NBS Working paper
5/2025

Environment vs. Economic Growth: Do Environmental Preferences Translate into Support for Green Parties?

Vladimir Otrachshenko and Olga Popova

NATIONAL BANK OF SLOVAKIA
EUROSYSTEM

www.nbs.sk

NATIONAL BANK OF SLOVAKIA
EUROSYSTEM

research@nbs.sk

This publication is available on the NBS website

https://nbs.sk/en/publications/research-papers-working-and-occasional-papers-wp-op/

ISSN 2585-9269 (online)

Environment vs. Economic Growth: Do Environmental Preferences Translate into Support for Green Parties?*

Vladimir Otrachshenko[a]

Olga Popova[b]

Abstract

This paper contributes to a better understanding of the drivers of electoral support for Green parties and the environmental actions they promote, which is crucial for ensuring the long-term feasibility of environmental policies. We examine whether individual environmental preferences translate into voting for Green parties and analyze the mechanisms behind this effect. Employing an individual-level survey from developed and developing economies matched with the political parties' programs globally, we find that individuals who prefer environmental protection over economic growth are likely to translate their preferences into voting and supporting Green parties. These findings are robust to alternative definitions of Green parties and environmental preferences, as well as to potential endogeneity concerns. The key mechanisms behind this relationship are changes in the stringency of environmental regulations, individual economic insecurity, and individual- and country-level exposure to environmental changes. The effect of environmental preferences on Green party voting is less pronounced among individuals living in rural areas and those who are economically disadvantaged, including those with lower levels of education and income. These results suggest that support for Green parties and environmental policies is contingent on voters' economic security even when environmental preferences are strong.

JEL codes: D72; H11; Q56; Q58

Keywords: Environmental Preferences; Green Parties; Sustainable Development; Voting

---

* The views expressed in this paper are those of the authors and do not necessarily represent the official views of the organizations with which the authors are affiliated. The authors are grateful to the participants of the internal seminar at the National Bank of Slovakia and the Biennial Conference of the Czech Economic Society for useful comments and suggestions, and to Carolin Schneider for the research assistance. This paper initially appeared as IZA Discussion Paper 17475 and GLO Discussion Paper 1525 and should be replaced by the current version.

[a] Research Department, National Bank of Slovakia. E-mail: vladimir.otrachshenko@nbs.sk

[b] Leibniz Institute for East and Southeast European Studies (IOS), Regensburg, Germany; Institute of Labor Economics (IZA), Bonn, Germany; and Global Labor Organization (GLO), Essen, Germany.
E-mail: popova@ios-regensburg.de.

Non-technical Summary

Environmental concerns are growing globally. Recent polls by the United Nations indicate that many individuals worldwide agree that climate change affects their daily lives and demand that their country's governments take stronger action to protect and restore nature, as well as strengthen their commitments to climate action. Despite the importance of environmental protection in public debates, policies aimed at addressing these issues often face opposition due to their economic costs. As a result, Green parties struggle to secure stable electoral support and effectively implement environmental policies. Employing individual survey data from 60 countries, this paper contributes to a better understanding of these phenomena by examining whether and how individual environmental preferences influence intentions to vote for a Green party, as well as the mechanisms underlying this relationship.

The findings suggest that individuals who prioritize environmental protection over economic growth are more likely to vote for Green parties. However, factors such as economic insecurity, exposure to environmental changes, and the stringency of environmental regulations can limit the transfer from environmental preferences into votes for Green parties. Specifically, when individuals are worried about their financial situation or job security, they are less likely to vote for Green parties, even if they have strong environmental preferences. The availability of social protection programs in a country can reduce perceptions of economic insecurity. In countries with more effective social protection programs, individuals feel more economically secure and are more likely to support Green parties. On the other hand, more stringent environmental policies and exposure to natural disasters can exacerbate economic insecurity, which in turn reduces support for Green parties. Individuals in occupations more exposed to environmental changes, such as farming, may experience larger income losses due to natural disasters, weakening the impact of their environmental preferences on voting for Green parties.

1. Introduction

Environmental concerns are growing globally. Recent polls indicate that nearly 70% of respondents from over 70 countries agree that climate change impacts their daily lives, and more than 80% demand that their country's governments take stronger action to protect and restore nature, as well as strengthen commitments to climate action (UNDP, 2024). However, although voters view environmental protection as important, environmental policies often elicit legislative opposition because of being costly to both businesses and households (Aidt, 1998; Carter, 2006; Dunlap et al., 2001; McAlexander and Urpelainen, 2020).[1] As a result, Green parties remain relatively unsuccessful in elections and active policymaking (Caroll et al., 2009; Gourley and Khamis, 2023; Grant and Tilley, 2018; Niranjan and O'Carroll, 2024; Richardson and Roots, 1994).[2] Our paper contributes to a better understanding of these phenomena and examines whether individual environmental preferences actually translate into support for Green parties globally, as well as the mechanisms behind this relationship.

Recent evidence suggests that Green parties are more likely to receive votes in wealthier countries (Grant and Tilley, 2018), during periods of economic growth (Gourley and Khamis, 2023), in countries less exposed to international trade (Bez et al., 2023) and following recently occurred natural disasters (Garside and Zhai, 2022; Hoffmann et al., 2022; Kronborg et al., 2024). Voting for Green parties is hypothesized to be a phenomenon of a "new middle class" (Clark and Hoffman-Martinot, 1998) or post-materialistic (Inglehart, 1977) voting, suggesting that women, younger, richer, more educated, and those with stable jobs and from urban areas are more likely to vote for Green parties (Camcastle, 2007; Hooghe et al., 2010; Lichtin et al., 2023; Mannoni, 2025; Schumacher, 2014).[3] Nevertheless, Green parties still face difficulties in gaining stable support in elections (Hooghe et al., 2010).

This paper examines whether individual environmental preferences transfer into the Green party voting. Using data from the World Values Survey (WVS) 2017-2022, which includes over 60,000 individuals from 60 countries worldwide, we examine whether and how

[1] This may occur because environmental policies are perceived as a "secondary policy issue," i.e., important to voters but still not among their top priorities (List and Sturm, 2006; McAlexander and Urpelainen, 2020).

[2] For instance, although somewhat successful in gaining seats in the 2019 European Parliament elections (Han and Finke, 2022), Green parties substantially lost their positions in the 2024 elections (Niranjan and O'Carroll, 2024).

[3] A related strand of literature looks at the willingness to pay for environmental goods. In addition to voting for Green parties, willingness to contribute part of one's own income to protect the environment is another way to reveal individual preferences for environmental protection (e.g., Kahn and Matsusaka, 1997). The findings suggest that those with a high income, more educated, and married are more likely to contribute to the protection of the environment (see, e.g., Abate et al., 2020; Otrachshenko et al., 2022; Thalmann, 2004).

individual environmental preferences influence intentions to vote for a Green party and what mechanisms underlie this relationship. Our findings suggest that individuals who prefer environmental protection to economic growth are more likely to vote for Green parties. The changes in the stringency of environmental regulations, individual economic insecurity, and individual- and country-level exposure to environmental changes reduce this effect. At the same time, stronger social protection in a country may reinforce this relationship. Additionally, the impact of environmental preferences on voting for Green parties is less pronounced among individuals residing in rural areas and among economically disadvantaged individuals, including those with lower levels of education and income. The findings are robust to potential endogeneity concerns and a battery of sensitivity checks.

The contribution of this paper is threefold. First, we provide a comprehensive analysis of the mechanisms and heterogeneities in the impact of environmental preferences on voting for Green parties among different socioeconomic groups of individuals, using the most recent available data from 60 countries. Contrary to the narrow strand of literature, we focus on both developed and emerging economies. It is crucial to analyze the studied research question globally, as combating climate change for the future of the next generation requires a joint effort and collaboration from many countries. In addition, understanding the individual-level factors behind Green party voting in developing countries is especially important as these economies are more vulnerable to climate change despite having lower greenhouse gas emissions than developed countries (Diffenbaugh and Burke, 2019; Fankhauser and McDermott, 2014; Otrachshenko et al., 2024; Tol et al., 2004). Related work by Norris and Patulny (2005) utilizes the WVS 1981-2000 data from 14 developed countries. It descriptively shows that sociodemographic profiles of those who are willing to pay taxes for environmental protection and those who intend to vote for Green parties are comparable. Both groups are slightly richer, more educated, and younger than non-supporters of environmental taxes and those who prefer to vote for other parties. In addition, Carroll et al. (2009) examine a similar question using data from the 2005 New Zealand Values Survey and show that those who vote for the Green party are more likely to have environmental and social justice concerns than voters for other parties, while Peeters and Coffé (2024) and Schumacher (2014) find similar results in Belgium and Germany, respectively.

Second, our paper contributes to the literature on the willingness to pay for environmental goods. Broadly speaking, support for Green parties can be considered an environmental good, and the payment for this good represents the trade-off between economic

growth and environmental protection. In other words, the presence of Green parties in government is associated with the more active implementation of costly environmental policies (Anderson et al., 2017; Jensen and Spoon, 2011) and voting for Green parties indirectly reflects an individual's willingness to pay for such policies.

Finally, our analysis contributes to the recent debates on the broader societal consequences of economic hardship and inequality, suggesting, for instance, that economic insecurity may lead to crime, social unrest, and an increased demand for populism (see Deza et al., 2024; Guiso et al., 2024; Heslin, 2020). We find that economic circumstances and economic uncertainty limit the transfer from environmental preferences into votes for Green parties. As demonstrated, when we combine Green parties and parties addressing both economic and environmental concerns, support for such parties, namely *pro-Green* parties, increases almost threefold. That is, Green parties addressing the concerns of vulnerable groups may gain more support to implement environmental policies.

2. Conceptual Background and Hypotheses

According to the theory of issue voting, public issues salient to voters are likely to set the political agenda (Bélanger and Meguid, 2008; Dennison, 2019). Larger parties are typically more responsive to voters' general policy priorities, while niche parties are more responsive to issues in which they are perceived as competent (Klüver and Spoon, 2016). This implies that if voters for whom a specific public issue is salient believe that a particular political party is more competent in addressing this issue than other parties, they are more likely to vote for such a party (Bélanger and Meguid, 2008; Walgrave et al., 2015; Walgrave et al., 2020). In the context of environmental protection and climate change, this implies that the voters who are concerned about environmental issues are likely to attribute the competency of dealing with those issues to Green parties and, thus, more likely to vote for such parties (Crawley et al., 2021; Han and Finke, 2022; Peeters and Coffé, 2024). This explains why, for instance, Green parties receive more electoral support following natural disasters (Garside and Zhai, 2022; Hoffmann et al., 2022; Kronborg et al., 2024), which make environmental concerns more salient to the wider population (Li et al., 2011; Konisky et al., 2016; Ray et al., 2017).

In psychological literature, individual attitudes are seen as strong predictors of individual intentions and behavior (Aizen, 1988; Sherman and Fazio, 1983). From this perspective, voting for Green parties may serve to reveal individual environmental preferences. Previous research shows that environmental attitudes are indeed associated with various types of ecological behavior. For instance, individuals with environmental preferences are more likely

to commute by public transport and consume less gasoline (Kahn, 2007; Wagner, 2016), reduce household energy use (Poortinga et al., 2004), and recycle (Halvorsen, 2008) (for reviews, see Dietz et al., 2005; Turaga et al., 2010). Such pro-environmental behavior is often seen as being motivated by moral values and social justice attitudes rather than economic self-interest (Caroll et al., 2009; Halvorsen, 2008; Heinz and Koessler, 2021; Turaga et al., 2010).

Several studies on developed economies also suggest that those individuals who have environmental concerns are more likely to vote for Green parties (see Caroll et al. (2009) for the results on New Zealand, Peeters and Coffé (2024) for Belgium, and Schumacher (2014) for Germany). In addition, Comin and Rode (2023) find that in Germany, individuals who adopt solar panels are more likely to vote for a Green party and suggest that this effect might be driven by changes in environmental attitudes due to solar panel adoption. By casting a vote for Green parties, individuals express their explicit support for promoting and implementing environmental policies. Thus, we hypothesize that:

H1: Individuals with environmental preferences are likely to vote for Green parties.

Several potential mechanisms may be behind this relationship. Since the presence of Green parties in government is likely to be associated with more active implementation of environmental policies (Anderson et al., 2017; Jensen and Spoon, 2011), the first mechanism is related to environmental policy stringency and borne costs. In the short run, more stringent environmental policies targeted at reducing greenhouse gas emissions and enforcing environmental protection induce higher direct abatement costs borne by enterprises (Aidt, 1998; Berman and Bui, 2001), higher electricity generation costs (Gollop and Roberts, 1983), and deterred foreign direct investment (Bialek and Weichenrieder, 2021; Cai et al., 2016), although having mostly no effects on trade (Ederington et al., 2005), aggregate employment (Cole and Elliott, 2007; Morgenstern et al., 2002), and competitiveness (Jaffe et al., 1995).[4]

More stringent environmental policies are also associated with higher costs borne by the general population through environmental taxes, job losses and subsequent job reallocation costs, increased energy costs, and the adoption of (initially costly) energy-saving technologies

[4] Although being initially costly for the economy, more stringent environmental policies bring productivity and innovations growth and improved environmental quality in the medium- and long-run (Berman and Bui, 2001; Costantini and Crespi, 2008; Galeotti et al., 2020; Henderson, 1996; Porter and van der Linde, 1995; Rubashkina et al., 2015; Sohag et al., 2024) (for reviews, also see Brännlund and Lundgren, 2009; Brunel and Levinson, 2013). These benefits can partly be explained by the fact that environmental policies are typically more stringent in democratic countries (Bättig and Bernauer, 2009; Mavisakalyan et al., 2023), while corruption reduces environmental policy stringency (Damania et al. 2003).

(Campagnolo and De Cian, 2022; Comin and Rode, 2023; Dechezleprêtre et al., 2020; De Groote and Verboven, 2019; Thalmann, 2004; Ullah et al., 2024; Walker, 2013). These costs tighten household budget constraints. Theories of economic voting suggest that such costs have consequences for voting behavior: voters typically attribute changes in economic performance to governmental activities and vote accordingly (see Debus et al., 2014; Ivanov, 2023; Lewis-Beck and Stegmaier, 2019).[5] In addition, Green parties are more likely to focus on environmental policies and less likely to focus on economic growth, making them less attractive to lower-income voters (Schumacher, 2014). Thus, household economic insecurity would likely lead to weaker public support for environmental policies and a lower effect of environmental preferences on Green party voting. Therefore, our next set of hypotheses is as follows:

H2: More stringent environmental policies reduce the impact of environmental preferences on voting for Green parties.

H3: Individual economic insecurity reduces the impact of environmental preferences on voting for Green parties.

A related mechanism may work through income inequality and its perceptions. Environmental policies typically have strong distributional consequences, with those at the lower end of the income distribution, i.e., lower-income, unskilled, or low-educated individuals, suffering a disproportionately higher financial burden (Boccanfuso et al., 2011; Campagnolo and De Cian, 2022; Campanella and Lawrence, 2024; Chepeliev et al., 2021; Fullerton, 2009; Johnstone and Serret, 2006). We thus hypothesize that:

H4: Individual perceptions of income inequality reduce the impact of environmental preferences on voting for Green parties.

On the other hand, social safety net and governmental assistance programs may at least partially alleviate the household's economic insecurity concerns (Azeem et al., 2018; Borjas, 2004; Schmidt et al., 2016; Tenzing, 2020). This implies that in countries with more effective social protection programs, individuals are likely to feel more economically secure and protected against the distributional effects of environmental policies. As a result, the impact of

[5] Debus et al. (2014) argue that economic voting primarily benefits the ruling party. However, the policies proposed by Green parties are typically known to be costly. Thus, voters are likely to consider the economic consequences of those policies independently of whether a Green party is currently in the government or not.

environmental preferences on the Green parties' support may be stronger in those countries. Therefore, we hypothesize that:

H5: The impact of environmental preferences on voting for Green parties is stronger in countries with a higher share of social expenses.

Finally, interacting more with nature in daily life and being exposed to environmental changes may also affect the relationship between environmental preferences and voting for Green parties. This mechanism is twofold. On the one hand, exposure to natural disasters may exacerbate (the perceptions of) economic insecurity (Bui et al., 2014; Carter et al., 2007; Mavisakalyan et al., 2024) and, similarly to the mechanisms described above, weaken the relationship between environmental preferences and support for Green parties. On the other hand, frequent interaction with nature and the experience of natural disasters increase environmental concerns and support for environmental policies (Li et al., 2011; Konisky et al., 2016; Ray et al., 2017), reinforcing the relationship between environmental preferences and Green party voting. At the individual level, this mechanism may work through occupational choice. For instance, occupations such as farming and agricultural work are more exposed to the impacts of climate variability and natural disasters (Huang et al., 2020; Jessoe et al., 2018; Park et al., 2018; Otrachshenko et al., 2024a; Otrachshenko et al., 2024b). These individuals may experience larger income losses due to natural disasters, thereby weakening the impact of their environmental preferences on the support for Green parties. Alternatively, they may have stronger environmental concerns, reinforcing the support for Green parties. *A priori,* it is unclear which side of this mechanism would prevail. Therefore, we hypothesize that:

H6a: The impact of environmental preferences on voting for Green parties is likely to differ for individuals living in countries with higher and lower GDP losses due to natural disasters.

H6b: The impact of environmental preferences on voting for Green parties is likely to differ for individuals in occupations with higher and lower exposure to environmental changes.

3. Methodology

We estimate the following econometric model:

$$GreenVote_{ic} = \beta_0 + \beta_1 EnvPreferences_{ic} + \boldsymbol{\gamma'} \boldsymbol{X_{ic}} + \boldsymbol{\mu_c} + \boldsymbol{t_c} + \varepsilon_{ic} \qquad (1)$$

where *i* stands for an individual and *c* stands for country. $GreenVote$ is a binary variable that equals one if an individual intends to vote for a Green party and zero if an individual intends to vote for any other party. $EnvPreferences$ reflect individual preferences for environmental protection over economic growth (hereinafter, environmental preferences). The definition of

this variable is provided in the data section. $\boldsymbol{X}$ is a vector of individual characteristics, including age and its square, biological sex, a dummy variable for having a higher education, a dummy variable for being employed, income, rural/urban residence, marital status, number of children, and living in a landlocked country. $\boldsymbol{\mu}$ is a vector of country-fixed effects, t is a vector of survey year fixed effects, and ε is a stochastic disturbance. β_0, β_1, and $\boldsymbol{\gamma}$ are the model parameters to be estimated.

We estimate Equation (1) using the Heckman two-step selection model (Heckman 1979). This approach allows us to account for selection into participating in the elections, as not all respondents may have an interest or right to vote. First, we estimate the following selection equation to analyze whether an individual votes in the national election or not:

$$\Pr(Vote_{ic} = 1) = \alpha_0 + \alpha_1 Migrant_{ic} + \alpha_2 IntPolitics_{ic} + \boldsymbol{\delta}' \boldsymbol{X_{ic}} + \boldsymbol{\mu_c} + \boldsymbol{t_c} + \epsilon_{ic} \quad (2)$$

where *i* stands for an individual and *c* stands for country. $Vote$ is a dummy variable that equals one if an individual usually votes in the national election and zero otherwise. We use two variables that account for selection into voting: $Migrant$ and $IntPolitics$. $Migrant$ equals one if a respondent is an international migrant and zero otherwise. $IntPolitics$ is a variable that reflects the extent to which a respondent is interested in politics, ranging from 1 (not at all interested) to 4 (very interested), with a response of 1 used as the default category. Both these variables are likely to affect the decision to vote. Specifically, international migrants are less likely to participate in the national elections in the host country because they might be ineligible to vote, while those generally uninterested in politics are also less likely to vote. At the same time, both variables affect the intention to vote for a Green party in Equation (1) only through the decision to participate in the election, as specified in Equation (2). That is, these variables serve as exclusion restrictions in our model. $\boldsymbol{X}$ is a vector of individual characteristics as defined above, $\boldsymbol{\mu}$ is a vector of country-fixed effects, $\boldsymbol{t}$ is a vector of survey year fixed effects, and ϵ is a stochastic disturbance. $\alpha_0, \alpha_1, \alpha_2,$ and $\boldsymbol{\delta}$ are the model parameters.

Based on Equation (2), we estimate the individual probability of voting in the national election. Accounting for this probability of voting, we then estimate Equation (1) using ordinary least squares.[6] Standard errors are bootstrapped.

[6] Alternative ways to estimate Equation (1) is to use the probit model at the second stage, i.e. use the Heckman probit selection model (Van de Ven and Van Pragg, 1981), or to use the Heckman maximum likelihood estimation. However, these procedures are computationally demanding when many dummy variables are included in the model. Moreover, estimates and marginal effects in non-linear models with interaction terms are inconsistent (see Ai and Norton, 2003; Balli and Sørensen, 2013; Greene, 2010), while having interaction terms is important for studying mechanisms behind our effects of interest. We thus apply the Heckman two-step estimation.

We provide several robustness checks of our results. First, we estimate Equation (1) with a redefined dependent variable, $ProGreenVote$. This is a binary variable that equals one if an individual intends to vote for a pro-Green party, which lists environmental protection as one of its priorities, and zero if an individual intends to vote for any other party. In addition, we use alternative variables that reflect individual environmental preferences: (i) considering environmental beauty as a country's most important goal, rather than economic growth, and (ii) membership in environmental organizations. Definitions of these variables are provided in the data section.

In addition, we provide several checks to ensure that our results are not affected by potential endogeneity. First, it may be the case that individual unobserved factors, such as personality traits, affect both environmental preferences and voting for Green parties. To alleviate this concern, we use the procedure suggested by Oster (2019). It allows us to empirically check whether potential unobserved factors nullify the impact of environmental preferences on voting for Green parties.

Second, one might be concerned about a possible simultaneity issue in our model. On the one hand, environmental preferences influence voting for Green parties, as shown in Equation (1). On the other hand, this voting may reinforce pro-environmental behaviors that strengthen environmental preferences. To address this possible issue, we apply the instrumental variable approach.

We use several instrumental variables related to environmental preferences and affect voting for Green parties only through environmental preferences. The first set of instruments relates to personal qualities and moral values, such as the feeling of responsibility, tolerance and respect for others, and unselfishness. These variables are based on a survey question of whether respondents consider these qualities important to be taught to children at home (see the next section for variable definitions). Economic and psychological literature suggests that these moral values, especially when taught in childhood, are strong predictors of environmental preferences (see De Groot and Steg, 2007; Dietz et al., 2005; Gifford and Nilsson, 2014; Halvorsen, 2008; Heinz and Koessler, 2021; Turaga et al., 2010). The second instrument is the respondent's individual perception of the state of human rights protection in their country of residence. This instrument measures social justice attitudes, which are also found to be related to environmental preferences (Carroll et al., 2009; De Groot and Steg, 2007; Heinz and Koessler, 2021; Reese and Jacob, 2015).

In the next step, we analyze the heterogeneity of results by individual socioeconomic characteristics. Specifically, we estimate Equation (1) for different subsamples of individuals, disentangled by education, employment status, income, age groups, gender, having children, and living in an urban or rural area, and test whether the results differ across these subsamples. Through this analysis, we test whether the effect of environmental preferences on voting for Green parties varies with individual socio-demographic profiles.

Finally, we examine the mechanisms behind the relationship between environmental preferences and voting for Green parties. As discussed above, we analyze three sets of mechanisms: 1) the stringency of the country's environmental policies and individual economic insecurity, 2) individual income inequality tolerance, and 3) individual susceptibility to extreme weather events through respondents' own occupational choice. To understand whether and how these mechanisms affect the relationship between environmental preferences and voting for Green parties, we include the interaction terms of environmental preferences and the specific mechanism variable in Equation (1). A negative sign on the interaction term implies that the specified mechanism reduces the effect of environmental preferences on voting for Green parties, whereas a positive sign implies that the mechanism reinforces the main effect.

4. Data

Our main data source is the World Values Survey (WVS), wave 7 (2017-2022). This cross-sectional survey includes rich information on individuals' values, preferences, and socio-demographic characteristics. The survey was conducted in more than 60 countries between 2017 and 2022, with individuals from various countries surveyed during different years using a standardized questionnaire.[7]

4.1. Dependent Variables

To define intentions to vote for the Green party, we use the following WVS survey question: "*If there were a national election tomorrow, for which party on this list would you vote? Just*

[7] Our sample includes 60 countries: Andorra, Argentina, Armenia, Australia, Bangladesh, Bolivia, Brazil, Canada, Chile, Colombia, Cyprus, Czechia, Ecuador, Egypt, Ethiopia, Germany, Greece, Guatemala, Hong Kong SAR, India, Indonesia, Iran, Iraq, Japan, Kazakhstan, Kenya, Kyrgyzstan, Lebanon, Libya, Macau SAR, Malaysia, Maldives, Mexico, Mongolia, Morocco, Myanmar, the Netherlands, New Zealand, Nicaragua, Nigeria, Pakistan, Peru, Philippines, Puerto Rico, Romania, Russia, Serbia, Slovakia, South Korea, Taiwan, Tajikistan, Thailand, Tunisia, Turkiye, Ukraine, United States, Uruguay, Uzbekistan, Venezuela, and Zimbabwe. The WVS wave 7 also includes China, Jordan, Singapore, and Vietnam, however, the question on voting intentions was not asked in those countries. Also, we exclude Great Britain and Northern Ireland as the information on Green parties and country-level mechanism variables are only available for the United Kingdom, but not separately for Great Britain and Northern Ireland.

call out the number on this card. If don't know: Which party appeals to you most?" In each country, this question provides a list of political parties registered in this country in the survey year. Based on this question, we construct a dummy variable *Green,* which equals 1 if a respondent intends to vote for the Green party, and 0 if a respondent intends to vote for any other party.

We have employed two approaches to classify the parties as either "Green" or "non-Green". First, we use the Global Party Survey (GPS) 2019 (Norris, 2020). For over 1,000 parties globally, it asks knowledgeable experts in 170 countries to evaluate their country's parties' positions on various issues, including environmental protection. The question on the environmental protection positions of parties in the Global Party Survey is phrased as follows: "*Next, where do parties currently stand on the issue of environmental protection? Where would you place each party on the following scale? 0=Strongly favors environmental protection, 10=Strongly opposes environmental protection.*" For parties that are available in both WVS and GPS, we use this continuous measure to define whether a party is Green or not. If the GPS score of a party is below 3.5, we define such party as "Pro-Green", and if the score is equal to or below 2, we define such party as "Green".

Since not all the parties available in WVS also appear in the GPS, in addition to GPS, we have manually searched for parties' programs and classified the parties as "Pro-Green" if their programs mention environmental protection as one of the priorities and as "Green" if their programs include environmental protection as a main ideological focus.

4.2. Explanatory Variables

We measure individual preferences regarding environmental protection versus economic growth using the following WVS question: "Here are two statements people sometimes make when discussing the environment and economic growth." *Which of them comes closer to your own point of view?: 1 Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent; 2 Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs; 3 Other answer.*"

Additionally, we employ two alternative measures of environmental preferences. The first measure is based on a survey question: "*People sometimes talk about what the aims of this country should be for the next ten years. Would you please say which one of these you, yourself, consider the most important? (1) A high level of economic growth, (2) Making sure this country has strong defense forces, (3) Seeing that people have more say about how things are done at their jobs and in their communities, and (4) Trying to make our cities and*

countryside more beautiful." Similarly to the measure of environmental preferences described above, we code the variable as 1 if a respondent considers economic growth as the most important aim, 2 if making cities and countryside more beautiful is the most important aim, and 3 if a respondent chooses another option.

The other variable is individual environmental activism, measured by the respondent's membership in environmental organizations, as indicated by a survey question: "*Now I am going to read off a list of voluntary organizations. For each organization, could you tell me whether you are an active member, an inactive member or not a member of that type of organization? Environmental organization.*" with possible answers 2=Active member, 1=Inactive member, and 0=Do not belong. We use this variable as a dummy that equals one if a respondent is a member of an environmental organization (either active or inactive) and zero otherwise.

In the estimation, we also control for several sociodemographic characteristics, including age and its square, biological sex, employment status, income, having a high education, rural or urban residence, marital status, and having children. These variables are also available from WVS. We also use information on whether respondents live in a landlocked country.

4.3. Instrumental Variables

The first set of instruments we use is the child qualities important to be taught at home. These variables are based on a survey question: "*Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important?*" If a respondent mentions qualities such as "feeling of responsibility," "tolerance and respect for others," and "not being selfish (unselfishness)," we code the respective variable as one and zero otherwise.

The second instrument is the respondents' evaluation of human rights protection in their country. It is based on the following WVS question: "*How much respect is there for individual human rights nowadays in this country?*" The answers range from 1 (no respect at all) to 4 (a great deal of respect for individual human rights).

4.4. Mechanisms

Several variables are used to test the mechanisms behind the environmental preferences-voting relationship.

The stringency of environmental regulations in a country is measured using data from the World Economic Forum's Travel and Tourism Competitiveness reports (World Economic Forum, 2015, 2017).[8] This measure is based on an expert assessment of the stringency of environmental regulations, as determined by the question: "*How would you assess the stringency of your country's environmental regulations?"* and ranges from 1 (very lax, among the worst in the world) to 7 (among the world's most stringent). We use data on this indicator for 2015 and 2017 (the first year of WVS data we use for the analysis) and compute the difference in the stringency of environmental regulations between those years. A positive value of the difference indicates that, over the two-year period from 2015 to 2017, a country strengthened its environmental policies, while a negative value indicates that it weakened those policies.

Individual economic security is measured through two WVS questions. The first question concerns the respondent's self-assessed financial satisfaction: "*How satisfied are you with the financial situation of your household?*" with answers ranging from 1 (completely dissatisfied) to 10 (completely satisfied). The second question we use is about the respondent's worries about losing a job: "To what degree are you worried about the following situations? Losing my job or not finding a job," with answers ranging from 1 (not at all) to 4 (very much).

We measure income inequality perceptions through the WVS question: *"How would you place your views on this scale? 1 means you agree completely with the statement on the left (Incomes should be made more equal); 10 means you agree completely with the statement on the right (There should be greater incentives for individual effort); and if your views fall somewhere in between, you can choose any number in between."* That is, if the response to this question is closer to 1, then the individual is inequality-averse, while if the response is closer to 10, the individual is more tolerant of income inequality.

The information on social protection expenses as a percentage of GDP comes from the World Social Protection Report of the International Labour Organization (ILO, 2021). As a

[8] An alternative measure of environmental policy stringency used in the literature (see, e.g., Mavisakalyan et al., 2023; Sohag et al., 2024) is a multidimensional EPS index developed by the Organization for Economic Co-operation and Development (OECD) (Botta and Kozluk, 2014; Brunel and Levinson, 2013). This index measures the extent to which various environmental regulations are implemented and ranges from 0 (least stringent on all environmental policy instruments) to 6 (most stringent on all environmental policy instruments). However, this index is only available for OECD countries and a select group of non-OECD countries, whereas our sample encompasses many developing countries. The correlation between the World Economic Forum's stringency of environmental regulations measure, which we use in our analysis, and the OECD EPS index is 0.75.

measure of exposure to natural disasters, we use the losses due to extreme environmental events as a percentage of GDP for the period 2017-2019, which is available from the Global Climate Risk Index developed by Germanwatch (Eckstein et al., 2021, 2020, and 2019).

We use the respondent's occupation as a proxy for individual-level exposure to environmental events. It is likely that certain occupations, especially those in agriculture, are more exposed to extreme weather events, both in terms of direct exposure due to outdoor work and in terms of income-related exposure, such as agricultural income losses resulting from floods or droughts. We code this variable as one if a respondent is a farm worker (e.g., farm laborer or tractor driver), farm owner, or farm manager, and 0 otherwise. Descriptive statistics for all variables used in the analysis are shown in Table A1 in the appendix.

5. Results

5.1. Main Results

Table 1 presents the main results on the relationship between environmental preferences and voting for Green parties.[9] Accounting for selection in voting, we find that those who prefer environmental protection over economic growth are 3.1 percentage points (p.p.) more likely to vote for a Green party than those who prefer economic growth over environmental protection.

When we use alternative model specifications and modify dependent or independent variables, similar patterns are observed. In column (1) of Table 2, we find that individuals with environmental preferences are more likely to vote for pro-Green parties by 8.5 p.p., compared to those who prefer economic growth. Interestingly, this impact is almost three times greater than the one in Table 1. One possible explanation for this notable difference is that parties that address both economic concerns and environmental protection issues in their programs gain more support.

In column (2) of Table 2, when we use an alternative definition of environmental preferences (i.e., considering environmental beauty as the main aim for a country), individuals with environmental preferences are more likely to vote for Green parties by 3.3 p.p. than those who consider economic growth to be the most important. Finally, members of environmental organizations are 2.9 p.p. more likely to vote for Green parties compared to non-members (see column (3) of Table 2). Variables used as exclusion restrictions, i.e., being a migrant and being

[9] The full regression results for Table 1 are presented in Table A2 in the appendix.

interested in politics, are statistically significant in selection equations in all models, suggesting that our model's identification is not weak.

Table 1. Environmental Preferences and Voting for Green Parties.

	Heckman two-step selection
Main equation (dep. variable: Vote for the Green party)	
Environmental preferences (default: Prefer economic growth)	
Prefer environmental protection	0.031***
	(0.002)
Selection equation (dep. variable: Vote in the national election)	
Migrant	-0.791***
	(0.028)
Interested in politics (default: Not at all)	
Not very interested	0.404***
	(0.017)
Somewhat interested	0.698***
	(0.018)
Very interested	0.863***
	(0.025)
No. of observations	
Total	63,785
Selected	49,167
Non-selected	14,618

Notes: *** p<0.01, ** p<0.05, * p<0.1. Estimated coefficients after the Heckman two-step selection model are reported. Bootstrapped standard errors are in parentheses. Green parties are parties that have environmental protection as a key priority (see Section 4.1 for details). Both main and selection equations include individual socioeconomic characteristics, country fixed effects, and survey year fixed effects. Individual socioeconomic characteristics include age and its square, biological sex, employment status, income, having a higher education, being married, having children, urban or rural residence, and living in a landlocked country.

The results of Oster's (2019) check of the baseline specification in Table 1 suggest that unobserved factors are unlikely to drive our results.[10] Specifically, the influence of unobserved factors should be 8.6 times higher to nullify the impact of environmental preferences on voting for Green parties.

[10] We used ordinary least squares (OLS) estimation of Equation (1) to conduct the Oster's (2019) check procedure.

Table 2. Environmental Preferences and Voting for Green Parties: Additional Results.

	Env. preferences and voting for pro-Green parties (1)	Env. beauty and voting for Green parties (2)	Membership and voting for Green parties (3)
Main equation			
Environmental preferences (default: Prefer economic growth)			
Prefer environmental protection	0.085***		
	(0.003)		
Most important aim (default: Economic growth)			
Environmental beauty		0.034***	
		(0.004)	
Membership in environmental organizations (default: Not a member)			0.029***
			(0.003)
Selection equation (dep. variable: Vote in the national election)			
Migrant	-0.791***	-0.795***	-0.794***
	(0.028)	(0.029)	(0.028)
Interested in politics (default: Not at all)			
Not very interested	0.404***	0.406***	0.405***
	(0.017)	(0.017)	(0.016)
Somewhat interested	0.698***	0.700***	0.698***
	(0.018)	(0.018)	(0.017)
Very interested	0.863***	0.866***	0.862***
	(0.026)	(0.026)	(0.025)
No. of observations			
Total	63,785	62,895	63,337
Selected	49,167	48,277	48,719
Non-selected	14,618	14,618	14,618

Notes: *** p<0.01, ** p<0.05, * p<0.1. Estimated coefficients after the Heckman two-step selection model are reported. Bootstrapped standard errors are in parentheses. The dependent variable in the main equation is the vote for pro-Green parties in column (1) and the vote for Green parties in columns (2) and (3). Green parties are parties that have environmental protection as a key priority, while pro-Green parties are parties that have environmental protection as one of their priorities (see Section 4.1 for details). Both main and selection equations include individual socioeconomic characteristics, country fixed effects, and survey year fixed effects. Individual socioeconomic characteristics include age and its square, biological sex, employment status, income, having a higher education, being married, having children, urban or rural residence, and living in a landlocked country.

In addition, we estimate our model using the instrumental variable approach. The results presented in Table 3 suggest that, after accounting for potential endogeneity, the impact of environmental preferences on voting for Green parties increases in magnitude but remains positive and statistically significant. All in all, these findings suggest that our baseline results in Table 1 may serve as a lower-bound estimate of the impact of environmental preferences on voting for Green parties. Thus, our findings are in line with our hypothesis H1, suggesting that

environmental preferences are indeed positively associated with voting for Green parties. That is, individuals with environmental preferences are likely to support environmental policies that Green parties put forward and promote.

Table 3. Environmental Preferences and Voting for Green Parties: IV Results.

	IV estimation with a Heckman correction
Main equation, second stage (dep. variable: Vote for the Green party)	
Environmental preferences (default: Prefer economic growth)	
Prefer environmental protection	0.167**
	(0.081)
Selection equation (dep. variable: Vote in the national election)	
Migrant	-0.603***
	(0.159)
Interested in politics (default: Not at all)	
Not very interested	0.232***
	(0.034)
Somewhat interested	0.427***
	(0.058)
Very interested	0.548***
	(0.071)
First stage (dep. variable: Environmental preferences)	
Child qualities	
Feeling of responsibility	0.008
	(0.007)
Tolerance and respect for other people	0.044***
	(0.011)
Not being selfish (unselfishness)	0.036***
	(0.010)
Respect for human rights	
Not much respect	0.019*
	(0.011)
Fairly much respect	0.027**
	(0.012)
A great deal of respect	0.021
	(0.013)
R-squared	0.079
First stage F statistics	129.58
No. of observations	55,856

Notes: *** p<0.01, ** p<0.05, * p<0.1. Estimated coefficients after the two-stage least squares (2SLS) estimation are reported. To account for selection, the main and selection equations are estimated sequentially. Bootstrapped standard errors are in parentheses. Green parties are parties that have environmental protection as a key priority (see Section 4.1 for details). Both the main and selection equations, as well as the first-stage equation, include individual socioeconomic characteristics, country fixed effects, and survey year fixed effects. Individual socioeconomic characteristics include age and its square, biological sex, employment status, income, having a higher education, being married, having children, urban or rural residence, and living in a landlocked country.

5.2. Heterogeneity

Individuals in certain socioeconomic groups may exhibit varying voting behaviors due to their economic circumstances. To analyze whether this is the case, we disentangle the results in Table 1 by the socioeconomic characteristics of respondents. As shown in Figure 1, compared to the baseline model in Table 1, the impact of environmental preferences on voting for Green parties is less pronounced for individuals who are less educated, have lower incomes, have children, and reside in rural areas. These socioeconomic groups are likely to be less economically secure. Thus, it is likely that those voters may prefer parties that prioritize improving economic conditions more than Green parties. These findings suggest that individual economic situations may affect the relationship between environmental preferences and voting for Green parties. In the next section, we test this mechanism more formally.

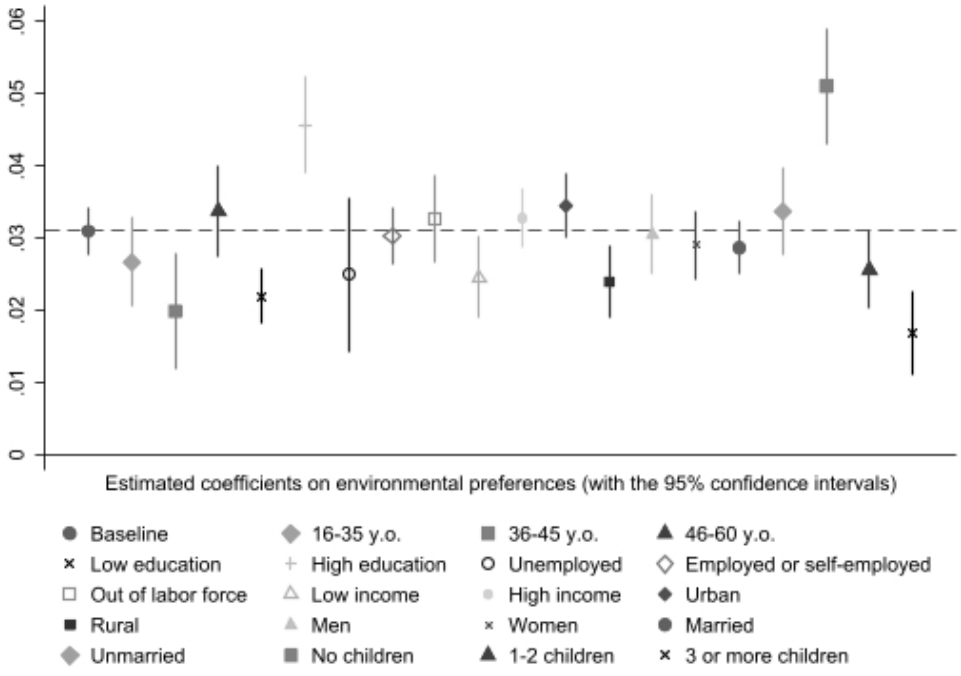

Figure 1. Heterogeneity by individual socioeconomic characteristics.

Notes: The figure illustrates the estimated impact of environmental preferences on voting for Green parties, broken down by individual socioeconomic characteristics. The baseline model is from Table 1. The coefficients, along with their 95% confidence intervals, are reported after estimation of the Heckman two-step selection model. Standard errors are bootstrapped. Green parties are parties that have environmental protection as a key priority (see Section 4.1 for details). Both main and selection equations include individual socioeconomic characteristics, country fixed effects, and survey year fixed effects. Individual socioeconomic characteristics include age and its square, biological sex, employment status, income, a dummy variable for having a higher education, a dummy variable for being married, having children, urban or rural residence, and living in a landlocked country

We find no differences in the impact of environmental preferences on voting for Green parties based on gender and employment status. We also find that there are mostly no age differences, except for middle-aged individuals, for whom the effect of environmental

preferences on voting for Green parties is lower than in the baseline model. It is worth mentioning that we could not estimate the impact of environmental preferences on Green parties' voting for individuals over 60 years old, as there were only a few responses in this age group who voted for Green parties. This may suggest that older individuals prioritize economic growth over environmental protection.

5.3. Mechanisms

In this section, we examine several mechanisms that may influence the impact of environmental preferences on voting for Green parties. The results are presented in Table 4.

The first mechanism is changes in environmental policy stringency. As shown in column 1 of Table 4, changes in the stringency of environmental policies reduce both the support for Green parties and the effect of environmental preferences on voting for Green parties. Thus, we find empirical support for our hypothesis H2. This implies that although strengthening the stringency of environmental policies may align with individual preferences for environmental protection, these measures might be costly, reducing support for Green parties.

To understand why the country-level stringency of environmental policies reduces individual support for Green parties, one needs to look at more nuanced mechanisms at the individual level. As discussed above, one such mechanism is perceptions of individual economic insecurity that environmental policies might induce. As shown in columns 2 and 3 of Table 4, being more satisfied with the household's financial situation reinforces the impact of environmental preferences on voting for Green parties, while respondents' worries about losing their own jobs reduce this impact. This supports our hypothesis H3.

Another individual-level mechanism is related to perceptions and tolerance of income inequality. In column 4 of Table 4, we find that the impact of environmental preferences on voting for Green parties is lower for respondents who are more likely to believe that income inequality creates incentives for individual efforts, and is greater for respondents who support fighting income inequality. Thus, we do not find support for hypothesis H4. This result suggests that individuals who support fighting income inequality are more likely to prioritize economic growth over environmental protection and, consequently, vote for parties that focus on economic growth more than Green parties do.

As discussed above, the availability of social protection programs in a country may reduce perceptions of economic insecurity. In column 5 of Table 4, we demonstrate that a higher share of social expenditures in the country's GDP results in more votes for Green parties,

thereby reinforcing the effect of environmental preferences on the Green parties' voting. This supports our hypothesis H5.

Finally, the relationship between environmental preferences and voting for Green parties may differ for individuals more exposed to nature and environmental changes. In column 6 of Table 4, we use GDP losses due to natural disasters in the respondent's country of residence as a mechanism and demonstrate that higher losses reduce the support for Green parties and lower the effect of environmental preferences on this support. This finding aligns with our hypothesis 6a. It may imply that disaster-related economic losses may exacerbate the economic insecurity in the country, which is translated into lower support for Green parties.

At the individual level, this mechanism works similarly. Specifically, in column 7 of Table 4, we show that farmers and farm workers who frequently interact with nature and are more likely to be exposed to the consequences of natural disasters are also more likely to vote for Green parties. However, the impact of environmental preferences on their voting for these parties is lower than that of individuals in less exposed occupations. Thus, it is likely that natural disasters may induce income losses in more exposed occupations, reducing the impact of environmental preferences on voting for Green parties. This is in line with our hypothesis H6b.

Table 4. Mechanisms.

	Env. policy stringency (1)	Econ. security (2)	Worries about losing a job (3)	Inequality tolerance (4)	Social expenses (5)	GDP losses (6)	Exposed occupation (7)
Main equation (dep. variable: Vote for a Green party)							
Environmental preferences (default: Prefer economic growth)							
Prefer environmental protection	0.034***	0.019***	0.066***	0.062***	0.009***	0.036***	0.033***
	(0.002)	(0.004)	(0.005)	(0.005)	(0.003)	(0.002)	(0.002)
Mechanisms							
Change in environmental policy stringency 2015-2017	-0.065***						
	(0.004)						
Economic security (default: completely dissatisfied with the household's financial situation)		-0.003***					
		(0.000)					
Worries about losing own job (default: Not at all)			0.007***				
			(0.001)				
Income inequality tolerance				-0.001***			
				(0.000)			
Social expenses (% of GDP)					0.004***		
					(0.000)		
GDP losses due to natural disasters (% of GDP)						-0.000***	
						(0.000)	
Occupation exposed to natural disasters (default: Less exposed)							0.020***
							(0.003)
Prefer env. protection*Mechanism	-0.012**	0.002***	-0.013***	-0.005***	0.004***	-0.001***	-0.031***
	(0.006)	(0.001)	(0.002)	(0.001)	(0.000)	(0.000)	(0.004)
Selection equation (dep. variable: Vote in the national election)							
Migrant	-0.772***	-0.790***	-0.781***	-0.792***	-0.913***	-0.658***	-0.791***
	(0.027)	(0.029)	(0.029)	(0.029)	(0.022)	(0.026)	(0.029)
Interested in politics (default: Not at all)							
Not very interested	0.420***	0.404***	0.407***	0.405***	0.376***	0.399***	0.404***
	(0.017)	(0.017)	(0.016)	(0.017)	(0.015)	(0.015)	(0.016)
Somewhat interested	0.708***	0.698***	0.702***	0.698***	0.615***	0.618***	0.698***
	(0.017)	(0.017)	(0.017)	(0.018)	(0.016)	(0.016)	(0.017)
Very interested	0.876***	0.860***	0.866***	0.862***	0.820***	0.798***	0.863***
	(0.025)	(0.025)	(0.024)	(0.025)	(0.023)	(0.022)	(0.026)
No. of observations							
Total	55,710	63,630	62,282	63,500	63,772	62,196	63,785
Selected	44,529	49,012	47,664	48,882	48,643	48,844	49,167
Non-selected	11,181	14,618	14,618	14,618	14,129	13,352	14,618

Notes: *** p<0.01, ** p<0.05, * p<0.1. Estimated coefficients after the Heckman two-step selection model are reported. Bootstrapped standard errors are in parentheses. Green parties are parties that have environmental protection as a key priority (see Section 4.1 for details). Both main and selection equations include individual socioeconomic characteristics, country fixed effects, and survey year fixed effects. The models in columns (1), (5), and (6) do not include country fixed effects since environmental policy stringency, social expenses, and GDP losses are measured at a country level. Individual socioeconomic characteristics include age and its square, biological sex, employment status, income, having a higher education, being married, having children, urban or rural residence, and living in a landlocked country.

6. Conclusion

This paper suggests that individuals with environmental preferences are more likely to vote for Green parties. This finding suggests that increasing public environmental awareness could enhance support for Green parties and the environmental policies they promote. At the same time, we find that environmental preferences have an almost threefold higher effect on voting for pro-Green parties than for Green parties. That is, parties that consider environmental protection alongside other economic policies and priorities may receive more substantial public support.

We also find that the impact of environmental preferences on Green party voting is lower among economically less secure individuals, including those with lower education and income and living in rural areas. One potential explanation for this pattern is that, despite having preferences for environmental protection, economically insecure individuals are unwilling to contribute financially and are concerned about the additional environmental regulations and taxes that Green parties might implement. Thus, economically less secure voters would prefer policies and parties that focus on supporting economic growth and improving the overall economic situation. This suggests that support for Green parties and environmental policies is contingent upon voters' economic security, even when environmental preferences are strong, emphasizing the need for Green parties to address voters' economic concerns to gain more support for their environmental policies. In line with those arguments, we find that individual economic insecurity and changes in the stringency of environmental regulations may reduce the effect of environmental preferences on voting for Green parties. At the same time, stronger social protection policies reinforce the effect of environmental preferences on voting for Green parties.

Our results suggest that changes in countries' environmental regulations within two years can impair the support for Green parties, highlighting the need for careful and gradual policies that address public environmental concerns. Additionally, we find that the impact of environmental preferences on voting for Green parties is lower for individuals in occupations that are more likely to involve interaction with nature and exposure to environmental changes, such as farmers and agricultural workers. This finding suggests that countries with a higher proportion of individuals employed in occupations exposed to natural disasters (e.g., agricultural sectors) may have lower support for Green parties. Thus, focusing on the long-term feasibility of implemented environmental policies is essential for ensuring sustainable development, especially in less economically advanced countries.

Our paper opens several avenues for future research. First, our findings highlight the significance of understanding the drivers of electoral support for Green parties and the

environmental actions they advocate. Future research may further focus on how individual- and aggregate-level economic and environmental shocks affect support for Green parties.

Second, we provide evidence on the impact of environmental preferences on the likelihood of voting for Green parties, as well as the underlying mechanisms behind this relationship. More research is also needed to understand the factors that affect the likelihood of elected Green parties remaining in power after they are elected. For instance, recent qualitative research suggests that populist rhetoric emphasizing the economic insecurity brought by environmental actions imposes a serious threat to the feasibility of those actions in the future (Campanella and Lawrence 2024; White 2023). Our results highlight the need for measures that mitigate disproportionate burdens on vulnerable households, such as targeted subsidies or job training programs, to protect those most affected by the transition to a greener economy and, thus, to gain stronger support for Green parties.

References

Abate, T. G., Börger, T., Aanesen, M., Falk-Andersson, J., Wyles, K. J., & Beaumont, N. (2020). Valuation of marine plastic pollution in the European Arctic: Applying an integrated choice and latent variable model to contingent valuation. *Ecological Economics*, 169: 106521.

Ai, C. R., & Norton, E.C. (2003). Interaction terms in logit and probit models. *Economics Letters*, 80(1): 123–129.

Aidt, T. S. (1998). Political internalization of economic externalities and environmental policy. *Journal of Public Economics*, 69(1): 1-16.

Ajzen, I. (1988). *Attitudes, personality, and behavior*. Chicago: Dorsey Press.

Anderson, B., Bohmelt, T., & Ward, H. (2017). Public opinion and environmental policy output: a cross-national analysis of energy policies in Europe. *Environmental Research Letters*, 12: 114011.

Azeem, M. M., Mugera, A. W., & Schilizzi, S. (2018). Do social protection transfers reduce poverty and vulnerability to poverty in Pakistan? Household-level evidence from Punjab. *The Journal of Development Studies*, *55*(8): 1757–1783.

Balli, H.O., Sørensen, B.E. (2013). Interaction effects in econometrics. *Empirical Economics,* 45: 583–603.

Bättig, M. B., & Bernauer, T. (2009). National institutions and global public goods: Are democracies more cooperative in climate change policy? *International Organization*, *63*(2), 281–308.

Bélanger, E., & Meguid, B. M. (2008). Issue salience, issue ownership, and issue-based vote choice. *Electoral Studies*, 27(3): 477–491.

Berman, E., & Bui, L. T. M. (2001). Environmental regulation and productivity: Evidence from oil refineries. *The Review of Economics and Statistics*, 83(3): 498–510.

Bez, C., Bosetti, V., Colantone, I., & Zanardi, M. (2023). Exposure to international trade lowers green voting and worsens environmental attitudes. *Nature Climate Change* 13: 1131–1135.

Bialek, S., & Weichenrieder, A.J. (2021). Do stringent environmental policies deter FDI? M&A versus Greenfield. *Environmental and Resource Economics,* 80, 603–636.

Boccanfuso, D., Estache, A., & Savard, L. (2011). The intra-country distributional impact of policies to fight climate change: A survey. *The Journal of Development Studies*, *47*(1): 97–117.

Borjas, G. J. (2004). Food insecurity and public assistance. *Journal of Public Economics*, 88(7–8): 1421–1443.

Botta, E., & Kozluk, T. (2014). *Measuring environmental policy stringency in OECD countries: a composite index approach*. OECD Economics Department Working Paper No. 1177. OECD Publishing.

Brännlund, R., & Lundgren, T. (2009). Environmental policy without costs? A review of the Porter hypothesis. *International Review of Environmental and Resource Economics*, 3: 75–117.

Brunel, C., & Levinson, A. (2013). *Measuring environmental regulatory stringency*. OECD Trade and Environment Working Papers No. 2013/05, OECD Publishing.

Bui, A. T., Dungey, M., Nguyen, C. V., & Pham, T. P. (2014). The impact of natural disasters on household income, expenditure, poverty and inequality: evidence from Vietnam. *Applied Economics*, *46*(15): 1751–1766.

Cai, X., Lu, Y., Wu, M., & Yu, L. (2016). Does environmental regulation drive away inbound foreign direct investment? Evidence from a quasi-natural experiment in China. *Journal of Development Economics*, 123: 73–85.

Camcastle, C. (2007). The Green Party of Canada in political space and the new middle class thesis. *Environmental Politics*, *16*(4): 625–642.

Campagnolo, L., & De Cian, E. (2022). Distributional consequences of climate change impacts on residential energy demand across Italian households. *Energy Economics*, 110: 106020.

Campanella, E., & Lawrence, R. Z. (2024). *Populist opposition is threatening progress on climate change.* Peterson Institute for International Economics *(*PIIE) Working Paper 24-16. Washington, D.C.

Carroll, P., Casswell, S., Huakau, J., Perry, P., & Chapman, P. H. (2009). Environmental attitudes, beliefs about social justice and intention to vote Green: Lessons for the New Zealand Green Party? *Environmental Politics*, *18*(2): 257–278.

Carter, M. R., Little, P. D., Mogues, T., & Negatu, W. (2007). Poverty traps and natural disasters in Ethiopia and Honduras. *World Development*, 35(5): 835–856.

Carter, N. (2006). Party politicization of the environment in Britain. *Party Politics*, *12*(6): 747–767.

Chepeliev, M., Osorio-Rodarte, I., & van der Mensbrugghe, D. (2021). Distributional impacts of carbon pricing policies under the Paris Agreement: Inter and intra-regional perspectives. *Energy Economics*, 102: 105530.

Cole, M., & Elliott, R. (2007). Do environmental regulations cost jobs? An industry-level analysis of the UK. *The B.E. Journal of Economic Analysis & Policy*, *7*(1).

Comin, D.A., & Rode, J. (2023). *Do green users become green voters?* NBER Working Paper 31324.

Costantini, V., & Crespi, F. (2008). Environmental regulation and the export dynamics of energy technologies. *Ecological Economics*, 66(2–3): 447–460.

Clark, T.N., & Hoffman-Martinot, V., eds. (1998). *The new political culture*. Boulder: Westview.

Crawley, S., Coffé, H., & Chapman, R. (2021). Climate belief and issue salience: Comparing two dimensions of public opinion on climate change in the EU. *Social Indicators Research,* 162(1): 307–325.

Damania, R., Fredriksson, P.G., & List, J.A. (2003). Trade liberalization, corruption, and environmental policy formation: theory and evidence. *Journal of Environmental Economics and Management*, 46(3): 490–512.

Debus, M., Stegmaier, M., & Tosun, J. (2014). Economic voting under coalition governments: Evidence from Germany. *Political Science Research and Methods*, 2(1): 49–67.

Dechezleprêtre, A., Nachtigall, D., & Stadler, B. (2020). The effect of energy prices and environmental policy stringency on manufacturing employment in OECD countries: Sector- and firm-level evidence. *OECD Economics Department Working Papers*, No. 1625, OECD Publishing.

De Groot, J. I. M., & Steg, L. (2007). Value orientations and environmental beliefs in five countries: Validity of an instrument to measure egoistic, altruistic and biospheric value orientations. *Journal of Cross-Cultural Psychology*, *38*(3), 318–332.

De Groote, O., & Verboven, F. (2019). Subsidies and time discounting in new technology adoption: Evidence from solar photovoltaic systems. *American Economic Review*, 109(6): 2137–2172.

Dennison, J. (2019). A review of public issue salience: Concepts, determinants and effects on voting. *Political Studies Review*, *17*(4): 436–446.

Deza, M., Lu, T., Maclean, J. C., & Ortega, A. (2024). *Losing Medicaid and crime.* NBER Working Paper 32227.

Dietz, T., Fitzgerald, A., & Shwom, R. (2005). Environmental values. *Annual Review of Environment and Resources*, 30: 335–372.

Diffenbaugh, N. S., & Burke, M. (2019). Global warming has increased global economic inequality. *Proceedings of the National Academy of Sciences of the United States of America,* 116(20): 9808–9813.

Dunlap, R.E., Xiao, C., & McCright, A.M. (2001). Politics and environment in America: Partisan and ideological cleavages in public support for environmentalism. *Environmental Politics*, 10(4): 23–48.

Eckstein, D., Künzel, V., & Schäfer, L. (2021). *Global Climate Risk Index 2021. Who suffers most from extreme weather events? Weather-related loss events in 2019 and 2000 to 2019.* Briefing Paper, Germanwatch.

Eckstein, D., Künzel, V., Schäfer, L., & Winges, M. (2020). *Global Climate Risk Index 2020. Who suffers most from extreme weather events? Weather-related loss events in 2018 and 1999 to 2018*. Briefing Paper, Germanwatch.

Eckstein, D., Hutfils, M.-L., & Winges, M. (2019). *Global Climate Risk Index 2019. Who suffers most from extreme weather events? Weather-related loss events in 2017 and 1998 to 2017.* Briefing Paper, Germanwatch.

Ederington, J., Levinson, A., & Minier, J. (2005). Footloose and pollution-free. *The Review of Economics and Statistics*, 87(1): 92–99.

Fankhauser, S., & McDermott, T. K.J. (2014). Understanding the adaptation deficit: Why are poor countries more vulnerable to climate events than rich countries? *Global Environmental Change,* 27(1): 9–18.

Fullerton, D. (ed.) (2009). *Distributional effects of environmental and energy policy.* Routledge.

Galeotti, M., Salini, S., & Verdolini, E. (2020). Measuring environmental policy stringency: Approaches, validity, and impact on environmental innovation and energy efficiency. *Energy Policy*, 136: 111052.

Garside, S., & Zhai, H. (2022). If not now, when? Climate disaster and the Green vote following the 2021 Germany floods. *Research & Politics*, *9*(4): 1–8.

Gifford, R., & Nilsson, A. (2014). Personal and social factors that influence pro-environmental concern and behaviour: A review. *International Journal of Psychology*, 49(3): 141–157.

Gollop, F., & Roberts, J. (1983). Environmental regulations and productivity growth: The case of fossil-fueled electric power generation. *Journal of Political Economy*, 91(4): 654–674.

Gourley, P., & Khamis, M. (2023). It is not easy being a Green party: Green politics as a normal good. *European Journal of Political Economy*, 76: 102266.

Grant, Z. P., & Tilley, J. (2018). Fertile soil: explaining variation in the success of Green parties. *West European Politics*, *42*(3): 495–516.

Greene, W. (2010). Testing hypotheses about interaction terms in nonlinear models. *Economics Letters*, 107(2): 291–296.

Guiso, L., Herrera, H., Morelli, M., & Sonno, T. (2024). Economic insecurity and the demand for populism in Europe. *Economica*, 91(362): 588-620.

Halvorsen, B. (2008). Effects of norms and opportunity cost of time on household recycling. *Land Economics*, 84(3): 501–516.

Han, J., & Finke, D. (2022). Voting Green in European Parliament elections: Issue voting in an electoral context. *Journal of European Public Policy*, *30*(12): 2764–2785.

Heckman, J. (1979). Sample selection bias as a specification error. *Econometrica* 47: 153–161.

Heinz, N., & Koessler, A.-K. (2021). Other-regarding preferences and pro-environmental behaviour: An interdisciplinary review of experimental studies. *Ecological Economics*, 184: 106987.

Henderson, J. V. (1996). Effects of air quality regulation. *The American Economic Review*, *86*(4): 789–813.

Heslin, A. (2020). Riots and resources: How food access affects collective violence. *Journal of Peace Research*, *58*(2): 199–214.

Hoffmann, R., Muttarak, R., Peisker, J., & Stanig, P. (2022). Climate change experiences raise environmental concerns and promote Green voting. *Nature Climate Change,* 12: 148–155.

Hooghe, M., Heyndels, B., Jottier, D., Bircan, T., & Botterman, S. (2010). Explaining the Green vote: Belgian local elections, 1994–2006. *Environmental Politics*, *19*(6): 930–950.

Huang, K., Zhao, H., Huang, J., Wang, J., & Findlay (2020). The impact of climate change on the labor allocation: Empirical evidence from China. *Journal of Environmental Economics and Management* 104: 102376.

Inglehart, R. (1977). *The Silent Revolution: Changing values and political styles among Western publics*. Princeton University Press.

International Labour Organization (ILO) (2021). World social protection report 2020-2022: Social protection at the crossroads – in pursuit of a better future. Geneva: International Labour Organization. Available at: https://www.social-protection.org/gimi/gess/Media.action?id=7368 (last accessed October 30, 2024).

Ivanov, D. (2023). Economic insecurity, institutional trust and populist voting across Europe. *Comparative Economic Studies,* 65: 461–482.

Jensen, C. B., & Spoon, J.-J. (2011). Testing the 'Party Matters' thesis: Explaining progress towards Kyoto Protocol targets. *Political Studies*, 59(1): 99–115.

Jessoe, K., Manning, D. T., & Taylor, J. E. (2018). Climate change and labour allocation in rural Mexico: Evidence from annual fluctuations in weather. *Economic Journal,* 128(608): 230–261.

Johnstone, N., & Serret, Z. (eds.) (2006). *The distributional effects of environmental policy*. Edward Elgar Publishing, Cheltenham.

Jaffe, A., Peterson, S., Portney, P., & Stavins, R. (1995). Environmental regulation and the competitiveness of U.S. manufacturing: What does the evidence tell us? *Journal of Economic Literature*, 33(1): 132–163.

Kahn, M. E. (2007). Do greens drive Hummers or hybrids? Environmental ideology as a determinant of consumer choice. *Journal of Environmental Economics and Management*, 54(2): 129–145.

Kahn, M. E., & Matsusaka, J. G. (1997). Demand for environmental goods: Evidence from voting patterns on California initiatives. *The Journal of Law & Economics*, *40*(1): 137–174.

Klüver, H., & Spoon, J. J. (2016). Who responds? Voters, parties and issue attention. *British Journal of Political Science*, 46(3): 633–654.

Konisky, D.M., Hughes, L., & Kaylor, C.H. (2016). Extreme weather events and climate change concern. *Climatic Change,* 134, 533–547.

Kronborg, A., Hedegaard, F., Klindt, I., & Vandeweerdt, C. (2024). Do green parties in government benefit from natural catastrophes? How wildfires are linked to voting. *Electoral Studies*, 88: 102749.

Lewis-Beck, M.S., & Stegmaier, M. (2019). *Economic voting*. In: Congleton, R.D., Grofman, B.N., & Voigt, S. (eds.), The Oxford Handbook of Public Choice, Volume 1, Chapter 12, 247–265.

Li, Y., Johnson, E.J., & Zaval, L. (2011). Local warming: daily temperature change influences belief in global warming. *Psychological Science*, 22(4): 454–459.

Lichtin, F., van der Brug, W., & Rekker, R. (2023). Generational replacement and Green party support in Western Europe. *Electoral Studies*, 83: 102602.

List, J. A., & Sturm, D. M. (2006). How elections matter: Theory and evidence from environmental policy. *The Quarterly Journal of Economics*, *121*(4): 1249–1281.

Mannoni, E. (2025). Pro-environmental voting: What it is, how to measure it, and its determinants among contemporary European voters. *Parliamentary Affairs*, 78(1): 77–96.

Mavisakalyan, A., Otrachshenko, V., & Popova, O. (2023). Does democracy protect the environment? The role of the Arctic Council. *Climatic Change,* 176: 49.

Mavisakalyan, A., Otrachshenko, V., & Popova, O. (2024). *Natural disasters and acceptance of intimate partner violence: The global evidence*. IZA Discussion Paper 17172.

McAlexander, R. J., & Urpelainen, J. (2020). Elections and policy responsiveness: Evidence from environmental voting in the U.S. Congress. *Review of Policy Research*, 37(1): 39–63.

Morgenstern, R., Pizer, W., & Shih, J. (2002). Jobs versus the environment: an industry-level perspective. *Journal of Environmental Economics and Management*, 43(3): 412–436.

Niranjan, A., & O'Carroll, L. (2024). Green party losses in EU elections raise concerns over Green Deal. The Guardian, June 9. Available online at: https://www.theguardian.com/world/article/2024/jun/09/green-party-losses-in-eu-elections-raise-concerns-over-green-deal (last accessed July 30, 2024).

Norris, P. (2020). Global party survey 2019 (https://www.globalpartysurvey.org/). DOI: https://doi.org/10.7910/DVN/WMGTNS.

Norris, L., & Patulny, R. (2005). *Values and votes in global sustainability*. SPRC Discussion Paper 140.

Oster, E. (2019). Unobservable selection and coefficient stability: Theory and evidence. *Journal of Business and Economic Statistics* 37(2): 187–204

Otrachshenko, V., Popova, O., & Alimukhamedova, N. (2024a). Rainfall variability and labor allocation in Uzbekistan: the role of women's empowerment. *Post-Soviet Affairs*, *40*(2): 119–138.

Otrachshenko, V., Iliyas, S., & Alimukhamedova, N. (2024b). Informal network as a coping strategy in the climate-livestock relationship. *Communist and Post-Communist Studies*, 57(1): 101–129.

Otrachshenko, V., Tyurina, E., & Nagapetyan, A. (2022). The economic value of the Glass Beach: Contingent valuation and life satisfaction approaches. *Ecological Economics*, 198: 107466.

Park, R. J., Bangalore, M., Hallegatte, S., & Sandhoefner, E. (2018). Households and heat stress: Estimating the distributional consequences of climate change. *Environment and Development Economics,* 23(3): 349–368.

Peeters, W., & Coffé, H. (2024). Votes for climate: green issue salience and preferences, and regional differences in the electoral success of green parties in the 2019 Belgian federal elections. *Acta Politica*, forthcoming. DOI: https://doi.org/10.1057/s41269-024-00337-7.

Poortinga, W., Steg, L., & Vlek, C. (2004). Values, environmental concern, and environmental behavior: a study into household energy use. *Environment and Behavior,* 36(1): 70–93.

Porter, M. E., & van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. *Journal of Economic Perspectives*, 9(4): 97–118.

Ray, A., Hughes, L., Konisky, D.M., & Kaylor, C. (2017). Extreme weather exposure and support for climate change adaptation. *Global Environmental Change*, 46: 104–113.

Reese, G., & Jacob, L. (2015). Principles of environmental justice and pro-environmental action: A two-step process model of moral anger and responsibility to act. *Environmental Science & Policy*, 51: 88–94.

Richardson, D., & Roots, C. (1994). *The Green Challenge: The development of Green parties in Europe*. Routledge.

Rubashkina, Y., Galeotti, M., & Verdolini, E. (2015). Environmental regulation and competitiveness: Empirical evidence on the Porter Hypothesis from European manufacturing sectors. *Energy Policy*, 83, 288–300.

Schmidt, L., Shore-Sheppard, L., & Watson, T. (2016). The effect of safety-net programs on food insecurity. *Journal of Human Resources*, 51 (3): 589–614.

Schumacher, I. (2014). An empirical study of the determinants of Green party voting. *Ecological Economics*, 105: 306–318.

Sherman, S. J., & Fazio, R.H. (1983). Parallels between attitudes and traits as predictors of behavior. *Journal of Personality*, 51: 308–345.

Sohag, K., Islam, M.M., & Hammoudeh, S. (2024). From policy stringency to environmental resilience: Unraveling the dose-response dynamics of environmental parameters in OECD countries. *Energy Economics*, 134, 107570.

Thalmann, P. (2004). The public acceptance of green taxes: 2 million voters express their opinion. *Public Choice* 119: 179–217.

Tenzing, J.D. (2020). Integrating social protection and climate change adaptation: A review. *Wiley Interdisciplinary Reviews (WIREs) Climate Change*, 11(2): e626.

Tol, R. S. J., Downing, T.E., Kuik, O.J., & Smith, J.B. (2004). Distributional aspects of climate change impacts. *Global Environmental Change,* 14(3): 259–272.

Turaga, R. M. R., Howarth, R. B., & Borsuk, M. E. (2010). Pro-environmental behavior. Rational choice meets moral motivation. *Annals of the New York Academy of Sciences,* 1185(1): 211–224.

Ullah, A., Aslam, N., Rehman, H., & Hongfei, H. (2024). An empirical analysis to examine the role of institutions in bridging the gap between environmental policy stringency and energy poverty. *Journal of Environmental Management*, 366: 121901.

United Nations Development Programme (UNDP) (2024). The people's climate vote 2024. Available online at: https://www.undp.org/publications/peoples-climate-vote-2024 (last accessed July 30, 2024).

Van de Ven, W. P. M. M., & Van Pragg, B. M. S. (1981). The demand for deductibles in private health insurance: A probit model with sample selection. *Journal of Econometrics* 17: 229–252.

Wagner, K. (2016). Environmental preferences and consumer behavior. *Economics Letters,* 149: 1–4.

Walgrave, S., Tresch, A., & Lefevere, J. (2015). The conceptualisation and measurement of issue ownership. *West European Politics*, *38*(4): 778–796.

Walgrave, S., Lefevere, J., & Tresch, A.D. (2020). Position, competence, and commitment: Three dimensions of issue voting. *International Journal of Public Opinion Research*, 32(1): 165–175.

Walker, W. R. (2013). The transitional costs of sectoral reallocation: Evidence from the Clean Air Act and the workforce. *The Quarterly Journal of Economics*, 128(4): 1787–1835.

White, J. (2023). *What makes climate a populist issue?* Centre for Climate Change Economics and Policy Working Paper 426/Grantham Research Institute on Climate Change and the Environment Working Paper 401, London School of Economics and Political Science.

World Economic Forum (2015). *The Travel & Tourism Competitiveness Report 2015. Growth through Shocks*. Available at: https://www3.weforum.org/docs/TT15/WEF_Global_Travel&Tourism_Report_2015.pdf (last accessed August 24, 2024).

World Economic Forum (2017). *The Travel & Tourism Competitiveness Report 2017. Paving the way for a more sustainable and inclusive future*. Available at: https://www3.weforum.org/docs/WEF_TTCR_2017_web_0401.pdf (last accessed August 24, 2024).

Appendix

Table A1. Descriptive statistics of variables used in the analysis.

Variable	Obs	Mean	Std. dev.	Min	Max
Dependent variables					
Vote for the Green party	58,279	0.049	0.215	0	1
Vote for a pro-Green party	58,279	0.268	0.443	0	1
Environmental preferences					
Environmental protection vs. Economic growth					
Prefer economic growth (default)	63,053	0.407	0.491	0	1
Prefer environmental protection	63,053	0.562	0.496	0	1
Prefer other option	63,053	0.031	0.173	0	1
Environmental beauty vs. Economic growth					
Economic growth is the most important (default)	62,500	0.487	0.500	0	1
Environmental beauty is the most important	62,500	0.092	0.289	0	1
Another option is the most important	62,500	0.421	0.494	0	1
Member of an environmental organization	63,096	0.163	0.369	0	1
Independent variables					
Age	63,785	42.352	16.517	16	103
Age squared	63,785	2066.50	1552.58	256	10609
Male	63,785	0.487	0.500	0	1
Has a higher education	63,785	0.338	0.473	0	1
Employment status					
Unemployed (default)	63,785	0.080	0.272	0	1
Employed or self-employed	63,785	0.597	0.490	0	1
Out of labor force	63,785	0.322	0.467	0	1
Income					
Low income (default)	63,785	0.236	0.425	0	1
High or middle income	63,785	0.746	0.435	0	1
Income (response missing)	63,785	0.018	0.131	0	1
Lives in an urban area	63,785	0.672	0.470	0	1
Married	63,785	0.632	0.482	0	1
Children					
No children (default)	63,785	0.310	0.463	0	1
1-2 children	63,785	0.424	0.494	0	1
3 or more children	63,785	0.266	0.442	0	1
Lives in a landlocked country	63,785	0.201	0.401	0	1
Key variables of the selection equation					
Usually votes in national elections	63,785	0.771	0.420	0	1
Migrant	63,785	0.060	0.238	0	1
Interested in politics					
Not at all (default)	63,785	0.213	0.410	0	1
Not very interested	63,785	0.304	0.460	0	1
Somewhat interested	63,785	0.351	0.477	0	1
Very interested	63,785	0.132	0.338	0	1
Instrumental variables					
Child qualities that are important to be taught at home					
Feeling of responsibility (1=mentioned, 0=not mentioned)	63,448	0.646	0.478	0	1
Tolerance and respect for other people (1=mentioned, 0=not mentioned)	63,378	0.626	0.484	0	1
Not being selfish (unselfishness) (1=mentioned, 0=not mentioned)	62,981	0.274	0.446	0	1
Human rights are respected in a country					
No respect at all (default)	63,047	0.098	0.298	0	1
Not much respect	63,047	0.276	0.447	0	1
Fairly much respect	63,047	0.454	0.498	0	1
A great deal of respect	63,047	0.172	0.377	0	1
Mechanisms					
Change in environmental policy stringency 2015-2017	55,710	-0.028	0.232	-0.71	0.47
Economic insecurity	63,536	6.187	2.444	1	10

(1=financial satisfaction above mean, 0=financial satisfaction below mean)					
Worries about losing own job (1=not at all, 4=very much)	61,930	2.802	1.113	1	4
Income inequality tolerance (1= Incomes should be made more equal; 10= There should be greater incentives for individual effort)	63,292	6.287	2.995	1	10
Social expenses in GDP (% of GDP)	62,772	7.707	5.533	0.4	19.4
Losses due to natural disasters (% of GDP)	62,196	1.156	8.005	0	63.3
Occupation exposed to extreme weather events (1=Farmer or farm worker, 0=other occupation)	63,785	0.070	0.255	0	1

Note: Individuals below age 18 in our sample are from Brazil and Nicaragua, where the voting age is 16 years old.

Table A2: Full regression results for Table 1.

	Main equation (dep. variable: Vote for the Green party)	Selection equation (dep. variable: Vote in the national election)
Environmental preferences (default: Prefer economic growth)		
Prefer environmental protection	0.031***	
	(0.002)	
Prefer other option	0.028***	
	(0.006)	
Migrant		-0.791***
		(0.028)
Interested in politics (default: Not at all)		
Not very interested		0.404***
		(0.017)
Somewhat interested		0.698***
		(0.017)
Very interested		0.863***
		(0.024)
Age	0.000	0.051***
	(0.000)	(0.002)
Age squared	-0.000**	-0.000***
	(0.000)	(0.000)
Male	-0.009***	0.024*
	(0.002)	(0.013)
High education	0.011***	0.272***
	(0.002)	(0.015)
Employment status (default: Unemployed)		
Employed or self-employed	-0.002	0.095***
	(0.004)	(0.024)
Out-of-labor force	-0.006	-0.016
	(0.004)	(0.025)
Income (default: Low income)		
High income	-0.015***	0.051***
	(0.002)	(0.015)
Income (missing response)	-0.017**	-0.347***
	(0.008)	(0.046)
Urban	0.004*	-0.091***
	(0.002)	(0.015)
Married	-0.005**	0.116***
	(0.002)	(0.016)
Children (default: No children)		
1-2 children	-0.008***	0.072***
	(0.003)	(0.019)
3 or more children	-0.001	0.082***
	(0.003)	(0.023)
Living in a landlocked country	-0.002	-0.300***
	(0.011)	(0.102)
Constant	0.026**	-0.906***
	(0.013)	(0.088)
Lambda	-0.006	
	(0.007)	
No. of observations		
Total	63,785	
Selected	49,167	
Non-selected	14,618	

Notes: *** p<0.01, ** p<0.05, * p<0.1. Estimated coefficients after the Heckman two-step selection model are reported. Bootstrapped standard errors are in parentheses. Green parties are parties that have environmental protection as a key priority (see Section 4.1. for details). Both main and selection equation include country fixed effects and survey year fixed effects.