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The Role of Moral Foundations in the Energy Transition

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Research Report

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Abstract

Public support for renewable energy and climate policies is crucial for the success of the energy transition. While previous research has established the influence of political ideology on energy preferences, the role of moral foundations in shaping these attitudes remains underexplored. This study examined the relationships between moral foundations and support for renewable energy (solar and wind) and fossil fuel reduction policies, while controlling for political orientation and other relevant factors.

Using data from an online national survey of 2,188 U.S. adults, we employ binary logistic regression analyses to test the independent associations of the five moral foundations (care, fairness, authority, loyalty, purity) with energy policy preferences. The results reveal that the individualizing foundations of care and fairness consistently predict higher support for renewable energy and lower support for fossil fuels, even after accounting for political ideology. In contrast, the binding foundation of authority is negatively associated with renewable energy support, while loyalty predicts opposition to decreasing fossil fuel use. Results also demonstrate that moral foundations play a distinct role in shaping public attitudes towards energy transition policies, beyond the influence of political orientation. The care and fairness foundations emerge as potential drivers of support for renewable energy and climate action across the political spectrum. Conversely, the authority and loyalty foundations may contribute to resistance to energy system changes, particularly among conservatives.

We highlight the importance of considering moral concerns in the design and communication of energy transition strategies. Policymakers and advocates could leverage moral foundations theory to craft targeted messages and policies that resonate with different segments of the public. By aligning climate and energy initiatives with widely shared moral values, it may be possible to build broader coalitions of support for the energy transition. Further research is needed to test the effectiveness of morally-framed interventions in shifting energy attitudes and behaviors.

1. Introduction

We investigate the role of moral foundations in shaping public preferences for renewable energy and fossil fuel policies, independent of political ideology. While previous research has established the influence of political orientation on energy attitudes, the distinct contribution of moral concerns

remains underexplored. Understanding how moral foundations relate to energy preferences, beyond partisan divides, is crucial for designing effective transition strategies that resonate with diverse segments of the public. By examining this question in a national sample of Americans, we seek insights into the moral underpinnings of energy attitudes and their implications for policy.

Climate change poses a significant and increasingly urgent threat to the global ecosystem and human civilization alike (IPCC, 2021). The primary driver for climate change is the burning of fossil fuels for energy, accounting for 73% of global greenhouse gas emissions (EPA, 2022). Transitioning to renewable resources is critical to both mitigate the escalating consequences of climate change and to assist in the development of sustainable consumption and production initiatives (IRENA, 2022). Despite this, public and legislative attempts to advance renewable energy interests are routinely rejected along partisan lines, stalling any progress towards reducing carbon emissions. A successful transition away from fossil fuels will require investigating the full scope of the relationship between political orientation and attitudes towards sustainable energy sources.

Previous research has examined the factors shaping public preferences for renewable energy policies, including political orientation, ideology, cultural values, and moral foundations (Bidwell, 2016; Boudet et al., 2016; McCright et al., 2016b). Moral foundations theory (Graham et al., 2013; Haidt & Graham, 2007) specifically offers a promising avenue of research concerning the relationship between values, political orientation, and climate beliefs (Feinberg & Willer, 2013; Wolsko et al., 2016). Unfortunately, little existing evidence has investigated the relationship between renewable energy perceptions and moral foundations (Thomas et al., 2022; Watkins et al., 2016). The present study provides an exploration of the interaction between moral foundations and energy policy preferences, rectifying the absence of related research.

1.1 Energy and American demographics

A substantial body of research has examined the social, political, and psychological factors shaping public perceptions of renewable energy resources and associated policies in the United States. Demographic variables including age, gender, race, income, and education all significantly predict energy attitudes, with younger, female, more educated, and higher income Americans tending to express higher support for renewable resources and climate action (Bedle et al., 2023; Boudet et al., 2016; Drummond & Fischhoff, 2017; Hamilton, 2011). Impersonal factors such as experiencing extreme weather may also influence belief in climate change and support for mitigation initiatives (Akerlof et al., 2013; McDonald et al., 2015; van der Linden, 2015; Howe et al., 2013). Despite these findings, research investigating strategies for effective climate communication and policy creation remains inconclusive (Dickinson et al., 2016), suggesting the influence of additional factors on energy and climate-related attitudes.

1.2 Political Orientation

The influence of political orientation on climate and energy attitudes has been robustly established within the literature. Conservatives consistently express less concern about climate change, less support for renewable energy, and less desire for emissions reduction policies compared to liberals (Dunlap & McCright, 2016; Hornsey et al 2016; McCright et al., 2016a; McCright & Dunlap, 2011). Republican party affiliation and endorsement of a conservative political orientation are among the strongest predictors of

opposition to climate action, particularly within the context of renewable energy transitions (Clulow et al., 2021; Thomas et al., 2022; Hamilton et al., 2018). Conservatives also traditionally favor hierarchical and individualistic values that clash with liberals' preference for egalitarianism, which is a key component of climate change framing - potentially driving the dismissal of climate risks among conservatives (Kahan et al., 2011).

While evidence suggests that public perceptions of wind energy are generally favorable (Klick & Smith, 2010), wind energy is significantly less popular with conservatives (Crowe, 2020) and for individuals living near established or proposed wind farms (Umit & Schaffer, 2022). This has important implications for the construction of wind farms, as local resistance to wind projects can considerably constrain their development (Isaksson & Gren, 2024; Kitzing et al., 2024). Furthermore, as renewable energy initiatives rely primarily upon state governments, the election of Democratic governors correlates with the expansion of wind energy at the state level (Dorrell & Lee, 2020). While some research indicates that conservative opinions on wind energy may be more malleable than anticipated (Sokoloski et al., 2018) - particularly when emphasizing the potential economic benefits (Schimpf et al., 2022) - partisan disapproval for wind projects can have a measurable influence on their success.

Similar to findings within wind energy literature, solar power is broadly popular, with studies reporting that upwards of 80% of respondents support the construction of solar facilities (Carlisle et al., 2014). Consistent with research on wind energy, Republican support for solar projects decreases as proposals become more proximal, perhaps resulting from differences in underlying values (Carlisle et al., 2016). Evidence also indicates that solar energy development is improved by the election of Democratic state governors relative to Republican governors - although is additionally constrained by state-level economic factors (Bonnet & Olper, 2024). While findings are mixed, some studies show that partisan divides extend beyond local attitudes and into national support for solar energy (Crowe & Li, 2020), particularly following the increased political polarization of the topic. To explain this ideological disparity, some scholars implicate the increasing association of solar energy to the broader politics of climate change - particularly fueled by the labeling of solar energy as "green" - and the potential for solar energy to disrupt dominant fossil fuel industries (Schelly, 2015).

Continuing the trend of general public support for climate-friendly energy initiatives, research indicates that a majority of Americans support decreasing fossil fuel usage (Hawes & Nowlin, 2022) - with natural gas being a notable exception, as the public perceives it to be more environmentally friendly relative to coal and oil (Hazboun & Boudet, 2021). These attitudes vary greatly by political ideology, with conservatives perceiving natural gas to be significantly more environmentally friendly than liberals, as well as endorsing a decreased desire for the cessation of fossil fuel use (Funk & Hefferon, 2019; Hawes & Nowlin, 2022; Hazboun & Boudet, 2021). Belief in the economic benefits of fossil fuels additionally predicts support for their continued consumption (Schimpf et al., 2022; Hazboun & Boudet, 2021), a value predominately espoused by conservatives (Chu & Yang, 2020).

Despite these apparent ideological divides, the scholarly evidence indicates that conservatives are not universally opposed to renewable energy (McCright et al., 2016b), with certain moral and value-based framing evidencing an ability to influence climate-related beliefs (Adger et al., 2017; Campbell & Kay, 2014). These findings isolate a need to control for ideological differences within energy preference with respect to underlying moral values.

1.3 Moral Foundations

The ideological divides evident in energy preferences may result from underlying differences in values between liberals and conservatives (Chu & Yang, 2020). Moral Foundations Theory (Graham et al., 2009; Haidt & Graham, 2007) offers a compelling framework through which political orientation and its varying moral components can be examined. Moral Foundations Theory (MFT) proposes the existence of five innate moral categories: authority/subversion, purity/degradation, care/harm, fairness/cheating, and loyalty/betrayal. While more recent Moral Foundations work has identified a sixth category (Atari et al., 2023), the present study focuses only on the original five foundations. Under the assertions of MFT, political liberals place greater emphasis on the two 'individualizing' foundations of care and fairness, while political conservatives also engage the 'binding' foundations of loyalty, authority, and purity.

MFT research suggests that the individualizing foundations of care/harm and fairness/cheating are most frequently engaged within the context of climate change concerns (Gromet et al., 2013). The care/harm foundation assesses sensitivity to cruelty, suffering and vulnerability. It predicts increased concern about the anthropologic and environmental consequences to climate change (Dickinson et al., 2016; Markowitz & Shariff, 2012). The fairness/cheating foundation centers on justice and reciprocity, and is primarily concerned with social equity (Howell & Allen, 2019; Wolf, 2011). Fairness concerns shape views on equal sharing of climate mitigation costs, as well as in seeking justice against perpetrators of the climate crisis (Dawson & Tyler, 2012; Jansson & Dorrepaal, 2015). However, as liberals engage these individualizing foundations at higher levels than conservatives, both care and fairness divide liberals and conservatives in assessments of environmental risks (Feinberg & Willer, 2013; Koleva et al., 2012).

The binding foundations of loyalty/betrayal, authority/subversion, and purity/degradation are often engaged by conservatives to justify climate change skepticism (Feinberg & Willer, 2013). The loyalty/betrayal foundation emphasizes in-group allegiances, and is implicated in increased nationalism among conservatives. This foundation influences resistance to global cooperation on climate initiatives when seen as sacrificing national interests and sovereignty (Graham et al., 2009). However, loyalty can also motivate desire for climate action among conservatives when framed as a patriotic duty (Myers et al., 2012). The authority/subversion foundation prioritizes deference to hierarchies, rules, and figures of authority. It contributes to climate skepticism in the defense of the status quo and industry leaders reliant upon fossil fuel-based energy (Feinberg & Willer, 2013). The purity/degradation, foundation prioritizes the avoidance of disgust, contamination, and corruption of perceived purity. Purity predicts increased environmental sensitivity among conservatives, as it may relate to moral concerns surrounding human interference with nature (Dickinson et al., 2016; Feinberg & Willer, 2013).

Prior research has consistently found that political orientation and party affiliation are key predictors of energy policy preferences, with conservatives and Republicans tending to favor fossil fuels while liberals and Democrats show greater support for renewable energy sources (Gromet et al., 2013; Hurst & Stern, 2020; Hudson, 2022). This pattern likely reflects deeper ideological differences, with conservatives emphasizing values like loyalty to traditional industries, respect for authority, and protection of the ingroup, while liberals prioritize care for the environment and fairness in the energy transition (Hudson, 2022; Vainio & Mäkiniemi, 2016; Watkins et al., 2016).

However, the role of moral foundations in shaping energy preferences beyond political ideology remains an open question. While some studies have suggested links between individualizing moral foundations

(care, fairness) and support for sustainable energy, and binding foundations (authority, loyalty, purity) and opposition to renewable transitions, the evidence is mixed (Silfver et al., 2023; Watkins et al., 2016). Moreover, the potential for moral reframing to appeal to conservatives' values and increase support for renewable energy has been proposed but not conclusively demonstrated (Hurst & Stern, 2020).

Therefore, this study aims to examine the independent relationships between moral foundations and energy preferences, after accounting for the influence of political orientation. By disentangling these factors, we can better understand the distinct role that moral concerns may play in shaping public attitudes towards the energy transition, and the implications for crafting transition policies and messaging that resonate across the political spectrum.

Using original survey data collected in 2023 from a nationally representative sample of Americans, this study employs a series of logistic regression models to empirically address the following research questions:

1) How do the five moral foundations (care, fairness, authority, loyalty, purity) relate to support for increasing renewable electricity sources (solar, wind) and decreasing fossil fuel dependence (oil, gas), while controlling for the influence of political orientation?
2) What are the implications of these findings for crafting renewable energy policies and transition messaging that can appeal across the political spectrum?

Based on the reviewed theory and evidence, the study hypothesizes:

H1: Higher scores on the individualizing moral foundations of care and fairness will predict increased support for renewable energy and decreased support for fossil fuels, independent of political orientation. This hypothesis is informed by previous findings linking care and fairness concerns to pro-environmental attitudes and support for climate action (Dickinson et al., 2016; Jansson & Dorrepaal, 2015; Koleva et al., 2012).

H2: Higher scores on the binding moral foundations of authority and loyalty will predict decreased support for renewable energy and increased support for fossil fuels. This hypothesis draws on research suggesting that binding foundations, particularly authority, are associated with defense of the status quo and existing power structures, which may translate to opposition to energy system changes (Feinberg & Willer, 2013; Wolsko et al., 2016). We do not believe that the purity foundation will be important, as it tends to be more salient for issues that directly relate to bodily and spiritual defilement, such as sexual morality and religious taboos (Koleva et al., 2012).

2. Methods

2.1 Data and Availability

This study analyzes data from a survey conducted by the authors at the University of Oklahoma. The survey was administered online by Qualtrics to a nationally representative sample of 2,188 U.S. adults in April thru May 2023. Recruitment used quota-based sampling based on age, gender, income, education, race/ethnicity and U.S. census region to approximate accurate representativeness of the United States. The University of Oklahoma Institutional Review Board approved all study procedures under protocol

#15823. Data is available to share dependent on the collection and sharing guidelines of the IRB. Additional details of the survey are available in the SPEER23 Report (Bedle et al., 2024).

2.2 Dependent Variables

Support for renewable energy policies was measured by asking respondents' level of agreement on whether the U.S. should increase or decrease use of solar power, wind power, natural gas and oil. The exact wording of the question was as follows: "Please give your opinion on the following energy sources and technologies, and whether you would like to see less or more of each type in the overall energy mix used at the regional and national level." The participants were given a 6-point scale ranging from 'drastically decrease' to 'drastically increase,' and an option to note that they were 'unfamiliar with this technology.' For regression analyses, responses were recoded into binary variables of Support for Increasing Solar, Support for Increasing Wind, and Support for Decreasing Oil and Gas, where 1 = Increase/Decrease and 0 = all other responses.

2.3 Independent Variables

The moral foundations were assessed using 20 moral relevance questions developed and validated by the Moral Foundations Questionnaire (Graham et al., 2011). This asks respondents to rate the relevance of moral concepts to their thinking on 6-point scales. Items load onto the five foundations of care/harm, fairness/cheating, loyalty/betrayal, authority/subversion, and purity/degradation. Responses were averaged to create foundation scales.

2.4 Control Variables

Additional variables controlled for standard demographics and other covariates commonly related to environmental attitudes based on previous research and as noted in the literature review. Control variables include political party, mean-centered age (along with a squared term when significant), gender, race, education, income, marital and parental status, religious service attendance, evangelical identity, and biblical views, urbanicity, and US region.

2.5 Analysis

We use binary logistic regressions to test relationships between moral foundations and energy policy support. Preliminary models only include control variables. Subsequent models include moral foundations scales. Tables 1 reports full results of the logistic regression models.

3. Results

Results from fully controlled, binary logistic regressions are shown in Table 1. Overall, results show that adding moral foundations to energy preference models substantially increase model fit. Results for support for wind energy, displayed in Model 1b, demonstrate that a one-unit increase in the care and fairness foundations, results in a 7.2 and 5.6 percent increase in odds of supporting wind energy, respectively. These findings support Hypothesis 1. A one-unit increase in the authority foundation scale, however, reduces wind support by 4.6 percent. Loyalty and purity are unrelated to wind energy support. These results partially support Hypothesis 2. The inclusion of moral foundations has a substantial mediating effect on the relationship between political affiliation and wind energy preference.

Model 2b in Table 1 displays results for support for increasing solar energy. For every one-unit increase in the care and fairness scales, the odds of supporting solar energy increase by 7.7 and 8.6 percent, respectively - supporting Hypothesis 1. Like results for wind energy, a higher score on the authority foundation reduces solar energy support (5.7 percent decrease for each one-unit increase on the scale). Again, loyalty and purity are unrelated to support for increasing solar energy. These findings offer partial support for Hypothesis 2. As with support for wind, we find that moral foundations partially mediate the effect of political orientation on support for solar energy.

Results for opposition to oil and gas energy are displayed in Model 3b of Table 1. For each one-unit increase in the care foundation scale, the odds of oil and gas opposition increase by 7.7 percent and for each increase in the fairness scale, the odds of opposition increase by 9.2 percent. Findings for binding moral authorities are more robust for views of oil and gas compared to renewable energies as both Loyalty and authority decrease opposition to oil and gas. Specifically, a one-unit increase in the loyalty and authority foundations reduce the odds of oil and gas opposition by 7.4 and 4.9 percent, respectively. Purity is unrelated to opposition to oil and gas energy. Once again, moral foundations partially mediate the effect of political orientation on oil and gas energy preferences. These results support both of our hypotheses.

Overall, the results demonstrate that individualizing moral foundations increase support for renewable energy and decrease support for oil and gas. Results for binding moral authority are somewhat mixed. The authority foundation decreases support for renewable energy and opposition to oil and gas. The loyalty foundation only decreases opposition to oil and gas. Purity does not associate with energy preference in any of the models. Furthermore, the increased model fit and partial mediation of the relationship between political orientation and energy preference when moral foundations are accounted for, suggests that some of the effect of political polarization on energy preference found in a wealth of literature on the subject can be attributed to how individuals understand their own views of morality.

4. Discussion

This study examines the independent relationships between moral foundations and public support for renewable energy and fossil fuel policies, after accounting for the influence of political orientation and other demographic variables. The results reveal the distinct role moral concerns can play in shaping energy preferences, beyond partisan divides.

Consistent with the study's first hypothesis, the individualizing moral foundations of care and fairness emerged as significant positive predictors of support for increasing solar and wind power, as well as decreasing reliance on oil and gas. This suggests that individuals who place a high value on compassion, empathy, and ensuring fair outcomes are more inclined to favor a transition towards renewable electricity sources. These findings align with previous research linking the individualizing foundations to sustainable consumption behaviors and support for climate action (Howell & Allen, 2019; Silfver et al., 2023; Watkins et al., 2016).

Interestingly, the binding moral foundation of authority was a consistent negative predictor of renewable energy support, irrespective of political orientation. This may indicate that a preference for respecting traditional sources of power and deferring to established authorities inhibits acceptance of

disruptive energy transitions, even among liberals who generally favor renewable policies. The loyalty foundation also played an unexpected role, with higher loyalty predicting resistance to decreasing fossil fuel use. This suggests that a strong allegiance to one's own social group can translate to defending the economic interests of conventional energy industries.

These patterns provide evidence that moral foundations shape energy preferences independently of political ideology. Effective strategies for accelerating the energy transition may need to account for these underlying moral motivations, in addition to standard partisan divides. Specifically, messaging and policies that appeal to the care and fairness foundations could help garner broader public support, while approaches that acknowledge concerns over authority and loyalty may be necessary to reach skeptical segments. Finally, fossil fuel reduction strategies should recognize and account for the moral values associated with increased support for oil and gas.

5. Policy Implications

These insights suggest that the development of morally-targeted climate initiatives, such as renewable portfolio standards, pricing policies, incentives, and communication campaigns, may be beneficial to garner increased public support. The implementation of nuanced, values-based messaging with specific tailoring to ideological groups may accelerate climate action through heightened public desire and demand. The implications of divided moral valuations on the creation of effective transition policies are as follows:

5.1 Renewable Portfolio Standards (RPS)

Renewable portfolio standards are government policies that set targets for the amount of clean, renewable energy sources that must be included in a region's electricity generation. These RPS policies could be designed to better account for regional differences in moral foundations and political ideologies.

Research indicates that moral foundations and political orientations vary geographically, with more liberal and egalitarian values concentrated on the coasts, and more conservative and traditional values in the South and Midwest (Bishop & Cushing, 2009). Aligning RPS policies with these regional moral differences could involve tiered targets - establishing higher renewable goals in more liberal states, while implementing more gradual objectives in conservative areas (Strokes & Breetz, 2018). This phased approach may allow additional time for informational and messaging campaigns to shape public perceptions in conservative regions, enabling a tolerable pace of renewable energy expansion.

Importantly, this study finds that the binding moral foundation of authority was a consistent negative predictor of support for renewable energy. This suggests RPS policies should be tailored to avoid clashing with this moral concern, especially in regions where authority is more strongly emphasized. For example, goals could be tiered or phased in gradually in high authority areas to better align with local values and mitigate potential backlash. Pairing such policies with messaging that demonstrates respect for traditional energy authorities and gradual change may further help build acceptance.

Overall, this flexible, regionally-calibrated approach to RPS design and implementation could foster more nuanced compromise around the energy transition, accounting for diverse moral foundations across the country.

5.2 Carbon Pricing Policies

Carbon pricing policies are a potentially bipartisan initiative involving the creation of a framework to tax carbon emissions. Such a framework allows for the integration of moral foundations into policy design, enabling consideration of values held by both political parties and potentially preventing outright rejection by conservatives. For example, carbon dividend proposals that directly rebate revenues to consumer households could engage the Fairness foundation, appealing to motivating values (Carattini et al., 2017). Additionally, highlighting the economic benefits of carbon pricing policies may activate the care foundation among conservatives, as demonstrated by prior research (Myers et al., 2012).

However, the findings from this study suggest additional moral considerations are warranted. The binding foundation of loyalty emerged as a negative predictor of support for decreasing fossil fuels. This indicates that policies protecting the economic interests of traditional energy industries and workers could help gain buy-in from conservatives high in loyalty. Framing carbon pricing as upholding the authority foundation and preserving jobs may also be an effective approach.

Stratified experimental surveys and focus groups could further identify optimal moral framings for carbon pricing policies (Wolsko et al., 2016), building on the insights from this study. By carefully designing such policies to resonate with a range of moral concerns, carbon pricing may have greater potential as a bipartisan climate solution.

5.3 Targeted transition plans

Transition plans for the replacement of fossil fuel industries and resulting economic impacts will require values-based messaging initiatives, especially to increase support among conservatives. Rural clean energy development initiatives could appeal to the care and purity foundations within local communities, as the present study suggests that conservatives with high engagement of these foundations proportionally express decreased support for fossil fuel use (see also Jacquet & Stedman, 2015). Urban solar projects specifically may find support among liberals and moderates by emphasizing the fairness foundation. This may doubly appeal to conservatives if the attention is focused on the preservation of local jobs and economies, as opposed to preventing harm to victims of climate change (Bedle et al., 2023; Hudson, 2022; Watkins et al., 2016). As this approach would still engage the care and fairness foundations, it would be unlikely to alienate liberals and moderates (Hurst & Stern, 2020), thus allowing the creation of messaging with bipartisan appeal. However, the negative relationship between the authority foundation and renewable energy support suggests an additional consideration.

5.4 Climate Communication Campaigns

Liberals and conservatives tend to have divergent perspectives on clean energy policies, often rooted in differing moral intuitions as revealed by this study. Effective communication campaigns should segment messaging to target the specific moral values of their intended audiences (Feinberg & Willer, 2013). Emphasizing the economic benefits and household financial savings from clean energy can engage the care foundation, which may have greater moral appeal than person-based framing (Bedle et al., 2023; Hudson, 2022; Watkins et al., 2016). However, the study also found the binding authority foundation to be a consistent negative predictor of renewable energy support. To address this, communications targeted at certain audiences could demonstrate how clean energy initiatives uphold established power

structures and industry leadership, rather than disrupt the traditional energy system. Messaging that conveys respect for traditional authorities may help mitigate resistance from those high in authority. Additionally, giving a seat at the table to established energy authorities when setting renewable energy targets and policies could demonstrate respect for their role and expertise. This "top-down" approach may be more palatable than perceived threats to their power.

To engage the care and fairness foundations, communications could highlight how clean energy policies address the disparate impacts of pollution and climate change on disadvantaged communities. Framing emissions reductions as an egalitarian pursuit with shared international burdens may also appeal to notions of fairness (Markowitz & Shariff, 2012).

While not exhaustive, these examples demonstrate tangible ways that insights from MFT and the present study could assist in the creation of policies and strategies for accelerating the renewable energy transition. By carefully designing energy policies and programs to resonate with the key moral foundations identified in this study - care, fairness, and authority - policymakers may be able to navigate partisan divides and accelerate the renewable energy transition with broader public support. Further research should investigate how additional value orientations shape sociopolitical dynamics around energy system transition and climate change beliefs.

6. Conclusion

Moral foundations play a distinct and significant role in shaping public attitudes towards renewable energy and fossil fuel policies, independent of political ideology. The individualizing moral foundations of care and fairness consistently predicted higher support for renewable energy sources like solar and wind, as well as decreased support for fossil fuels. Conversely, the binding moral foundations of authority and loyalty were associated with resistance to renewable energy transitions and a desire to maintain the status quo of fossil fuel reliance.

This suggests that effective strategies for accelerating the renewable energy transition should consider the underlying moral concerns that motivate different segments of the public. By crafting policies and messaging that resonate with the care and fairness foundations, policymakers and climate advocates may be able to build broader coalitions of support for renewable energy initiatives. Simultaneously, addressing the moral concerns related to authority and loyalty could help mitigate resistance to energy system changes, particularly among conservatives. Aligning climate and energy policies with widely-shared moral values may be key to achieving a transition to a sustainable energy future.

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Table 1. Binary Logistic Regressions for Energy Preference by Political Orientation and Moral Foundations

	Increase Wind Energy		Increase Solar Energy		Decrease Oil and Gas Energy	
	Model 1a	Model 1b	Model 2a	Model 2b	Model 3a	Model 3b
	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.
Political Orientation						
Moderate	.481***	.570***	.520***	.628**	.482***	.640***
Conservative	.263***	.334***	.338***	.438***	.255***	.365***
Moral Foundations						
Care	-	1.072***	-	1.077***	-	1.077***
Fairness	-	1.056**	-	1.086***	-	1.092***
Loyalty	-	.980	-	.968	-	.926***
Authority	-	.954*	-	.943**	-	.951**
Purity	-	.993	-	1.012	-	.982
Log likelihood	-1267	-1238	-1163	-1121	-1177	-1120
Psuedo R^2	.082	.103	.080	.113	.130	.172

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

**Note: Model includes controls for party affiliation, age, gender, race, socio-economic status, family status, and religious variables*

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