

# Aiding the energy transition? How greening foreign aid affects domestic politics

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## Abstract

Greening foreign aid is a vital step in the fight against climate change, but requires donors to shift their funding away from carbon-intensive development projects. Novel data from the World Bank shows that aid withdrawal, particularly in the energy sector, is common. As donors withdraw their support for fossil fuels in favor of renewable energy, the economic benefits to voters in aid-dependent countries depends on their representatives' links to foreign funding. I use a spatial difference-in-differences design to test the theory in the case of the World Bank's withdrawal of support for a coal plant in Kosovo. Aid withdrawal altered voting patterns for parties with close ties to the international community: coal-producing areas voted disproportionately against this party while places with potential for investment in renewables voted for it. The distributional effects of the green energy transition may determine long-term international influence as their domestic allies bear the costs (and benefits). The centrality of international funding for energy in developing nations adds nuance to our understanding of global climate politics.

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# 1 Introduction

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). While high-income countries have been responsible for the vast majority of historic carbon emissions, these same countries use foreign aid and other economic inducements to reduce present and future emissions in low-income, developing nations (Heffron & Heffron, 2021; Sultana, 2022). Who bears the cost of international efforts to promote climate-friendly policies, and how does this affect the success of these policies? For low-income countries, international promotion of green energy often appears as a trade-off between economic growth and climate mitigation (Gaikwad *et al.*, 2020). But within these countries, some citizens are likely to benefit from funding for new climate initiatives while others lose (Aklin & Mildemberger, 2020; Colgan *et al.*, 2021).

I argue that the distributional effects of greening foreign aid creates both public backlash against and political opportunities for international actors and their domestic political allies. Particularly, I focus how changes in international funding targets affect political behavior in recipient countries. While a burgeoning literature examines the distributional costs and consequences of the energy transition in major emitter countries (Beiser-McGrath & Bernauer, 2020; Colantone *et al.*, 2022), public responses to climate policies in developing countries are less well-examined (Gaikwad *et al.*, 2020). Citizens of aid-dependent nations are sophisticated voters who are attuned to not only their domestic politicians, but to the relationship between politicians and prominent aid donors. 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 interna-

tional support to achieve their policy goals. Citizens who benefit from the climate transition may align more closely with green parties, but importantly they also are likely to support parties closely linked to international donors. In the same manner, citizens who bear costs of the climate transition will vote against these parties and move towards regressive parties with fewer international ties (Voeten, 2024).

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), much less is known about the fate of “brown,” environmentally costly aid projects. Disinvestment in fossil fuels is a crucial strategy for climate mitigation: withdrawing support for dirty aid projects is one attractive strategy for international donors to align their funding with their international priorities. In line with work on prospect theory (Levy, 1992; Tversky & Kahneman, 1992), the loss of funding for existing or proposed projects should be as if not more salient as funding for new projects. I show that aid withdrawal is an extensive phenomenon in the energy sector: in a novel, comprehensive data set of aid withdrawal events at the World Bank, up to 30% of energy aid projects are withdrawn in a given year. In contrast to other priorities, such as human rights or democratization, supporting climate-friendly policies is more likely to require donors to reverse existing aid policies aimed at economic growth. The World Bank, for example, sets a threshold at which the economic growth benefits of an aid project must be greater than the environmental costs of a project in order to proceed with any non-climate-friendly projects. As donors put more weight on the cost of environmental damage against potential project benefits, support for previously tenable projects may reverse entirely.

A challenge in studying aid withdrawal 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)<sup>1</sup>, in order to understand aid withdrawal as a strategic tool for donor influence, we must first understand the effects of aid withdrawal on its own, without confounding factors. I use subnational variation in response to exogenous aid withdrawal to identify the baseline causal effect of withdrawal on political behavior.

Using a shock to international financing, the decreasing cost of renewable energy in comparison to fossil fuels, I examine the case of aid withdrawal in a World Bank-supported coal power plant in Kosovo. The internationally supported project was the subject of intense international public scrutiny after the World Bank pledged to stop funding coal power in 2013, but continued its support for the Kosovo plant until 2018.<sup>2</sup> The World Bank pulled back from the project after more than ten years of planning due to changes in the organization’s environmental standards and falling prices of renewable energy. Using a spatial difference-in-differences design, I find that communities that benefitted from the power plant disproportionately voted against pro-international parties in subsequent elections. In communities embedded in renewable energy production, however, this pattern is reversed: voters exposed to renewable energy support the pro-international party at higher levels in the wake of aid withdrawal from the coal plant. A third party with an anti-international and pro-green energy platform saw no change in vote share amongst either subgroup.

Finally, I discuss the implications of these results for the domestic political economy of foreign aid. While international agencies have practical and normative incentives to change aid policies in line with global shifts in priorities and technological advancements, the sunk costs of existing aid projects may cause friction in these transitions for aid recipients. This is particularly salient in the case of climate change mitigation efforts. While international aid

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<sup>1</sup>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)

<sup>2</sup>*Reuters*. “World Bank pulls out of Kosovo coal power plant project.” 10 October 2018. <https://www.reuters.com/article/worldbank-kosovo/world-bank-pulls-out-of-kosovo-coal-power-plant-project-idUKL8N1WQ518>



organizations have made adding additional climate adaptation and mitigation aid a priority, I demonstrate that failure to consider the consequences of altering or abandoning projects developed in less climate-friendly periods may cost international actors allies in prospective recipient countries. This finding notably unites the foreign aid and climate transition literatures by illustrating the link between lost employment prospects and lower support for climate change mitigation amongst transition “losers” (Gaikwad *et al.*, 2020; Scoville-Simonds *et al.*, 2020; Zucker, 2021)—as well as increased support for the international community amongst those exposed to renewable energy generations. This is both substantively and theoretically significant as lower support for the international ally party suggests 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 donor-led climate policy by drawing close attention to the distributional consequences of aid withdrawal.

## 2 Aid withdrawal: descriptions

Aid withdrawal removes a “carrot” intended to induce donor-preferred behavior in target states (De Mesquita & Smith, 2007; Bueno de Mesquita & Smith, 2009; Mertens, 2021). Strategically, aid withdrawal is a low-cost method through which donors can alter policy in recipient countries. Taking away funding signals donor disapproval; indeed, non-specific aid withdrawal is often used to punish recipients for pursuing goal misaligned with donors. In the wake of Tanzania’s 2018 anti-gay laws, for example, many Western donors suspended aid programs in the country in protest (Brown, 2022). General aid withdrawal is considered a

form of economic sanction (Kohno *et al.*, 2020; Nielsen, 2013). On the other hand, recipient governments may change their preferences and remove cooperation from donors to ensure that these priorities are reflected in domestic aid projects.

However, donors have many reasons for rescinding promised funding *independent* of recipient politics. Political shifts in donor countries may alter the composition of power and preferences for aid donations (Dietrich *et al.*, 2020; Greene & Licht, 2018; Thérien & Noel, 2000). Aid withdrawal may respond to donor country domestic political shocks by reducing overall aid flows (Goldstein & Moss, 2005) or changing the targets of aid (Starrs, 2017), resulting in aid withdrawal events exogenous to recipient country policies.<sup>3</sup> Fluctuations in the global economy could generate different demands for aid across sectors (Dolan & Nguyen, 2021; Heinrich *et al.*, 2016; Kobayashi *et al.*, 2021). Technological developments may alter the cost-benefit calculations for a given aid project and drive shifts in policy changes that are also unrelated to recipient country actions or characteristics (Aiken *et al.*, 2022; Haushofer & Shapiro, 2016; MacLean & Brass, 2015; Reinsberg, 2019). When prior donor funding is at extreme odds from current donor preferences and capacity, withdrawing support for previous projects is one method of advancing these priorities (Molenaers *et al.*, 2015; Swedlund, 2017a,b). For climate aid, removing donor investment from fossil fuel projects is a clear means of ensuring that donor funding is used for climate-friendly means. In 2013, for example, 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).

Aid withdrawal shifts the distribution of benefits within the economic pie as well as the pie itself. Individual projects, or aid targeted at specific sectors, benefit particular populations more than others. Reducing support for these existing projects empowers rival factions. In the case of energy aid, the size and division of the pie is particularly relevant because

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<sup>3</sup>See Hudson & Mosley (2008); Kharas (2008); Bulíř & Hamann (2003); Hudson (2015); Fielding & Mavrotas (2008) for more on how aid volatility affects growth.

energy production requires government or international guarantees of a market in order for investments in new fossil fuel or renewable plants to be profitable. 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.”<sup>4</sup> 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.<sup>5</sup>

Descriptively, determining the frequency, and causes, of aid withdrawal is a challenge due to poor aid disbursement data quality (Tierney *et al.*, 2011), political incentives to mislabel<sup>6</sup>, and bureaucratic incentives to downplay problematic projects (Weaver, 2008). I collect novel data from the World Bank’s Monthly Operational Summaries (MOS) to provide a lower bound of the frequency and form of aid withdrawal.<sup>7</sup> With these data, which include details on projects in progress but not yet approved by the World Bank, I show the first evidence (to my knowledge) of the rate at which specifically energy aid projects are withdrawn in Figure 1. Withdrawn projects are not evenly spread across World Bank sectors; energy projects are particularly likely to be withdrawn (see Appendix A). On average, ten percent of proposed World Bank projects are withdrawn. For energy projects, this rate increases dramatically from 2004 to 2015. As Figure 1 shows that, in the midst of the World Bank’s transition away from coal funding, over 30% of proposed energy projects were withdrawn. The majority of

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<sup>4</sup>*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>

<sup>5</sup>“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>

<sup>6</sup>For example, US President Donald Trump claimed to have suspended aid to Ukraine due to corruption when, in fact, phone transcripts showed his own political reasons.

<sup>7</sup>For a full description of these data, see Appendix A

these projects supported fossil fuel production and were subsequently replaced by renewable energy projects (see Appendix A).

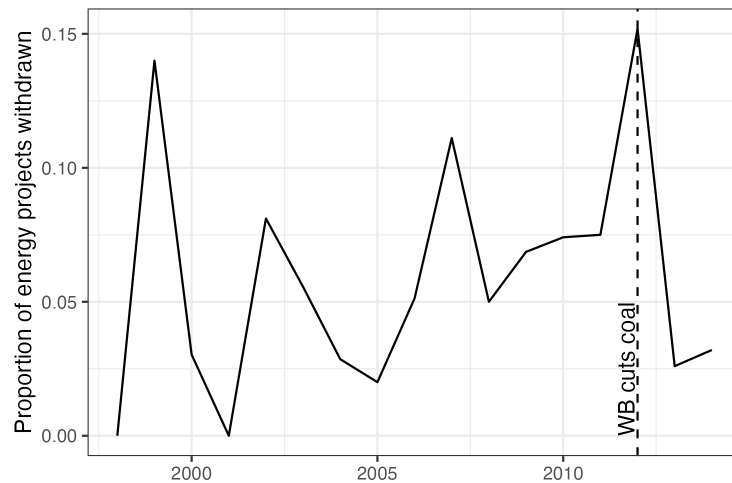


Figure 1: *Aid withdrawal rates in energy sector*: Proportion of projects from 1998 to 2015 withdrawn. Black line represents proportion of projects last reported on in a given year that were withdrawn. Dotted horizontal line at 2013 shows the year in which the World Bank pledged to remove funding for coal plants. Data collected by author from World Bank Monthly Operational Summaries.

Energy projects are highly politicized, visible, and salient to recipient publics (Marx, 2017; Zeitz, 2021).<sup>8</sup> In aid-dependent contexts, aid beneficiaries 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

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<sup>8</sup>While the MOS occasionally describe the reasons for withdrawal, from economic crises in recipient countries to security concerns to the formation of new governments, more often than not the project is described as “no longer in the current lending program” without further elaboration. The data may tell us the frequency of overall withdrawal, but not why the projects were withdrawn.

provision of these goods (Baldwin & Winters, 2023; Dolan, 2020; Ijaz, 2020; Young, 2009).

Donor preferences for climate policy may be especially likely to generate aid withdrawal events as environmental standards are directly weighed against other benefits of aid projects. When climate-based concerns become more salient than other types of concerns, projects that otherwise align with donor priorities may too be costly to fund. The World Bank, for example, developed stronger environmental protections after high-profile incidents of infrastructure projects, particularly large dams and road projects, came under severe criticism from local activists, NGOs, and the US Congress in the late 1980s and early 1990s, leading to a shift in the types of projects sponsored by the Bank from heavy infrastructure to more social and environmental projects (Nielson & Tierney, 2003; Wade, 1997, 2002; Weaver, 2008). In the case of energy projects, it is more possible for support *within a given project* to reverse. Focusing on environmental standards may reverse support for established projects rather than support for aid in a country more generally; a donor may put more weight on democratization one year than another, but is unlikely to have supported a project that is deliberately authoritarian in the past and have to pull funding upon valuing democratization.

Specifically with regard to energy aid, fears that China could step in to fund projects with “even fewer environmental safeguards” are rampant within the aid industry despite calls to reduce funding for fossil fuel projects.<sup>9</sup> One of the most notorious World Bank projects, the Narmada Dam project in India, was withdrawn due to global environmental activism and local resistance to displacement; however, the Indian government planned to go forward with the project without the Bank’s support, and with less attention to environmental damage (Nielson & Tierney, 2003). The presence of alternative funding is a clear deterrent for aid withdrawal, even when that withdrawal is in line with the original donor’s policy preferences (Kohno *et al.*, 2021). In circumstances where additional funding is not available, however,

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<sup>9</sup>Plumer, Brad. “The U.S. will stop financing coal plants abroad. That’s a huge shift.” *Washington Post*. June 27, 2013. <https://www.washingtonpost.com/news/wonk/wp/2013/06/27/the-u-s-will-stop-subsidizing-coal-plants-overseas-is-the-world-bank-next/>

aid withdrawal can have consequential impacts on recipient political economies, as I describe below in Section 3.

### **3 The domestic political economy of aid withdrawal**

Aid withdrawal from specific projects leaves recipients without established funding to complete the projects. What are the distributional effects of this shift in donor priorities? I theorize that people in recipient countries who live close to the proposed projects, particularly infrastructure projects, disproportionately benefit from the projects due to local boosts in employment. When aid is withdrawn, these same communities bear greater costs from the loss of funding compared to communities further from the planned projects. However, some locations may benefit from priority shifts that generate new projects or increase support for existing projects in other communities.

The political effects of the distributional consequences of aid withdrawal will depend on how voters perceive party platforms as in alignment with donor priority shifts or opposed to them. Parties may polarize around donor priorities for various reasons. Incumbent parties that are in power when the aid is withdrawn have clear incentives to move forward with projects in order to avoid breaking promises to their constituents (Schneider & Thomson, 2021; Stokes, 2001). Parties without clear ties to the project should be less inclined to pursue the continuation of the project (or compensate losers) because they do not bear political costs of the project's failure. In line with work on political targeting of aid projects, parties not associated with the project also may not be actively courting the voters who would benefit most from the project. Parties with clear connections to the international community may develop a reputation amongst their constituents for acquiring aid (Dolan, 2020; Ijaz, 2020) or for general affinity with international norms and preferences (Terman, 2019). These parties also are likely to value their relationship with internationals and see

this as a selling point for their voters, reducing incentives to threaten that relationship by publicly blaming internationals for aid project failures. Parties *without* clear ties to the international community are not constrained by their reputation amongst citizens or donors in their ability to shift blame to internationals. In fact, this may be an optimal strategy given that their non-alignment towards, or even alignment against, the international community may be a selling point for voters in the aftermath of aid withdrawals.

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

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. Two hypotheses emerge from these theoretical expectations.

*H1*: Aid withdrawal “losers” decrease support for parties linked to international donors/increase support for anti-international actor.

*H2*: Aid withdrawal “winners” increase support for parties linked to international donors/decrease support for anti-international actors.

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. Revising the hypotheses for the context of the internationally led energy transition:

*H1a*: Fossil fuel communities decrease support for parties linked to international donors/increase support for anti-international actor.

*H2a*: Renewable energy communities increase support for parties linked to international donors/decrease support for anti-international actors.

Geographically, however, some areas are more suited to some types of aid projects than others. The spatial distribution of potential energy generation, in particular, affects which populations can benefit from jobs created by the transition to renewables. Donors may not be able to target renewable energy investments at the populations that lose jobs in fossil fuel extractive industries if the environment in which the original project was planned



is unsuitable for other forms of energy production. Depending on the relative size of the winners and losers from policy changes, donors' attempts to shift recipient priorities in line with their own could undermine not only their own influence, but that of their political allies. I explore this dynamic in the case of Kosovo.

## 4 Coal, Kosovo, and the World Bank

When the World Bank's widely publicized decision to forgo funding for coal plants was announced in 2013, major news outlets' coverage cited the Bank's involvement in a coal-powered plant in Kosovo as the Bank's first major challenge: <sup>10</sup> Kosovo is a case of extreme dependence on the international community for both economic support and security. Kosovo was released from Serbian rule in 1999 after an unsuccessful Albanian insurgency, a Serbian attempt at ethnic cleansing, and several months of NATO bombings of Belgrade. The nascent state declared independence in 2008 after almost a decade of provisional rule by the United Nations Mission in Kosovo. In the years since the NATO bombings, Kosovo has been one of the biggest beneficiaries of international aid per capita.<sup>11</sup> Given Kosovo's proximity to the EU, Western donors have a vested interest in ensuring the stability and growth of the country (Bermeo & Leblang, 2015; Papadimitriou *et al.*, 2007). The power asymmetry between Kosovo and its international donors and creditors makes it an appropriate case

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<sup>10</sup>"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>.

<sup>11</sup>The OECD puts Kosovo in the top 25% of aid recipients on a per-capita basis.

study for the domestic political consequences of aid withdrawal.

The energy sector in Kosovo faced challenges after the war because it lacked safe, existing energy infrastructure and political disagreements with its neighbors, primarily Serbia, prevented easy import of energy. Blackouts and shortages were common in the decade leading up to independence and continue to this day. Two central power plants, Kosovo A and Kosovo B, continue to provide the majority of electricity to citizens despite running on coal. In the words of the *New York Times*, “Coal plants don’t come much dirtier than Kosovo A.”<sup>12</sup> The idea of building a new power plant in lieu of or in addition to the renovation of the existing power plants was supported by the Government of Kosovo<sup>13</sup> and all of its international partners due to the economic and social costs of irregular power supplies.<sup>14</sup> While the international community had reservations about the environmental costs of the proposed power plant, these concerns were outweighed by the benefits to economic and security stability offered by a domestic power source.

In 2006, the World Bank partnered with Kosovo to address the demands on the country’s electric grid.<sup>15</sup> The World Bank did not require policy concessions from Kosovo; the goals of the investors and grant recipient were in line. In proposing the power plant, dubbed “Kosova e Re” [“New Kosovo”]<sup>16</sup>, the World Bank had to balance concerns about funding coal power

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<sup>12</sup>“U.S. on Both Sides of New Battle Over Assistance to ‘Ugly’ Coal-Fired Power Plant” Lisa Friedman. 11 July 2011. *New York Times* <https://archive.nytimes.com/www.nytimes.com/cwire/2011/07/11/11climatewire-us-on-both-sides-of-new-battle-over-assistan-96428.html?pagewanted=all>

<sup>13</sup>Before 2008, the Government of Kosovo was known as the Provisional Institutions of Self-Government, or PISG.

<sup>14</sup>“Based upon data provided by the KEK [Kosovo Energy Company] Capacity Management Department, the percentage of unserved demand (the ratio of unserved energy to supplied energy plus unserved energy) was 14.03% in 2006.”(iv) “Korporata Energjetike e Kosoves (KEK) Network and Supply Project 2007 to 2013 Final Report: USAID Contract Number EPP-I-04-03-00008-00.” July 2013. Produced by Tetra Tech ES. [https://pdf.usaid.gov/pdf\\_docs/PBAAA300.pdf](https://pdf.usaid.gov/pdf_docs/PBAAA300.pdf)

<sup>15</sup><https://projects.worldbank.org/en/projects-operations/project-detail/P097635>

<sup>16</sup>Originally the plant was called “Kosovo C” in reference to the existing Kosovo A and B plants but was rebranded to increase the distance between the unpopular and pollutant-generating plants and the new, “cleaner” plant. “Pas 11 vitesh plane, fillon ndërtimi i termocentralit “Kosova e Re.” *Telegrafi* 12 June 2015. <https://telegrafi.com/pas-11-vitesh-plane-fillon-ndertimi-i-termocentralit-kosova-e-re/>

in the 21st century and providing a stable source of electricity for Kosovars. From 2006 to 2017, the World Bank argued that coal was the most viable source of energy for Kosovo and therefore an exception to its own ban on funding coal power. Support for the plant continued even after the World Bank pledged to fund no more coal plants in 2013. World Bank president Dr. Jim Jong Kim stated in 2014, “Climate change and the coal problem is one thing, but the humanitarian issue is another, and we cannot turn our backs on the people of Kosovo who face freezing to death if we do not move.”<sup>17</sup> The cost of developing renewables exceeded that of coal, even when environmental and health spillover effects were included.<sup>18</sup> Kosovo frequently cited the World Bank’s, and other international actors’, support for the use of coal as justification for the project; the Minister of Economic Development noted in early 2018 that “the ‘New Kosovo’ TPP is one of the few exceptions in the world that the World Bank has made to finance it, which will generate electricity from lignite.”<sup>19</sup>

However, the World Bank officially withdrew its support for the power plant in October 2018, twelve years after it had first agreed to work with Kosovo to develop it.<sup>20</sup> The

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<sup>17</sup>“Kosova C: A është ndonjëherë thëngjilli investim i pastër?” *Zeri*. 15 January 2016. <https://zeri.info/ekonomia/71994/kosova-c-a-eshte-ndonjehere-thengjilli-investim-i-paster/>

<sup>18</sup>“It is undisputed that the World Bank is no great proponent of coal energy, but it is also correct that Kosovo is an exception. Even though it is not a large country, it has the world’s fifth-largest lignite reserves. It is estimated that at least 10.9 billion tons are exploitable, which means that, with current consumption, there is enough coal for the next 1,500 years. At the same time, the preconditions for generating electricity from wind and hydro sources are unfavorable.” “An Example of How Things Should Not Be Done.” *World Bank News*. 7 August 2014. <https://www.worldbank.org/en/news/opinion/2014/08/07/example-how-things-should-not-be-done>

<sup>19</sup>“Lluka flet për rëndësinë e termocentralit “Kosova e Re”.” *Koha*. 22 April 2018. <https://www.koha.net/arberi/88769/lluka-flet-per-rendesine-e-termocentralit-kosova-e-re/>. Kosovo authorities say they have strong World Bank support for the construction of the “New Kosovo” power plant, and have warned that the project is in the final stages of finalization. The statements followed the World Bank’s letter sent to the Economic Development Minister confirming that ‘support in principle is conditional on meeting all the necessary technical, economic, environmental, social, legal and financial criteria of the World Bank Group’. “Termocentrali i ri drejt finalizimit, Banka Botërore kërkon përmbushjen e kushteve.” *Radio Evropa e Lire*. 22 June 2017. <https://www.evropaelire.org/a/28325140.html>

<sup>20</sup>“World Bank pulls out of Kosovo coal power plant project.” *Reuters*. 10 October 2018. <https://uk.reuters.com/article/worldbank-kosovo/world-bank-pulls-out-of-kosovo-coal-power-plant-project-idUKL8N1WQ518>

least-costly option for energy in Kosovo, when factoring in environmental and health costs, had become renewable sources, whose price had plummeted since the plant had first been proposed.<sup>21</sup> The Kosovan government pledged to continue with the plant with other international or domestic funding but this decision faced pushback from civil society and parliamentary opposition parties.

In the wake of the withdrawal, and prior to the 2019 parliamentary elections, the three major political parties in Kosovo diverged on their approaches to the withdrawal of international support for the power plant. The incumbent party, PDK (henceforth *incumbent* party), campaigned on promises of moving forward with the project despite lack of international support. 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. LV (henceforth, *populist* party), a populist opposition party emerging from the “Movement for Self-Determination” and known for its anti-elite and anti-international rhetoric, opposed building the plant even before the international community withdrew its support. The pro-Western, internationally supported party, LDK (henceforth, *international* party), tacitly accepted the withdrawal while pledging future investment in renewable energy. The international party has historically appealed to international donors from its initial nonviolent resistance to Serbian aggression to its support from the Kosovar diaspora.

The opposition defeated the ruling party handily in the October 2019 elections. The populist party made major gains in political power at the expense of the incumbent party and formed a governing coalition with the internationalist party.<sup>22</sup> In 2020, the company

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<sup>21</sup> “Energy in Kosovo.” *World Bank*. October 2018. <https://www.worldbank.org/en/country/kosovo/brief/energy-in-kosovo>

<sup>22</sup> “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/>

contracted with building the coal plant withdrew from the project, citing lack of government support as a primary reason.<sup>23</sup> 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; one climate expert in the country “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?’”<sup>24</sup>

Ultimately, the World Bank rescinded its support because of an exogenous drop in alternative energy pricing, not because of actions or lack thereof on the part of Kosovo. The initial issue of the need for domestic energy generation has never been in dispute in Kosovo politics, but the World Bank’s initial support for the power plant led the governing party to make the plant a salient issue in its campaign messaging. The visibility and importance of the project for governing party supporters created an opening for the opposition party to take a stance against the project in-line with its anti-imperialist message. In contrast, the party with the closest ties to the international community refused to criticize the withdrawal of international support.

In the following section, I examine the causal effect of aid withdrawal on support for political parties. Theoretically, I expect voters for whom changes in energy production are salient to be particularly attentive to aid withdrawal. 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 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

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<sup>23</sup>Gallop, Pippa. “ContourGlobal finally quits Kosova e Re coal plant”. *Bankwatch Network*. 17 March 2020. <https://bankwatch.org/blog/contourglobal-finally-quits-kosova-e-re-coal-plant>

<sup>24</sup>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/>

Party	Party position		Expected effect of withdrawal (vote share)	
	Support drawal	with- community	Coal community	Renewable com- munities
Incumbent	-	-	Increase	Decrease
International	✓	✓	Decrease	Increase
Populist	✓	-	No change	No change

Table 1: *Party positions*: Support for coal plant withdrawal and the international community by political party.

party given its support for renewables and its backing by the international community. The populist 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 1 depicts the positions of each party with regard to the withdrawal of the plant and the international community as well as empirical expectations.

## 5 Empirics

I use observational and experimental data to understand how withdrawing energy aid affects donors, domestic allies, and policy predictions amongst recipients. First, I use a spatial difference-in-differences strategy to identify the effect of aid withdrawal on party vote share amongst individuals close to and farther from the planned project. Then, I field a survey experiment to explore citizens’ political expectations in the wake of aid withdrawal.

### 5.1 Observational evidence

I put together a novel dataset of geolocated polling stations in Kosovo from 2010-2021.<sup>25</sup> In total, I observe 818 polling stations across five national elections (2010, 2014, 2017, 2019,

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<sup>25</sup>Polling station-level electoral results are only available from 2010 onwards from the Kosovo Central Election Commission.

and 2021). I calculate the absolute distance from each polling station to the planned Kosovo B power plant. In the main specification, I use bandwidth of 15 kilometers to determine “exposure” to the power plant.<sup>26</sup> The model is robust to multiple bandwidths. Figure 2 shows the individual polling station locations as well as the location of the planned power plant.



Figure 2: *Locations of polls and ‘Kosova e Re’*: Geolocated polling stations are represented by black dots. Location of planned ‘Kosova e Re’ plant depicted with a red triangle.

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

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<sup>26</sup>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 aid exposure compared to the existing literature, which applies a 50km bandwidth (Briggs, 2019), but one that more appropriately approximates the exposure of individuals to aid 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 aid projects with statistical power, as fewer polling stations are included in a lower (5km, for example) bandwidth.

to and further from the proposed plant.<sup>27</sup> A key assumption in the difference-in-differences design is that the control units are not affected by treatment. In the case of the power plant, all units are treated by both the *information content* of the withdrawal and the *national benefits and costs* of access to energy from the power plant. All people in Kosovo received the campaign information from political parties about the power plant and all Kosovans would benefit from the energy stability created by the power plant and pay the associated fiscal and pollution costs of self-funding it. However, only people voting at polling stations close to the power plant benefit from the employment opportunities offered by the plant. Treatment, then, is the access to potential power plant employment, which can be considered excludable from the further control units.

One potential threat to inference is the existence of pre-election coalitions in Kosovo’s national 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 incumbent formed a pre-election coalition in the third time period in the study (2017), with the internationalist party and a third incumbent 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.<sup>28</sup> 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

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<sup>27</sup>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.

<sup>28</sup>See Appendix Table K for a full accounting of pre- and post-electoral coalitions.



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.

Figure 3 shows the resulting coefficients for the synthetic difference-in-differences results. The incumbent party's vote share increases by four percentage points ( $SE = 0.008$ ), the internationalist party's decreases by two ( $SE = 0.005$ ), and populist party's decreases by less than one ( $SE = 0.006$ ) in polling stations close to the proposed power plant.

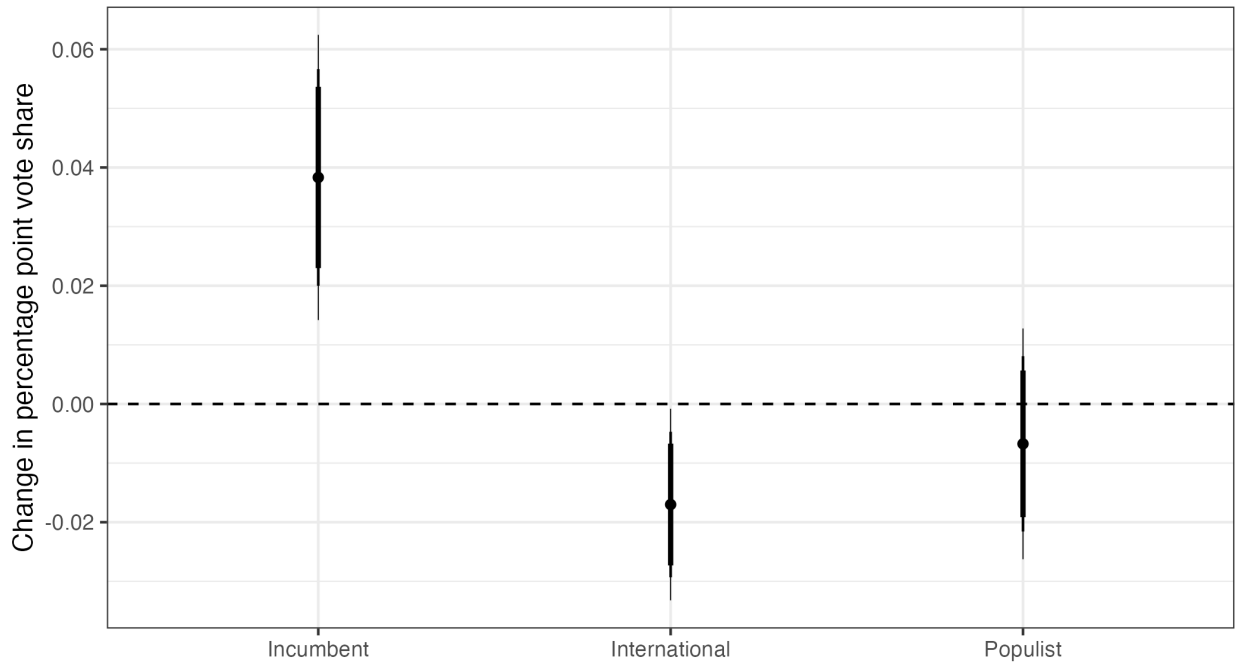


Figure 3: *Coal energy synthetic difference-in-differences*: Coefficients for the interaction term, **Close\*Post-2018**, using a 15km bandwidth of exposure (**Close**). 90, 95, and 99% confidence intervals depicted. Three separate models estimated by party: Incumbent is the leftmost point estimate, International the center, and Populist the rightmost.

The theory of donor priority shifts predicts a decrease in vote share for parties that adhere to donor politics at the expense of local economic concerns. However, if donor priority shifts are in line with local economic concerns, parties affiliated with donor policies should benefit. I examine locations in Kosovo that should benefit from greater donor commitment to

Company	Renewable	Municipality	Year est.	Capacity (kw)
LED Light Technology Kosovoa	Solar	Klina	2015	102.00
ONIX Spa	Solar	Istog	2016	500.00
Birra Peha	Solar	Gjakova	2018	3000.00
Frigo Food Kosova	Solar	Gjakova	2018	3000.00
Eling	Solar	Peja	2019	480.00
Solar Green Energy	Solar	Kamenica	2019	3000.00
Kitka	Wind	Kamenica	2019	32,400.00

Table 2: *Renewable energy projects in Kosovo (active in 2019)*: Information from “Kosovo energy security of supply: Assessment of PV Generators in Kosovo,” January 2021 USAID report.

renewable energy in the wake of withdrawal from the planned coal power plant. Compared to areas that are not likes to experience investment in renewable energy, people in municipalities with high potential for solar power should be aware of the benefits of renewable energy for both the local workforce and environmental protection. As electricity generated by the specified renewable sources is distributed through the national electric grid, proximity to these potential projects does not ensure greater stability of energy supply but may support the local economy through job provision and increased local demand. As a member of the Energy Community Treaty (EnCT), a commitment between states in southern Europe and European Union member states to expand access to European energy, Kosovo has set up a funding mechanism to support investment in renewable energy along with international funding <sup>29</sup>.

I use a difference-in-differences strategy to estimate the effect of proximity to potential renewable energy sources on vote share for different parties in the wake of the withdrawal of international support for the ‘Kosova e Re’ power plant. Figure 4 depicts the locations of renewable energy plants funded by the international community. As the plants are located in several different regions in Kosovo, this test reduces the likelihood that the differences in

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<sup>29</sup>Specifically, renewable projects will be supported by a feed-in tariff funding mechanism which ensures that renewable energy will be purchased before oil and gas in order to maintain steady demand.

vote share for affected regions are due to other political geographic characteristics.

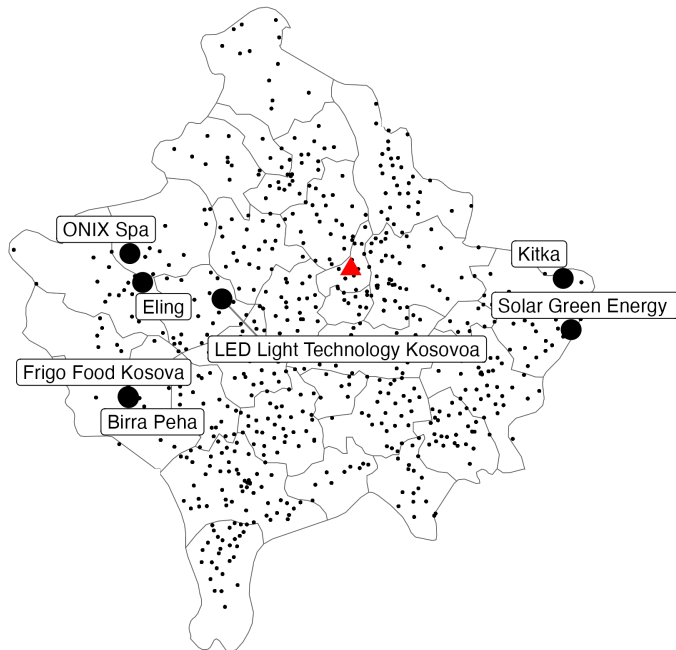


Figure 4: *Locations of polls and renewable energy:* Geolocated polling stations are represented by black dots. Geolocated renewable energy plants are represented by red triangles.

I adjust for the issue of pre-electoral coalitions using the synthetic difference-in-differences model. Under this model, seen in Figure 5, the incumbent party's support drops by five percentage points ( $SE = 0.008$ ) while the populist's drops by one percentage point ( $SE = 0.006$ ) in municipalities in the 80th percentile of photovoltaic potential. In contrast, the internationalist party's increases by two percentage points ( $SE = 0.005$ ). These results are largely consistent with the original difference-in-differences specification.

The results are robust to a number of different specifications. Appendix B reruns both the coal and renewable models with additional smaller and larger bandwidths—the results remain substantively the same across exposure distances. Additional models with the inclusion of covariates at the municipal level also replicate the main findings for both the coal and renewable models. The results for renewable energy plants replicate when considering future

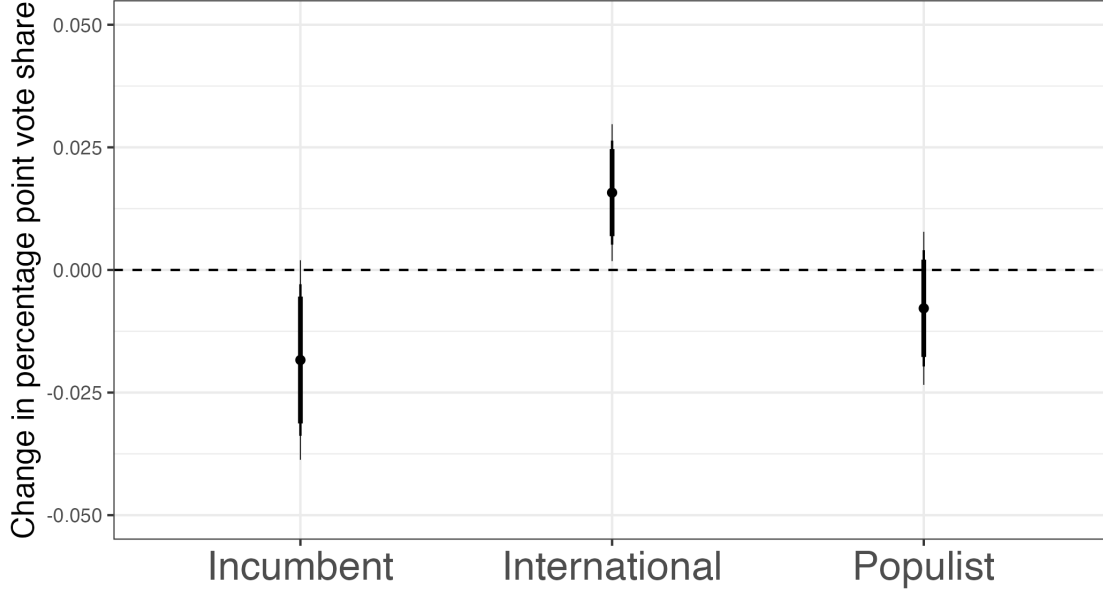


Figure 5: *Renewable energy synthetic difference-in-differences*: Coefficients for the interaction term, **Close\*Post-2018**, using a 15km bandwidth of exposure (**Close**). 90, 95, and 99% confidence intervals depicted. Three separate models estimated by party: Incumbent is the leftmost point estimate, International the center, and Populist the rightmost.

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 I). I also run geographical placebos for both sets of findings in Appendix F; the results for the incumbent party are significantly different in areas that are exposed to the coal plant or to renewable energy compared to placebo locations.

## 6 Alternative mechanisms

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 incumbent, the party proposing to move forward with the plant, 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 incumbent’s efforts. Instead, results from polling stations in the vicinity of renewable energy plants show clear increased support for the internationalist 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 L shows that the area around the coal plant sees disproportionate coverage of the coal plant, but not of renewable energy or pollution.

Second, withdrawal could create pressure on the energy grid, increasing energy prices.<sup>30</sup> High-energy consumers might then be more likely to vote for the incumbent party and against the international party in order to restore energy prices. Appendix J 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 incumbent and against the 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

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<sup>30</sup>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.

the party supporting renewables with international support.<sup>31</sup>

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 H, 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 60).

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 international and incumbent party, respectively. Ideational backlash would also be more likely to increase support for the populist party, which explicitly blamed the World Bank for its failure to follow through with the project—empirically the populist party sees no change in its vote share. Evidence from a novel survey experiment fielded in Kosovo finds null effects of information about energy aid and the withdrawal of energy aid on propensity to vote for an incumbent politician (see Appendix M).<sup>32</sup> This suggests that, while information may play a role in backlash politics, the economic impacts likely dominate.

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<sup>31</sup>Importantly, these results are not a consequence of a sudden increase in energy demand overall or in particular sectors (see Appendix H)—rather, they are in line with expectations of *future* energy generation from coal and renewables.

<sup>32</sup>Survey respondents in the coal municipality, however, are more likely to shift their expectations of economic outcomes in response to information about energy aid—evidence consistent with a focus on local economic conditions rather than a pure information effect.

## 7 Discussion

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.

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). South Africa saw an increase in coal exports to Europe in the wake of Russia’s invasion of Ukraine <sup>33</sup>, undermining donors’ ability to push the country to decommission its coal plants.<sup>34</sup> 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. <sup>35</sup> The viability of renewable energy development within aid-dependent countries is also in flux as domestic investments in renewable energy production in the United States, Europe, Canada, and Australia, including the seminal Inflation Reduction Act of 2022, undermine the competitiveness of renewable energy in the Global South. The chief economist of the Asian Development Bank noted of the new industrial policies, “We just think all of that is terrible for the world. You’re going to slow the green transition.”<sup>36</sup>

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

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<sup>33</sup>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>

<sup>34</sup>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>

<sup>35</sup>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/>

<sup>36</sup>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>



of aid withdrawal and the energy transition.<sup>37</sup> 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.

## 8 Conclusion

Aid withdrawal is common and costly. In the internationally sponsored energy transition, it plays a particularly important role. Evidence from the World Bank shows high rates of discontinuation of energy projects even 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. Aid withdrawal as a tool of policy change can effectively reverse donor commitments to projects no longer aligned with donor priorities, but may have longer-term costs on donor influence in a given state if donor allies lose ground.

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

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<sup>37</sup>Shukman, David. “China-backed coal projects prompt climate change fears.” *BBC* 22 November 2018. <https://www.bbc.co.uk/news/science-environment-46310807>

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.

However, the development projects negotiated when the energy-environment balance was skewed towards fossil fuels did not disappear with the emergence of new environmental standards. While projects going forward will start from the premise of renewables being both more cost-effective and climate-friendly than fossil fuels, international aid agencies are faced with the prospect of either moving forward with a number of ongoing or planned fossil fuel-intensive projects against their internal protocols, altering the projects to be more climate-friendly, or dropping the projects altogether. International aid organizations choose between the direct environmental costs of continuing less-climate-sensitive aid programs and undermining their own bargaining power in recipient contexts in which internationals withdraw or alter the composition of benefits for planned or ongoing aid 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.

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# A 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.

## **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.mousalem@undp-lebprojects.org, Contact: Manal Mousalem, 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 (NE-LACEP):** 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.

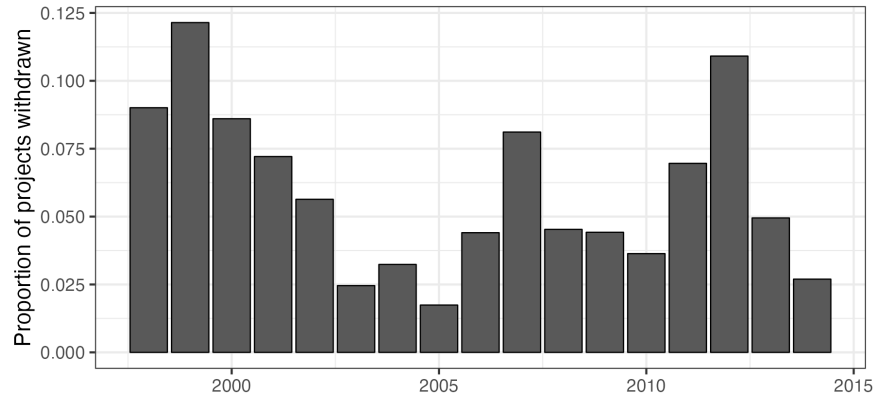


Figure 6: *Aid withdrawal rates by year*: Aggregated by year from projects ended from 1998 to 2015. Data collected by author from World Bank Monthly Operational Summaries.

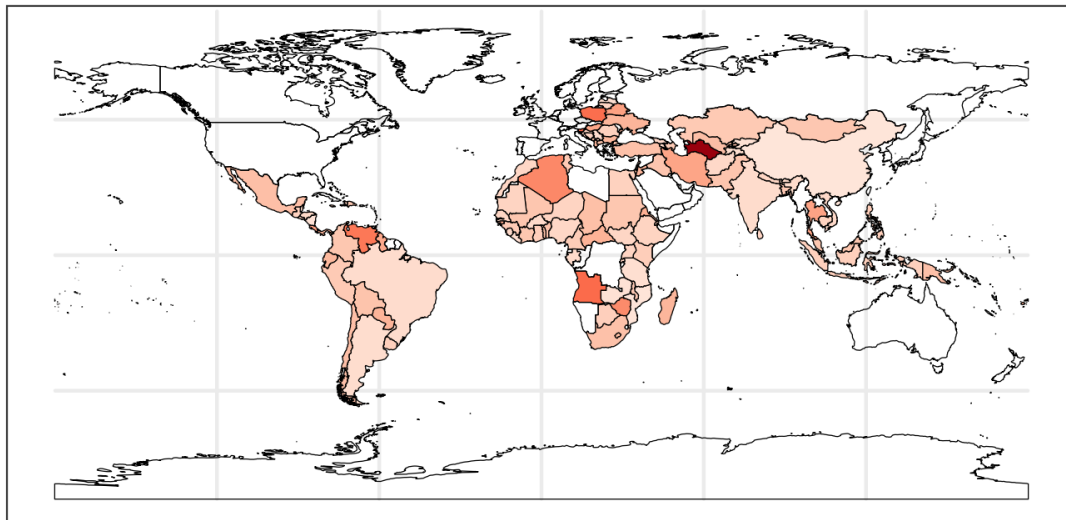


Figure 7: *Proportion projects withdrawn*: Proportion of total projects withdrawn by country.

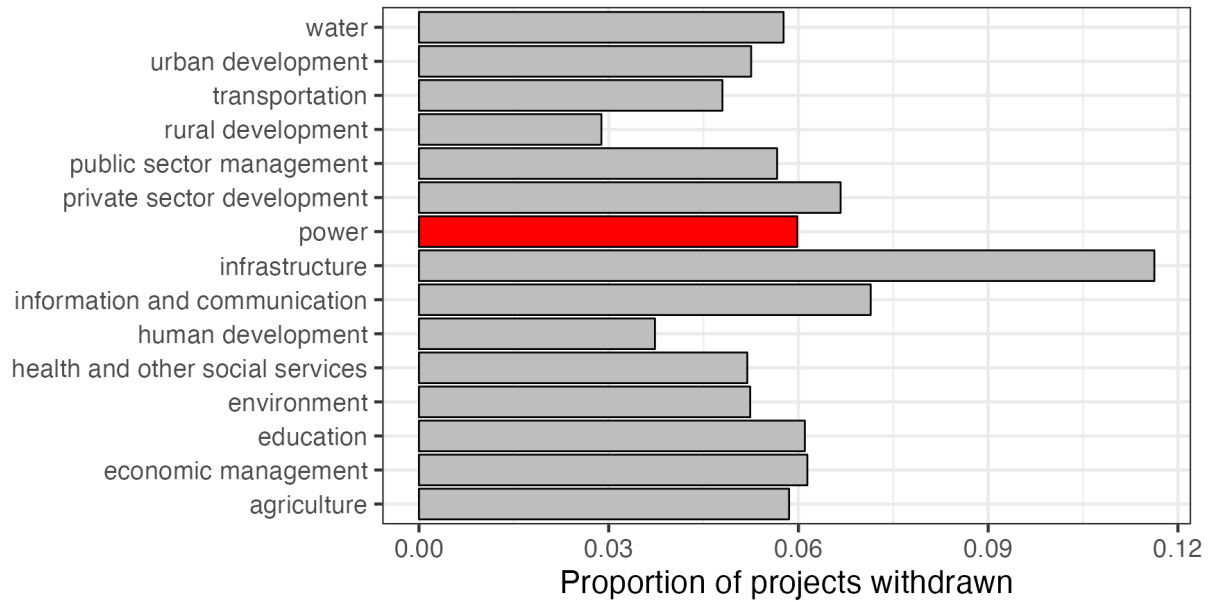


Figure 8: *Aid withdrawal rates by sector:* Aggregated by sector from projects started from 2004 to 2013. Data collected by author from World Bank Monthly Operational Summaries.

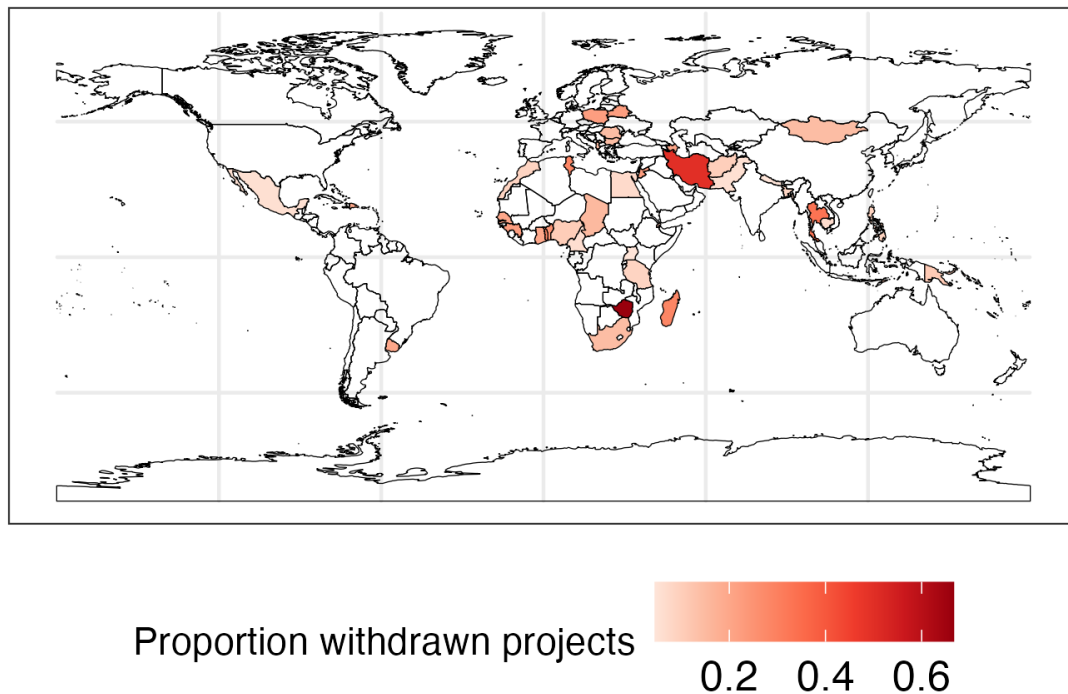


Figure 9: *Proportion energy projects withdrawn:* Proportion of total energy projects withdrawn by country.

## B Bandwidths

Figure 10 shows the main difference-in-difference results for exposure to aid withdrawal by party. The main model specification uses a fifteen kilometer bandwidth around the location of the proposed plant to determine whether a given polling station is considered affected.

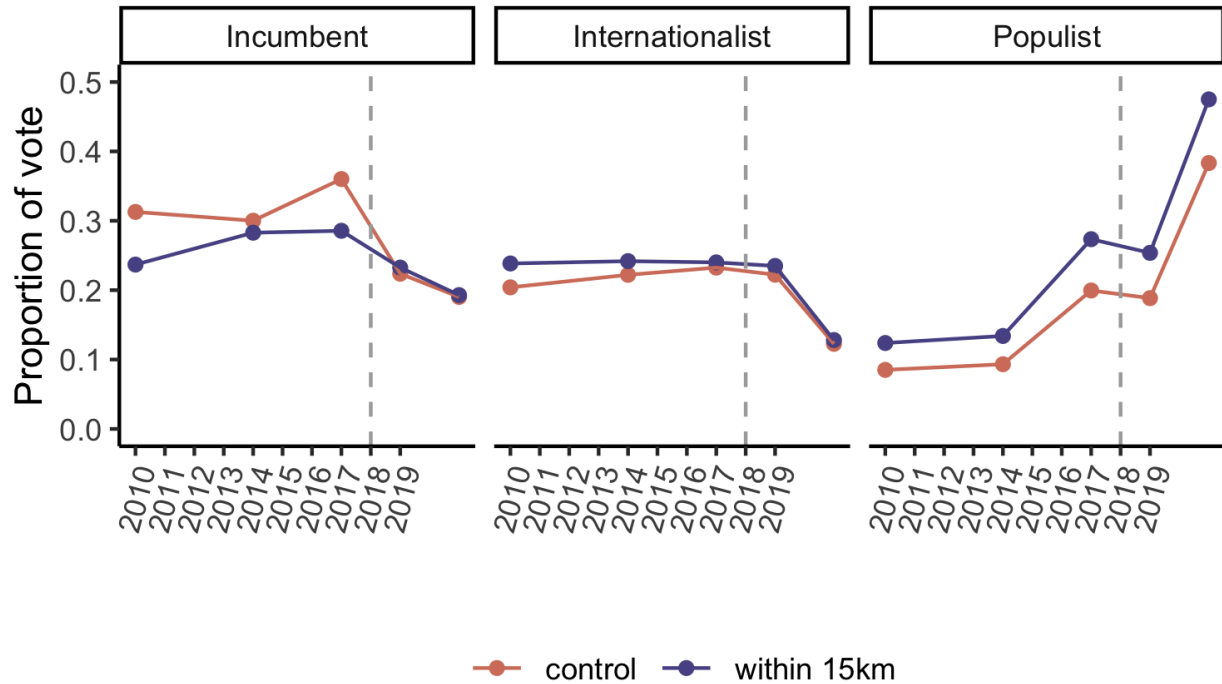


Figure 10: *Difference-in-differences for ‘Kosova e Re’*: Vote share by party using 15km bandwidth around planned coal plant.

Table 10 shows difference-in-difference results for proximity to the planned ‘Kosova e Re’ power plant with a 15 kilometer bandwidth determining “closeness” to the affected plant. Models 1-3 depict results for each main party with no fixed effects or controls. Models 4-6 include municipal fixed effects while models 7-9 include both municipal fixed effects and control variables. The control variables, all at the municipal level, include Population, Population density, Nighttime lights, Temperature (average), Wind speed (average), Solar exposure (average), and Elevation. Population and

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Intl.	Pop.	Incumb.	Intl.	Pop.	Incumb.	Intl.	Pop.	Incumb.
Close	0.02 (0.06)	0.05 (0.04)	-0.05 (0.06)	0.07** (0.02)	0.25*** (0.02)	0.06** (0.02)	-0.61 (0.52)	0.94 (0.98)	0.15 (1.09)
Post-2019	-0.04*** (0.01)	0.15*** (0.01)	-0.11*** (0.01)	0.03** (0.01)	0.11*** (0.01)	-0.08*** (0.02)	-0.004 (0.05)	0.15 (0.10)	-0.02 (0.10)
Close*	-0.01 (0.03)	0.03 (0.02)	0.06** (0.02)	-0.04 (0.03)	0.02 (0.03)	0.05* (0.02)	-0.01 (0.02)	0.01 (0.01)	0.05* (0.02)
Poll*Year FE	-	-	-	✓	✓	✓	✓	✓	✓
Covs	-	-	-	-	-	-	✓	✓	✓
Adj. R <sup>2</sup>	0.03	0.20	0.06	0.84	0.83	0.84	0.86	0.85	0.81
Num. units.	818	818	818	818	818	818	790	792	792
N Clusters	37	37	37	37	37	37	37	37	37

\*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.10$

Table 3: *Proximity to planned coal plant (15km)*: Difference-in-differences models estimating effect of proximity to the planned ‘Kosova e Re’ power plant on vote share for different parties. Dependent variable is percent vote share for a given party. Models 1-3 depict results for each main party with no fixed effects or controls. Models 4-6 include municipal fixed effects while models 7-9 include both municipal fixed effects and control variables. Robust standard errors clustered by municipality.

Population density account for municipal labor characteristics and Nighttime lights considers municipal development. The environmental variables control for the suitability of a given municipality for different types of power projects, including renewable sources.



	Intl	Pop	Inc	Intl	Pop	Inc	Intl	Pop	Inc
Close (5k)	-0.06 (0.02)	-0.12 (0.06)	-0.12 (0.06)	-0.06* (0.00)	0.21* (0.01)	0.11* (0.01)	-0.29 (0.11)	0.33 (0.20)	-0.06 (0.20)
Post-2019	-0.05*** (0.01)	-0.11*** (0.01)	-0.11*** (0.01)	0.02* (0.01)	0.11*** (0.01)	-0.07*** (0.02)	-0.01 (0.06)	0.15 (0.10)	0.02 (0.10)
Close (5k) *	-0.00 (0.01)	0.04 (0.01)	0.04 (0.01)	-0.02 (0.01)	0.01 (0.01)	0.02 (0.01)	-0.00 (0.01)	0.01 (0.02)	0.01 (0.02)
Poll & Year FE	-	-	-	✓	✓	✓	✓	✓	✓
Covs	-	-	-	-	-	-	✓	✓	✓
R <sup>2</sup>	0.03	0.06	0.06	0.88	0.86	0.87	0.89	0.89	0.86
Num. obs.	3904	3904	3904	3904	3904	3904	3096	3096	3096
N Clusters	38	38	38	38	38	38	37	37	37

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

Table 4: *Proximity to planned coal plant (5km)*: Difference-in-differences models estimating effect of proximity to the planned ‘Kosova e Re’ power plant on vote share for different parties. Dependent variable is percent vote share for a given party. Models 1-3 depict results for each main party with no fixed effects or controls. Models 4-6 include municipal fixed effects while models 7-9 include both municipal fixed effects and control variables. Robust standard errors clustered by municipality.

	Intl	Pop	Inc	Intl	Pop	Inc	Intl	Pop	Inc
Close (10k)	0.02 (0.08)	-0.10 (0.05)	-0.10 (0.05)	0.27** (0.03)	0.15** (0.02)	-0.06 (0.02)	0.31 (0.24)	-0.04 (0.41)	0.27 (0.28)
Post-2019	-0.05*** (0.01)	-0.11*** (0.01)	-0.11*** (0.01)	0.03* (0.01)	0.11*** (0.01)	-0.07*** (0.02)	-0.01 (0.06)	0.15 (0.10)	-0.00 (0.10)
Close (10k) *	-0.01 (0.04)	0.06* (0.02)	0.06* (0.02)	-0.03 (0.02)	0.02 (0.02)	0.05 (0.02)	-0.01 (0.02)	0.00 (0.01)	0.04 (0.02)
Poll & Year FE	-	-	-	✓	✓	✓	✓	✓	✓
Covs	-	-	-	-	-	-	✓	✓	✓
R <sup>2</sup>	0.03	0.07	0.07	0.88	0.86	0.87	0.89	0.89	0.86
Num. obs.	3904	3904	3904	3904	3904	3904	3096	3096	3096
N Clusters	38	38	38	38	38	38	37	37	37

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

Table 5: *Proximity to planned coal plant (10km)*: Difference-in-differences models estimating effect of proximity to the planned ‘Kosova e Re’ power plant on vote share for different parties. Dependent variable is percent vote share for a given party. Models 1-3 depict results for each main party with no fixed effects or controls. Models 4-6 include municipal fixed effects while models 7-9 include both municipal fixed effects and control variables. Robust standard errors clustered by municipality.

	Intl	Pop	Inc	Intl	Pop	Inc	Intl	Pop	Inc
Close (20k)	0.02 (0.05)	-0.02 (0.07)	-0.02 (0.07)	-0.14*** (0.02)	-0.02 (0.02)	0.53*** (0.02)	0.56 (0.23)	0.10 (0.41)	0.37 (0.29)
Post-2019	-0.05*** (0.01)	-0.12*** (0.01)	-0.12*** (0.01)	0.03* (0.01)	0.11*** (0.01)	-0.08*** (0.02)	-0.01 (0.06)	0.15 (0.10)	-0.02 (0.11)
Close (20k) *	-0.00 (0.02)	0.06* (0.02)	0.06* (0.02)	-0.01 (0.02)	0.01 (0.02)	0.04 (0.02)	-0.01 (0.01)	0.00 (0.01)	0.05* (0.02)
Poll & Year FE	-	-	-	✓	✓	✓	✓	✓	✓
Covs	-	-	-	-	-	-	✓	✓	✓
R <sup>2</sup>	0.03	0.06	0.06	0.88	0.86	0.87	0.89	0.89	0.86
Num. obs.	3904	3904	3904	3904	3904	3904	3096	3096	3096
N Clusters	38	38	38	38	38	38	37	37	37

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

Table 6: *Proximity to planned coal plant (20km)*: Difference-in-differences models estimating effect of proximity to the planned ‘Kosova e Re’ power plant on vote share for different parties. Dependent variable is percent vote share for a given party. Models 1-3 depict results for each main party with no fixed effects or controls. Models 4-6 include municipal fixed effects while models 7-9 include both municipal fixed effects and control variables. Robust standard errors clustered by municipality.

## C Synthetic difference-in-differences

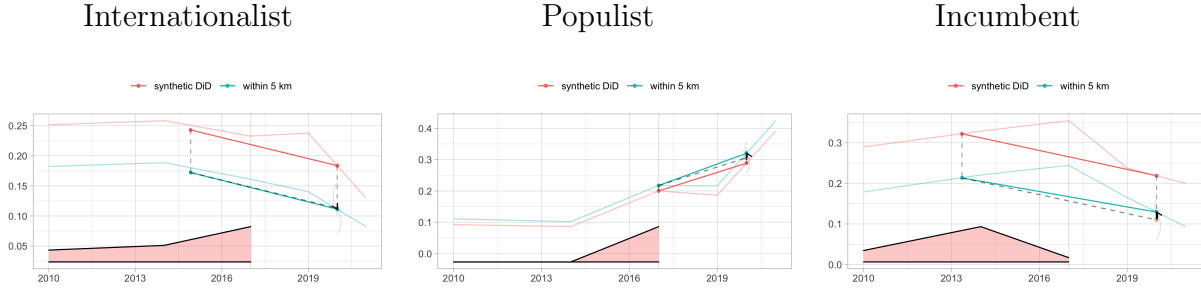


Figure 11: *‘Kosova e Re’ synthetic difference-in-differences (5k)*: Vote share by party using 5km bandwidth. Blue line depicts the treatment group, red the synthetic control. The shaded pink area underneath the trends shows the temporal weighting of different pre-treatment periods. More volume indicates larger weights. The dotted black line depicts the potential outcome of the treatment group if it had not been treated.

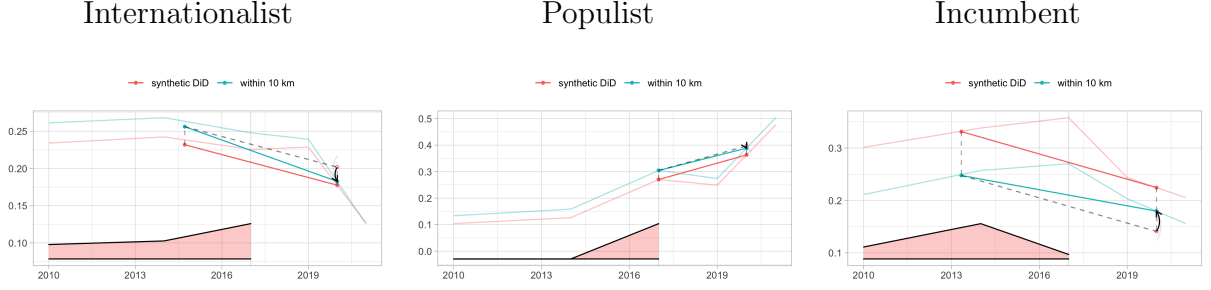


Figure 12: ‘Kosova e Re’ synthetic difference-in-differences (10k): Vote share by party using 10km bandwidth. Blue line depicts the treatment group, red the synthetic control. The shaded pink area underneath the trends shows the temporal weighting of different pre-treatment periods. More volume indicates larger weights. The dotted black line depicts the potential outcome of the treatment group if it had not been treated.

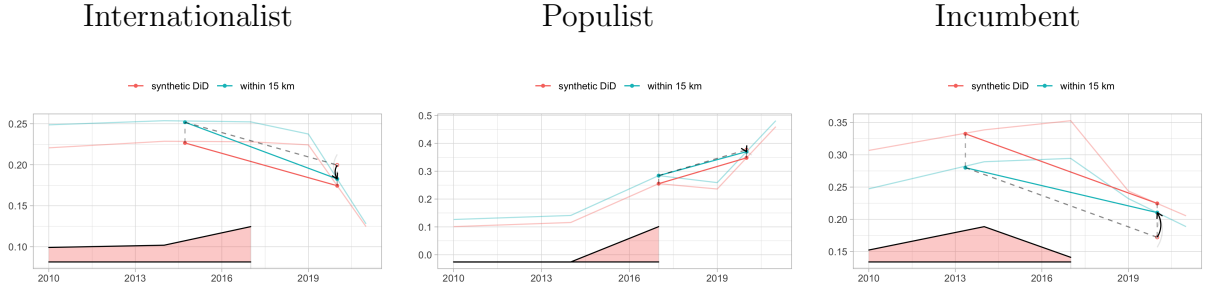


Figure 13: ‘Kosova e Re’ synthetic difference-in-differences (15k): Vote share by party using 15km bandwidth. Blue line depicts the treatment group, red the synthetic control. The shaded pink area underneath the trends shows the temporal weighting of different pre-treatment periods. More volume indicates larger weights. The dotted black line depicts the potential outcome of the treatment group if it had not been treated.

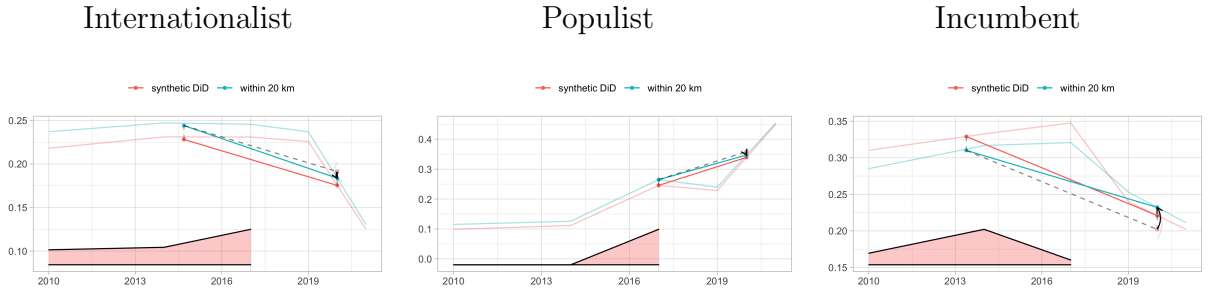


Figure 14: ‘Kosova e Re’ synthetic difference-in-differences (20k): Vote share by party using 20km bandwidth. Blue line depicts the treatment group, red the synthetic control. The shaded pink area underneath the trends shows the temporal weighting of different pre-treatment periods. More volume indicates larger weights. The dotted black line depicts the potential outcome of the treatment group if it had not been treated.

## C.1 Existing renewable energy

Figure 15 shows the main difference-in-differences results for exposure to the potential for renewable energy on party support post aid-withdrawal. I initially use the municipality in which a polling station is located to determine exposure. The cutoff is operationalized by the extent to which the municipality is suitable for solar energy: if a municipality is in the top X percentile of municipalities in photovoltaic potential, it is considered exposed to potential renewable energy. My main specification is the 75th percentile, though I use the 60th, 70th, 80th, and 90th percentiles for robustness.

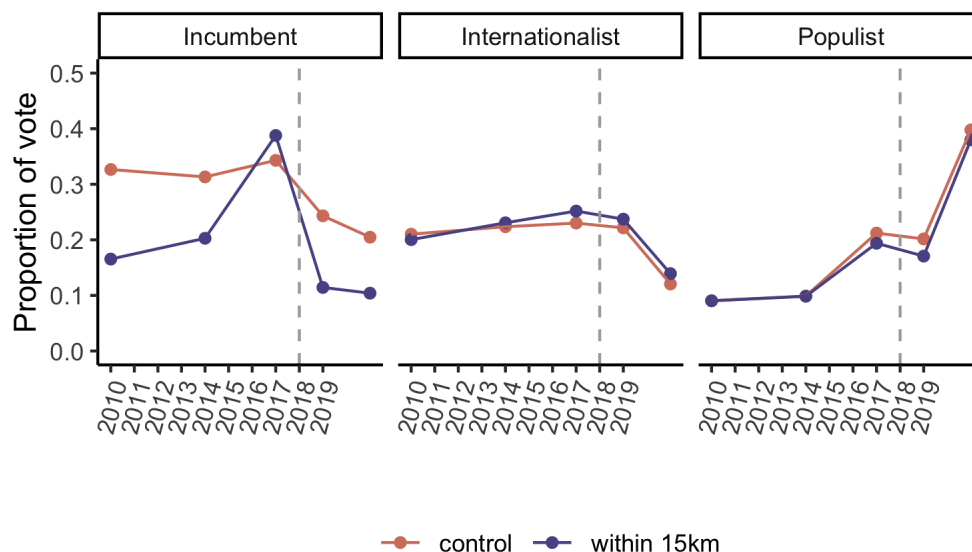


Figure 15: *Difference-in-differences for solar plants: Vote share by party using 15km bandwidth to closest solar plant location.*

Table 7 depicts full results for the difference-in-differences specifications for different parties. Models 1-3 show the raw results, 4-6 include two-way fixed effects, and 7-9 add in municipal covariates. Across all models, the internationalist party sees a statistically significant increase in vote share equivalent to two to three percentage points. The populist party's vote share decreases by two to three percentage points, but the results are not meaningfully distinct from zero. In contrast, the results for the incumbent party are inconclusive and

	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
	Intl.	Pop.	Incumb.	Intl.	Pop.	Incumb.	Intl.	Pop.	Incumb.
Solar	−0.08 (0.04)	−0.08** (0.02)	0.20* (0.08)	−0.20*** (0.01)	−0.08*** (0.01)	0.15 (0.02)	0.31 (0.55)	0.02 (0.96)	1.11 (0.79)
Post-2018	−0.06*** (0.01)	0.15*** (0.01)	−0.10*** (0.01)	−0.11*** (0.01)	0.31*** (0.02)	−0.09*** (0.02)	−0.03 (0.06)	0.19 (0.10)	0.06 (0.10)
Solar*	0.02 (0.02)	−0.05* (0.02)	−0.06 (0.03)	0.02 (0.01)	−0.04* (0.02)	−0.06 (0.03)	0.03 (0.02)	−0.05* (0.02)	−0.06 (0.04)
Post-2018									
R <sup>2</sup>	0.08	0.20	0.19	0.89	0.89	0.88	0.90	0.89	0.88
Num. obs.	3193	3193	3193	3193	3193	3193	3193	3193	3193
N Clusters	38	38	38	38	38	38	38	38	38

\*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$

Table 7: *Suitability of location for renewable energy*: Difference-in-differences models estimating effect of suitability of location for solar plants on vote share for different parties. Models 1-3 show the raw results, 4-6 include two-way fixed effects, and 7-9 add in municipal covariates. Dependent variable is percent vote share for a given party. Robust standard errors clustered by municipality.

fluctuate in sign and magnitude between models.

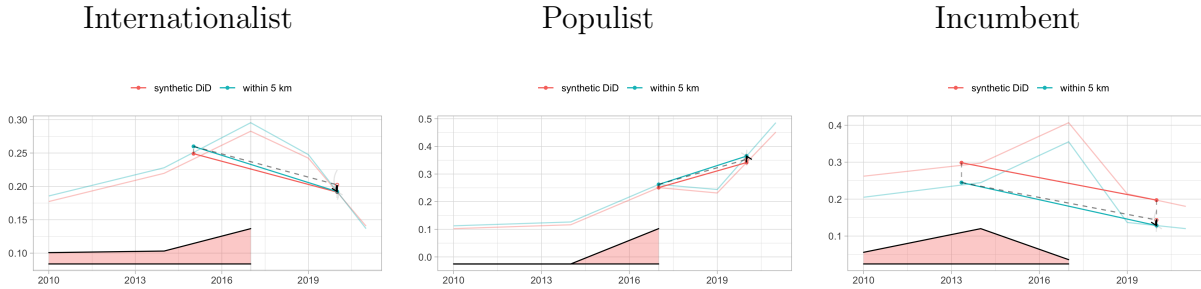


Figure 16: *Renewable synthetic difference-in-differences (5k)*: Vote share by party using 5km bandwidth. Blue line depicts the treatment group, red the synthetic control. The shaded pink area underneath the trends shows the temporal weighting of different pre-treatment periods. More volume indicates larger weights. The dotted black line depicts the potential outcome of the treatment group if it had not been treated.

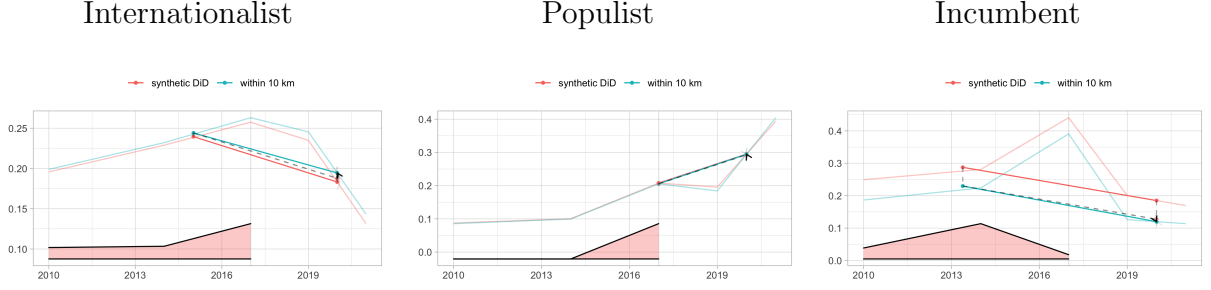


Figure 17: *Renewable synthetic difference-in-differences (10k)*: Vote share by party using 10km bandwidth. Blue line depicts the treatment group, red the synthetic control. The shaded pink area underneath the trends shows the temporal weighting of different pre-treatment periods. More volume indicates larger weights. The dotted black line depicts the potential outcome of the treatment group if it had not been treated.

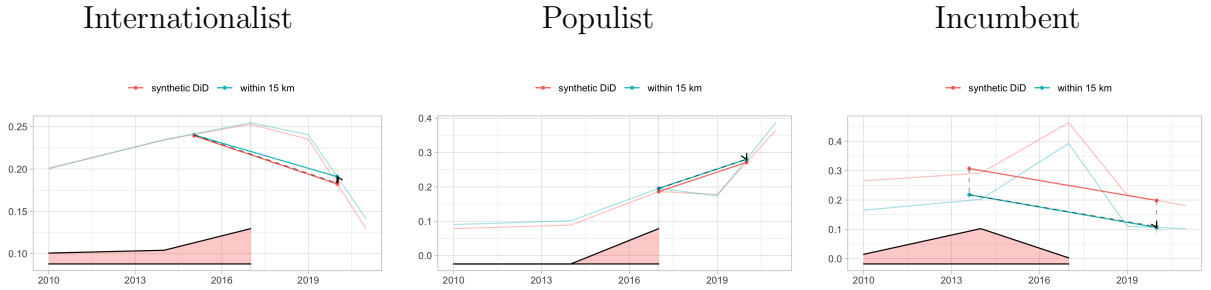


Figure 18: *Renewable synthetic difference-in-differences (15k)*: Vote share by party using 15km bandwidth. Blue line depicts the treatment group, red the synthetic control. The shaded pink area underneath the trends shows the temporal weighting of different pre-treatment periods. More volume indicates larger weights. The dotted black line depicts the potential outcome of the treatment group if it had not been treated.

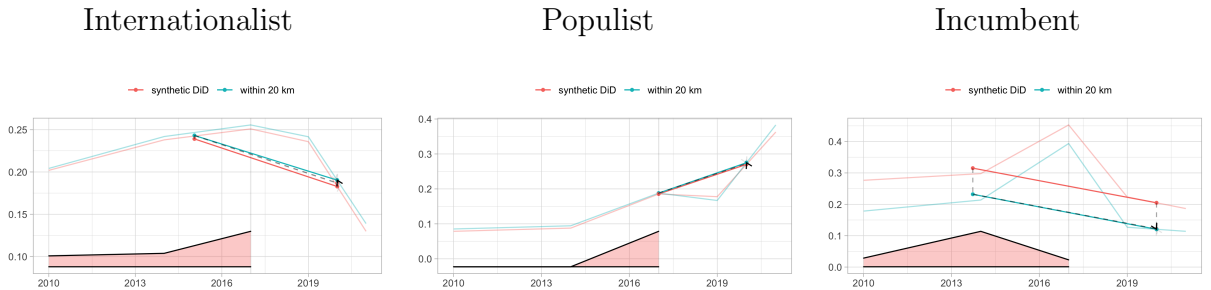


Figure 19: *Renewable synthetic difference-in-differences (20k)*: Vote share by party using 20km bandwidth. Blue line depicts the treatment group, red the synthetic control. The shaded pink area underneath the trends shows the temporal weighting of different pre-treatment periods. More volume indicates larger weights. The dotted black line depicts the potential outcome of the treatment group if it had not been treated.

## D Estimates excluding 5km bandwidths

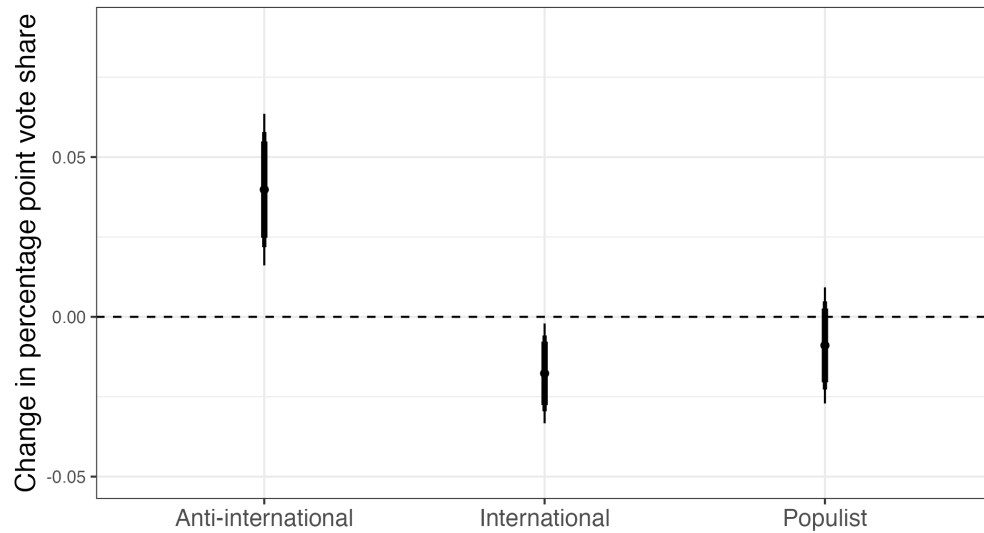


Figure 20: *'Kosova e Re' synthetic difference-in-differences coefficient plot (15km)*: Results by party. Thickest lines represent 90% confidence intervals, medium 95%, smallest 99%. Excludes polling stations within 5km of plant.

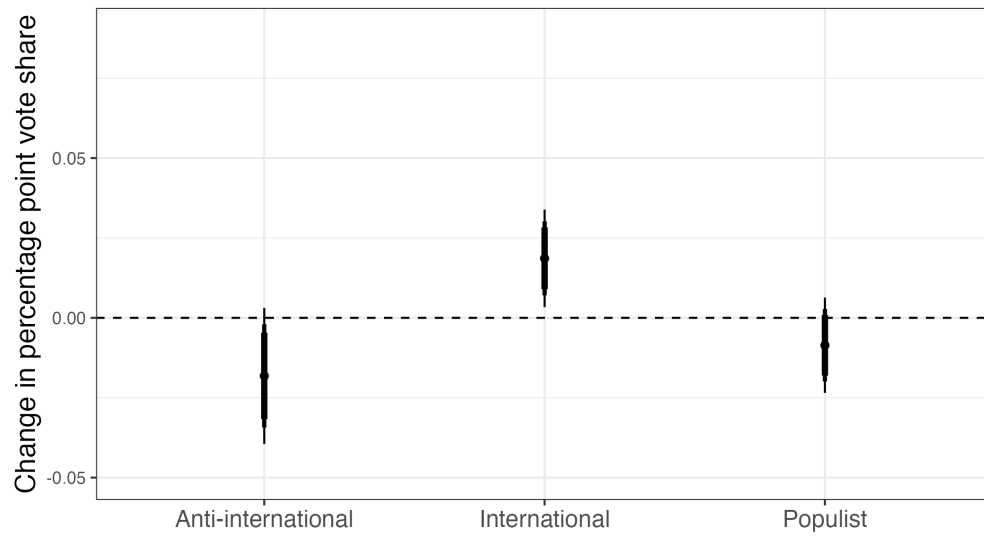


Figure 21: *Renewable synthetic difference-in-differences coefficient plot (15km)*: Results by party. Thickest lines represent 90% confidence intervals, medium 95%, smallest 99%. Excludes polling stations within 5km of plant.

## E Renewable energy by plant

Figures 22 through 28 depict different plants (in reverse chronological order)—the top panel of each figure shows the synthetic difference-in-differences results for the individual plant at different bandwidths while the bottom panel shows the raw difference-in-difference data at the 15km bandwidth. Table 2 reports the information on each plant.

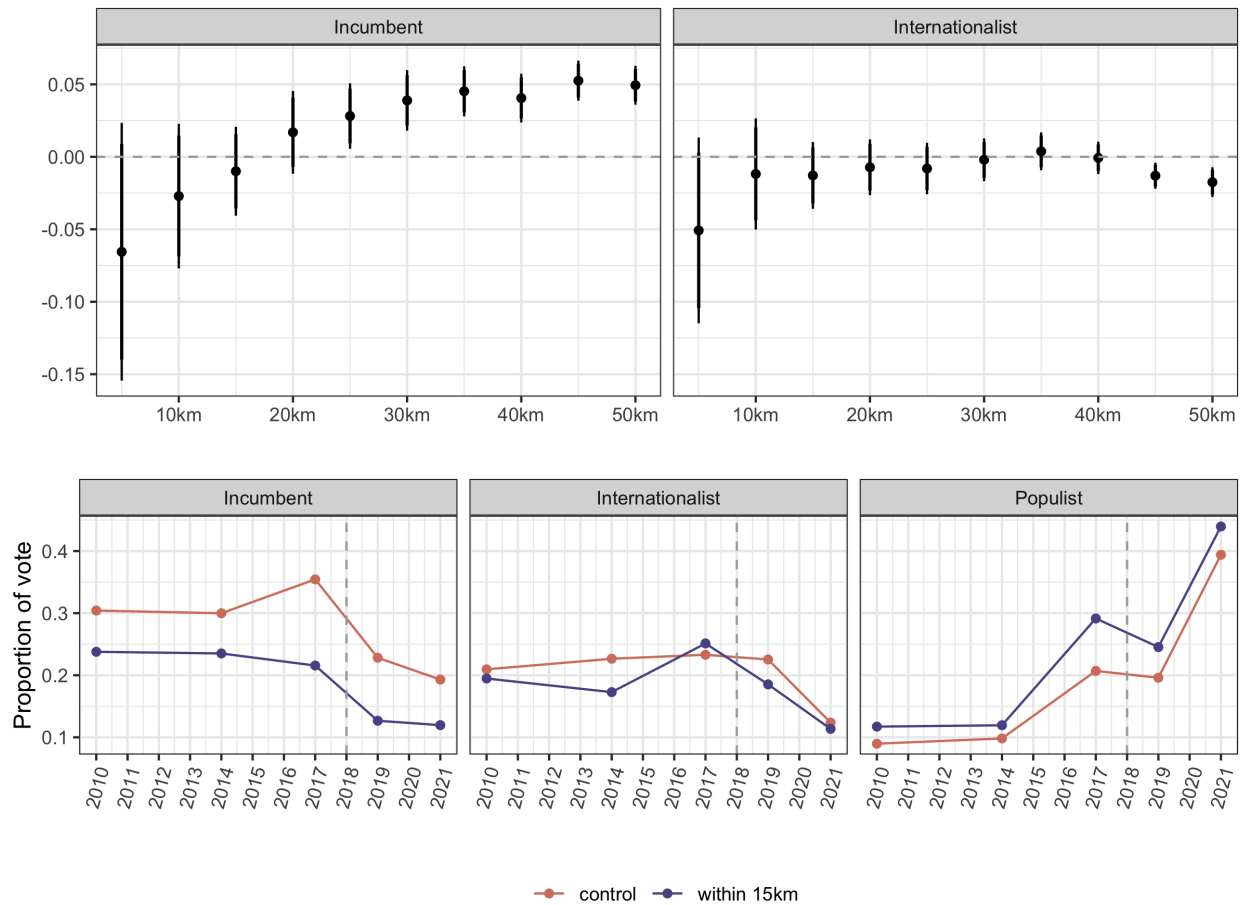


Figure 22: Kitka (2019, wind)  
 Incumbent: current incumbent  
 Location: Kamenica  
 Local incumbent in 2018: populist  
 Local incumbent in 2019: populist



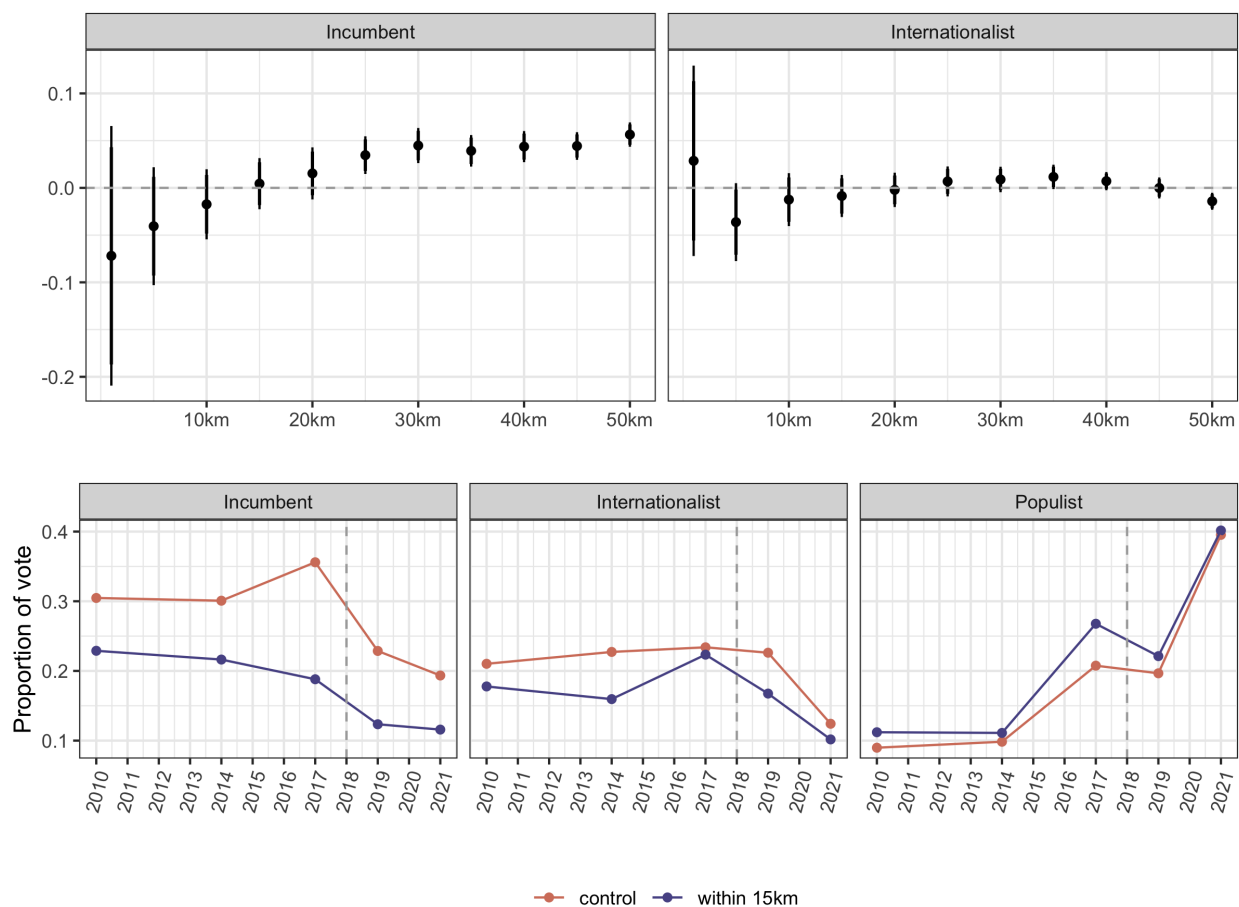


Figure 23: Solar Green Energy (2019, solar)

Incumbent: current incumbent

Location: Kamenica

Local incumbent in 2018: populist

Local incumbent in 2019: populist

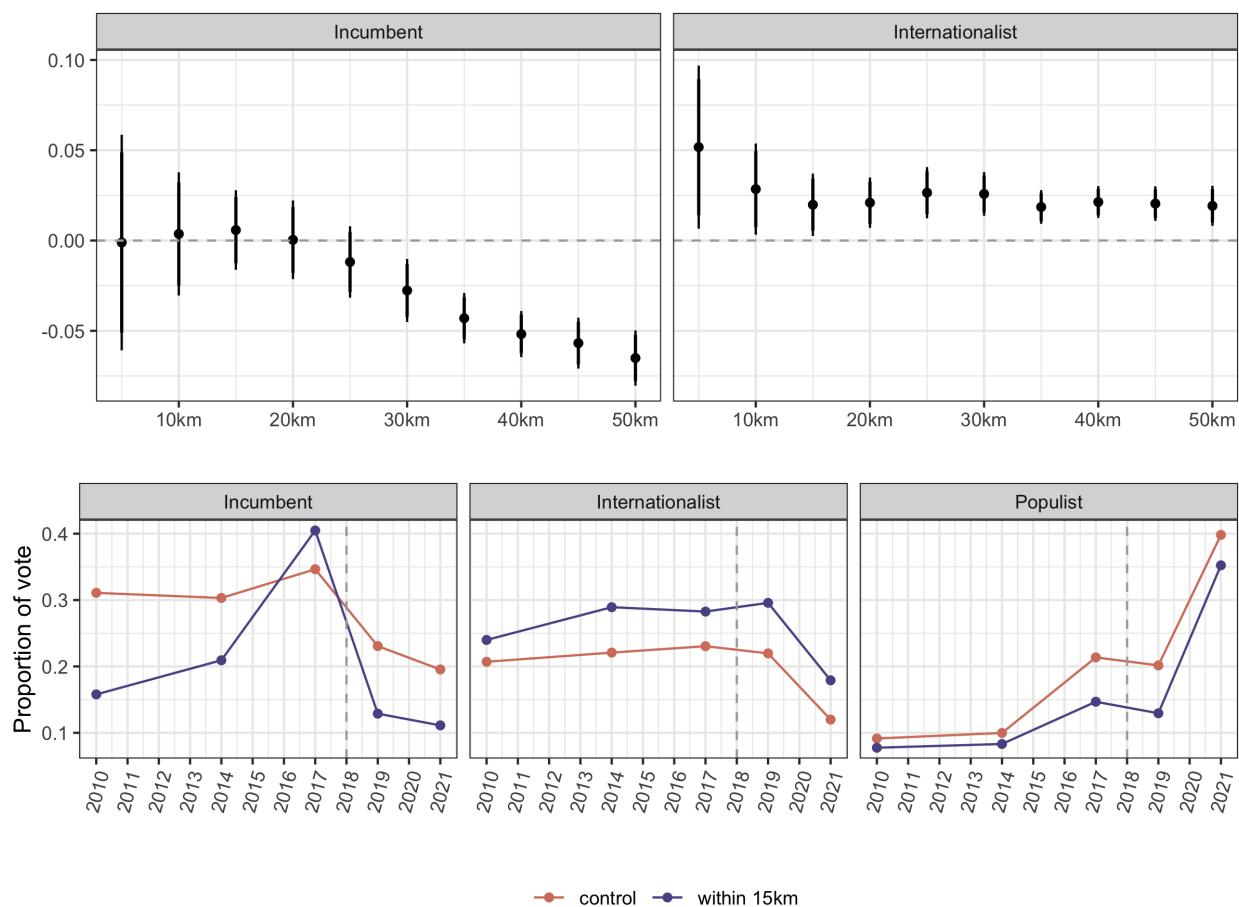


Figure 24: Eling (2019, solar)  
 Incumbent: current incumbent  
 Location: Peja  
 Local incumbent in 2018: internationalist  
 Local incumbent in 2019: internationalist

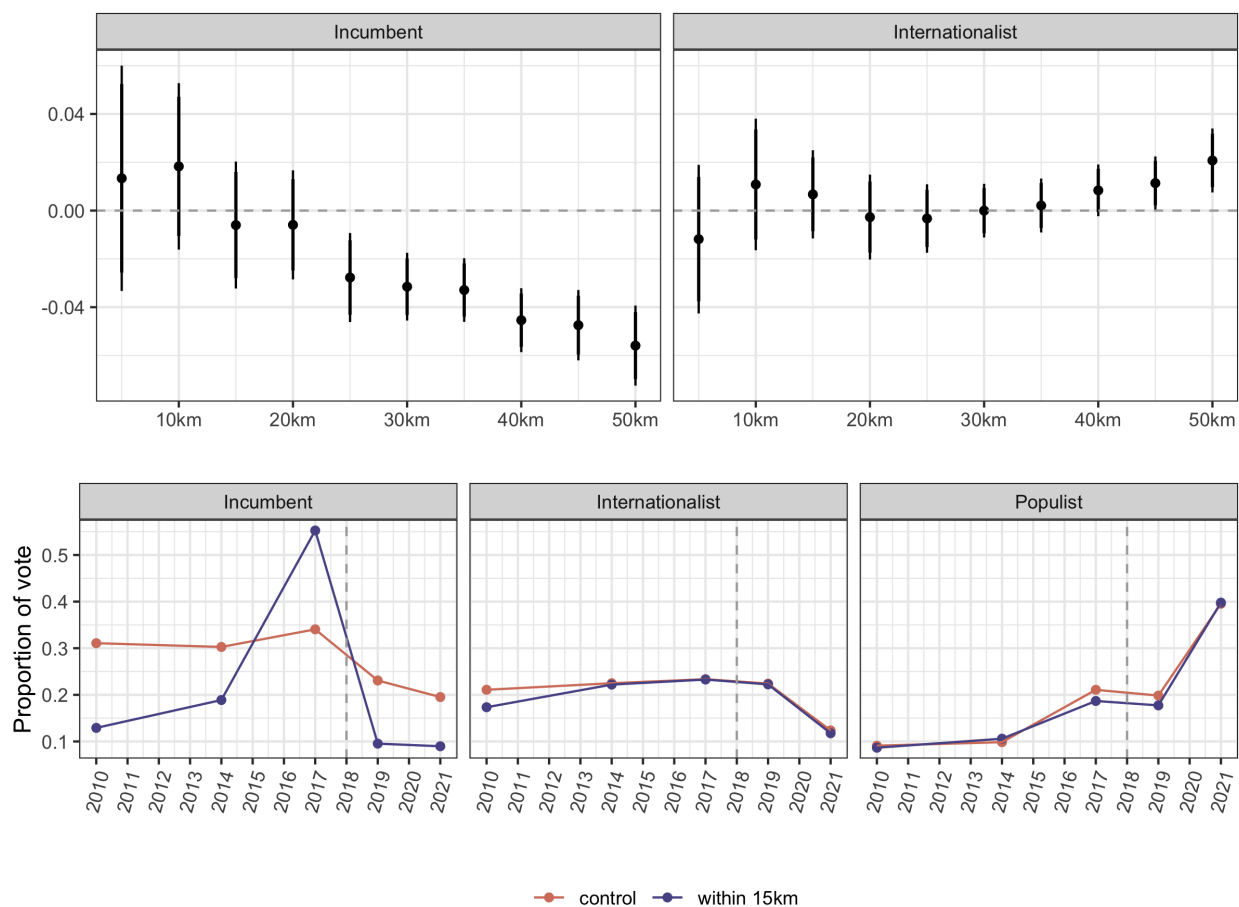


Figure 25: Frigo Food Kosova (2018, solar)

Incumbent: current incumbent

Location: Gjakova

Local incumbent in 2018: party affiliated with current incumbent

Local incumbent in 2019: party affiliated with current incumbent

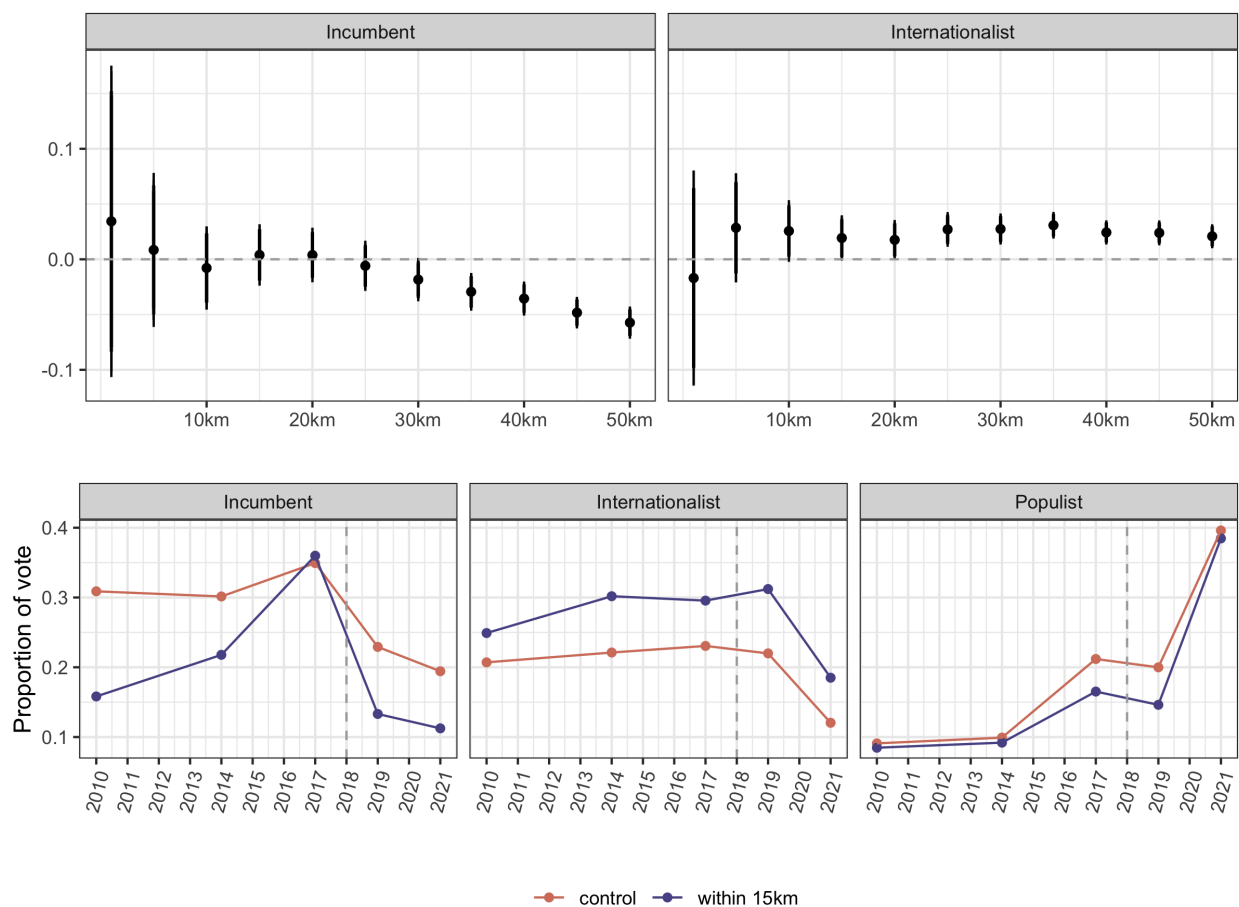


Figure 26: ONIX Spa (2016, solar)  
 Incumbent in 2016: current incumbent, internationalist  
 Location: Istog  
 Local incumbent in 2016: internationalist  
 Local incumbent in 2019: internationalist

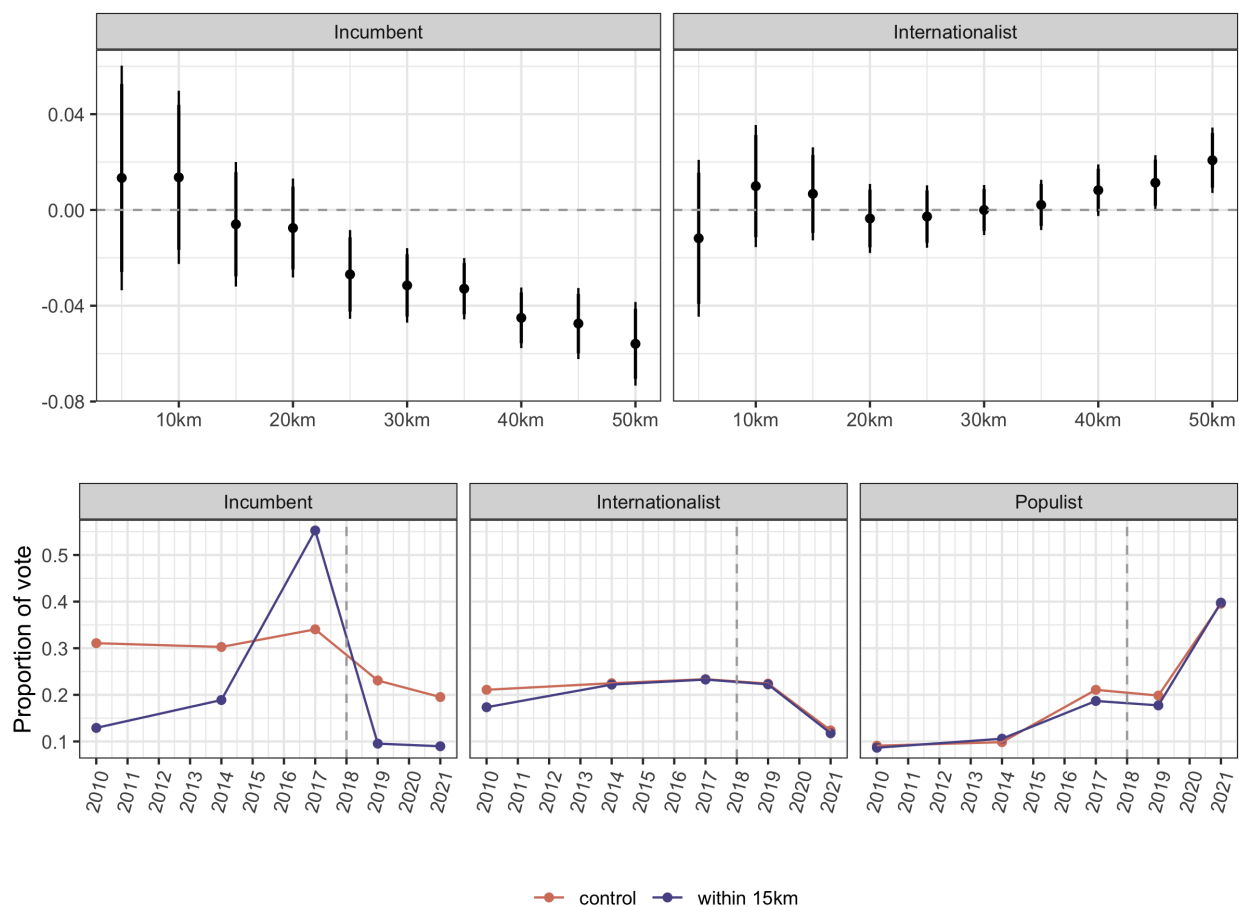


Figure 27: Birra Peja (2016, solar)

Incumbent in 2016: current incumbent, internationalist

Location: Gjakova

Local incumbent in 2016: party affiliated with current incumbent

Local incumbent in 2019: party affiliated with current incumbent

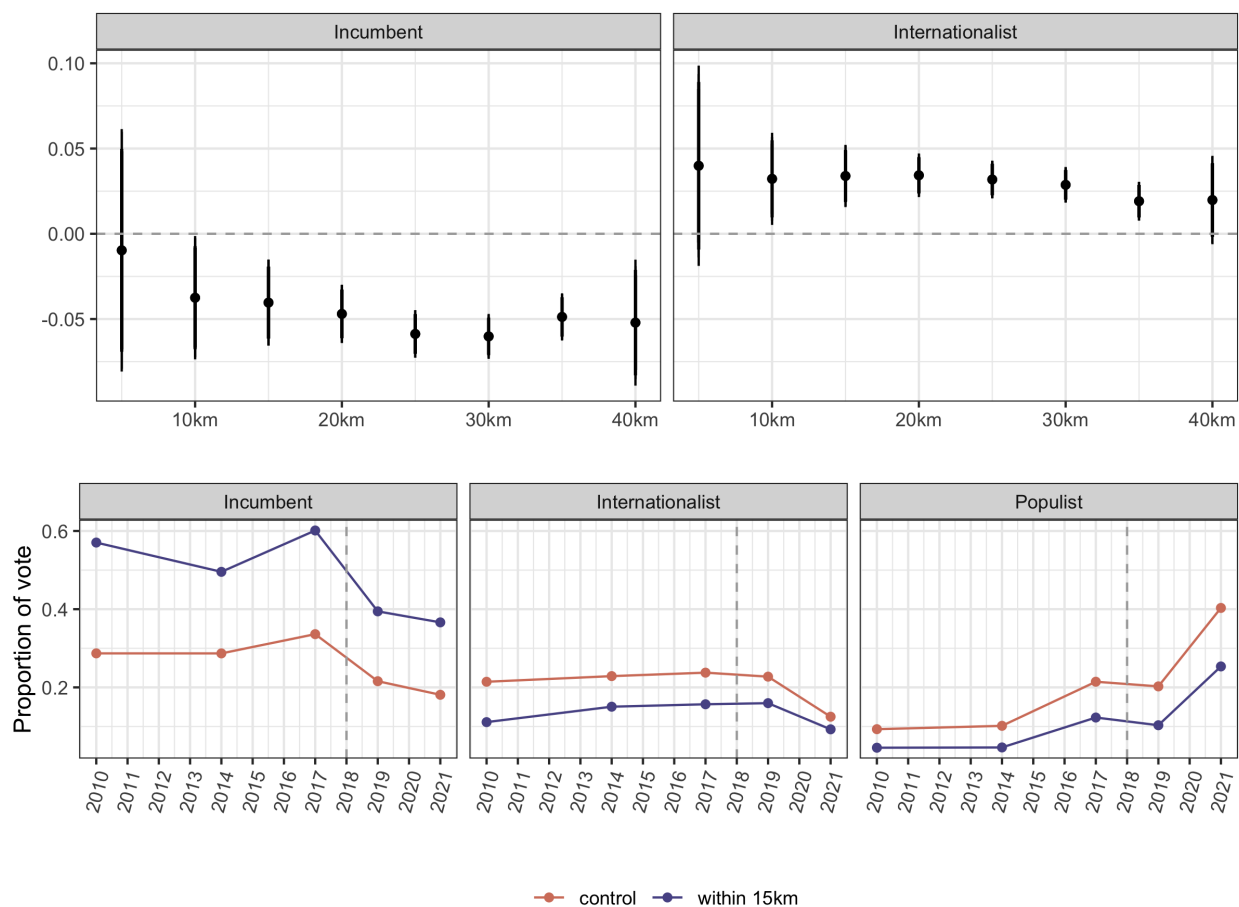


Figure 28: LED Light Technology Kosova (2015, solar)

Incumbent in 2015: current incumbent, internationalist

Location: Klina

Local incumbent in 2015: current incumbent

Local incumbent in 2019: party affiliated with current incumbent

## F Placebo tests

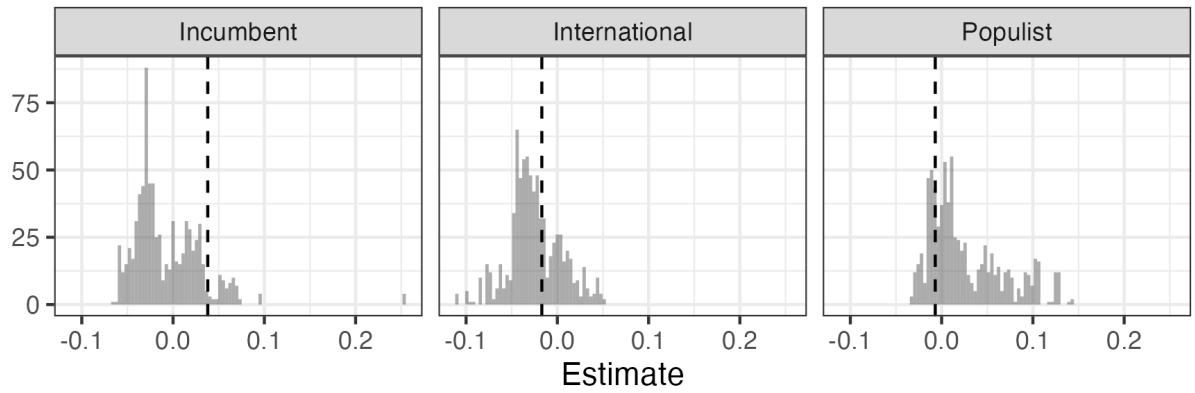


Figure 29: *Coal energy placebo locations*: Estimates of aid withdrawal effect on party vote share for 1000 draws of random location. Horizontal lines represent the actual effect.

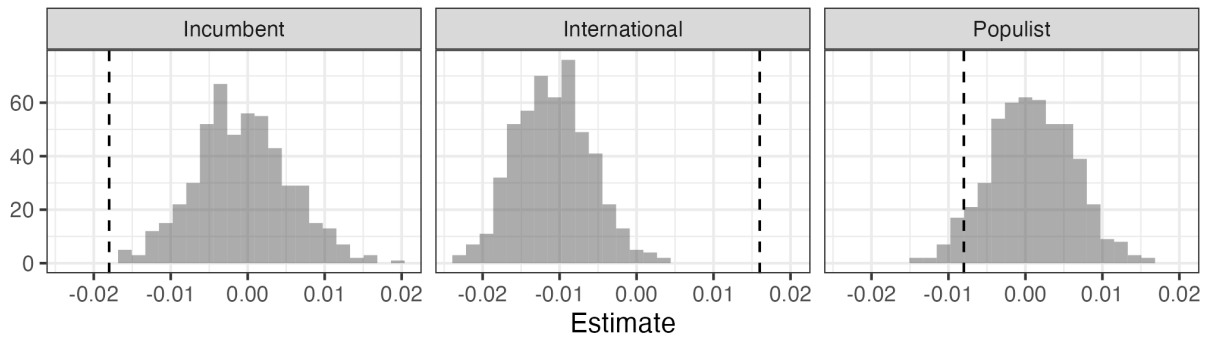


Figure 30: *Renewable energy placebo locations*: Estimates of aid withdrawal effect on party vote share for 500 draws of random locations for renewable plants (seven different locations). Horizontal lines represent the actual effect.



## G Vote shares

### G.1 Over time

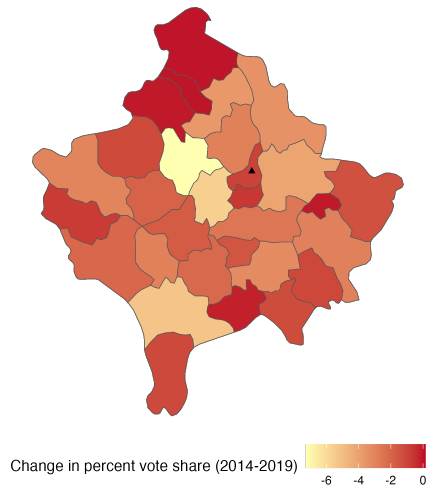


Figure 31: Incumbent ( $\Delta$  2014-2019)

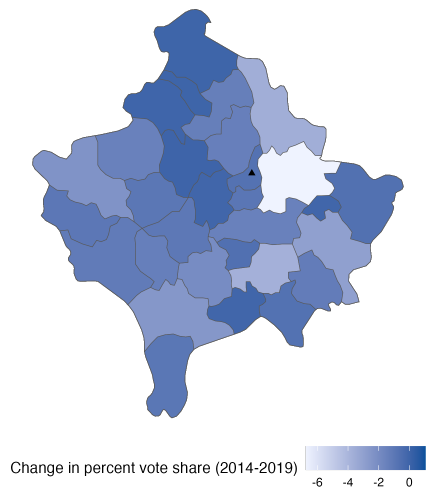


Figure 32: International ( $\Delta$  2014-2019)

### G.2 Pre-withdrawal

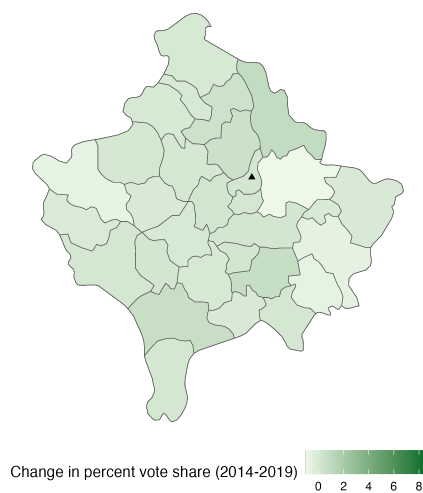


Figure 33: Populist ( $\Delta$  2014-2019)

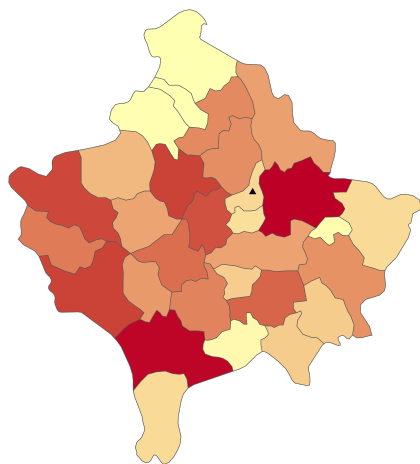


Figure 34: Incumbent vote share (2017)

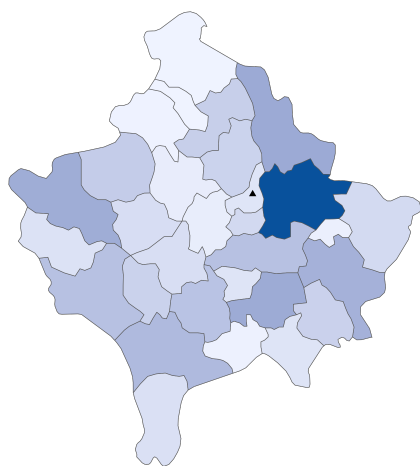


Figure 35: International vote share (2017)

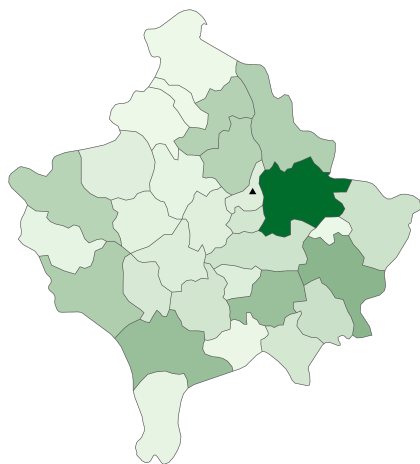


Figure 36: Populist vote share (2017)

## H Labor characteristics

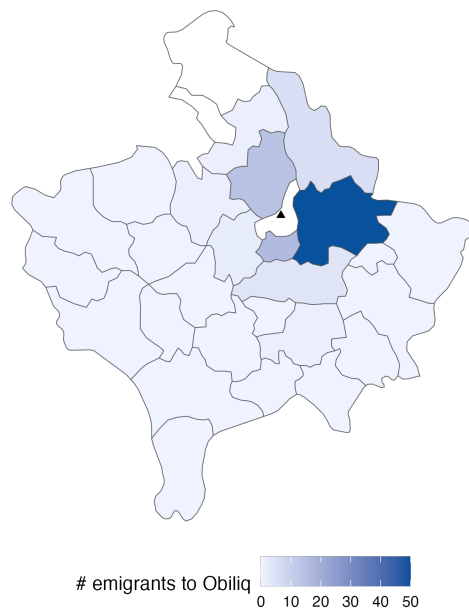


Figure 37: Migration into mining area

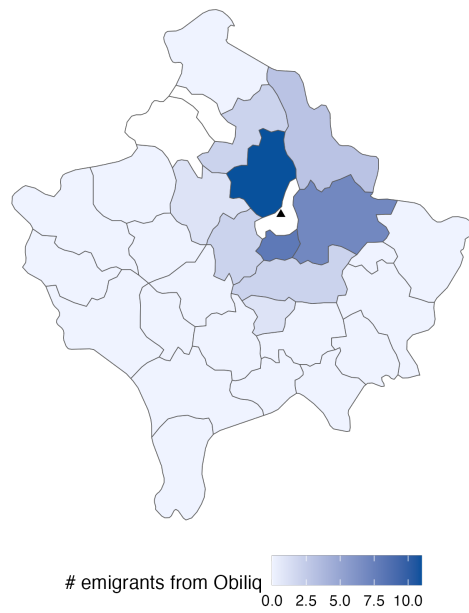


Figure 38: Migration out of mining area

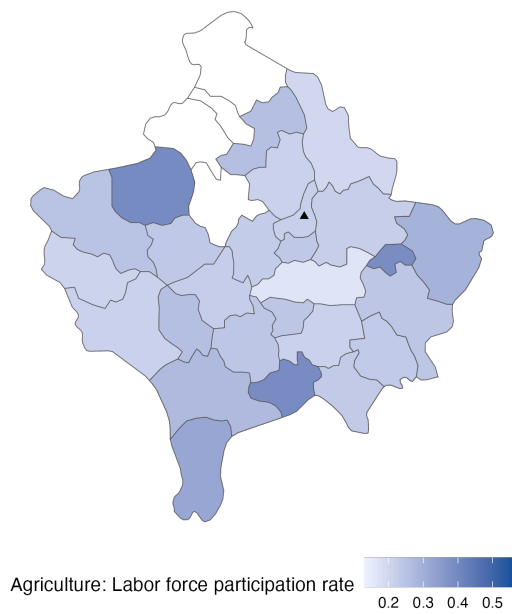


Figure 39: Labor force participation rate in agriculture by municipality

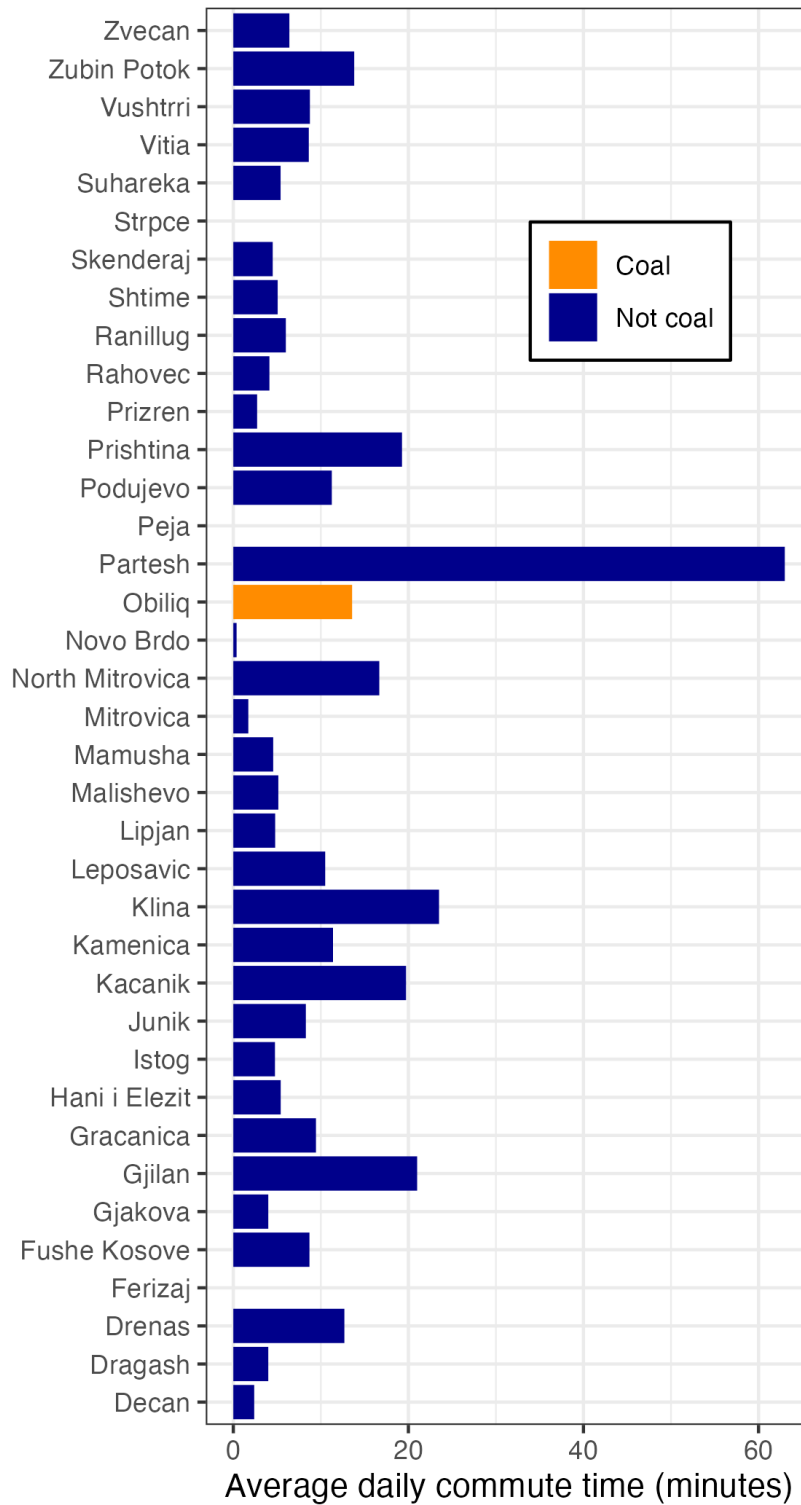


Figure 40: *Average commute times*: Average commute time in a given municipality. Data from the Kosovo Time Use Survey.

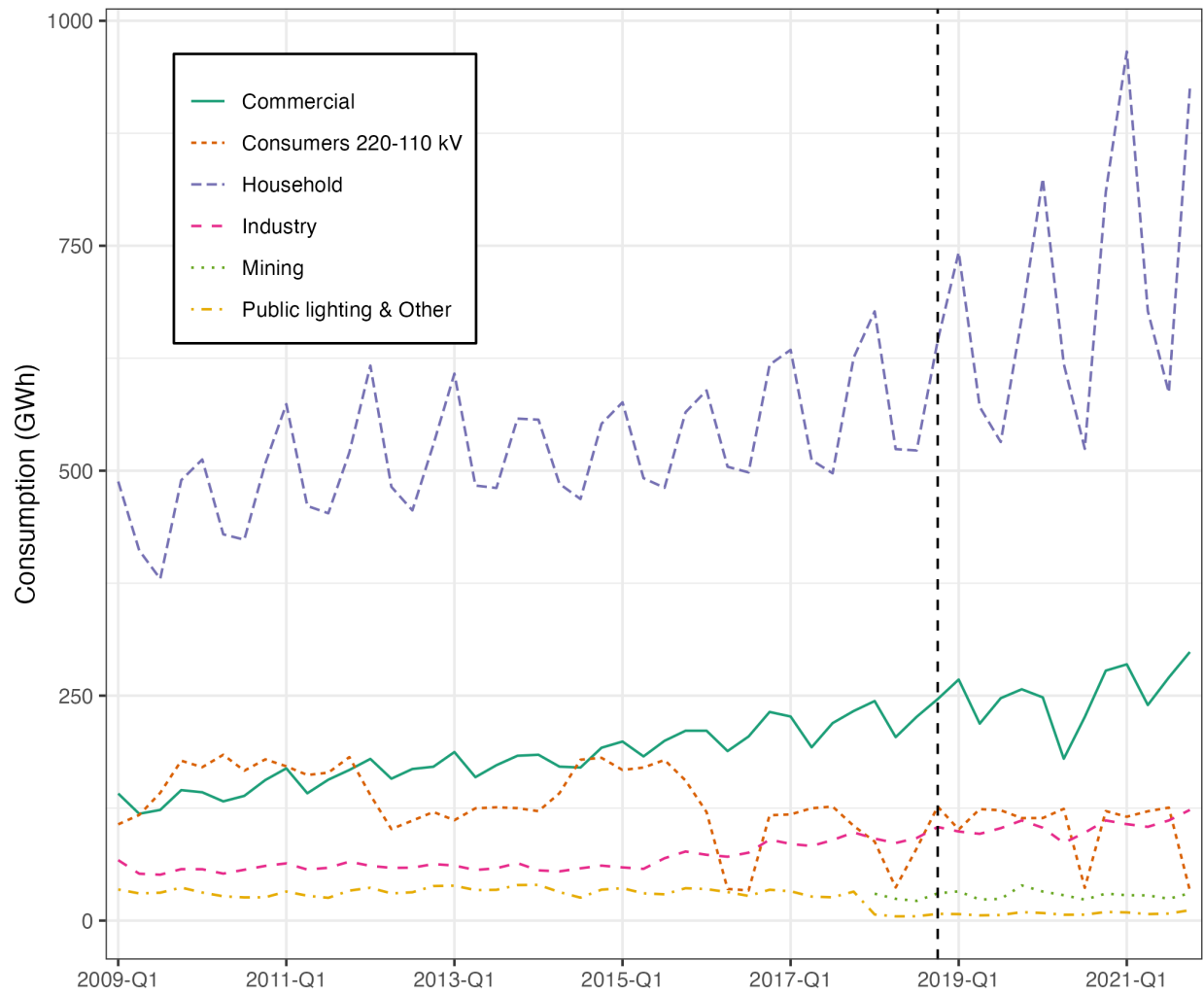


Figure 41: *Kosovo energy use*: Consumption of energy over time. Data from the Kosovo Agency for Statistics. Horizontal line indicates date of coal plant withdrawal.

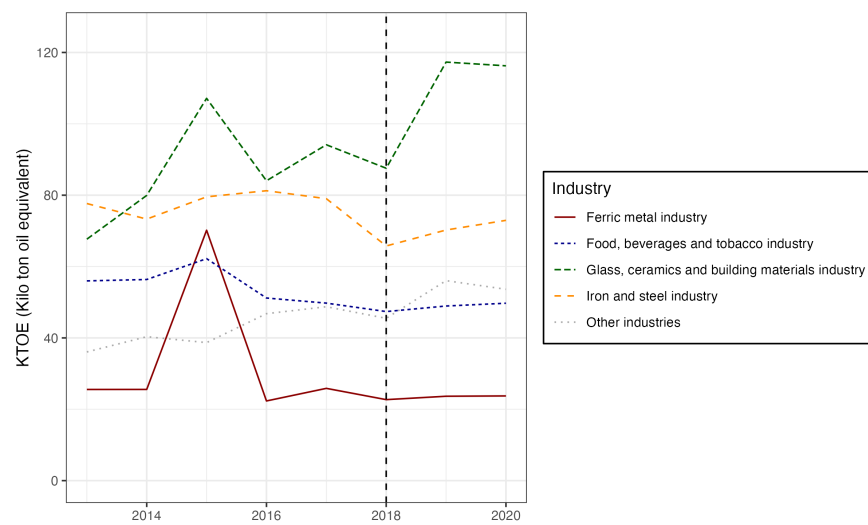


Figure 42: *Kosovo energy use by industry*: Consumption of energy over time by industry. Data from the Kosovo Agency for Statistics. Horizontal line indicates date of coal plant withdrawal.



# I Renewable potential

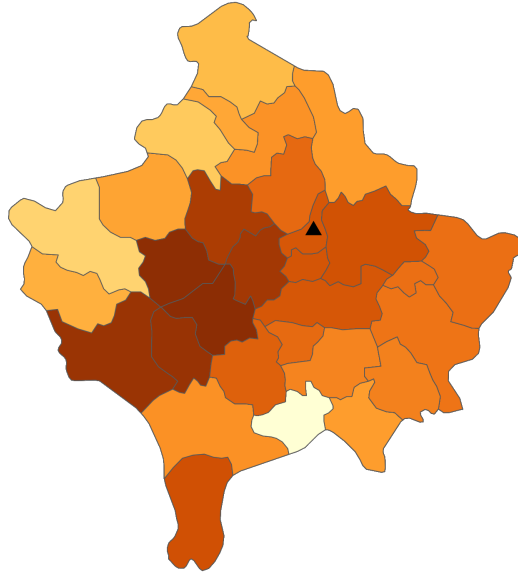


Figure 43: Photovoltaic output (darker hues = greater output). Black triangle indicates location of coal plant.

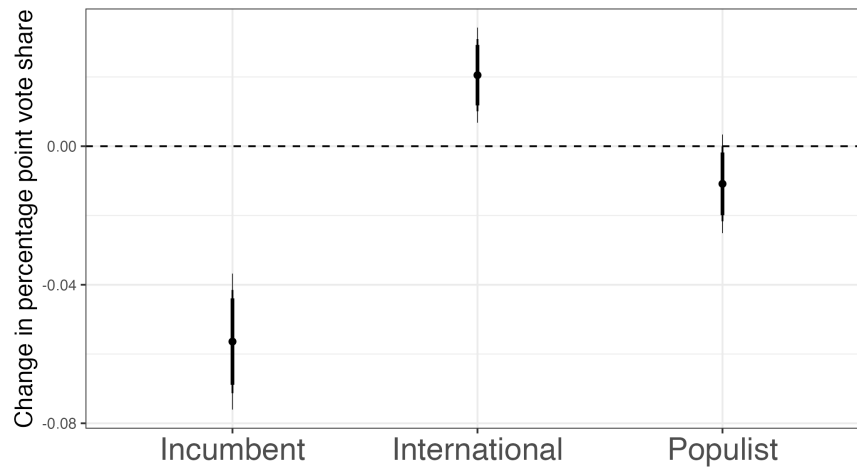


Figure 44: *Renewable energy suitability synthetic difference-in-differences*: Coefficients for the interaction term, **Close\*Post-2018**, using municipal suitability for solar (above 80th percentile) as treated area (**Close**). 90, 95, and 99% confidence intervals depicted. Three separate models estimated by party: Incumbent is the leftmost point estimate, International the center, and Populist the rightmost.

## J Effects by distance from city centers

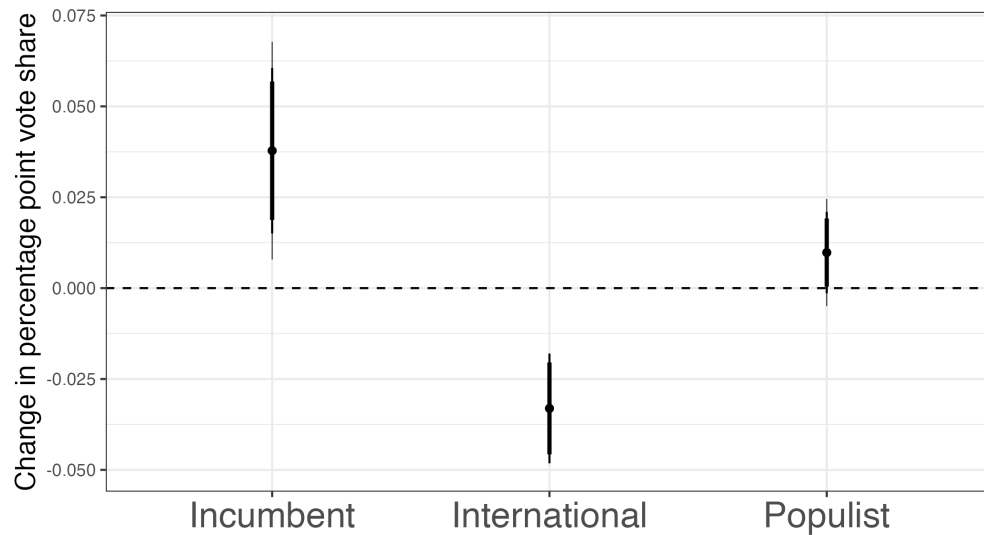


Figure 45: *Aggregate*: Coefficients for the interaction term, **Close\*Post-2018**, using 15km bandwidth of exposure (**Close**) around major city centers. 90, 95, and 99% confidence intervals depicted.

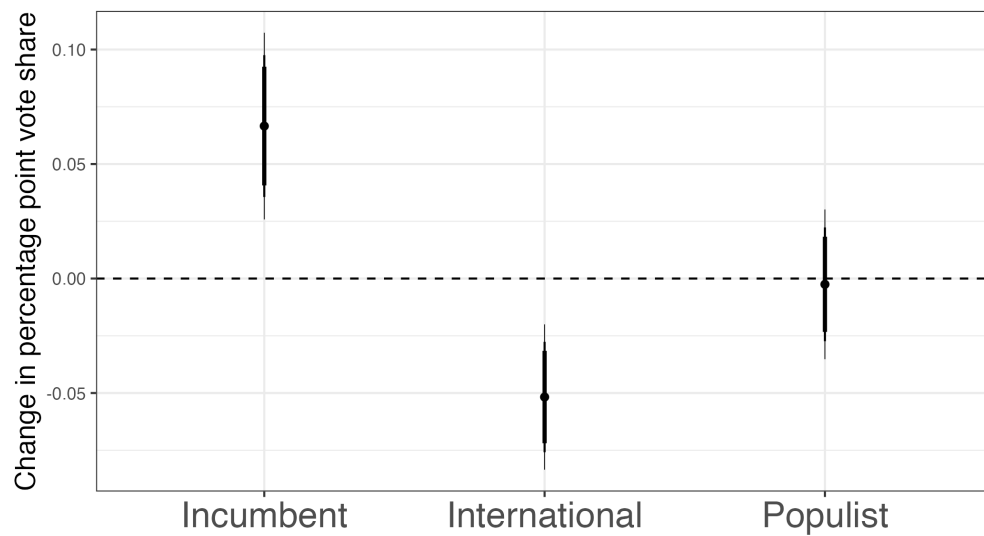


Figure 46: *Prishtina (Center)* Coefficients for the interaction term, **Close\*Post-2018**, using 15km bandwidth of exposure (**Close**) around major city centers. 90, 95, and 99% confidence intervals depicted.

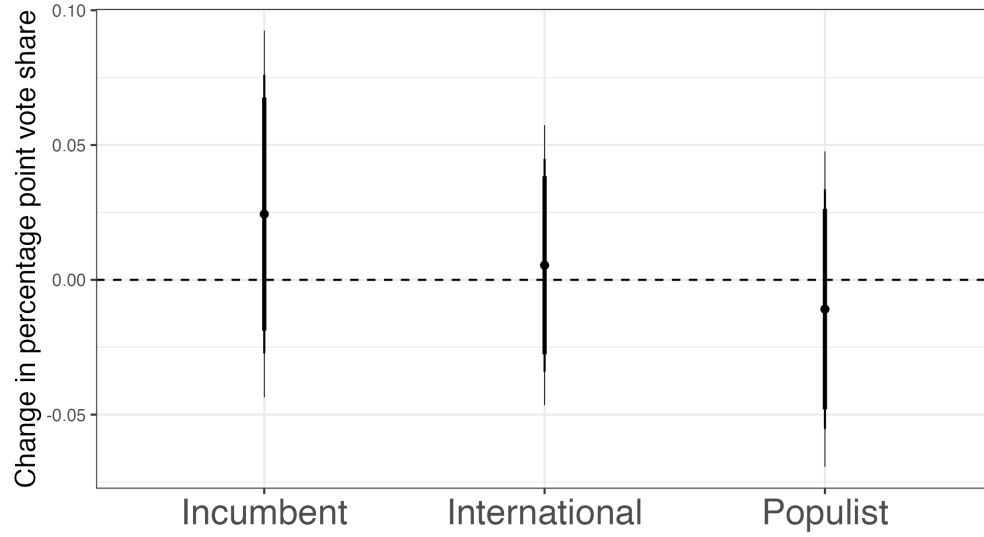


Figure 47: *Gjilan (East)* : Coefficients for the interaction term, **Close\*Post-2018**, using 15km bandwidth of exposure (**Close**) around major city centers. 90, 95, and 99% confidence intervals depicted.

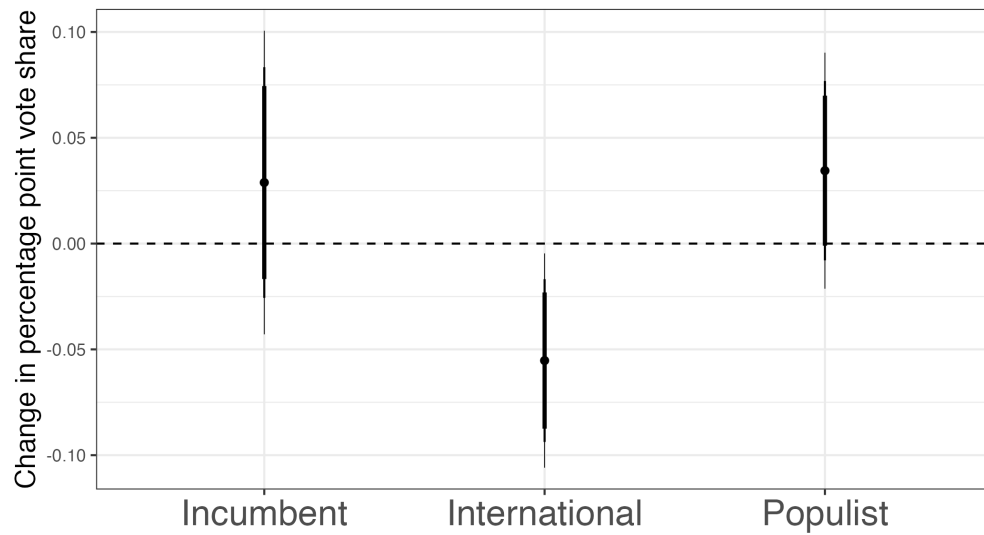


Figure 48: *Ferizaj (Southeast)* : Coefficients for the interaction term, **Close\*Post-2018**, using 15km bandwidth of exposure (**Close**) around major city centers. 90, 95, and 99% confidence intervals depicted.

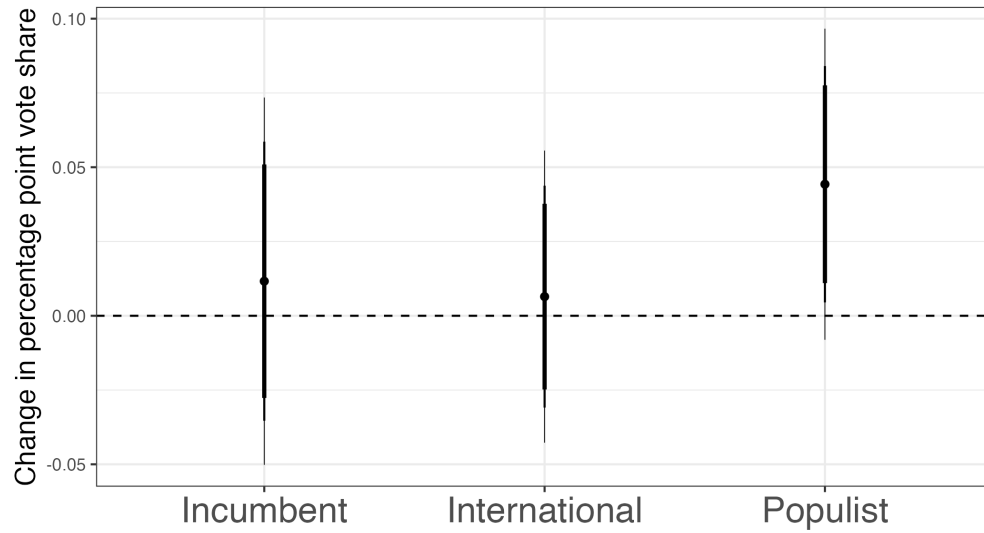


Figure 49: *Peja (West)*: Coefficients for the interaction term, **Close\*Post-2018**, using 15km bandwidth of exposure (**Close**) around major city centers. 90, 95, and 99% confidence intervals depicted.

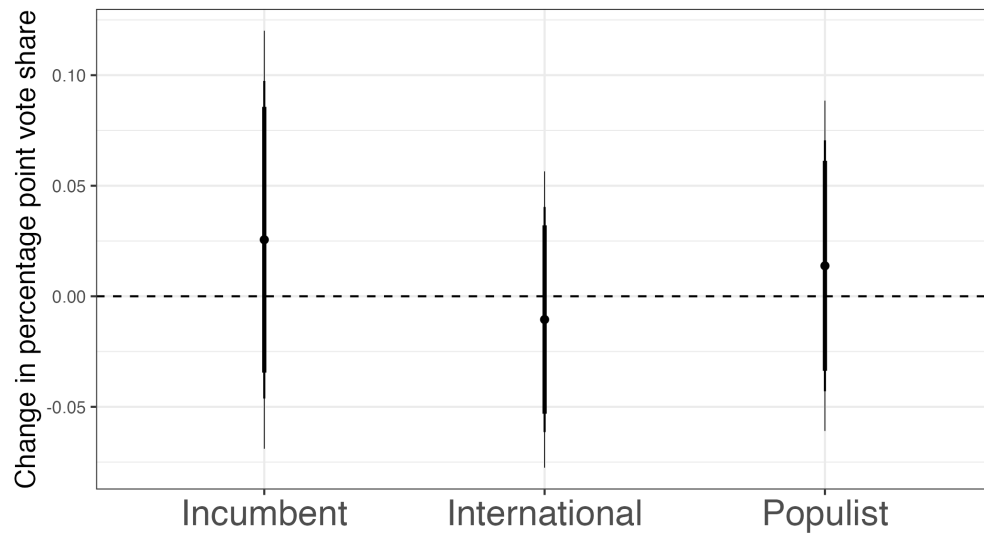


Figure 50: *Mitrovica (North)*: Coefficients for the interaction term, **Close\*Post-2018**, using 15km bandwidth of exposure (**Close**) around major city centers. 90, 95, and 99% confidence intervals depicted.

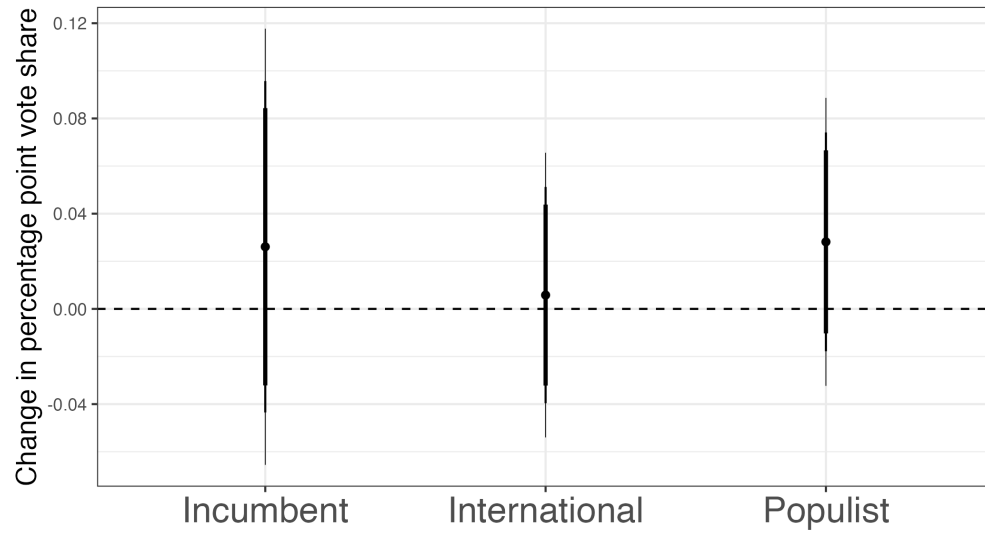
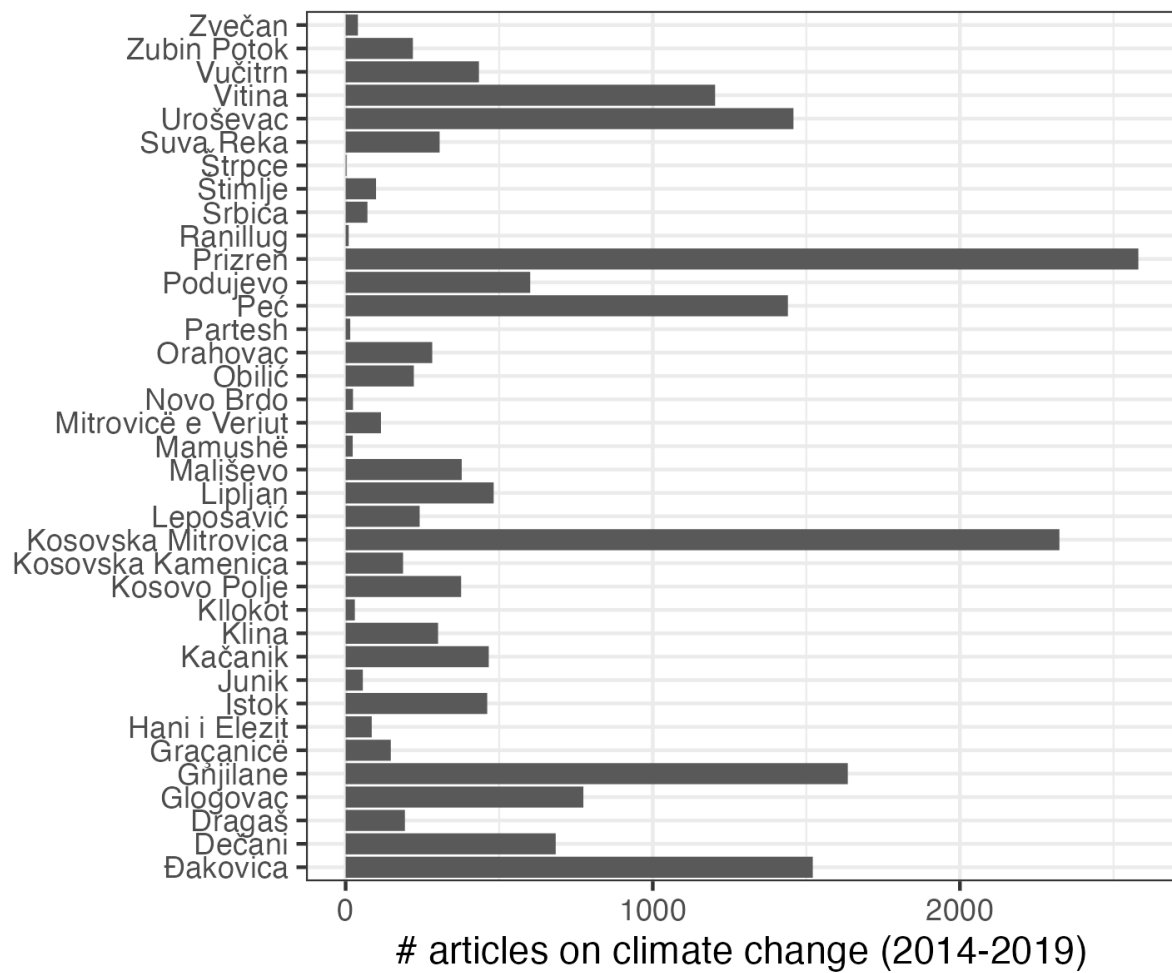


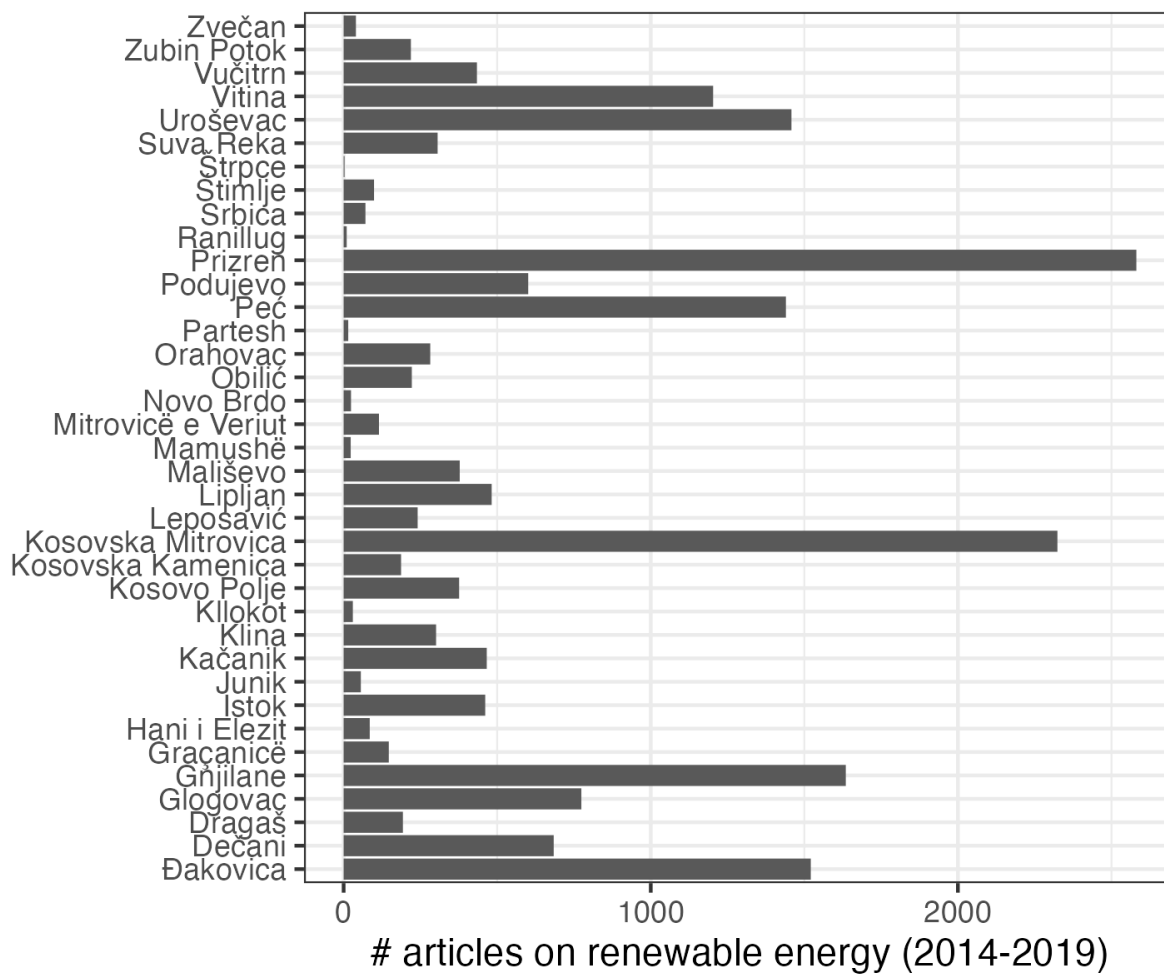
Figure 51: *Prizren (South)*: Coefficients for the interaction term, **Close\*Post-2018**, using 15km bandwidth of exposure (**Close**) around major city centers. 90, 95, and 99% confidence intervals depicted.

## K Coalitions

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

## L Media







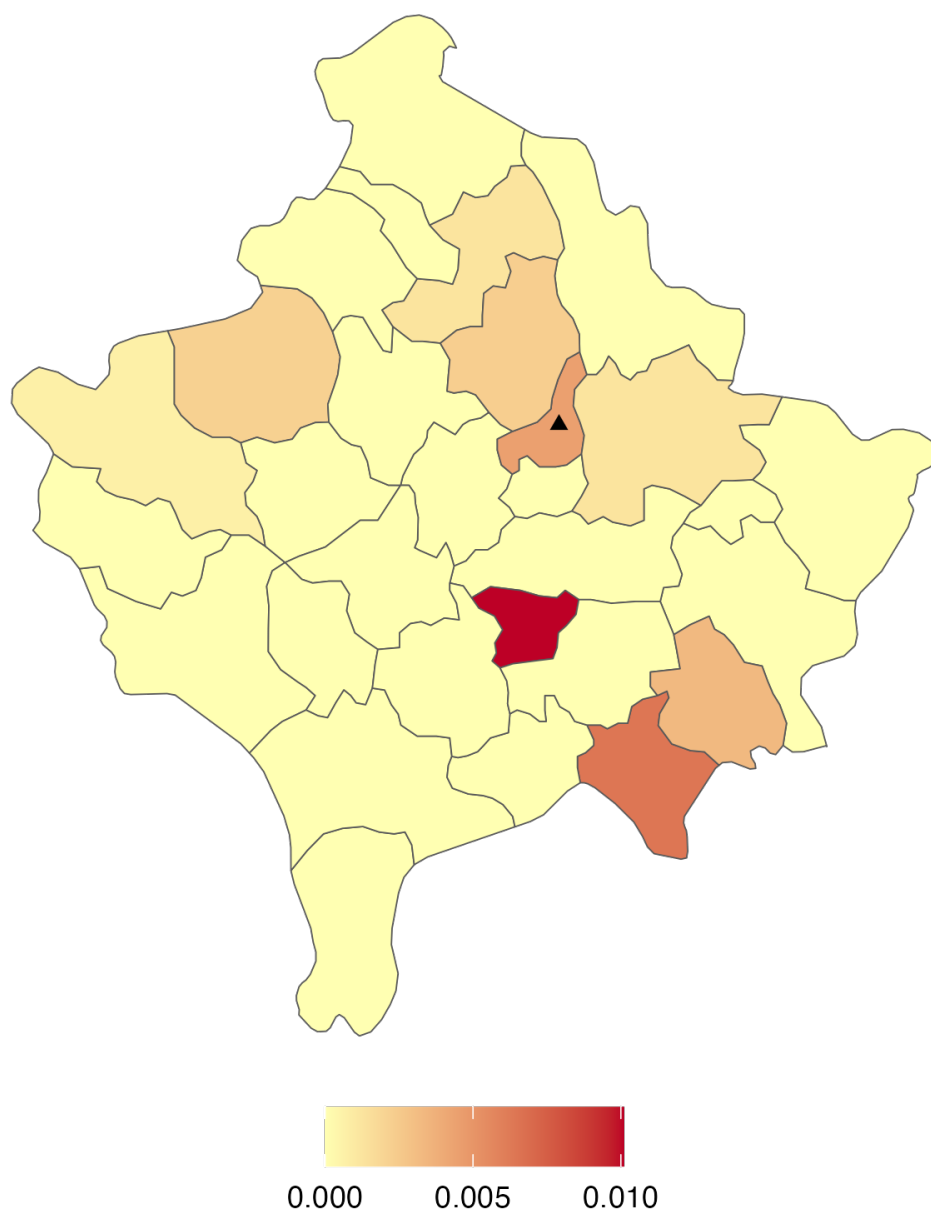


Figure 52: Proportion of news articles (2014-2017) mentioning municipality that also mention the coal plant.

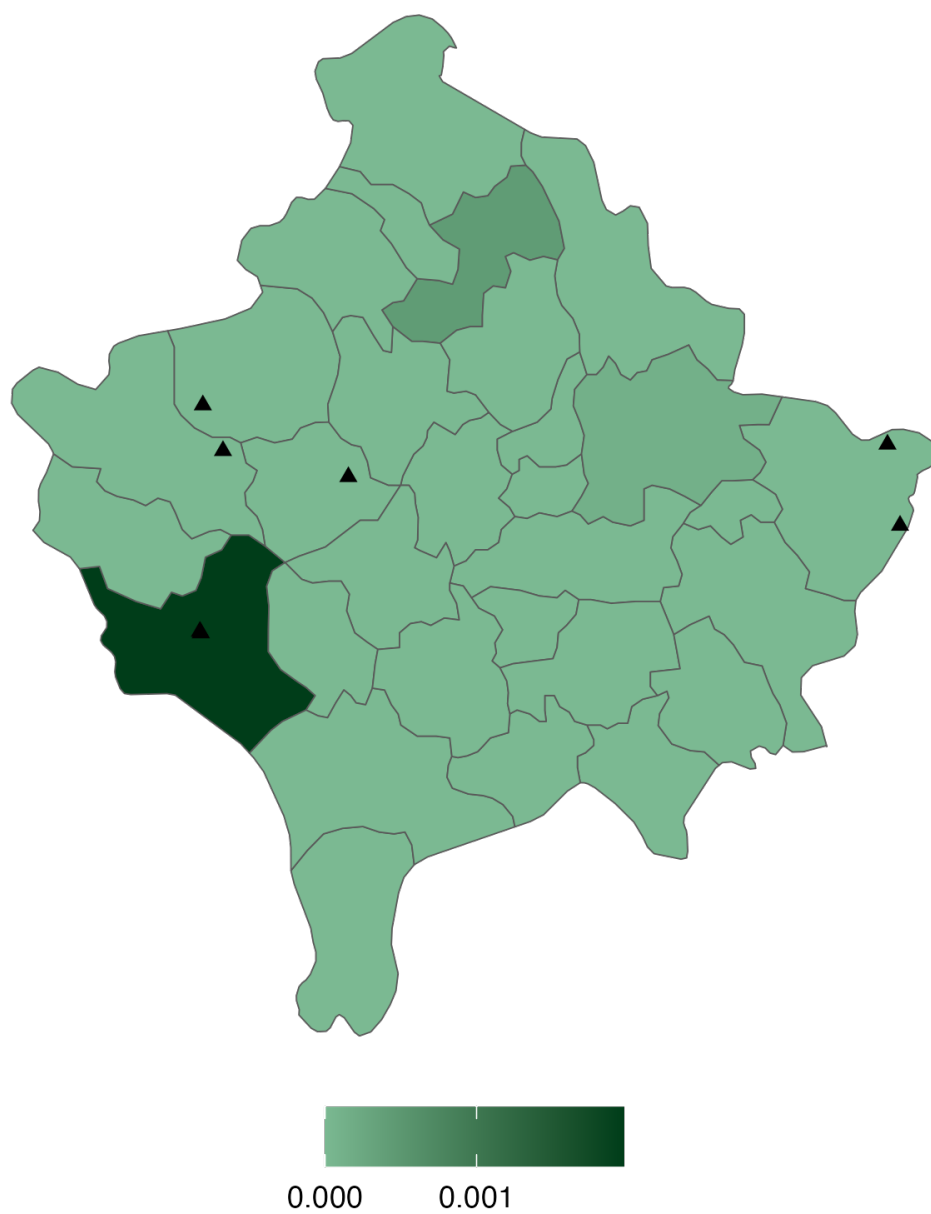


Figure 53: Proportion of news articles (2014-2017) mentioning municipality that also mention climate change.

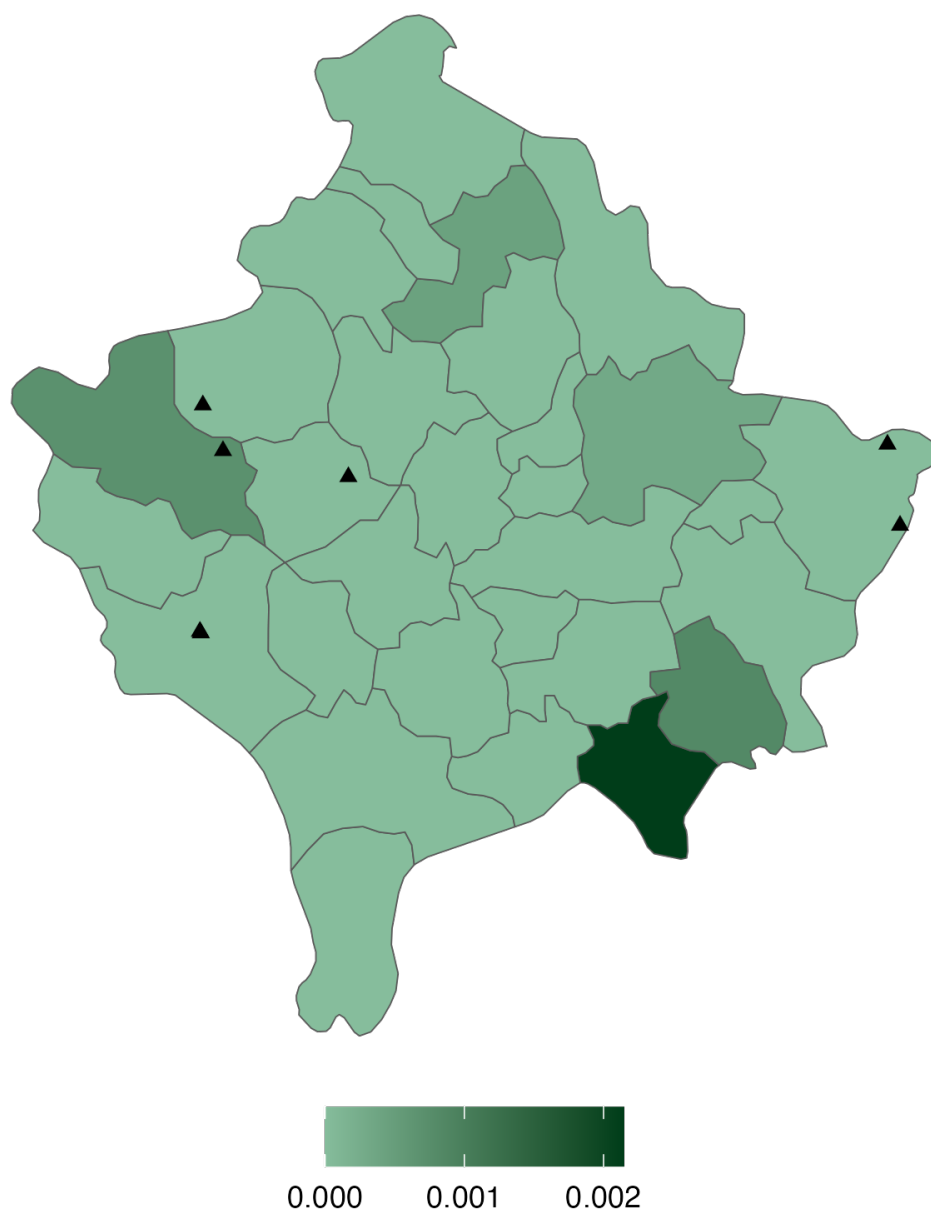


Figure 54: Proportion of news articles (2014-2017) mentioning municipality that also mention renewable energy.

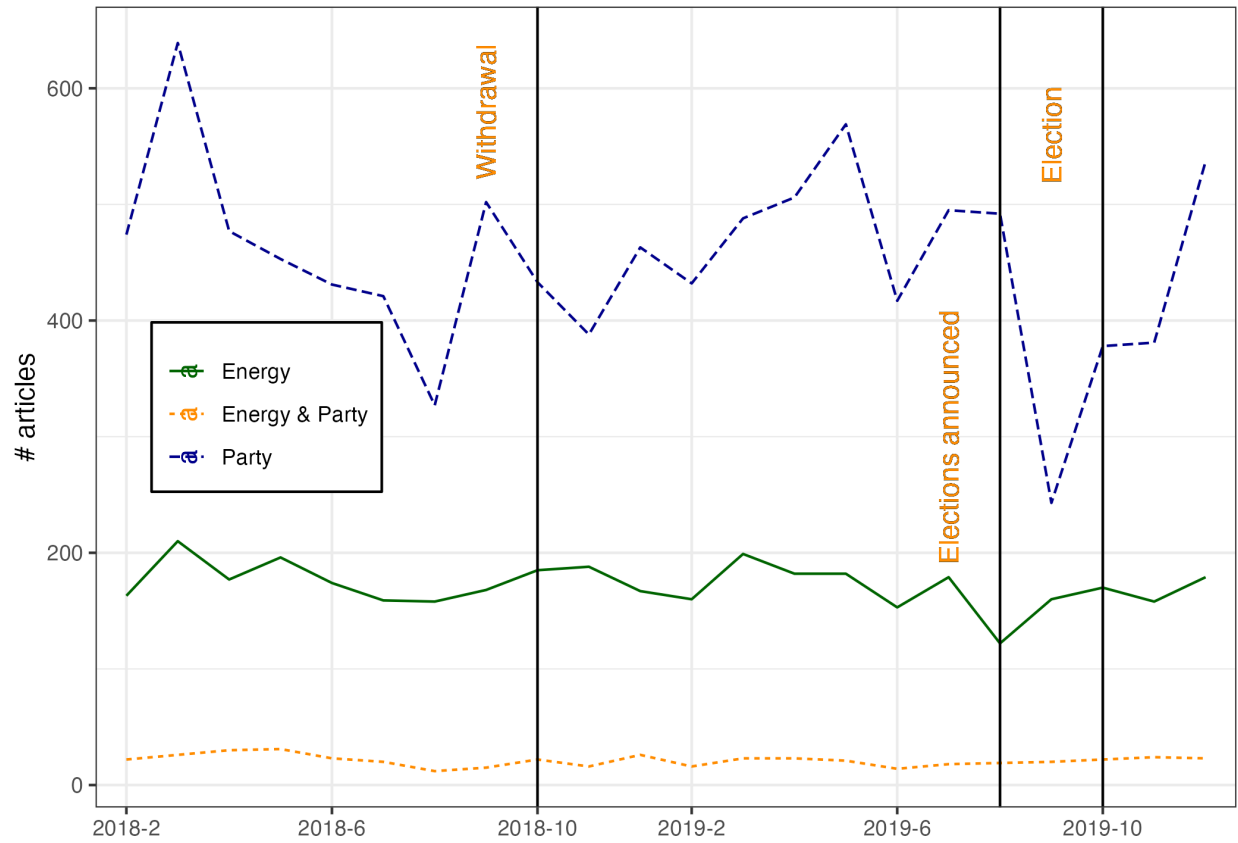


Figure 55: *Media coverage of energy and elections*: Number of articles explicitly mentioning energy (both renewables and fossil fuels), specific parties, and specific parties and energy. Horizontal lines indicate the date of withdrawal, elections announced, and the election itself.

# M Survey

## M.1 Summary statistics

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
age	57	0	33.1	11.6	17.0	30.0	90.0
gender	4	0	1.5	0.5	1.0	1.0	4.0
ethnicity	9	0	1.3	1.5	1.0	1.0	10.0
income	6	0	3.5	1.2	1.0	3.0	6.0
education	8	0	4.8	1.7	1.0	5.0	8.0
employed	2	0	1.4	0.5	1.0	1.0	2.0

Table 8: Covariate distribution

	No info (N=492)		Aid (N=508)		Withdraw (N=537)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
age	2020.9	816.3	2036.3	919.9	2038.7	892.0
gender	1.5	0.5	1.5	0.5	1.5	0.5
ethnicity	1.3	1.6	1.3	1.4	1.2	1.4
income	3.5	1.2	3.5	1.2	3.5	1.2
education	4.8	1.6	4.8	1.7	4.9	1.7

Figure 56: Covariate balance

## M.2 Consent script

You are invited to participate in a research study that will take approximately 15 minutes to complete. You will be asked to answer some questions about yourself and your preferences. There is no known or anticipated risk to you for participating in it. Participation in this study is entirely voluntary. You are free to decline participation, terminate it at any time for any reason, or refuse to answer any individual question without penalty or loss of compensation. The researcher will not know your name and no identifying information will be associated in any way with your survey responses. Therefore, the survey is anonymous. If at any time you have questions or concerns about the study or your rights or well-being as a research subject, contact Cleo O'Brien-Udry at [cleo.obrien-udry@yale.edu](mailto:cleo.obrien-udry@yale.edu). If you would like to speak to someone other than the researchers to discuss problems or concerns, to discuss situations where a member of the research team is unavailable or to discuss your rights as a research participant, you can contact the Committee of Yale University Human Subjects, 203-785-4688, [human.subjects@yale.edu](mailto:human.subjects@yale.edu). Additional information is available at <https://your.yale.edu/research-support/human-research/research-participants/rights-research-participant>. Do you accept?

## M.3 Outcome questions

Climate priority:

- On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about climate change?
- On a scale of 1-10, where 1 is not at all important and 10 is extremely important, how important do you think environmental protection should be for the Kosovar government?

Investment in renewables:

Table 9: Vignette treatments and text

Receive aid	Receive and withdraw aid	No information
Now imagine that the European Bank for Reconstruction and Development (EBRD) has committed to support a large natural gas production plant in Kosovo. Now please answer a few questions about your thoughts on Kosovo politics.	Now imagine that the European Bank for Reconstruction and Development (EBRD) has committed to support a large natural gas production plant in Kosovo. Years after this commitment, EBRD withdraws its funds for the power plant. Now please answer a few questions about your thoughts on Kosovo politics.	Now please answer a few questions about your thoughts on Kosovo politics.

- How likely do you think the following actors are to invest in renewable energy in Kosovo? [EBRD, Kosovo government]

Sectoral growth:

- How do you expect the number of jobs in the following sectors in Kosovo to change over the next year? [Renewables, fossil fuel]

## M.4 Experimental evidence

I ran a 1500 person survey in Kosovo with a local firm, Riinvest, using computer-assisted personalized interviews (CAPI) in March 2023. After a battery of covariates, respondents were randomly assigned with equal probability to one of three conditions: *no information*, *receive aid*, and *receive and withdraw aid*. Table 9 displays the text of each treatment. The respondents then answered questions about political and economic outcomes.

Aid and aid withdrawal affected respondents' perceptions of national economic trajectories. Figure 57 shows the effect of treatment on respondents' expectations of future energy investment. Information about aid for fossil fuels increased perceptions that the EBRD

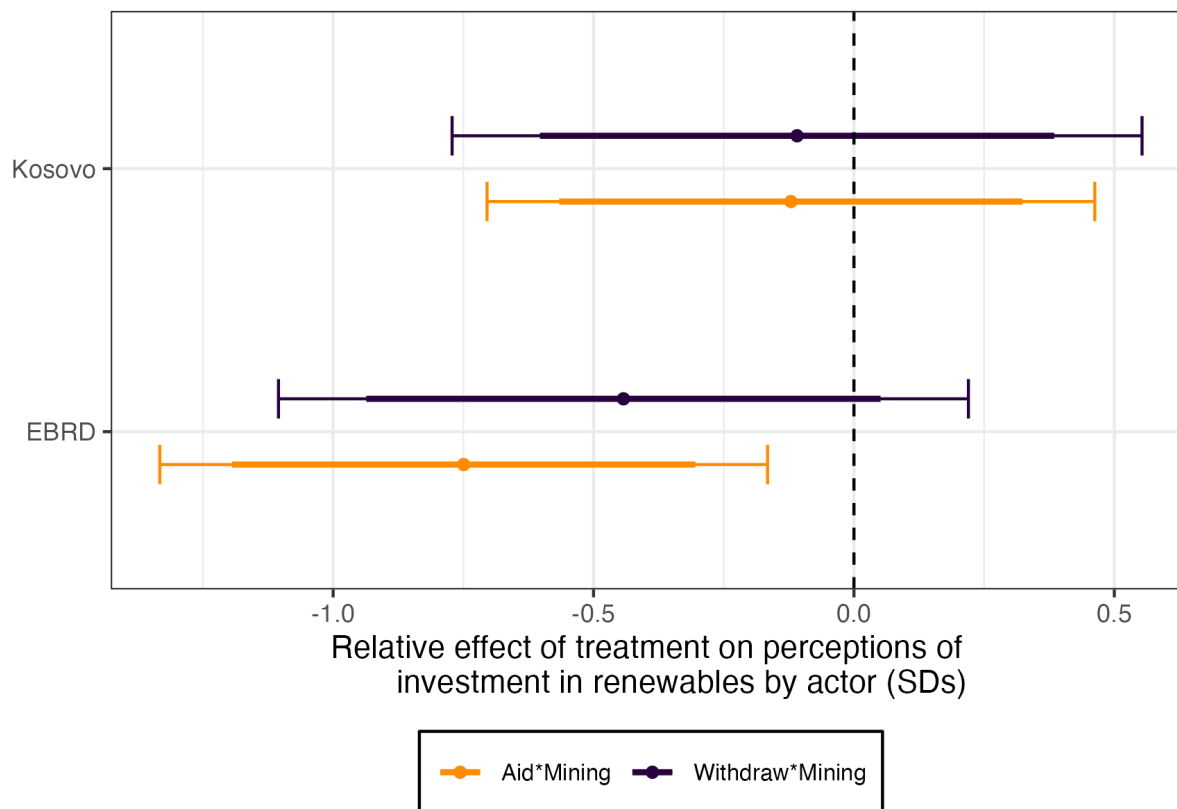


Figure 57: *Effect of treatment on perceptions of renewable investment*: Average treatment effects of information about receiving and withdrawing aid on perceptions of future investment in renewable energy by the EBRD and by the Kosovo government. Orange represents the aid treatment (compared to no information), dark blue the withdrawal (compared to no information), and dark green the effect of withdrawal relative to aid as a baseline. Regressions specified with OLS, robust standard errors, and basic covariates (gender, age, income, education, employment status).

would invest in renewable energy. This counter-intuitive finding suggests that, broadly, respondents view international investment in energy as fungible across sectors. Respondents do not see aid as spurring future investment in renewables from the Kosovar government.

Figure 58 confirms this relationship: most respondents see fossil fuel aid as increasing growth in both fossil fuel *and* renewable sectors. However, for respondents in mining municipalities, effects are in line with theoretical expectations. Fossil fuel aid is perceived to increase the number of jobs in the fossil fuel sector and decrease jobs in renewables. The



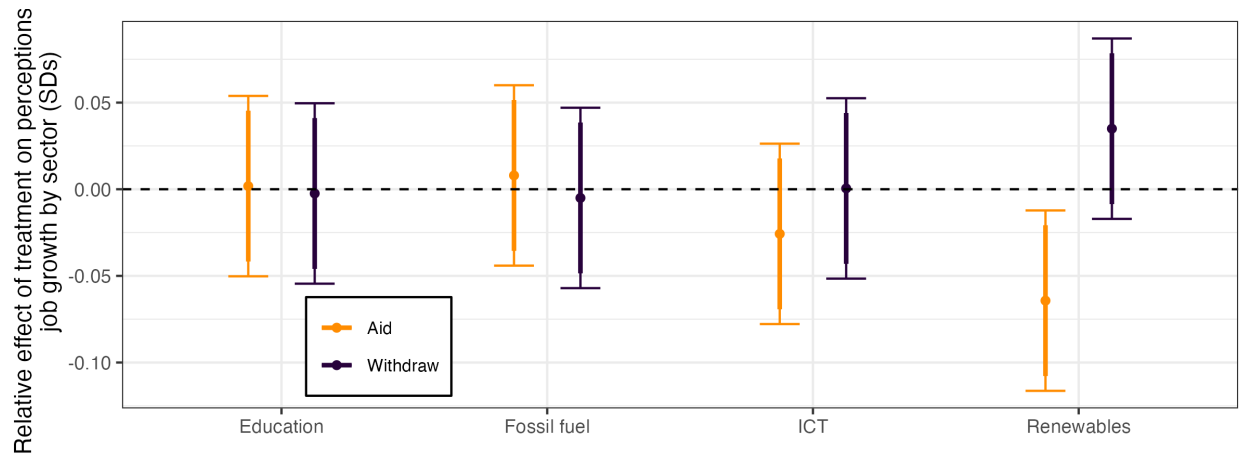


Figure 58: *Effect of treatment on job growth perspectives by location:* Average treatment effects of information about receiving and withdrawing aid on perceptions of future job growth in renewable and fossil fuel sectors. Respondents are split into two groups by residence in a municipality with coal mines or not. The left panel reports point estimates for perceptions of job growth amongst mining municipalities; the right all other municipalities. Orange represents the aid treatment (compared to no information), dark blue the withdrawal (compared to no information), and dark green the effect of withdrawal relative to aid as a baseline. Regressions specified with OLS, robust standard errors, and basic covariates (gender, age, income, education, employment status).

concentration of effects in respondents who have been directly exposed to international investment in, and withdrawal from, fossil fuel plants suggests that the salience of the issue conditions responses to new information.



Figure 59: Trepca mining location

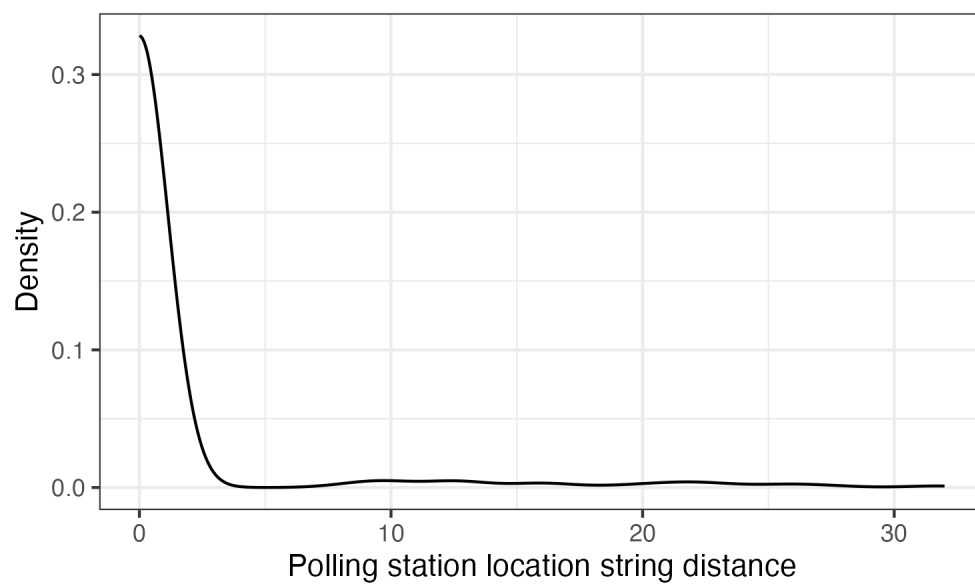


Figure 60: Polling station similarity check: String distance of all polling station location names from 2010 to 2021