use by industry:* Consumption of energy over time by industry. Data from the Kosovo Agency for Statistics. Horizontal line indicates date of coal plant withdrawal.

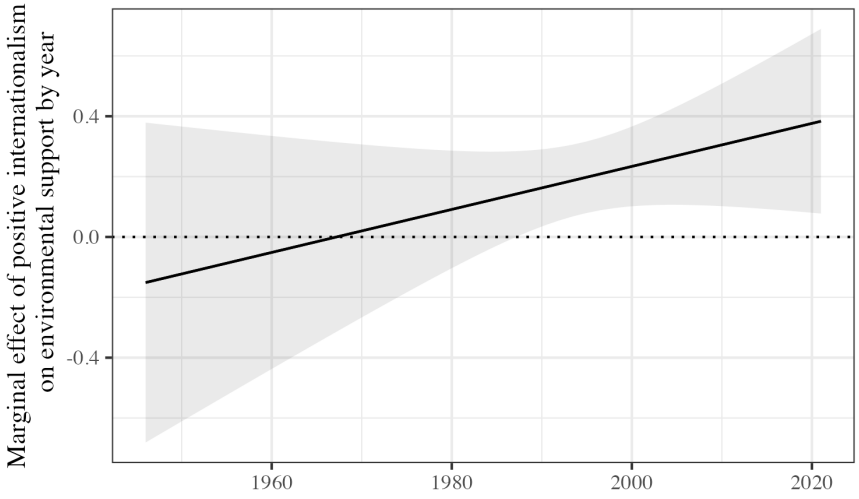


Figure 15: *Party internationalism and environmentalism over time:* Marginal effect of the increase in one unit of pro-environmental policy preference on pro-international policy preferences over time. Data on party platforms from Lehmann (2024); only parties in low- and low-middle income countries with greater than 10% of national vote share included

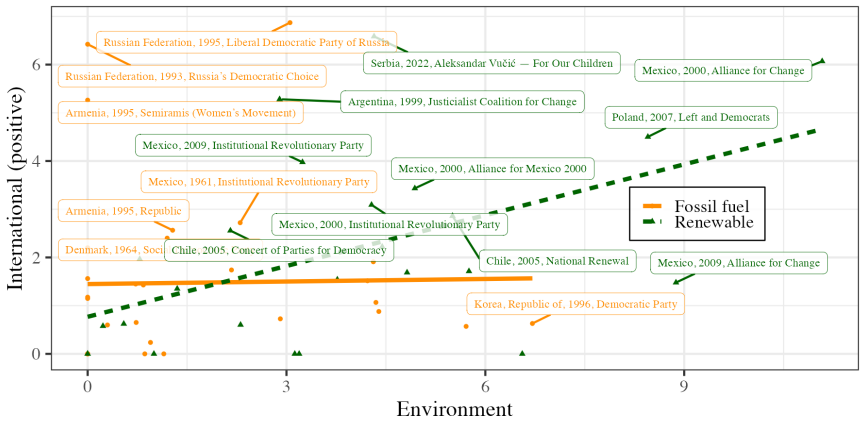


Figure 16: *Party internationalism and environmentalism by World Bank energy projects:* Association between political party stances on international actors and environmentalism. Points represent party platforms on two dimensions. Orange circles indicate party platforms for countries that have received a fossil fuel project from the World Bank in the prior five years; green triangles parties in countries that have received a renewable project over the last five years. Green dashed line indicates fitted relationship between environmentalism and internationalism for parties in countries that have received renewable energy projects; orange solid line fossil fuel projects. Select party-years labeled. Data on party platforms from Lehmann (2024); only parties in low- and low-middle income countries with greater than 10% of national vote share included. World Bank data coded by author.

	LITS II	LITS III	AfB 8	AfB 7	AfB 9	AsB 2	AsB 3	AsB 4	AsB 5
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(Intercept)	0.242***	0.212***	3.180***	2.773***	2.849***	2.541***	2.661***	2.605***	3.912***
	(0.008)	(0.006)	(0.032)	(0.019)	(0.018)	(0.007)	(0.007)	(0.006)	(0.009)
Climate	0.038***	0.055***	0.050***	0.026***	0.016***	0.041**	0.250***	0.096***	0.051***
	(0.002)	(0.002)	(0.008)	(0.005)	(0.004)	(0.014)	(0.038)	(0.010)	(0.015)
Num.Obs.	29 141	40 261	25 633	20 360	23 480	12 254	13 965	15 283	22 395
R2	0.008	0.018	0.002	0.002	0.001	0.001	0.004	0.005	0.001
R2 Adj.	0.008	0.018	0.002	0.002	0.001	0.001	0.003	0.005	0.001

Table 10: *Public opinion on climate change and pro-international orientation:* OLS estimates for association between climate concern and pro-international orientation (proxied by NGO and freedom of movement).

Lebanon

Agriculture, fishing, and forestry

Sustainable Agric. Livelihoods in Marginal Areas (SALMA): The proposed Project Development Objective (PDO) is to expand access of small farmers to supplementary irrigation and increase protection of agricultural lands from soil erosion in targeted remote hilly areas. Concept completed on 5 December 2012. *This project is no longer in the lending program. Further reporting will be discontinued.* Environmental Assessment Category B. Project: P131431. US$24.0 (IBRD). Consultants will be required. Ministry of Agriculture Tel: (961-1) 821-900, E-mail: mkhansa@agriculture.gov.lb, Contact: Mohammad Khansa, Advisor to H.E. the Minister of Agriculture.

Energy and mining

LB: PCB Management in the Power Sector Project: The objective of the Project is to dispose of high risk PCBs and improve the inventory management of transformers in the power sector in an environmentally sound manner. Approval completed on 21 November 2014. Environmental Assessment Category A. Project: P122540. US$ 2.5 (GEFU). Consultants will be required. Ministry of Environmenta Tel: 9611981854, E-mail: manal.moussalem@undp-lebprojects.org, Contact: Manal Moussalem, Advisor.

Niger

Agriculture, fishing, and forestry

Agriculture Climate Smart Support Project: The proposed development objective is to increase food production and enhance resilience through adoption of climate smart agriculture practices in the targeted communities and households in Niger Identification completed on 18 November 2014. Environmental Assessment Category B. US$ 116.0 (IDA Credit). Consulting services to be determined. Implementing agency(ies) to be determined.

Energy and mining

Niger - Electricity Access Expansion Project (NELACEP): 16. The Project Development Objective (PDO) is to increase access to electricity Concept completed on 3 February 2015. Environmental Assessment Category B. Project: P153743. US$ 60.0 (IDA Credit). Consulting services to be determined. Ministry of Energy and Petrol Tel: 22790645556, E-mail: as.toune@live.fr, Contact: Alio Touné, Chief of Staff; Nigelec Tel: 22720722461, E-mail: arzikam@yahoo.fr, Contact: Mahamadou Arzika, Secrétaire Général.

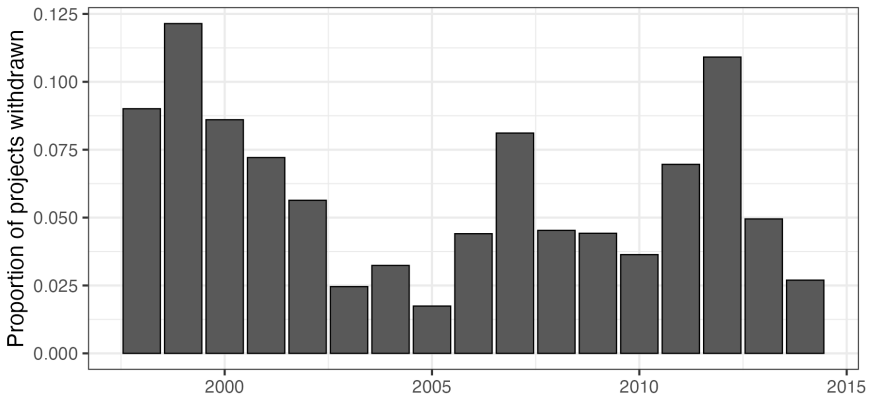


Figure 17: *Aid withdrawal rates by year:* Aggregated by year from projects ended from 1998 to 2015. Data collected by author from World Bank Monthly Operational Summaries.

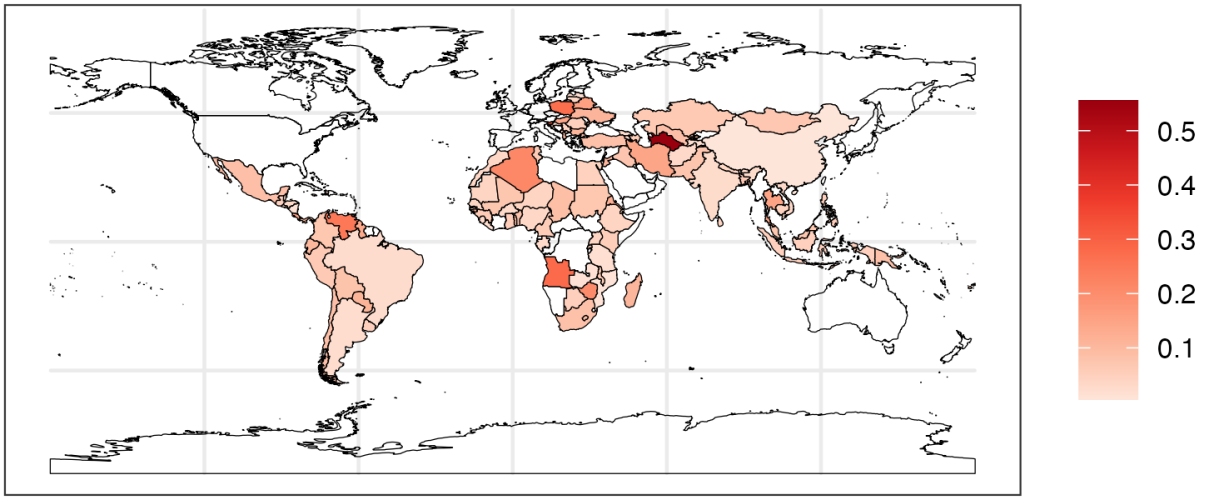


Figure 18: *Proportion projects withdrawn:* Proportion of total projects withdrawn by country.

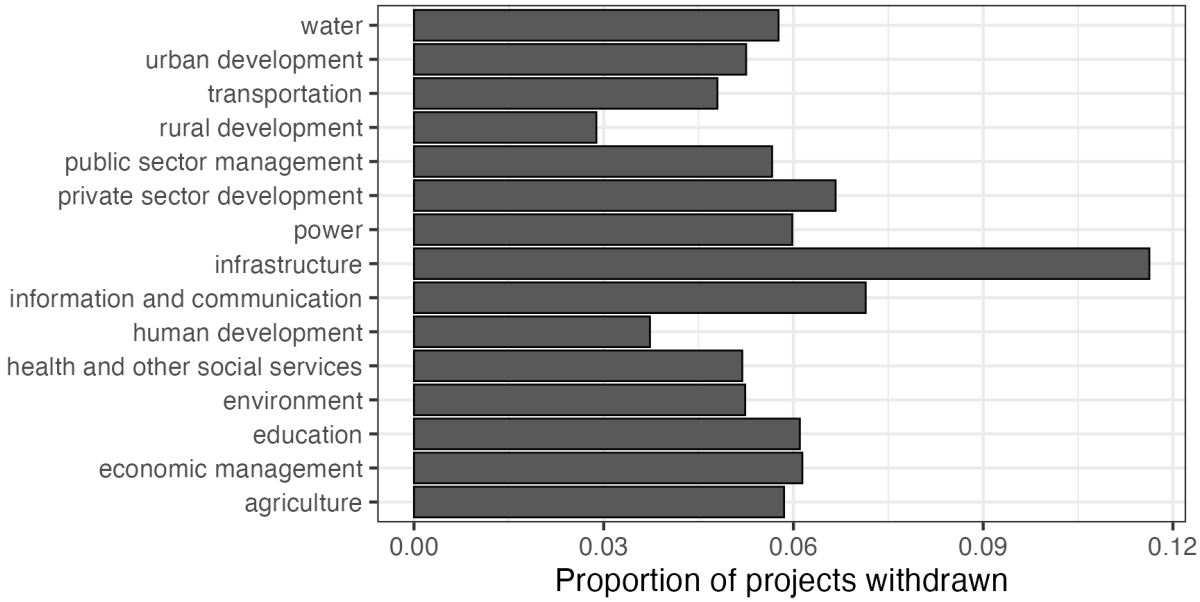


Figure 19: *Aid withdrawal rates by sector:* Aggregated by sector from projects started from 2004 to 2013. Data collected by author from World Bank Monthly Operational Summaries.

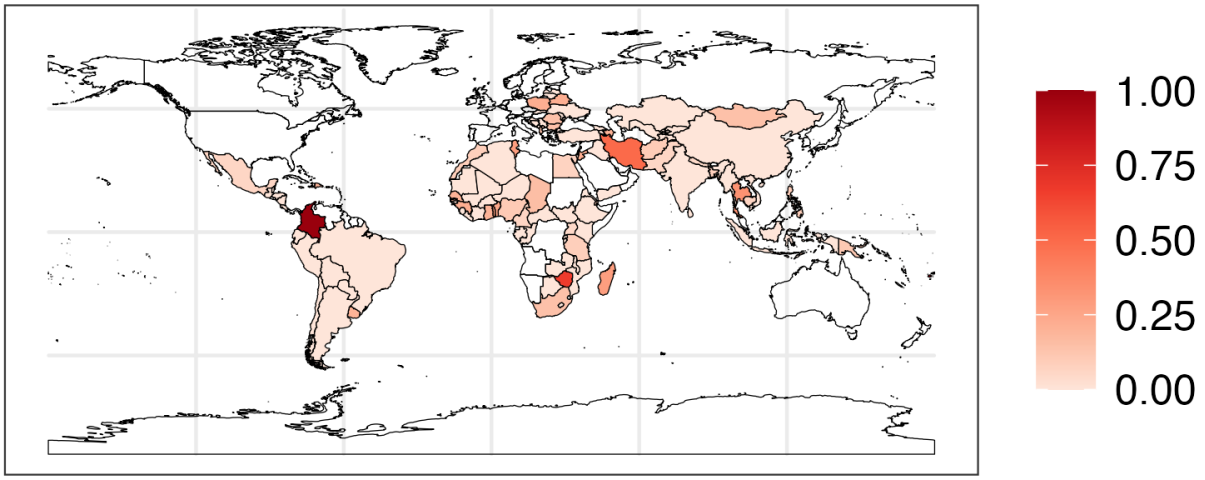
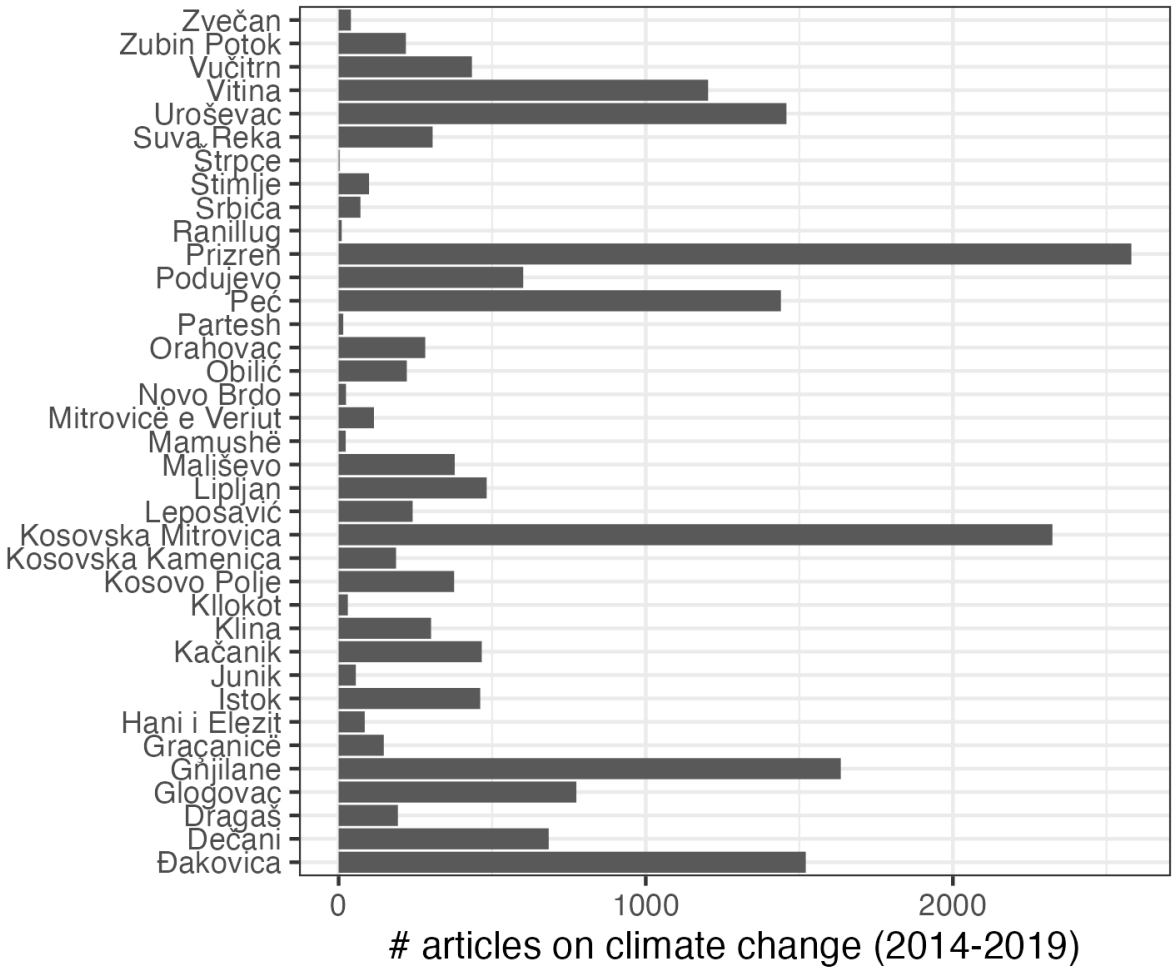


Figure 20: *Proportion energy projects withdrawn:* Proportion of total energy projects withdrawn by country.

Year	Stance	Pre-electoral coalitions	Post-election coalitions
2010	Government	PDK AAK-LDK	PDK AAK-LDK
	Opposition	New Kosovo Coalition (AKR–PD–PSD) LV	LV New Kosovo Coalition (AKR–PD–PSD) LDK
2014	Government	PDK	PDK LDK
	Opposition	LDK LV	LV
2017	Government	PAN Coalition (PDK-AAK-NISMA) LAA Coalition (LDK-AKR)	PANA Coalition (PDK-AAK-NISMA-AKR)
	Opposition	LV	LDK LV
2019	Government	PDK 100% Kosovo (AAK - PSD Coalition) NISMA - AKR - PD Coalition	LV-LDK
	Opposition	LV LDK	PDK 100% Kosovo (AAK - PSD Coalition) NISMA - AKR - PD Coalition

F Media


Zvečan
Zubin Potok
Vučitrn
Vitina
Uroševac
Suva Reka
Štrpce
Štimlje
Srbica
Ranillug
Prizren
Podujevo
Peć
Partesh
Orahovac
Obilić
Novo Brdo
Mitrovicë e Veriut
Mamushë
Mališevo
Lipljan
Leposavić
Kosovska Mitrovica
Kosovska Kamenica
Kosovo Polje
Kllokot
Klina
Kačanik
Junik
Istok
Hani i Elezit
Graçanicë
Gnjilane
Glogovac
Dragaš
Dečani
Đakovica
0
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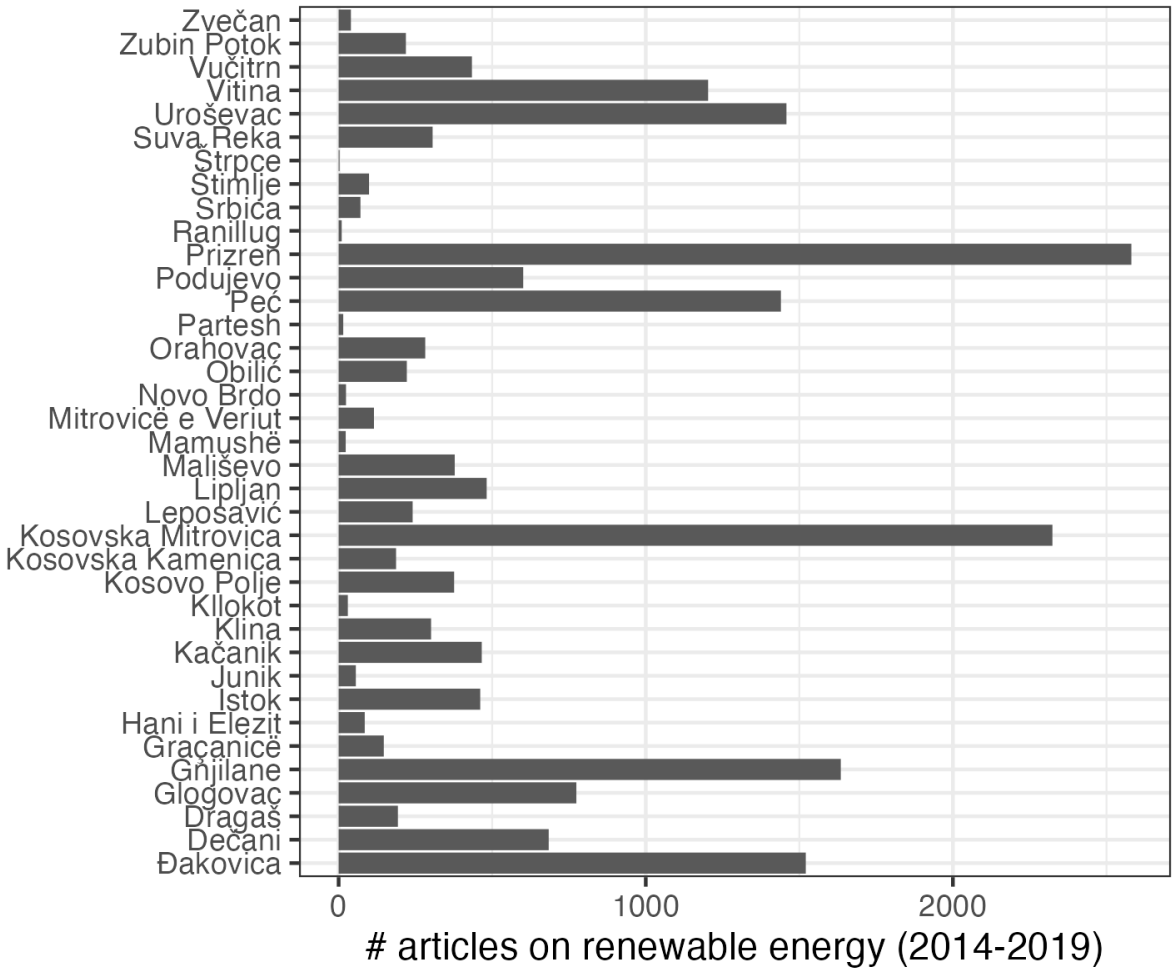
2000
articles on climate change (2014-2019)


Zvečan
Zubin Potok
Vučitrn
Vitina
Uroševac
Suva Reka
Štrpce
Štimlje
Srbica
Ranillug
Prizren
Podujevo
Peć
Partesh
Orahovac
Obilić
Novo Brdo
Mitrovicë e Veriut
Mamushë
Mališevo
Lipljan
Leposavić
Kosovska Mitrovica
Kosovska Kamenica
Kosovo Polje
Kllokot
Klina
Kačanik
Junik
Istok
Hani i Elezit
Graçanicë
Gnjilane
Glogovac
Dragaš
Dečani
Đakovica
0
1000
2000
articles on renewable energy (2014-2019)

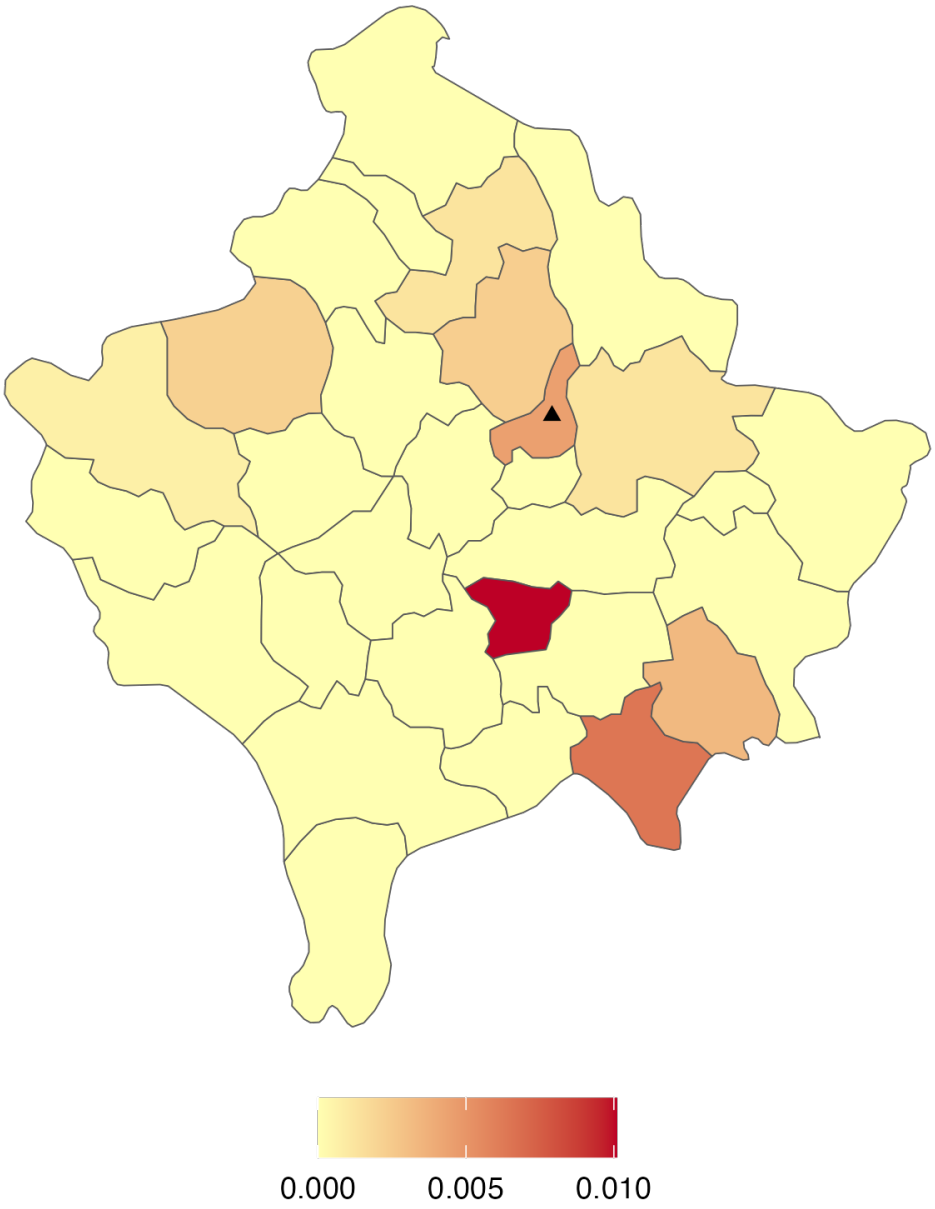


Figure 21: Proportion of news articles (2014-2017) mentioning municipality that also mention the coal plant.

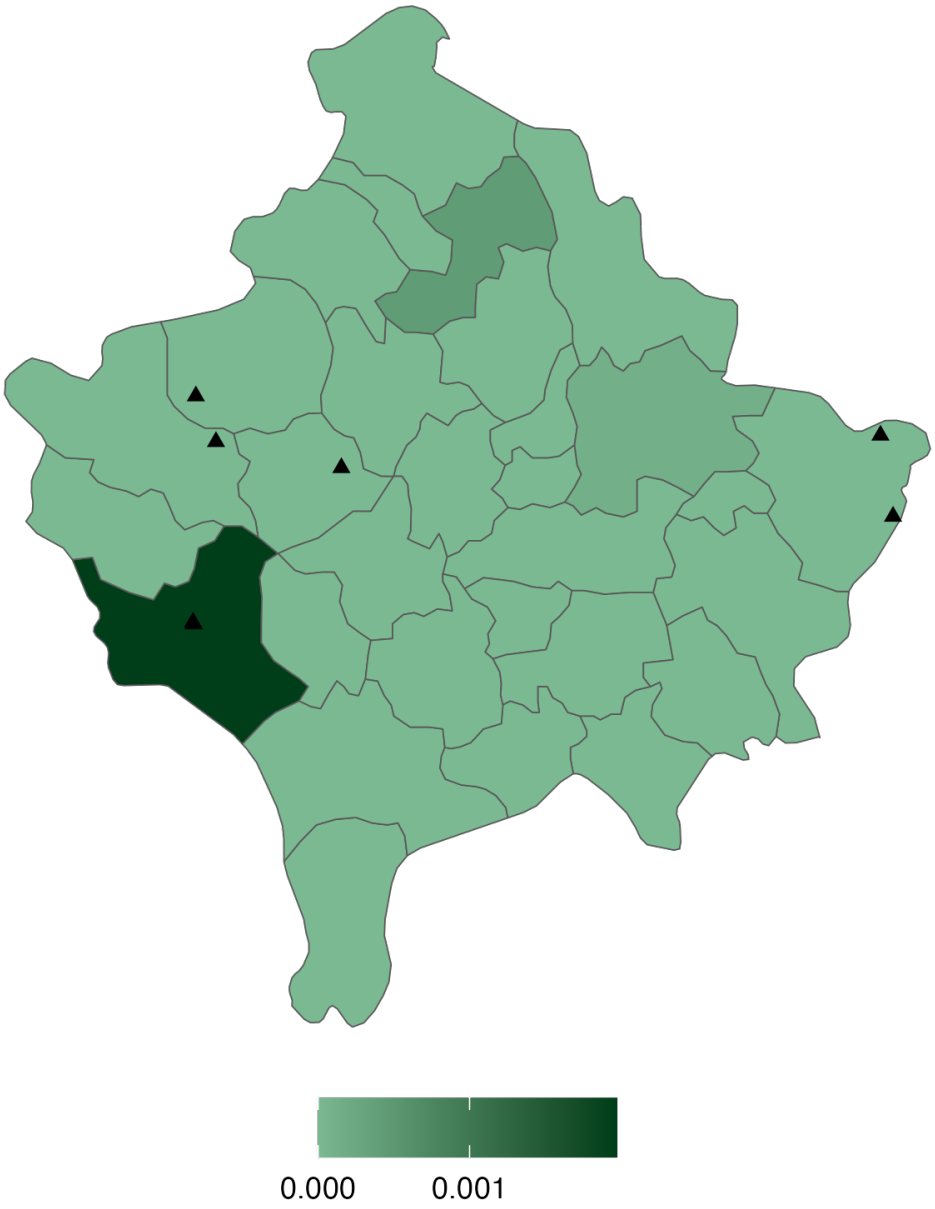


Figure 22: Proportion of news articles (2014-2017) mentioning municipality that also mention climate change.

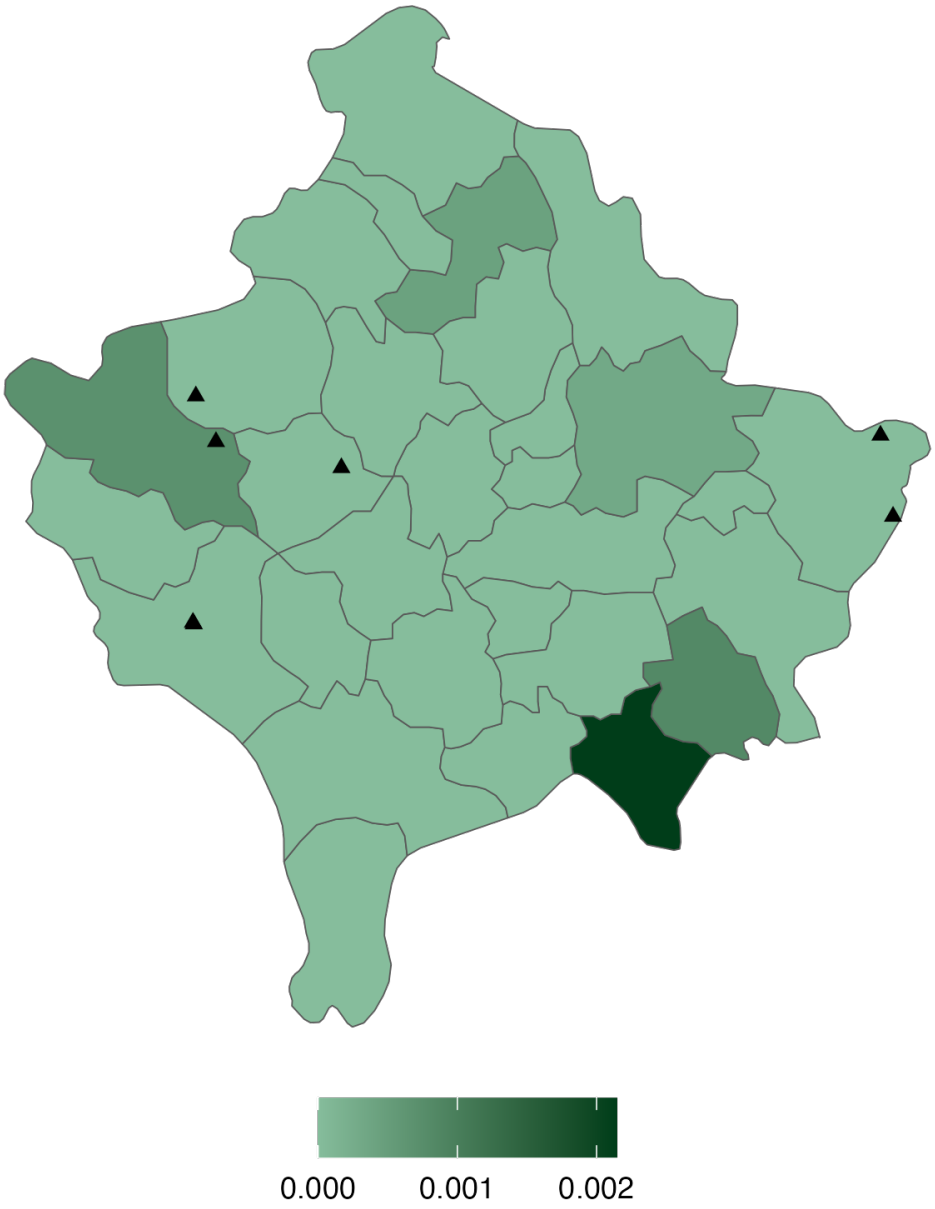


Figure 23: Proportion of news articles (2014-2017) mentioning municipality that also mention renewable energy.

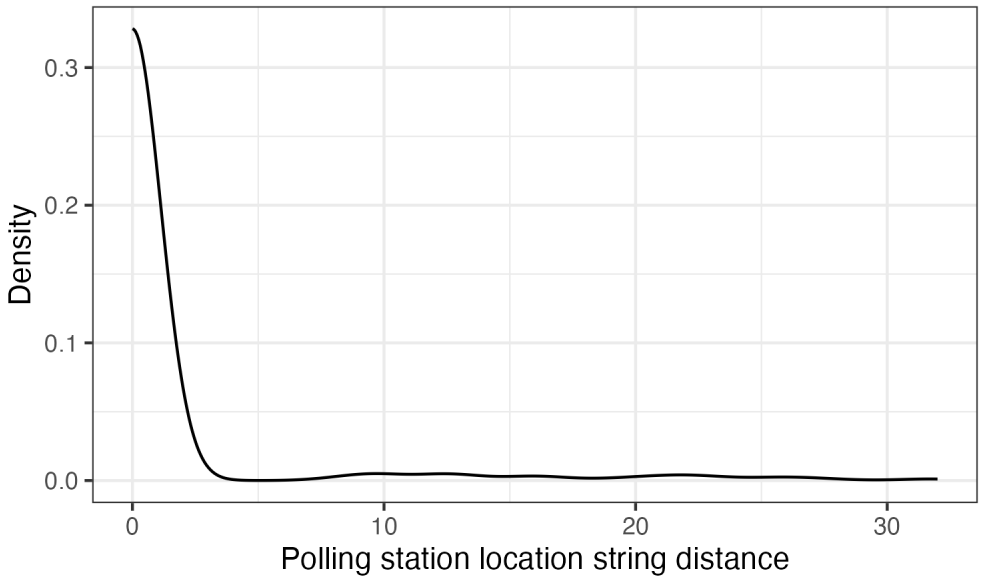


Figure 24: Polling station similarity check: String distance of all polling station location names from 2010 to 2021