Climate-induced migration and environmental values

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Most recent version

Abstract

Climate awareness is crucial for garnering public support for climate policies. While prior work emphasizes socio-political factors and personal experience with local weather, this paper introduces exposure to climate-induced migration as a novel driver of climate concern. Indirect exposure to climate-related events via migration inflows can reduce psychological distance to such events or increase perceived costs of climate inaction, thereby increasing concern for climate change. My empirical analysis leverages exogenous weather variations in non-OECD countries and I construct a gravity-predicted instrument for asylum demands in the European Union between 2000 and 2019. I find that weather-induced asylum inflows significantly increase individual climate concern in host countries. Using Google searches, I rule out news and media coverage as potential confounders. These shifts in stated preferences, however, do not translate into voting behavior, which I explain through turnout effects, growing concern among non-voters, as well as no changes in party pro-environmental platforms.

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1 Introduction

Climate mitigation ambitions continue to outpace public support for policy action. Advancing and implementing climate policies depends critically on public awareness and concern about climate change. Understanding the drivers of climate concern is of utmost importance. Prior work has emphasized socio-political factors (Dechezleprêtre et al., 2025), and personal experience with local weather (Hazlett and Mildenberger, 2020; Hoffman et al., 2022) as main determinants. Growing awareness of climate change has also brought increasing attention to its socio-economic consequences, including climate-induced migration (Arias and Blair, 2022). Surveys in the European Union show that respondents increasingly view migration as a consequence of climate change (Figure 1a). Yet despite mounting interest in the political effects of migration (Alesina and Tabellini, 2024), the political implications of climate-induced migration remain unexplored. Indirect exposure to climate impacts through migration inflows may reduce psychological and social distance to such events or increase perceived costs of climate inaction, fostering greater concern for the underlying cause: climate change.

This paper examines whether recent waves of weather-induced asylum seekers have influenced public climate concern and voting behavior in the European Union between 2000 and 2019. I combine non-OECD asylum demands with high-resolution climatological data and cross-country data sets on individual attitudes, media coverage, political party platforms, and electoral outcomes. While both internal and international, and permanent and temporary migration can be affected by changes in climatic conditions, with estimates that reach 1.5-billion people displaced from the Global South by 2070 (Xu et al., 2020), the European Union provides a compelling setting: asylum applications are expected to rise by 28% to 188% by the end of the century due to projected climate change (Missirian and Schlenker, 2017b), and both migration and climate change rank among the most salient issues in contemporary European politics.

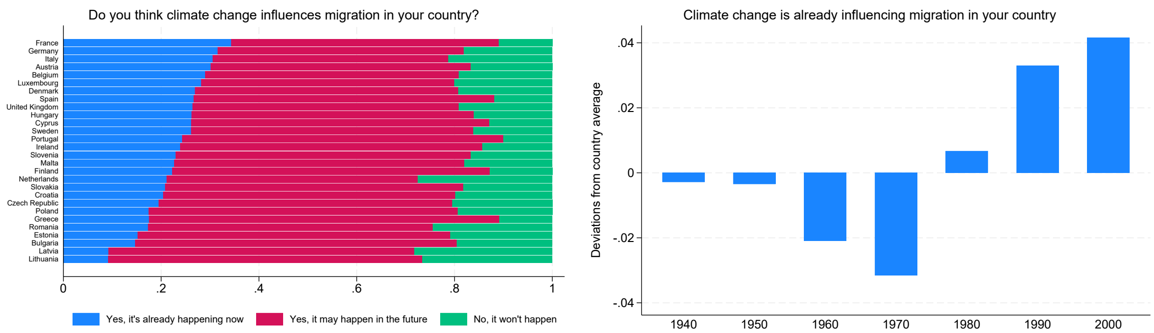
To estimate the causal effect of weather-induced asylum demands, I adopt an instrumental variable approach, constructing a measure of weather-driven asylum applications from a gravity model leveraging plausibly exogenous variation in temperatures and precipitation in origin countries. I recover an asymmetric U-shaped relationship between temperature and asylum demands, and use the estimated semi-elasticities to predict bilateral flows, holding fixed origin-destination and time-specific characteristics. I obtain an instrument for actual asylum demands and overcome the potential measurement error in inferring the weather-driven portion of asylum seekers. My final specification estimates the effect of asylum demands, instrumented by its weather-induced portion, on climate attitudes and pro-environment voting behavior, exploiting within-country variation over time, accounting for local weather conditions, individual birth cohort, age, other observable characteristics, and regional time-varying patterns.

Starting from survey-level analysis using Eurobarometer data, I find that weather-induced asylum applications increase individual concern about climate change as a political priority. Climate change has a differential degree of concern across age, as documented by previous surveys (Figure 1b, Marris (2019); Thompson (2021)) and climate-related school-strikes and demonstrations initiated by younger generations (Bowman, 2020; Kenis, 2021). Exploiting birth-cohort variation in exposure to weather-induced asylum seekers, I document that individuals exposed to more asylum demands when growing up were more concerned by climate change at the time of the survey, finding supporting evidence that environmental values are formed during the "formative age", between 16 and 24 years (Krosnick and Alwin, 1989). In my preferred specification, a 50% increase in weather-induced asylum applications (approximately equivalent to the inter-quartile range in the sample) increases an individual's climate concern by 19% of the sample mean. This is similar to the difference in climate concern between Cyprus and Germany, or that between Hungary and France. I rule out that news and media coverage are confounding the effect of weather-induced asylum demands by using data from Google searches. I find no correlation between the predicted measure of weather-induced asylum demands and public attention, and conclude that online searches cannot explain my findings.

Building on two theoretical mechanisms outlined in the framework, I empirically

Figure 1. Awareness of climate-migration nexus in surveys

(a) Country-level responses (b) Birth-cohort heterogeneity in responses



Notes: Both figures use the survey question "Do you think climate change influences migration in your country?" in the European Investment Bank Climate Survey in 2019. Panel (a) shows the country frequency by response category. Panel (b) shows the average deviations by ten-year birth cohorts across countries from country-specific means using a binary version of the question equal to one if individuals answers "Yes, it's already happening now".

test competing explanations for my baseline findings. On the one hand, increased asylum demands may reduce the perceived geographical and psychological distance to climate-related weather anomalies, prompting individuals to recognize climate change as a global challenge. On the other hand, climate-induced migration may be viewed as a social cost or a perceived "threat" (Baldwin, 2013), thereby elevating climate concern not through environmental awareness per se, but as a reaction to the consequences of inaction. My findings support the latter mechanism: weather-induced asylum applications do not shift broader climate-related attitudes but instead heighten concern about migration as a political issue. Climate concern increases primarily among right-leaning and less-educated individuals, suggesting that concern arises from a heightened salience of migration-related consequences rather than a generalized increase in climate awareness.

Then, I examine if changes in stated preferences translate into changes in revealed preferences by looking at pro-environment voting behavior. Weather-induced asylum demands between two European elections do not increase Green party votes, and if anything, the consensus reduces in response to such flows. I propose several co-existing explanations. First, weather-induced asylum applications do not affect any other party votes, but decrease electoral turnout, suggesting that the dropout of traditional Green voters of voting polls may partially explain the results. Second, only individuals below the voting age and not yet eligible to vote are more likely to report climate change as an important theme for the electoral campaign for the European Parliament elections, which could explain the gap between stated and revealed preferences at the voting booths. Finally, I find no evidence that party platforms become more pro-environmental in response to asylum inflows, indicating that a lack of supply-side shifts may further constrain the political translation of rising climate concern into pro-environmental voting behavior.

This paper contributes to the literature investigating the determinants of climate change perceptions, concern, and pro-environment voting behavior. Various studies document the importance of perceptions of climate policy costs, risk attitudes, and socio-demographic characteristics, including political ideology, education, gender (Carlsson et al., 2021; Czarnek et al., 2021; Dechezleprêtre et al., 2025; Duijndam and van Beukering, 2021; Hornsey et al., 2016; Nowakowski and Oswald, 2020; Poortinga et al., 2019), and personal experience of local weather (Baccini and Leemann, 2020; Bassi, 2019; Bergquist and Warshaw, 2019; Borick and Rabe, 2014; Carlton et al., 2016; Deryugina, 2013; Egan and Mullin, 2012; Garside and Zhai, 2022; Hazlett and Mildenberger, 2020; Hilbig and Riaz, 2024; Hoffman et al., 2022; Konisky et al., 2016; Lee et al., 2015, 2018; Li et al., 2011; Osberghaus and Fugger, 2022; Shao and Goidel, 2016; Whitmarsh, 2008; Zaval et al., 2014; Zappalà, 2023). Recent work has also documented the positive effect of climate protests (Brehm and Gruhl, 2024; Fabel et al., 2022; Valentim, 2023) and the negative impact of international trade (Bez et al., 2023). This paper introduces a novel approach to understanding climate concern determinants, by shifting the focus from direct meteorological shocks, such as temperature increases, to the socio-economic consequences of climate change—specifically, climate-induced migration. The findings reveal distinct patterns of heterogeneity across population subgroups, suggesting that different impacts of climate change—whether physical or social—resonate differently in the society, with important implications for climate communication and policy support.

There is a growing body of work on the relationship between immigration, political attitudes, and voting behavior (Alesina and Tabellini, 2024; Bazzi et al., 2023; Bursztyn et al., 2024).[1] While recent studies have documented favorable attitudes towards climate migrants in Denmark (Hedegaard, 2022), Germany (Helbling, 2020) and in the U.S. (Arias and Blair, 2022; Gillis et al., 2023; Raimi et al., 2024), in particular after local weather events (Arias and Blair, 2024), but less so in Kenya and Vietnam (Spilker et al., 2020), my paper takes a cross-country perspective in the European Union to study for the first time the political effects of climate-induced migration on climate attitudes and voting behavior.

From a methodological standpoint, this paper ties to the literature on the relationship between climate change and international migration (Beine and Jeusette, 2021; Hoffmann et al., 2021; Millock, 2015), which has insofar ambiguous findings: positive in certain cases (Backhaus et al., 2015; Cai et al., 2016; Coniglio and Pesce, 2015; Marchiori et al., 2012), null in others (Beine and Parsons, 2015), or conditional on income (Cattaneo and Peri, 2016). Regarding asylum seekers, Missirian and Schlenker (2017b) find that temperature fluctuations increase asylum demands, and Abel et al. (2019) document drought severity and induced armed conflict as important drivers. This paper complements these works by estimating a bilateral gravity model for asylum applications that leverages origin and destination weather as a push and pull factor to predict a climate-driven measure of asylum demands.

2 Theoretical framework: Indirect experience and climate concern

This section introduces a theoretical framework in which climate concern is influenced not only by direct personal experience with weather, but also by the socio-economic consequences of climate change, such as migration. Existing work shows that climate change affects societies through multiple pathways, including health, productivity, con-

[1] Prior work has studied economic immigration and right-wing (anti-immigration) voting in Austria (Halla et al., 2017; Steinmayr, 2021), Denmark (Harmon, 2018), France (Edo et al., 2019), Germany (Otto and Steinhardt, 2014), Italy (Barone et al., 2016; Campo et al., 2024), Switzerland (Brunner and Kuhn, 2018), and across Europe (Alesina et al., 2021; Moriconi et al., 2019, 2022).

flict, and migration (Carleton and Hsiang, 2016). Exposure to these indirect effects can serve as a mechanism through which individuals form and update beliefs about climate change — independently of their direct personal experience with weather.

This framework proposes a novel concept: different population subgroups may respond differently depending on the type of climate-related experience to which they are exposed. For instance, older individuals may be more responsive to their personal and proximate consequences of climate change, such as information on the well-established relationship between extreme temperatures and mortality (see, e.g., Carleton et al., 2022). This heterogeneity in responsiveness underscores the importance of studying how distinct climate-related information can shape public opinion about climate change.

Migration as a vehicle for indirect experience. Climate-induced migration represents one such indirect channel. By exposing host communities to the socio-economic consequences of those shocks, climate-induced migration can foster a greater awareness of climate change, influencing climate concern. There are two potential mechanisms through which this can happen. First, migration can reduce the perceived psychological and social distance between host communities and the consequences of climate change (McDonald et al., 2015; Schuldt et al., 2018). These forms of distance, often conceptualized as the belief that climate change is a remote threat affecting distant places or other people (Brügger et al., 2015; Spence et al., 2012), may diminish when migrants bring first-hand experiences of climate-related hardships. Migration acts as an experiential bridge that brings the impacts of climate change closer, transforming abstract risks into salient social realities. This mechanism implies that climate-induced migration can heighten concern about climate change even in the absence of local weather anomalies by increasing the salience of climate as a global threat.

Second, climate-induced migration might be interpreted as a visible cost of climate inaction, a signal of mounting socio-economic pressures that demand mitigation. Increased migration flows due to climate change can be perceived as a social cost or a "threat" (Baldwin, 2013), inducing individuals to update their beliefs about climate as a political priority in response to higher costs of climate inaction. In this case, the effect may be explained by simultaneous changes in attitudes toward migration, and by changes in preferences only among specific population subgroups that are particularly concerned with migration issues.

In the empirical sections that follow, I describe the data and the methodology that I use to test the hypothesis that weather-induced asylum applications in the European Union between 2000 and 2019 increased climate concern in host populations. I explore how this relationship varies across demographic and political subgroups, and assess whether changes in stated concern translate into shifts in voting behavior or party agendas.

3 Data

I combine data from multiple sources including asylum demands, climate data, survey data, Google search data, national party political agendas, and the electoral outcomes in European Parliament elections. This section (with complementary information in the Data Appendix B) describes and summarizes the main data sources.

3.1 Asylum applications

Bilateral data on asylum applications are sourced from the United Nations High Commissioner for Human Rights. Although this facet of migration accounts only for around 10% of the overall migration flows, asylum seekers have already received substantial attention in academia (Hatton, 2020; Missirian and Schlenker, 2017a) and in the policy debate (Byravan and Rajan, 2017; Wennersten and Robbins, 2017).

Around 13.4 million asylum applications were registered in the European Union between 2000 and 2019, of which more than 95% from non-OECD countries (Appendix Figure A1), which I focus on. Appendix Figure A2 shows the asylum applicant outflows by origin country over the time period considered, and Appendix Figure A3 displays the distribution of the asylum demands across the European Union (see Appendix B.1 for additional details).

The motivation to use asylum demands as a measure to derive migration induced by climate is two-fold. First, asylum-seeking can be linked to climate-related migration more directly than regular economic migration which is driven by various other push and pull factors. Weather-induced conflicts in developing countries spill over to developed countries through asylum seeker flows (Missirian and Schlenker, 2017b). Increases in asylum demands have been associated with climate change through droughts (Abel et al., 2019) and conflicts (Burke et al., 2015; Hsiang et al., 2011). Second, whilst refugee flows are also likely to be driven by climate-induced conflict, they are endogenous to a host country's specific policy in granting refugee status. Asylum procedures are long and differ across host countries. More than two years can range between application and formal status registration (Campo et al., 2024). I prefer asylum demands over actual stocks of refugees, which can be strongly affected by country-specific political actions (additional details on the asylum application process can be found in Appendix Section B.1.1).

3.2 Weather data

I gather temperature and precipitation data from two different sources. The main primary source is reanalysis ERA-5 data by the European Centre for Medium-Range Weather Forecasts (Copernicus Climate Change Service, 2023), which combines model data with observations from across the world into a globally complete and consistent dataset using information from weather stations, satellites, sondes, and re-analysis. ERA-5 is available at the daily level on a $0.25°$ grid resolution ($\approx$ 28km at the Equator) from 1950 to the present. For robustness, I also use the gridded Climatic Research Unit of the University of East Anglia (CRU) data at a $0.5°$ spatial resolution ($\approx$ 55km at the Equator) and a monthly resolution.

To maintain weather variability, I compute nonlinear transformations at the grid level before averaging values across space using grid-level weights, and account for fractional grid cells that partially fall within a country (Hsiang, 2016). Since a large share of the population in origin countries works in agriculture, I aggregate weather over space using agricultural land devoted to maize (Monfreda et al., 2008), which is the staple commodity accounting for the largest share of humans' caloric intake

(Missirian and Schlenker, 2017b), and over the year using country-specific growing season (Sacks et al., 2010).[2] For robustness, I also consider an unweighted average of weather across grid cells in the whole year, and a weighted average by population density (using Gridded Population of the World, v4.11).

Extensive research shows agricultural productivity as the main pathway linking temperature and migration (Bohra-Mishra et al., 2017; Cai et al., 2016; Cattaneo and Peri, 2016; Falco et al., 2019; Feng et al., 2012; Hoffmann et al., 2024; Marchiori et al., 2012; Missirian and Schlenker, 2017b). Higher temperatures may also have other disruptive effects, including increased conflicts, wars, and effects on health and fertility, which in turn could affect migration. Nevertheless, only certain of these reasons are valid for filing an asylum application (UN, 1951). Although it is beyond the scope of this paper to pin down the exact channels through which weather fluctuations drive asylum demands, I provide evidence that the agricultural productivity channel, through seasonal weather engendering higher "output conflict" (McGuirk and Burke, 2020), can be a valid mechanism for inducing spikes in asylum applications by leading to changes in acceptance rates (see Appendix Section C.4).

3.3 Individual survey data

I use the Eurobarometer surveys as the main source for individual stated climate concern. I use Eurobarometer Standard and Special editions that contain questions on individual perceptions, awareness, and attitudes towards climate change.[3] Each Eurobarometer survey typically involves 25,000-30,000 respondents from all EU member states. The two primary outcomes measure in a binary fashion i) whether individuals consider climate change important in the electoral campaign for the European Parliament elections, and ii) whether climate change is a priority for European Parliament deliberations. In Appendix Table B1, I report the exact formulation and temporal

[2]When I use daily weather information, I construct measures from the median planting date to the median harvest date. When I use monthly weather information, I define the growing season to start on the first of the month of the median planting date and to end on the last of the month of the median harvest date. If the crop is grown more than once a year, I focus on the first season.

[3]The surveys also contain information on socio-demographic characteristics of the respondents, such as gender, age, education, employment status, and political orientation.

coverage of the questions used as an outcome, and their summary statistics.

3.4 Electoral outcomes

I collect data on electoral votes for European Parliament elections from Schraff et al. (2022). The data contain information for six European Parliament election rounds from 1994 to 2019 at the NUTS-2 level. I classify parties as Green on the basis of their party family classification in the Manifesto Project electoral program database (Merz et al., 2016) and their membership in the European Green Party, a federation of political parties supporting green politics across Europe, that forms the G-EFA parliamentary group. Appendix Table B2 reports the number and years of the European Parliament elections for each country and the number of years of national elections in the data.

I use European elections since the use of proportional rules for the allocation of seats in the European Parliament should limit the extent to which voters engage in strategic voting and they should reveal their preferences more than in national elections (Pearson and Rüdig, 2020). Being "second-order elections" (Reif and Schmitt, 1980), voters have a lower level of strategies or utilitarian voting and are more likely to "vote with the heart" (Hix and Marsh, 2007). For this reason, votes in these elections provide a more accurate snapshot of individual preferences (Hoffman et al., 2022).

Green parties faced different destinies in Europe, accumulating electoral successes in Germany, Belgium, Finland, and France, but limited political relevance in Central and Eastern Europe. Since then, Green parties have become a more or less permanent feature on the political scene and they have been growing in visibility (Richardson and Rootes, 2006). Despite the variety of electoral mandates, Green parties share the closeness to any environmental, ecological, and climate-related matter.

3.5 Party political agenda

I retrieve information for 622 European political parties available for elections between 2000 and 2019 from the Manifesto Project Database (Merz et al., 2016), which contains detailed information through content analysis on the platforms (i.e., "manifestos") of political parties and party vote shares in every legislative election. Based on these manifestos, it categorizes 56 different political positions relating to economic, social, foreign policies, and, most importantly, the environment.

I measure party preferences on environmentalism as the share of quasi-sentences that positively referred to policies in favor of protecting the environment, fighting climate change and other green policies, including general preservation of natural resources, preservation of countryside forests, protection of national parks, animal rights. Appendix Table B3 reports the wording of each topic in the manifesto that I use in my analysis.

4 Empirical approach

In this section, I present the baseline empirical approach that estimates the effect of asylum applications on environmental values. In Section 4.1, I present my individual-level approach exploiting within-country variation over time and leveraging within-country between cohort variation in additional results. Section 4.2 explains the instrumental variable approach adopted for the causal identification of the effect driven by the weather-induced portion of asylum demands.

4.1 Individual-level analysis

I focus on the demand side of the environmental political process, and use citizens' stated preferences as a measure of voters' demand. I test whether asylum demands increase concern about climate change as a political priority in the host country with individual-level regressions of the form:

$$Y_{ibdrt} = \beta_1 \log\left(\sum_{\tau=s}^{S} AsyApp_{d,t-\tau}\right) + X_i'\boldsymbol{\gamma} + Z_{dt}'\boldsymbol{\delta} + \mu_d + \kappa_{t-b} + \zeta_{rt} + \theta_d \times age + \varepsilon_{ibdrt} \quad (1)$$

where Y_{ibdrt} is a vector of climate-related policy preferences of individual i born in year b in country d in region r interview in year t.[4] The main explanatory variable is $\sum_{\tau=s}^{S} AsyApp_{d,t-\tau}$, that is, the sum of all non-OECD asylum applications in country d over various time intervals, to let diffusion mechanisms unfold and to account for the average length of the electoral mandates in the country. The baseline specification accounts for asylum demands over the previous five years (i.e., $s = 0$ and $S = 5$). In Appendix Section D.2, I replicate the analysis using alternative time intervals. Since asylum demand distribution is right-skewed, I consider logs, and estimate relative impacts to allow for concavity in the response and interpret the coefficients as semi-elasticities. I control for a set of individual covariates, X_i', capturing socio-economic characteristics (gender, education, political orientation, and employment status). Most importantly, I control for a second-order polynomial of temperature and precipitation, Z_{dt}', so as to isolate the effect of migration from the well documented effect of local meteorological conditions on climate concern.

I also include host country fixed effects, μ_d, to partial out country-specific factors (e.g., political, cultural) that could drive unobserved heterogeneity in climate attitudes. I include age-specific fixed effects, κ_{t-b}, to partial out unobserved age-specific determinants of preferences and attitudes (e.g., preferences specific to life-cycle),[5] and region-year fixed effects, ζ_{rt}, that absorb not only time-varying changes in the overall ability of foreigners to migrate and international shocks but also region-specific local events (both climatic and economic). Finally, I account for country-specific linear age trends, $\theta_d \times age$, to help rule out the possibility that results are driven by country-specific cohort effects. Standard errors are clustered at the country level.

[4]Regions are defined following the UN M49 nomenclature: Eastern Europe (Bulgaria, Hungary, Poland, Romania, Slovakia); Northern Europe (Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Sweden, United Kingdom); Southern Europe (Croatia, Greece, Italy, Malta, Portugal, Slovenia, Spain); Western Asia (Cyprus); Western Europe (Austria, Belgium, France, Germany, Luxembourg, Netherlands).

[5]I conduct robustness tests including birth year fixed effects instead of age fixed effects since they are not perfectly collinear in a repeated cross-section. This approach does not alter my results.

4.2 Instrument for asylum applications

In an OLS estimation of Equation (1), the coefficient β_1 would produce a measure of the partial correlation between asylum applications and the outcome of interest that may be biased for several reasons. Unobservable characteristics affecting citizens' environmental values and correlated with asylum demands would generate such a bias. For instance, if asylum seekers are attracted to countries where citizens are more favorable to immigration, and these attitudes are correlated with climate attitudes or voting behavior, then a spurious correlation could arise. Similarly, social, economic, and demographic changes attracting asylum seekers and changing individual attitudes would also induce bias. To address these concerns, I adopt an instrumental variable approach that leverages plausibly exogenous variation in weather in origin countries, accounting for origin- and destination-time-specific unobservable characteristics.

4.2.1 Gravity equation and predicting weather-induced flows

I propose an identification strategy exploiting plausibly exogenous variation in weather to construct a predicted measure of asylum seeker flows, using it as an instrumental variable in a 2SLS estimation strategy. I adopt a "gravity" approach that predicts asylum applications based on nonlinear effects of variations in temperature and precipitations in origin countries (Beine et al., 2016).

Gravity models have been used in the migration literature to predict the geography-driven portion of migrant flows and estimate the causal impact of migration on receiving countries' economic performance (Alesina et al., 2016; Docquier et al., 2016; Ortega and Peri, 2014) and probabilities of conflict (Bosetti et al., 2020). I predict bilateral migration using an OLS estimator for the canonical log-transformation of the gravity equation (Frankel and Romer, 1999).[6] The bilateral gravity equation is written as:

[6] An alternative approach in the estimation of gravity equation is to use a Poisson Pseudo Maximum Likelihood (PPML) estimator, which addresses the large number of zeros in bilateral flows (Silva and Tenreyro, 2006). I do not adopt this estimation method for two reasons. First, the asylum application data do not contain zeros. Second, most importantly PPML always requires including origin-time fixed effects to control for the resistance term (Beine et al., 2016). By including such dummies, it would not be possible to identify origin-time effects such as the identifying weather variation used in Equation (2).

$$\log\left(AsyApp_{odt}\right) = f(\boldsymbol{W_{ot}}; \boldsymbol{X_{od}}; \alpha) + \theta_o + \mu_{dt} + \chi_{r(o)t} + u_{odt} \tag{2}$$

where the dependent variable is the natural logarithm of the asylum applications from origin o to destination d in year t. To obtain bilateral time-varying variation, I introduce interaction terms between origin weather $\boldsymbol{W_{ot}}$ and bilateral geographic characteristics $\boldsymbol{X_{od}}$, which include common border, common official language, common colonial history, and distance between the two capital cities.

In the baseline specification, I only consider contemporaneous weather and use a fourth-order polynomial of daily average temperatures, summed across the maize growing season, which provides sufficient flexibility to capture important nonlinearities (Carleton et al., 2022). Analogous to temperature, I construct a second-order polynomial of season-total precipitation over the maize growing season. I also include the uninteracted terms of the bilateral geographic characteristics, and origin, θ_o, destination-year, ψ_{dt}, and region-of-origin-year fixed effects, $\chi_{r(o)t}$, with the latter effectively purging out spatial correlation from the weather variations.[7] In a set of robustness checks, I explore the sensitivity of the results to alternative functional forms, including lower-order polynomials and binned daily temperatures, and to including lags in weather. Standard errors are clustered by origin-year.

One of the major challenges for the estimation of a gravity equation relates to the "multilateral resistance term" (Bertoli and Moraga, 2013), defined as the confounding influence that the attractiveness of alternative destinations exerts on the bilateral migration rate. Omitting this term can generate biases in the estimation of a gravity equation, by ignoring the influence of alternative destinations (Beine et al., 2016). This is particularly important since weather fluctuations can be positively correlated between origins and alternative destinations, both over time and space. Therefore, ignoring multilateral resistance, origin terms $\boldsymbol{W_{ot}}$ would pick up both their own effect and the effect of alternative destinations.

[7] Following the UN M49 nomenclature, the world is divided into 17 regions: Australia and New Zealand, Central Asia, Eastern Asia, Eastern Europe, Latin America and the Caribbean, Melanesia, Micronesia, Northern Africa, Northern America, Northern Europe, Polynesia, South-Eastern Asia, Southern Asia, Southern Europe, Sub-Saharan Africa, Western Asia, Western Europe.

I adopt two different approaches that account for the multilateral resistance term both non-parametrically and parametrically. First, the baseline specification controls for destination-by-year fixed effects and region-of-origin-by-year fixed effects to capture regional trends. Destination-by-year dummies account for time-varying multilateral resistances in receiving countries (Feenstra, 2015), including weather. Region-of-origin-by-year dummies control for the multilateral resistance to migration that is induced by time-varying heterogeneity in the preference for migration from a specific origin region.

Second, in Appendix Section C.1, I detail the construction of a parametric control of multilateral resistance, $\boldsymbol{MR_{odt}}$, as an additional robustness check. This destination-origin-specific measure is the average of all alternative destinations' weather variables weighted by the share of asylum applications in the first available year in the sample. These regressors account for changes in the attractiveness of alternative destinations weighted by the propensity to migrate to such alternative destinations (Mayda, 2010).

I use the vector of estimated parameters $\widehat{\alpha}$'s from Equation (2) to construct an instrument for asylum applications at the destination country-year level. Let $\boldsymbol{X_{odt}}$ be the matrix of temperature and precipitation, uninteracted and interacted with bilateral characteristics, the resulting weather-induced asylum seeker inflows predicted for country d in year t is $\widehat{AsyApp}_{dt} = \sum_o \exp(\widehat{\alpha} X_{odt})$. For robustness, I also construct alternative instruments. In Appendix Section C.2, I estimate a gravity equation that does not account for destination-by-year unobservable heterogeneity but includes destination-specific weather as a measure of pull factor. In Appendix Section C.3, I estimate host country-specific response functions to weather variations in origin countries, an alternative way to account for multilateral resistance.

4.2.2 Identifying assumptions and instrument validity

The instrument relies on the variation solely induced by deviations in temperature and precipitation in non-OECD origin countries and it is thus free from reverse causality and exogenous to any destination country, and within countries, to any specific age cohort characteristics. The time-varying nature of the instrument allows me to account for destination country-specific factors and shocks common to all destination countries that may be correlated with migration flows and environmental preferences.

A potential violation of the exclusion restriction for the predicted weather-induced asylum seeker flows as a valid instrument could arise if origin-country weather was correlated with environmental preferences through channels other than their effect on asylum applications. The key identifying assumption is that only asylum applications are directly affected by the predicted measure of weather-driven asylum applications, conditional on the fixed effects. There are four main concerns that I discuss below.

First, weather anomalies driving asylum demands are spatially correlated. In the individual-level analysis, this concern would arise if, relative to other birth cohorts in the same country, or relative to individuals in the same birth cohorts in other destination countries, cohorts more exposed to asylum applications because of weather fluctuations also experienced local weather shocks that influence their attitudes. All specifications always include local measures of temperature and precipitation at destination.

Second, individual environmental attitudes may lie on differential trends as a function of baseline networks between origin and destination, which may make certain host countries more likely to learn about weather in certain origin countries and thus change their environmental attitudes. To allay this concern, I use gradual climatic conditions in the gravity equation, and not natural disaster measures such as droughts or floods, which may affect the attitudes through other channels than migration inflows. The gravity equation includes time-varying destination-country fixed effects, which absorb the long-run effects of climate on the destination country through colonization history, disease environment, geographical accessibility, as well as the country's institutions.

I also conduct an empirical test by constructing a measure of country-level exposure to temperature and precipitation fluctuations via past migration links. I assume that destination countries that in the past received a higher share of asylum applications from certain origin countries are more likely to receive migrants from these origins when weather fluctuations occur there. I exploit the network channel, according to which migrants tend to choose destinations previously chosen by migrants from their same origin country (Card, 2001; Mahajan and Yang, 2020). I use the baseline share of asylum applications from a specific origin to construct a destination-year level weighted measure of exposure to origin country weather via migration links. I then regress the individual-level outcomes on this shift-share measure of weather in origin countries. A statistically significant effect would undermine the validity of the instrumental variable approach by indicating that individuals change their environmental attitudes as a function of weather fluctuations in origin countries via a country's baseline propensity to receive asylum seekers instead of annual fluctuations in weather-induced migration flows. Appendix Figure A4 allays such concern finding a null effect of indirect exposure to weather fluctuations.

Third, weather shocks in origin countries could increase salience of climate change in media and affect environmental attitudes. Using migration induced by less salient weather variation in temperature and precipitation may allay concerns that this channel can fully confound my findings, since these events receive much less coverage in cross-border news (Fetzer and Garg, 2025). To also empirically test for this channel, I gather data from Google searches about climate and migration (see Appendix Section B.3) and test for their correlation with asylum demands, and also include these as controls in the baseline specification.

Last, even if one could observe the reason for the asylum application, climate change and weather-related reasons do not apply to the refugee criteria of the 1951 Convention (UN, 1951). People may have a valid claim for refugee status for reasons indirectly affected by climate change (e.g., through disputes, armed conflict, and violence), but would not list climate as a direct cause of asylum application. For this reason, despite being widely used, the term "climate refugee" is not endorsed by institutional bodies, that deem more accurate the use of "persons displaced in the context of disasters and climate change" (UNHCR, 2021). I ascertain that spikes in additional demands induced by weather anomalies are valid for asylum and are thus not due to economic reasons (Missirian and Schlenker, 2017b). I examine the relationship between the number of accepted applications per year and application anomalies driven by weather, and find that weather-induced spikes lead to higher acceptance rates, providing suggestive evidence that application anomalies induced by weather classify as valid asylum demands, and are thus recognized as refugees by host countries (see Appendix Section C.4 for additional details).

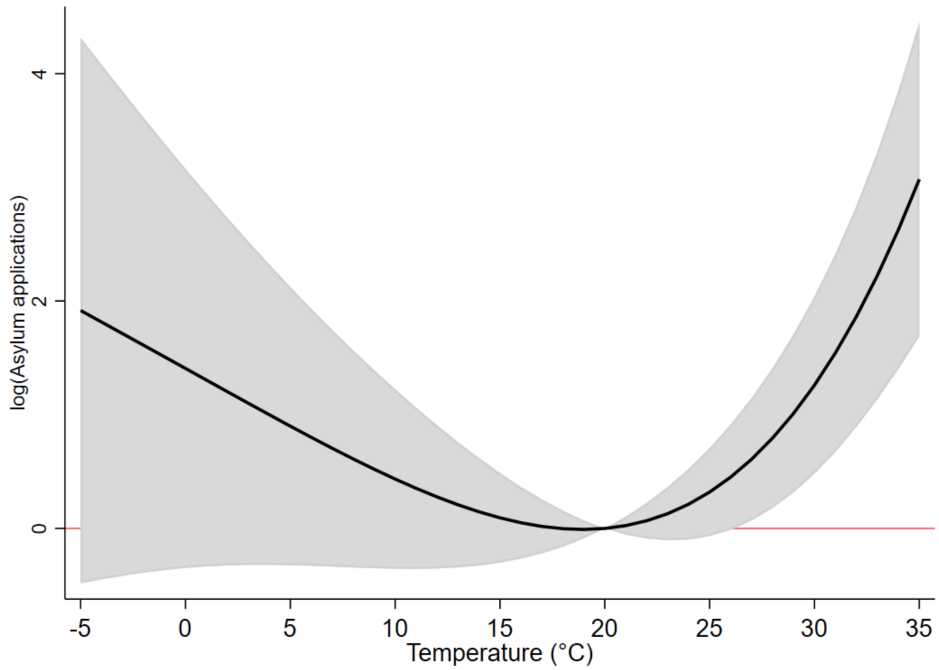
Altogether, this instrumental variable approach allows me to exploit only plausibly random variation in temperature and precipitation in origin countries to predict the climate-induced portion of asylum demands and estimate its impact on host country climate attitudes.

4.2.3 Gravity results

I first consider a gravity model without interaction terms between weather and bilateral controls. Figure 2 shows a robust asymmetric U-shaped relationship between temperature in the origin and asylum applications, with effects compared to a day at 20°C. The effect is strongly positive and statistically significant only for an additional day hotter than 25°C compared to a 20°C day. Conversely, total precipitation is not an important predictor for migration, consistent with previous findings (Cai et al., 2016). I also include up to three lags of the weather variables to account for delayed increases in asylum demands as a result of past weather fluctuations or forward migration displacement. The contemporaneous effect of temperature persists with the inclusion of up to three lags and asylum demands show a similar response function to past temperature fluctuations (Appendix Table D3).

Appendix Table D1 displays the estimates of the coefficients in the gravity model in Equation (2) including interaction terms. I report the estimates using three different measures of temperature and precipitation: unweighted average annual weather (column 1), weather weighted by maize area during the maize growing season (column 2), weather weighted by the population during the maize growing season (column 3). I also explore a non-parametric version of the effect of weather using binned daily average temperatures over the maize growing season. Appendix Figures A5 and A6 report the coefficients associated with the 5°C and 3°C bins over the temperature support. Results are also similar using monthly temperatures and precipitation from CRU weather

Figure 2. Response of asylum applications in the EU with respect to the origin country temperatures



Notes: The figure represents a predicted asylum applications-temperature response function from non-OECD countries in the EU. Regression estimates are from a fourth-order polynomial in daily average temperature over the maize growing season weighted by maize area in each grid cell. The response function is estimated in a regression model that controls for a quadratic function in season-total precipitation, multilateral weather, as well as destination-by-year, region-of-origin-by-year, and dyad-specific fixed effects. See Table D2 (column 2) for point estimates. Shaded areas are the associated 95% confidence interval using clustered standard errors at the origin country-year level.

data (Appendix Figure A7).

Appendix Figure A8 displays the conditional correlation between the inflows of asylum seekers and the predicted weather-induced portion of inflows obtained in the four alternative instruments that, respectively, use origin weather and bilateral characteristics; include the parametric multilateral resistance; include origin and destination weather; obtain destination-specific effects of origin weather. The correlation is strongly statistically significant and positive, suggesting that instrument effectively predicts asylum demands.

I also visually inspect the variation underlying the instrument by plotting its average annual change in Appendix Figure A9. Asylum demands induced by weather come mostly from Sub-Saharan Africa, the Middle East, and partly Latin America.

There is substantial variation within the same region, and the instrument predicts lower flows for a number of countries in Central America and South-East Asia. In the presence of heterogeneous treatment effects, the 2SLS estimates identify the impact of asylum demands in destination countries coming from source countries due to exogenous changes in weather, therefore estimating a local average treatment effect (LATE) on the "compliers" in host countries.

5 Individual climate concern

5.1 Main results

Table 1 displays the main results for the effect of weather-induced asylum applications on individual climate concern as a political priority. I report the OLS estimates of Equation (1) in columns (1) and (3), and the 2SLS estimates in columns (2) and (4), respectively for the two main survey outcomes.

The OLS estimates reveal a small and not statistically significant correlation between asylum applications and climate attitudes. Turning to the 2SLS estimates, the Kleibergen-Paap F-statistics confirm the validity of the instrument. The 2SLS coefficients indicate that weather-induced asylum applications have a strong, positive, and statistically significant effect on individual concern about climate change as a political priority. The magnitude of the 2SLS coefficients for the effects of asylum applications is substantially larger than the OLS by an order of magnitude. One potential explanation is that OLS estimates suffer from attenuation bias due to measurement error in asylum applications and do not capture the effect of the weather-driven portion of asylum seekers. As speculated above, another possibility is that the estimation strategy identifies a LATE for countries that experienced larger inflows of asylum seekers as a result of origin weather, and whose citizens were more likely to update their climate attitudes.

The effect is modest in size but not negligibly small. Doubling the country's weather-induced asylum applications in the five years before the survey increases by 2.3

percentage points (p.p.) the probability of reporting climate change as an important theme for the electoral campaigns of European elections, and by 4.3 p.p. the probability of reporting climate change as a political priority for the European Parliament deliberations. In the latter case, such a magnitude is similar to the difference between Cyprus's and Germany's country averages. On average, that is a 33% increase in concern for climate as a priority for European Parliament elections and a 41% increase in the preference for climate as a priority over European Parliament deliberations. To put this into context, comparing the effect to the partial correlation of socio-demographic characteristics, the effect of experiencing a doubling in asylum demands over five years on climate as a priority for European elections is over seven times larger than the effect of being employed and twice the effect of being left-wing leaning.[8]

Table 1. Weather-induced asylum applications and individuals' environmental values

Dep. variable	Climate concern in European Elections (*Mean: 0.068*)		Climate change as political priority (*Mean: .106*)	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
log(Asylum Applications)	-0.00147	0.0226**	0.00746	0.0431**
	(0.00384)	(0.0106)	(0.00651)	(0.0207)
Local weather controls	X	X	X	X
Individual controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Statistic		21.566		26.241
N	106614	106614	130068	130068
Number of countries	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-2 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 3-4 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. Columns (2) and (4) report the 2SLS estimates using the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

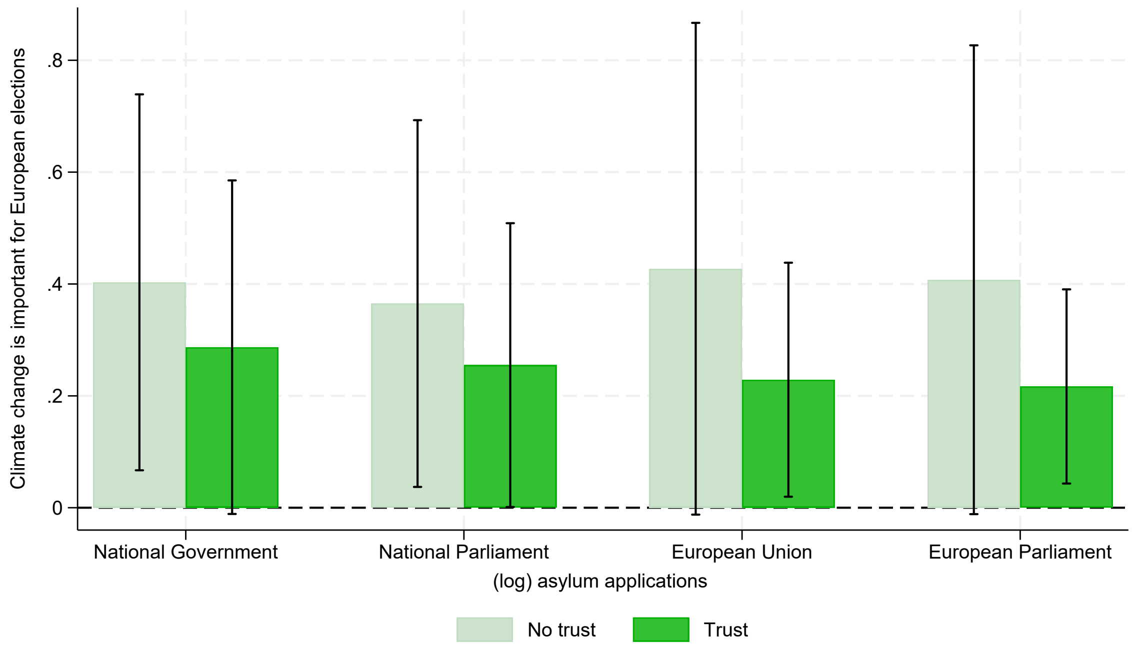
Summary of robustness checks. In Appendix Section D.2, I report the results of various robustness checks. First, I account for the average weather conditions in origin countries weighted by the baseline propensity to receive migrants from those countries and find robust and stronger estimates, suggesting that actual migration

[8] Appendix Table C3 reports the coefficients on all individual controls.

flows induced by weather fluctuations increase the salience of climate change, inducing updates in individual concern about the issue (Appendix Table D5). Second, I vary the set of fixed effects (Appendix Table D6). Third, I consider alternative gravity-derived instruments (Appendix Table D7). Fourth, I consider alternative time windows to construct asylum demand exposure (Table D8). Fifth, I use alternative treatments, including contemporaneous asylum demands, and a measure of weather-induced asylum anomalies constructed in Appendix Section C.4 (Appendix Table D9). Sixth, results are unaltered when leaving one country out at a time (Appendix Figure D1). Seventh, as a placebo exercise, I ascertain that the effect cannot be explained by any push factor, and use as an instrument predicted asylum demands from a gravity equation estimated only with non-climate related disasters, earthquakes and volcanic eruptions, and find a small and not significant effect (Appendix Table D10). Eighth, weather-induced asylum applications do not affect concern on any other topic or theme not related to climate, such as terrorism, Euro as a single currency, food safety, or economic growth (Appendix Table D11). Ninth, results are unchanged and estimates are more precise if I exclude the origin countries with the largest number of asylum seekers (Afghanistan, Iraq, Russian Federation, Serbia, Syria) (Appendix Table D12). Finally, I test for the presence of pre-trends, finding no correlation between past climate concern at the country level and leads in actual and predicted asylum demands (Appendix Table D13).

Heterogeneity. I explore heterogeneity of the baseline results across individual characteristics. First, individuals differentially interact with asylum seekers depending on their age, and preferences are more malleable after exposure to events during certain periods of life (this hypothesis is further explored in Section 5.2). Dividing the estimation sample by age terciles, younger individuals are more strongly affected by exposure to weather-induced asylum demands (Appendix Table C4). Heterogeneity by gender reveals that the effect is substantially driven by females (Appendix Table C5). Political ideology may also play a role. Since climate concern is surveyed as a political priority at the supra-national political level, the effect of asylum seekers may vary by attitudes toward the European Union legitimacy. I test for heterogeneous effects by trust towards legislative institutions, and find that the effect is driven by individuals with less trust in national and more in supra-national institutions (Figure 3).

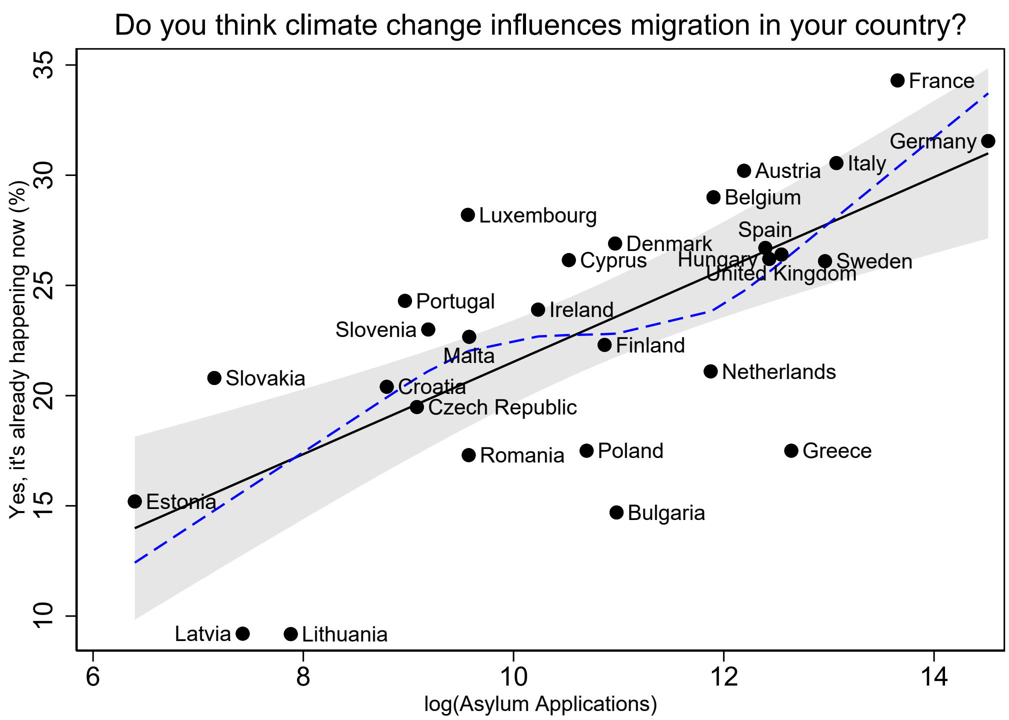
Figure 3. Heterogeneous effects of weather-induced asylum demands on climate concern by trust towards institutions



Notes: The figure plots the 2SLS coefficients for the effects of the log of five-year asylum applications on the survey response to the question "Climate change is important in the electoral campaign for European Parliament elections", after controlling for individual covariates (gender; education level; unemployment status; left-wing orientation) and country-level covariates (linear and squared average temperature and precipitation) and country-, age-, region-by-year fixed effects and country-age linear trends. Light (resp., dark) bars refer to individuals who reported no trust (resp. trust) in the institution reported on the x-axis. Tabular results are reported in Appendix Table C6. Standard errors are clustered at the country level.

Channels. In this sub-section, I explore different channels that may explain the mechanisms at play behind the estimated effects. There are two main puzzles to solve. First, to what extent asylum demands are informative about shifts in weather distributions in origin countries? How do individuals in host countries become aware of climate as the driver of asylum seeking - while migrants cannot state climate as a reason to apply for asylum? Descriptively, Figure 4 provides suggestive evidence of a strong positive correlation between the five-year cumulative asylum demands received in a country and the share of respondents that thinks that climate change is already influencing migration in their country (p-value <0.0001). Combined with leveraging only variation in weather in the origin to explain changes in asylum demands, this evidence strengthens the link between awareness of the climate-migration nexus and the actual flows of migrants in the country.

Figure 4. Asylum demands and climate-migration nexus awareness



Notes: The figure plots the share of respondents that answered "Yes, it's already happening now" to the statement "Do you think climate change influences migration in your country?" in the European Investment Bank Climate Survey in 2019 against the cumulative asylum applications received in the country over the period five years (in logs). The black dashed line is the fitted line (equal to 2.09, p-value< 0.0001), while the blue dashed line is a restricted cubic splines with 5 knots.

Second, one may wonder why climate attitudes change after an increase in weather-induced asylum applications. A potential channel relates to changes in public attention to the climate-migration nexus. To test for this, I use data from Google searches. I leverage these data in two ways. First, I run a horse race between instrumented weather-induced asylum demands and country-level average Google searches to ascertain that the instrumental variable approach does not confound in the media channel.

The estimates are comparable, and slightly larger in magnitude, to the baseline. Second, I examine the correlation between actual and predicted migration flows, and Google searches. I find a small positive but imprecisely estimated partial correlation between asylum demands and "climate change" searches, and a negative correlation with all other searches, significant only in the case of "climate protests" (Appendix Table C7). Although I cannot fully rule out that non-migration forces through Google searches might have independent effects on climate concern, this result supports the hypothesis that public attention through Google searches does not confound the estimates on weather-induced asylum demands. To further allay concerns on media coverage confounding the results, I also split the sample between destination countries above and below the median asylum demands and document a positive and significant effect only among countries above the median, suggesting that actual migration flows can explain the results (Appendix Table C8).

Finally, I test for the two hypotheses laid out in Section 2. Do individuals become more concerned about climate because climate-induced migration reduces the psychological distance to non-local weather, or because it increases the salience of short-term costs of inaction in climate mitigation efforts? To test for these hypotheses, I consider three additional results. First, I find a small not significant effect of weather-induced asylum demands on climate change perception as a global problem (Appendix Table C9). Second, I find a significant effect of weather-induced asylum applications on individual concern about migration as a political priority (Appendix Table C10). Third, the effect of weather-induced asylum demands on climate concern is driven by right-wing individuals (Appendix Table C11) and individuals without tertiary education (Appendix Table C12). In contrast with previous findings of local weather shocks driving attitudes among more educated and left-leaning individuals (Duijndam and van Beukering, 2021; Lee et al., 2015), these results reveal new dynamics on diverse coalition compositions around climate concern (Bush and Clayton, 2023; Gaikwad et al., 2022). Altogether, these findings provide evidence in support of the second hypothesis. Weather-driven asylum demands influence both concerns on climate and migration as political priorities. Individuals, in particular right-wing voters,

Table 2. Weather-induced asylum applications, environmental values, and Google Trends. 2SLS estimates.

Dep. variable	Climate concern in European Elections		Climate change as political priority	
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.0181*	0.0162*	0.0454**	0.0417***
	(0.00934)	(0.00890)	(0.0191)	(0.0142)
Google search "Climate change"	0.00209*	0.00282**	-0.00243	0.000430
	(0.00102)	(0.00125)	(0.00266)	(0.00227)
Google search "Climate protests"	-0.000550	0.000628	0.0243**	0.0185**
	(0.00441)	(0.00488)	(0.00943)	(0.00835)
Google search "Migration"		0.00187		-0.00345*
		(0.00137)		(0.00202)
Google search "Refugee"		-0.00198		-0.00118
		(0.00278)		(0.00310)
Local weather controls	X	X	X	X
Individual controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Stat	23.481	26.961	29.272	43.920
N	106614	106614	130068	130068

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. In columns (1)-(2), the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections; in columns (3)-(4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). All columns report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

update their concern about climate change as a response to higher costs of inaction induced by additional weather-induced asylum demands, which increases their incentives to fight climate change, in line with the hypothesis of climate-induced migration as a "threat" (Baldwin, 2013).

5.2 Exposure by age window

Climate change is a particularly important concern for children and young people (Hickman et al., 2021; Nature, 2021; Thompson, 2021). Recent school strikes and student-led demonstrations illustrate this phenomenon (Bowman, 2020; Kenis, 2021;

Ojala, 2012). Seminal work in social psychology posits the formative age (or "impressionable years") hypothesis, according to which attitudes, beliefs, and values are formed mostly during a period of great mental plasticity in late adolescence and early adulthood, defined as the formative age, between 16 and 24 years of age, and past this critical age, they change slowly (Cutler, 1974; Greenstein, 1965; Krosnick and Alwin, 1989; Sears, 1975).[9] I investigate whether the effect is stronger for individuals exposed to asylum flows during their formative age. For individuals born in year b in country d, I define exposure:

$$exposure_{bd} = \sum_{s=0}^{8} (\text{AsyApp})_{d,b+16+s}$$

where $AsyApp$ is country d's asylum applications received during the impressionable years (from the age of 16 to the age of 24). Such an approach allows me to construct exposure to asylum applications for the entire 2000-2019 period of available data since respondents interviewed in the same year and in the same country can have a different exposure history due to variation in their birth cohort.[10] Using this new exposure measure, the estimated specification is

$$Y_i = \beta_1 \log\left(exposure_{bdt}\right) + X_i'\boldsymbol{\gamma} + Z_{bdt}'\boldsymbol{\delta} + \mu_d + \zeta_{rt} + \kappa_{t-b} + \xi_b + \theta_d \times age + \varepsilon_{ibdt} \quad (3)$$

where Y_i is the same vector of outcomes as in Section 4.1 and the main explanatory variable is $exposure_{bdt}$, in logs to allow for concavity in the response.[11] I also control for a set of individual covariates, X_i', and for exposure to local weather conditions Z_{bdt}'.

[9] This hypothesis has already been tested on a variety of domains, including economic recessions and preferences for redistribution (Carreri and Teso, 2023), job preferences (Cotofan et al., 2023), and attitudes towards migration (Cotofan et al., 2024), exposure to trade with democracies and attitudes towards democracy (Magistretti and Tabellini, 2023), exposure to the 1968 movement and political preferences (Barone et al., 2022), epidemic exposure and confidence in political institutions (Eichengreen et al., 2024), environmental policy exposure and preferences (Vora and Zappalà, 2024).

[10] Since the data availability for asylum seeker flows in Europe starts from 2000, I limit myself to the birth cohorts whose impressionable years are in the 21$^{\text{st}}$ century (i.e., individuals born after 1984, whose year of age 16 is after 2000).

[11] For individuals interviewed before the end of their formative age, I use all available years over the 9-year age window, so exposure varies at the cohort-country-year level.

I include a wide set of fixed effects (country, region-by-year, age, birth-cohort), and country-age linear trends, so that β_1 is estimated from changes across birth cohorts within a country, as compared to changes across the same age groups in other countries, in a given year of interview.

Results in Table 3 show the OLS and 2SLS estimates of Equation (3). The 2SLS estimates indicate that being exposed to more weather-induced asylum applications over the impressionable years has a positive and statistically significant effect on both measures of climate concern as a political priority. In terms of magnitude, a 50% increase in exposure during the formative age (approximately equivalent to the interquartile range) increases the probability of reporting climate change as a priority in the electoral campaigns for the European Parliament elections by 15% of the sample mean and of stating climate change as a priority in the political arena by 19% of the sample mean. The latter is similar to the difference between Cyprus and Germany, or that between Hungary and France. These results provide suggestive evidence that exposure to weather-induced asylum seeker flows during late teenage and early adulthood drives concern about climate change at the time of the interview. Results are robust to alternative instruments (Appendix Table D15) and alternative definitions of formative age (Appendix Table D16).

6 From stated to revealed preferences

6.1 Empirical approach

To what extent do these effects on climate concern translate into political choices? In this section, I move from stated individual climate concern to revealed preferences in the form of voting behavior. I estimate the following specification:

$$y_{dt} = \beta_1 \log \left(\sum_{\tau=1}^{s} AsyApp_{d,t-\tau} \right) + X'_{dt}\gamma + \alpha_d + \lambda_t + \varepsilon_{dt} \tag{4}$$

where y_{dt} is the Green party vote share in European elections. The main explanatory variable, $\sum_{\tau=1}^{s} AsyApp_{d,t-\tau}$, is the sum of asylum demands in country d during

Table 3. Formative age exposure to weather-induced asylum seeker flows and environmental values

Dep. variable	Climate concern in European Elections (*Mean: 0.079*)		Climate change as political priority (*Mean: 0.099*)	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
$\log(\text{Exposure}_{16-24})$	0.00203	0.0235**	0.0165**	0.0390**
	(0.00455)	(0.00959)	(0.00775)	(0.0180)
Local weather controls	X	X	X	X
Individual Controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Birth-cohort FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Statistic		26.020		46.347
N	17554	17554	21661	21661
Number of countries	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed and whose formative age (between 16 and 24 years) occurs in the time period in which asylum applications data are available (i.e., after 2000). In columns (1)-(2), the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections; in columns (3)-(4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). Columns (1) and (3) report the OLS estimates using the (log) of the sum of asylum applications while individual was between 16 and 24 years old. Columns (2) and (4) report the 2SLS estimates where the (log) of exposure to asylum applications is instrumented with gravity-predicted asylum application flows described in Equation (2). Appendix Table D14 reports the estimates for all the other age windows. Robust standard errors, clustered at the country level, in parentheses. Individual controls: Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented. Weather Controls: Exposure to average temperature and precipitation over the same time period in which exposure to asylum applications is measured. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

the previous electoral mandate of the European Parliament, instrumented with its predicted counterpart that leverages origin weather. The matrix X'_{dt} includes a wide set of country-level covariates. Prior work has shown that support for Green parties is higher among young (Franklin and Rüdig, 1992), more educated (Knutsen, 2004), employed people (Knutsen, 2005) and it is positively correlated with GDP (Pearson and Rüdig, 2020), all observables that I control for, as well as electoral turnout, to account for the low and declining turnout in European elections (Van der Eijk and Van Egmond, 2007). I account for second-order polynomials of temperatures and precipitation since local weather influence voting behavior (Hoffman et al., 2022), and country and year fixed effects.

6.2 Main results

Table 4 displays the OLS (column 1) and 2SLS estimates (columns 2 to 4) of asylum demands on Green party votes in European elections. In both cases, the estimates are negative, but largely imprecise and not statistically significant at any conventional level, with the 2SLS estimates quantitatively larger than the OLS ones. Despite the small sample size, the instrumental variable approach preserves its relevance with the F-stat well above conventional thresholds. To further ascertain the validity of the approach, I check whether the actual or predicted flows of asylum applications induced by weather fluctuations are associated with the Green party vote shares in earlier elections. In both cases, the estimates are very close to zero and imprecisely estimated (Appendix Table D17). The results indicate that Green parties in countries more exposed to weather-induced asylum demands between one electoral round and the following one do not gain votes and, if anything, lose votes in response to such flows. Results are robust to alternative instruments (Appendix Table D18).

Table 4. Weather-induced asylum applications and Green party votes in European Parliament elections

Dep. variable	% Green votes (*Mean: 9.84*)			
	OLS	2SLS	2SLS	2SLS
	(1)	(2)	(3)	(4)
Log(Asylum Applications)	-0.323	-1.609	-2.392	-4.022
	(1.398)	(1.711)	(1.695)	(2.254)
Local weather controls	X	X	X	X
Country controls	X		X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Regional linear time trends				X
F-Statistic		12.657	23.060	20.882
N	65	65	65	65
Number of countries	20	20	20	20

Notes: The table reports the OLS (columns 1) and 2SLS (columns 2 to 4) coefficients on (log) of total asylum applications in the five years preceding the European elections. The dependent variable is the share of votes for Green parties. In columns (2) to (4), the (log) of total asylum applications in the five years preceding the elections is instrumented with the gravity-predicted (log) of total asylum applications described in Equation (2). Robust standard errors, clustered at the country level, in parentheses. Country controls: (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old, voter turnout. Local weather controls: Linear and squared average temperature and total precipitation in the country. All columns control for country and year-fixed effects. Column 4 adds region-specific linear time trends. F-statistic refers to the Kleibergen-Paap F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

6.3 Mechanisms

To understand why higher exposure to weather-induced asylum demands increases individual climate concern but does not translate into voting behavior, I evaluate and test for various mechanisms, which are by no means mutually exclusive: anti-immigration party votes, electoral turnout, changes in citizens' concern under voting age, and parties' environmental agenda.

Anti-immigration parties. A first potential explanation is that voters do not distinguish between weather-induced asylum seekers and migrants for economic conditions. Electoral preferences may have shifted towards populist anti-immigrant nationalist parties as a result of migration flows, rather than increasing the salience of environmental-related issues. Green party votes may also not capture all relevant aspects of pro-environment voting behavior, which may have been directed to other pro-environment parties. I examine whether votes for any other political groups respond to weather-induced asylum demands. The effect is imprecisely estimated for all parties, except for nationalist party votes that are negatively affected at the 90% significance level, suggesting that individuals shift away from more climate-skeptical parties (although not towards Green parties) as a voting behavioral impact. An opposite positive effect of a similar magnitude, though imprecise, is found in socialist and any other left-wing party votes (Appendix Table D19).

Turnout dropout. A second hypothesis is that Green party votes decrease because traditional Green voters did not vote in the European elections. I estimate the effect of weather-induced asylum applications on voter turnout and find a negative and statistically significant coefficient (Appendix Table D20). Therefore, I cannot entirely rule out that Green party votes may not have been affected by weather-induced asylum applications, due to an exit, at least partial, of the traditional Green voters from the electoral turnout.

Changes in preferences of young voters. In support of the latter hypothesis, there is evidence that younger generations are generally more supportive of Green parties (Lichtin et al., 2023), but there is low participation rate and turnout at the European elections among this population subgroup (Bhatti and Hansen, 2012). Changes in climate attitudes among youths may not be enough to drive overall shifts in voting behavior. To test for this hypothesis, I separately estimate the effect of weather-induced asylum demands on those below and above the voting age.[12] Respondents below the voting age are more likely to report climate change as an important theme for the electoral campaign for the European Parliament elections, whereas the effect is not statistically significant for respondents above the voting age (Appendix Figure A11). This result suggests that the increase in concern for climate change and its importance as part of the political agenda in the European electoral campaigns is driven by individuals not yet eligible to vote, and this might explain the gap between stated and revealed preferences in voting behavior.

Parties' environmental agenda. I examine potential changes on the supply side of the environmental political process, defined as the environmental agenda of political parties (Guiso et al., 2017). For this purpose, I use information on parties' political agenda to measure the degree of a party's environmentalism in national elections, and exploit within-party variation in the environmental political agenda across elections (see Appendix Section C.7 for additional details). I find that weather-induced asylum demands do not shift parties toward a *greener* environmental agenda (Appendix Table C15). These findings strengthen the hypothesis that a lack of supply side reactions can explain the unbalance between rising climate concern in response to climate-induced inflows and no changes in pro-environment voting behavior.

Environmentalism in national elections. Last, building on these findings, I construct a measure of *environmentalism* at the election-country level obtained as the average percentage of environmentalism in each party's manifesto weighted by its vote share in a given election. The 2SLS estimates on weather-induced asylum demands, although positive, are not statistically significant (Appendix Table C14). Similar null results are obtained when using alternative instruments (Appendix Table D21). Sim-

[12] The voting age is a minimum age established by law that a person must attain before they become eligible to vote in a public election. This is set at 18 years for most of the countries in the sample, except for Austria after 2007, Malta after 2018 which set their voting age to 16 years, and Greece after 2017, setting it to 17 years.

ilarly, weather-induced asylum demands do not seem to explain changes in other dimensions of the political agenda of parties (Appendix Table D22).

7 Conclusions

Understanding the drivers of changes in public climate concern and pro-environment voting behavior is essential to identify the mechanisms to promote climate action. Several studies examine the role of socio-economic determinants (see Drews and van den Bergh (2016) for a review) and direct experience of local weather (Hazlett and Mildenberger, 2020; Hoffman et al., 2022). A growing literature has documented the cultural and political effects of migration in host countries (Alesina and Tabellini, 2024). Fluctuations in temperatures as a result of climatic changes have increased the outflows of asylum seekers from non-OECD countries into the European Union (Missirian and Schlenker, 2017a), possibly altering the individual concern for climate change and leading to eventual changes in voting behavior.

In this paper, I examine the effect of weather-induced asylum applications on citizens' climate concern and pro-environment voting behavior, exploiting exogenous variation in asylum demands generated by weather fluctuations from non-OECD origin countries to the European Union. I find that exposure to weather-induced asylum applicants increases climate concern, and individuals who grew up when their country received more weather-induced asylum demands are more concerned about climate at the time of the survey, providing support to the formative age hypothesis. The effect of weather-induced asylum applications on climate concern appears to be driven by right-wing voters and to induce joint concern about climate and migration as political priorities rather than increasing public perception of climate change as a world problem, suggesting that climate-induced migration flows increase the perceive cost of climate inaction in host countries. These findings are not mirrored by pro-environment voting behavior changes in European elections. Three main co-existing mechanisms suggest that a drop out of traditional Green voters of the electoral turnout, a change in public concern among individuals who are not yet eligible to vote, and a lack of change in parties' pro-environmental platforms rationalize my results.

These findings point to several avenues for future research. First, this paper provides the first cross-national empirical evidence on the political effects of exposure to weather-induced asylum applications, aggregating over diverse country contexts, interaction types, and time periods—ranging from episodes of heightened salience in asylum discourse to periods of more severe weather anomalies. Yet, important heterogeneities remain to be unpacked. Country-specific analyses, both within the European Union and in other major migrant-receiving contexts such as the United States, could shed light on institutional, cultural, or media environments that mediate public responses to climate-induced migration. Changes in public attitudes and voting behavior may also hinge on the nature of host-migrant interactions and the attributes of both groups—including the specific climate shocks driving migration, countries of origin, and the political or socioeconomic characteristics of host populations. Second, by exploring how a socio-economic consequence of climate change — migration — shapes climate concern, this paper lays the groundwork for a novel research agenda investigating which population subgroups respond most strongly to different dimensions of socio-economic climate impacts. While my results suggest that right-leaning and less-educated individuals are particularly responsive to climate-induced migration, likely due to heightened sensitivity to immigration-related issues, other subgroups - such as older individuals - may react more to personal and proximate consequences of climate change, such as information on the well-documented relationship between extreme temperatures and mortality. Understanding which information is effective for which population subgroup can maximize communication policy effectiveness and catalyze public support for climate policies (Dechezleprêtre et al., 2025). Finally, a more geographically granular approach could better illuminate the role of media coverage in shaping the salience and interpretation of climate-related migration. Traditional media, including national newspapers, may not only amplify awareness of climate-migration linkages but also influence how migrants and their motivations are perceived, thereby shaping both public opinion and policy responses.

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Online Appendix "Climate-induced migration and environmental values"

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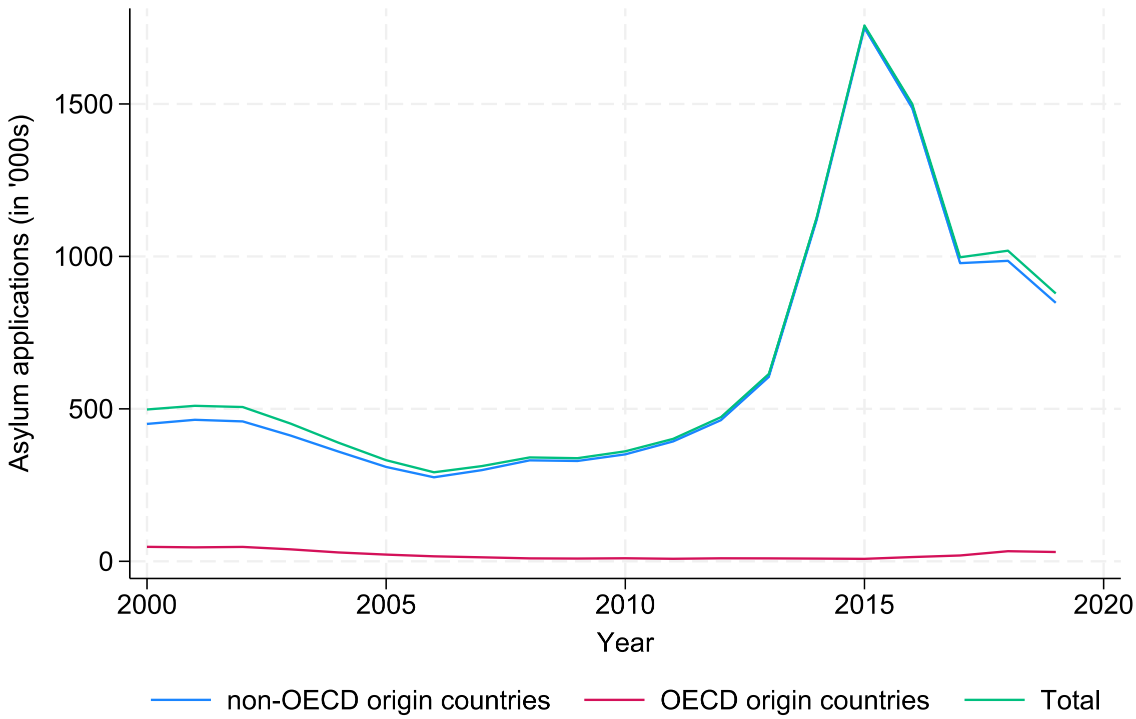
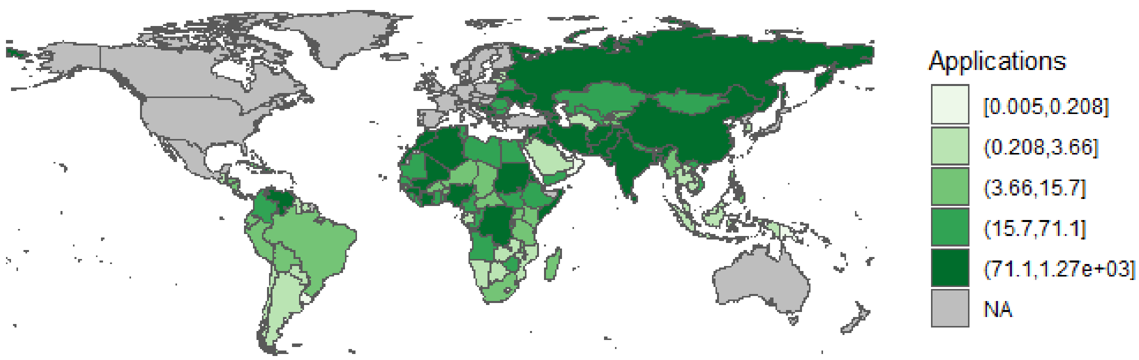
A Additional Figures

Figure A1. Asylum applications in the European Union between 2000 and 2019



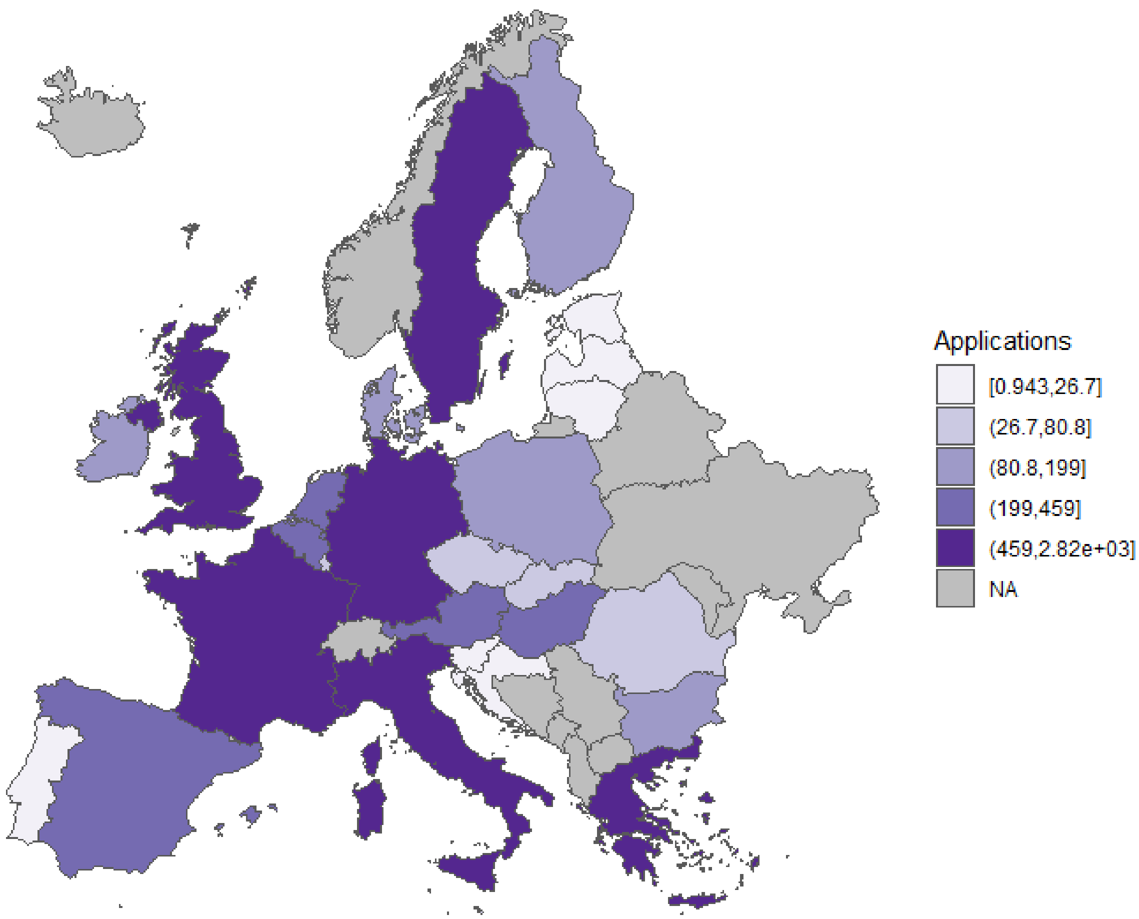
Notes: UNHCR (2020). Author's computation. Cumulative annual asylum demands in EU27+UK countries from 2000 to 2019.

Figure A2. Asylum applications (in 1000s) from non-OECD countries between 2000 and 2019



Notes: The map shows total asylum applications (in thousands) from non-OECD countries between 2000 and 2019.

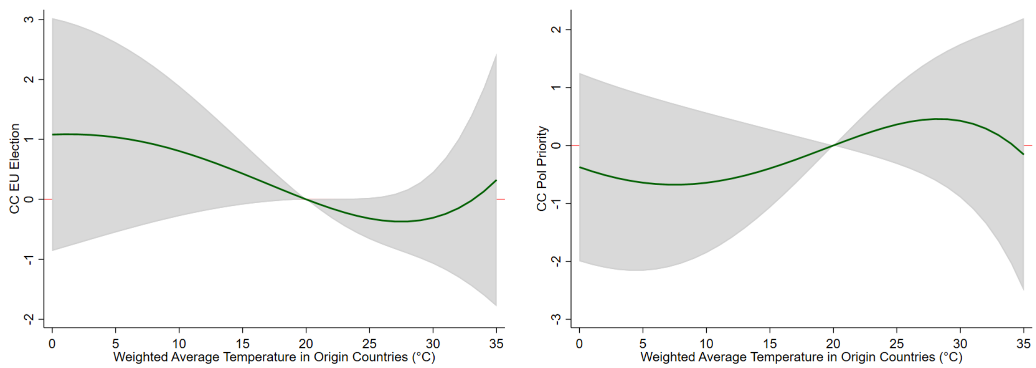
Figure A3. Asylum applications (in 1000s) in EU27 + UK between 2000 and 2019



Notes: The map shows total asylum applications (in thousands) in EU27+UK countries between 2000 and 2019.

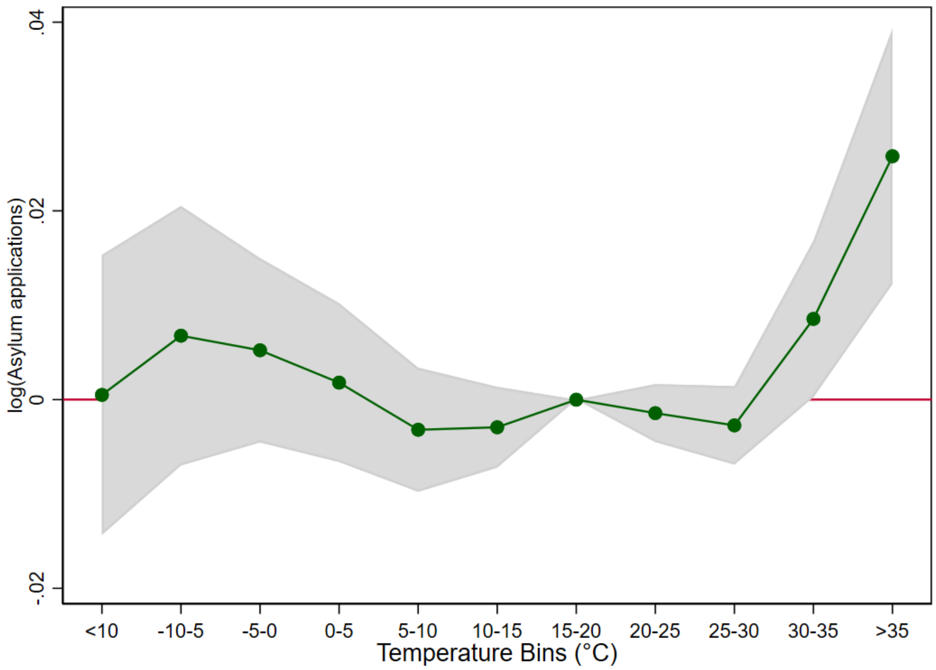
Figure A4. Effect of migration-weighted exposure to weather shocks in origin countries on climate change concern

(a) "Climate change is important in electoral campaigns for European elections" (b) "Climate change is a priority for European parliament deliberations"



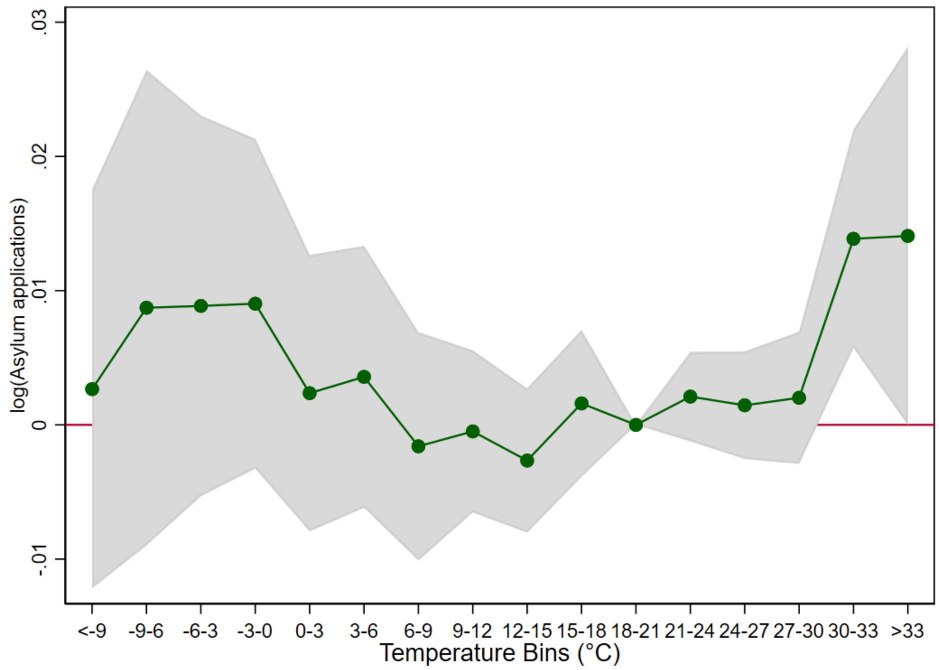
Notes: The figure shows the predicted individual preference-temperature response function (normalized at 20° C) using a baseline migration-weighted exposure measure of weather fluctuations in asylum application origin countries. Each origin country's weather realizations is weighted by the average number of asylum applications from the origin country to the destination country over the total average number of asylum applications of the destination country in the baseline 2000-2005 period. Regressions estimates are from a fourth-order polynomial in season average temperature and total precipitation fully saturated with country-, year-, age-, region-by-year and country-by-age linear trends. Shaded areas are the associated 95% confidence interval.

Figure A5. Response of asylum applications to 5°C binned daily temperature over the maize growing season



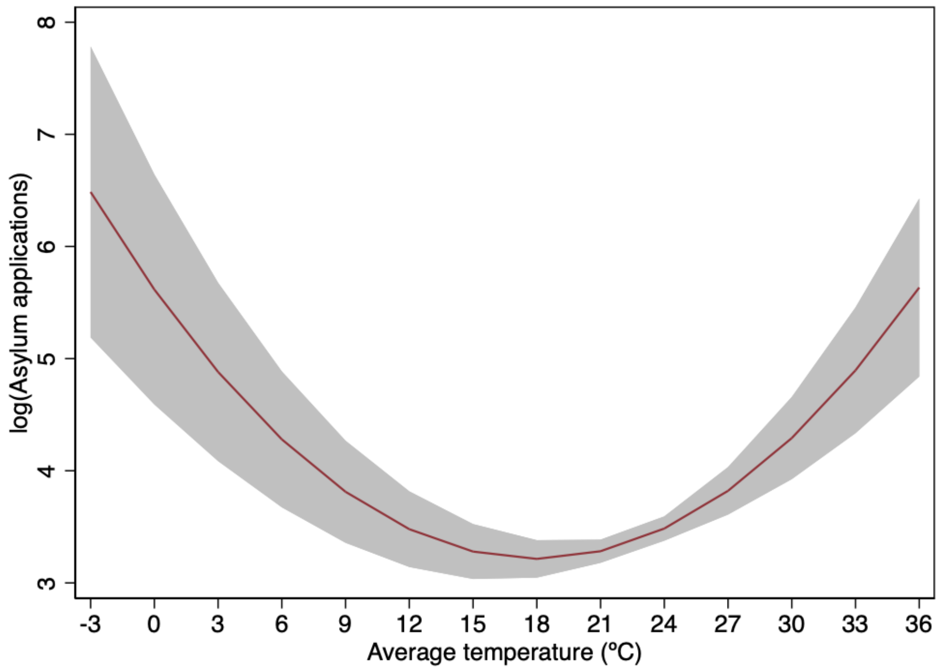
Notes: The figure represents a predicted asylum applications-temperature response function for the applications coming from non-OECD countries in the EU. Regression estimates are from binned daily average temperature over the maize growing season with bins 5°C wide weighted by maize area in each grid cell. The response function is estimated in a regression model that controls for a quadratic function in season-total precipitation, as well as destination-by-year, region-of-origin-by-year, and dyad-specific fixed effects. Shaded areas are the associated 95% confidence interval using clustered standard errors at the origin country-year level.

Figure A6. Response of asylum applications to the 3°C binned daily temperature over the maize growing season



Notes: The figure represents a predicted asylum applications-temperature response function for the applications coming from non-OECD countries in the EU. Regression estimates are from binned daily average temperature over the maize growing season with bins 3°C wide weighted by maize area in each grid cell. The response function is estimated in a regression model that controls for a quadratic function in season-total precipitation, as well as origin-, destination-by-year, region-of-origin-by-year, and dyad-specific fixed effects.

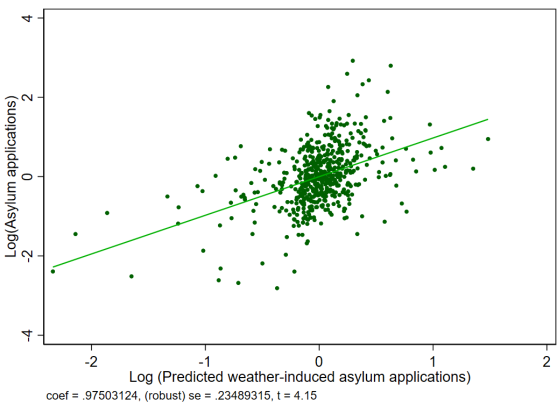
Figure A7. Response of asylum applications to the EU with respect to the annual average temperature over the maize growing season using CRU data



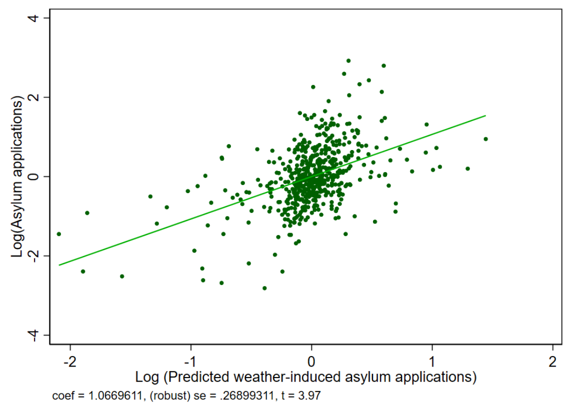
Notes: The quadratic response function is shown as a solid brown line. The y-axis indicates the relative impact of changing temperatures on asylum applications. The model controls for a quadratic function in season-total precipitation using CRU data as in Missirian and Schlenker (2017b), as well as origin-, -by-year, dyad-specific fixed effects.

Figure A8. Observed and predicted log weather-induced asylum applications. Predicted measure constructed by estimating the Equation in the label.

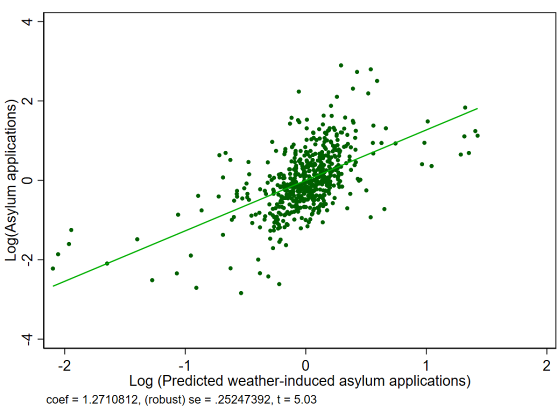
(a) Equation (2)



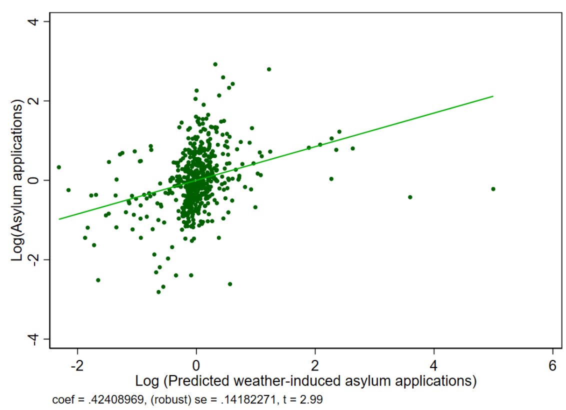
(b) Equation (C2)



(c) Equation (C3)

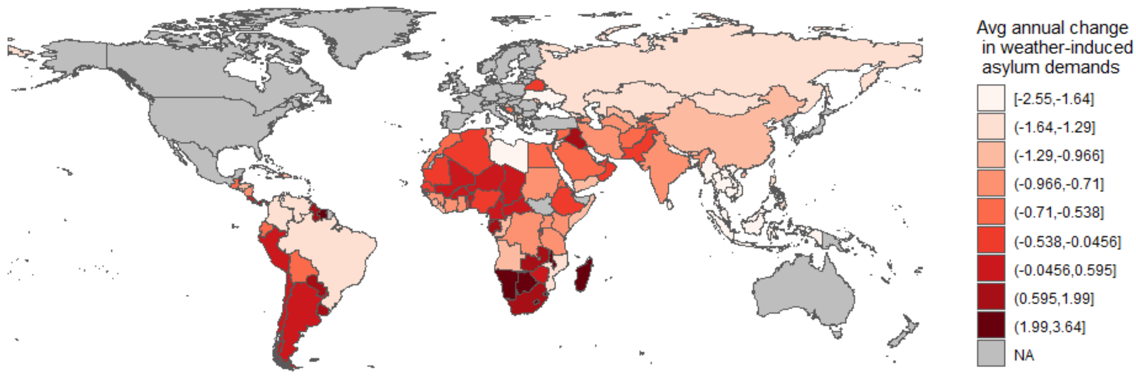


(d) Equation (C4)



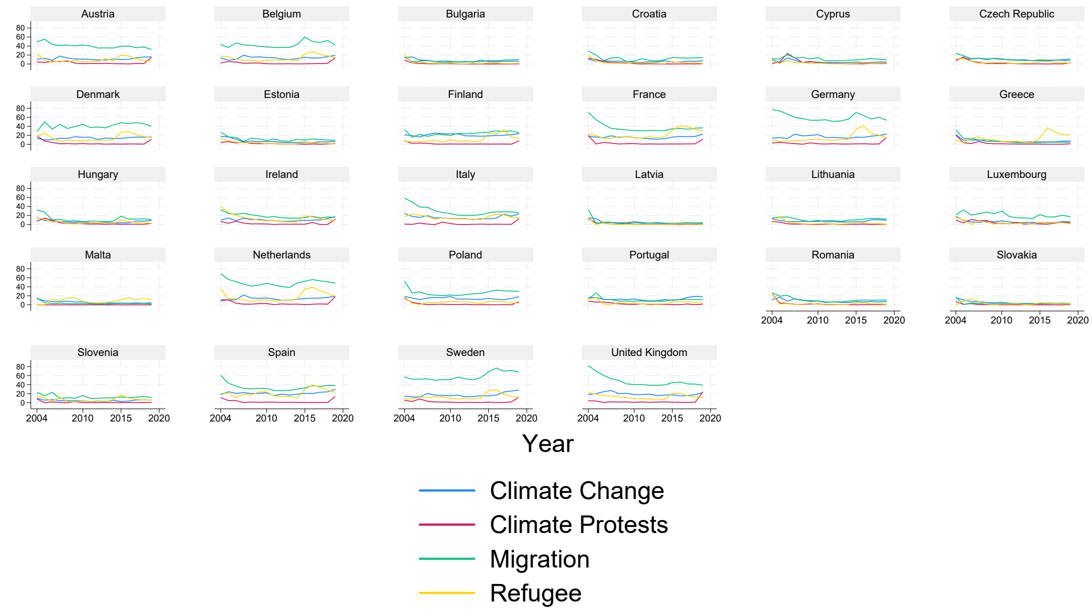
Notes: The vertical axis shows the observed logarithm of flows of asylum applications. The horizontal axis shows the logarithm of predicted weather-induced flows of asylum applications in EU obtained by estimating different gravity equations as reported in the title. Each point in the scatterplot represents the residuals of the two variables for each country-year observation, after filtering out country and year fixed effects. Standard errors are clustered at the country level. The green line refers to the slope of the regression of the actual (log) of asylum applications on the predicted weather-driven counterpart.

Figure A9. Average Change in Predicted Weather-Induced Asylum Applications



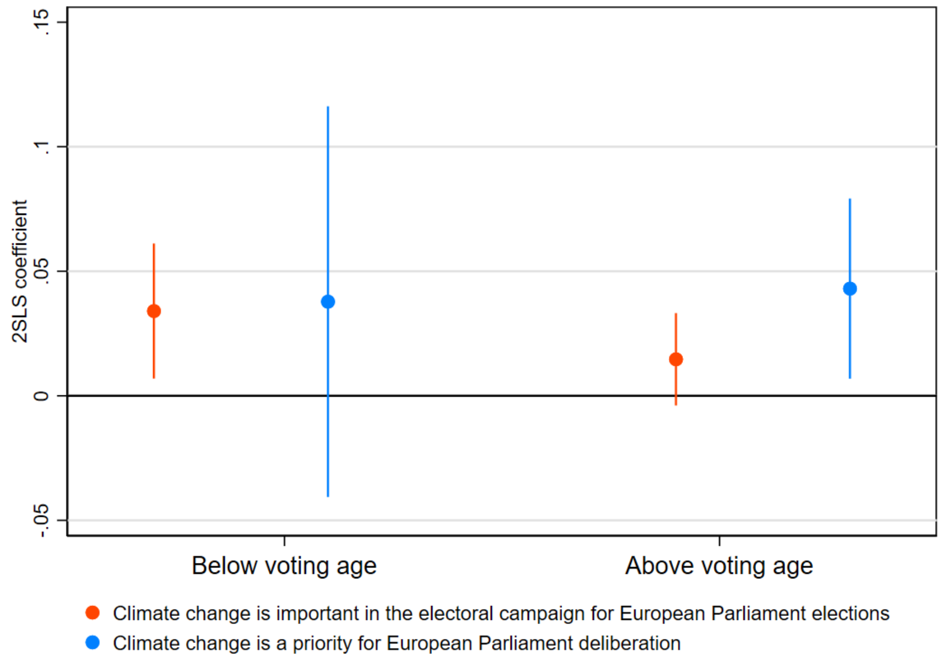
Notes: The figure plots the deciles of the average annual change in the log of predicted weather-induced asylum demands in EU member countries for the non-OECD countries from the estimation of Equation (2).

Figure A10. Annual average attention (measured with Google search) for climate change, climate protests, migration and refugee by country



Notes: The figure plots the average annual searches for "climate change", "climate protests", "migration", "refugee" from Google Trends. Additional details on the construction of the four variables can be found in Appendix Section B.3.

Figure A11. 2SLS coefficients of weather-induced asylum seeker flows exposure by eligibility to vote



Notes: The figure plots the 2SLS coefficients estimated regressing the survey response on the total asylum applications experienced during the formative age period in the sample of individuals interviewed above or below the voting age threshold in the country. The point estimates are reported in Table C13. Bins represent the 95% confidence interval.

B Data Appendix

B.1 Asylum applications data

The applications generally refer to the number of applicants or persons, rather than the number of applications or families. Only those persons who have officially filed a formal request for asylum are included. Other refugees who, for whatever reason, are either unwilling or unable to file an asylum request, and illegal immigrants are not included. The UNHCR data lists the year an application was filed, which allows for a clear temporal link on the intention to migrate, even if asylum is granted with a delay. The UNHCR also provides, at the same spatial and temporal resolution, the number of decisions. A decision corresponds to the closure of an application because the refugee status has been either granted ("recognized"), denied ("rejected"), denied but the applicant is given a complementary form of protection ("other decision"), or not determined before the application got closed for administrative reasons ("otherwise closed") (Missirian and Schlenker, 2017a).

B.1.1 Asylum application process

The asylum application process can substantially differ across European countries, however, there are certain common characteristics that they share which are described in what follows. Individuals fleeing their country have the right to ask for protection in a European country they have entered if they are afraid to return to the country of their current residence because their life or that of their family members is in danger. To register the request for asylum, individuals usually contact the national Police upon their arrival and, if needed, can ask to be hosted in a reception center, and have the right to be welcomed in a special center, have a temporary residence permit, and remain on the national territory waiting for their application to be examined. As long as their status as asylum seekers last, individuals cannot leave the national territory. Labor market integration of refugees differs across countries with lasting negative consequences of delayed entry into the destination country labor market due to employment restrictions while waiting for asylum (Fasani et al., 2021). In Denmark since 2013, refugees can work before asylum adjudication (Foged et al., 2022); in Italy, two months after the compilation of the application form at the Immigration Office of the Police, asylum seekers have the right to work regularly (Campo et al., 2024). Other countries, such as Germany in 2017, grant asylum seekers access to training and employment program during the pre-asylum phase (Fasani et al., 2021).

B.2 Additional covariates

I retrieve variables on geographic time-invariant bilateral characteristics that are included in the estimation of the gravity equation. The geographic controls come from the BACI dataset and provided by CEPII (Head and Mayer, 2014). In particular, I include variables on whether countries have a common border, a common official language, a common colonial history and a variable measuring the natural logarithm of bilateral (geodesic) distance between capitals (Abel et al., 2019; Beine and Parsons, 2015; Bosetti et al., 2020). The use of these time-invariant dyad-specific covariates provides an alternative specification to the gravity equation with bilateral fixed effects.

In the country-level specification, I include time-varying country-level covariates to account for potential confounders of the determinants of voting behavior that are also correlated with changes in asylum seeker inflows. Immigration may be driving per capita income levels in the destination country (Felbermayr et al., 2010), which has also been found to be associated with higher support for Green parties (Pearson and Rüdig, 2020). For this reason, I retrieve GDP and population data from the Penn World Table, version 10.0. In particular, I use Output-side real GDP at chained PPPs (in millions 2017 US$) and population in the country in millions. I also obtain yearly unemployment rate data from the World Bank indicator on total unemployment (as a percentage of total labor force based on International Labor Organization estimates), tertiary-level educational attainment (in the percentage of the total population) from Eurostat and the percentage of population between 18 and 23 years old from the United Nations Department of Economics and Social Affairs[13] as proxies of institutional determinants of migrants' decision of destination countries and as explanatory factors of the support

[13]Source: https://population.un.org/wpp/Download/Standard/Interpolated/

for Green parties.

B.3 Google Trends Data

Google Trends data consist of the volume of daily searches by word, or list of words, in a given country, over time in all languages. I leverage these data to measure public attention to migration, refugees, and climate change. I collect the volume of searches for several keywords to construct a measure of relative attention to the following topics (keywords in parentheses) "climate change" (climate change, drought*, flood*, heat wave*, global warming, storm*), "climate protests" (climate protest*, climate strike*, Fridays for future), "migration" (migration, migrants) and "refugee" (refugee*, asylum seeker*). Search trends are computed based on a random sample of the total searches on Google, and this might produce measurement error issues. To diminish such worries, I draw the time series three times and take an average. I then construct the four indices as an unweighted average of the searches of each keyword. Figure A10 plots the evolution of Google searches about the four indices by destination country. Each line represents the annual average of Google searches over time. Before averaging, the value is normalized, assigning 100 to the weekly maximum. Google searches strongly correlate with news articles (Battiston, 2020). Ideally, one would gather data from news articles to compare the two and include them in the estimating equation. This channel would be particularly relevant since newspapers' language and sentiment largely respond to readers' demands (Gentzkow and Shapiro, 2010). Given the wide cross-national scope of this analysis, it is difficult and beyond the aim of this paper to construct a comprehensive dataset of EU member states' newspaper coverage of climate and migration issues. This is left as a promising avenue for future research.

B.4 Additional data information

Table B1. *Eurobarometer* Outcome Variable Definition

VARIABLE	DESCRIPTION	MEAN (SD)	SURVEY WAVES [Sample Size]
Climate concern in European Elections (0-1)	Which of the following themes should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections? (Combating climate change and protecting the environment)	0.06 (0.24)	2008; 2009; 2018 [106,614]
Climate change as political priority (0-1)	The EP makes decisions on European legislation which directly impacts every citizen's life. In your opinion which of the following should be given priority by the European Parliament? (Combating climate change and protecting the environment)	0.107 (0.31)	2008; 2009; 2012; 2013; 2014; 2018 [130,068]
CC World Problem (0-1)	In your opinion, which of the following do you consider to be the most serious problem currently facing the world as a whole? (Global Warming / Climate Change)	0.37 (0.48)	2008; 2009; 2011; 2013; 2015; 2017; 2019 [116,879]
CC Seriousness (1-10)	How serious a problem do you think climate change is at this moment? Please use a scale from 1 to 10, '1' would mean that it is "not at all a serious problem" and '10' would mean that "it is a problem extremely serious".	7.57 (2.14)	2008; 2009; 2011; 2013; 2015; 2017; 2019 [164,779]
Migration EU Election (0-1)	Which of the following themes should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections? (Migration)	0.08 (0.27)	2008; 2009; 2018 [106,613]
Migration EU Pol Priority (0-1)	The EP makes decisions on European legislation which directly impacts every citizen's life. In your opinion which of the following should be given priority by the European Parliament? (Migration)	0.08 (0.28)	2008; 2009; 2012; 2013; 2014; 2018 [130,067]
Economic growth EU Election (0-1)	Which of the following themes should be discussed as a matter of priority during the electoral campaign for the next EP elections? (Economy and growth)	0.16 (0.37)	2008; 2009; 2018 [106,614]
Euro single currency EU Election (0-1)	Which of the following themes should be discussed as a matter of priority during the electoral campaign for the next EP elections? (Euro as single currency)	0.03 (0.16)	2008; 2009; 2018 [53,799]
Terrorism EU Election (0-1)	Which of the following themes should be discussed as a matter of priority during the electoral campaign for the next EP elections? (Fight against terrorism)	0.06 (0.23)	2008; 2009; 2018 [106,614]
Food safety EU Election (0-1)	Which of the following themes should be discussed as a matter of priority during the electoral campaign for the next EP elections? (Consumer protection and food safety)	0.05 (0.21)	2008; 2009; 2018 [106,614]
Terrorism EU Pol Priority (0-1)	The EP makes decisions on European legislation which directly impacts every citizen's life. In your opinion which of the following should be given priority by the EP? (Fight against terrorism)	0.11 (0.31)	2008; 2009; 2012; 2013; 2014; 2018 [130,068]

Notes: The survey waves used include Eurobarometer 69.2 (2008), 71.1 (2009), 78.2 (2012), 79.5 (2013),82.5 (2014), 83.4 (2015), 87.1 (2017), 90.1 (2018).

Table B2. European Parliament elections and National elections by country and year in the estimation sample

Country	# European Parliament Elections	Years with Green party votes	# National Elections	Years
Austria	4	2004; 2009; 2014; 2019	4	2006; 2013; 2017; 2019
Belgium	4	2004; 2009; 2014; 2019	4	2003; 2007; 2010; 2019
Bulgaria	0		5	2001; 2005; 2013; 2014; 2017
Croatia	0		4	2007; 2011; 2015; 2016
Cyprus	0		0	
Czech Republic	3	2004; 2009; 2014	5	2002; 2006; 2010; 2013 ; 2017
Denmark	3	2009; 2014; 2019	6	2001; 2005; 2007; 2011; 2015; 2019
Estonia	2	2009; 2019	4	2003; 2007; 2011; 2015
Finland	4	2004; 2009; 2014; 2019	5	2003; 2007; 2011; 2015; 2019
France	4	2004; 2009; 2014; 2019	4	2002; 2007; 2012; 2017
Germany	4	2004; 2009; 2014; 2019	4	2002; 2009; 2013; 2017
Greece	3	2004; 2009; 2019	4	2004; 2009; 2012; 2015
Hungary	2	2014; 2019	4	2002; 2006; 2010; 2014
Ireland	4	2004; 2009; 2014; 2019	3	2002; 2007; 2011
Italy	0		2	2008; 2018
Latvia	0		6	2002; 2006; 2010; 2011; 2014; 2018
Lithuania	2	2014; 2019	0	
Luxembourg	4	2004; 2009; 2014; 2019	2	2009; 2013
Malta	4	2004; 2009; 2014	0	
Netherlands	4	2004; 2009; 2014; 2019	6	2002; 2003; 2006; 2010; 2012; 2017
Poland	0		2	2001; 2005
Portugal	2	2014; 2019	4	2009; 2011; 2015; 2019
Romania	0		2	2012; 2016
Slovakia	0		5	2002; 2006; 2010; 2012; 2016
Slovenia	2	2004; 2019	4	2004; 2008; 2011; 2018
Spain	3	2009; 2014; 2019	6	2004; 2008; 2011; 2015; 2016; 2019
Sweden	4	2004; 2009; 2014; 2019	5	2002; 2006; 2010; 2014; 2018
United Kingdom	4	2004; 2009; 2014; 2019	5	2001; 2005; 2010; 2015; 2019

Table B3. *Manifesto* Outcome Variables Definition

VARIABLE	DESCRIPTION	MANIFESTO VARIABLE
Environmentalism	Environmental Protection. General policies in favour of protecting the environment, fighting climate change, and other "green" policies. For instance: General preservation of natural resources; Preservation of countryside, forests, etc.; Protection of national parks; Animal rights. May include a great variance of policies that have the unified goal of environmental protection.	per501
Europe +	Favourable mentions of European Community/Union in general. May include the: - Desirability of the manifesto country joining (or remaining a member);- Desirability of expanding the European Community/Union; - Desirability of increasing the ECs/EUs competences; - Desirability of expanding the competences of the European Parliament.	per108
Europe -	European Community/Union: Negative. Negative references to the European Community/Union. May include: Opposition to specific European policies which are preferred by European authorities; Opposition to the net-contribution of the manifesto country to the EU budget.	per110
Multiculturalism +	Multiculturalism: Positive. Favourable mentions of cultural diversity and cultural plurality within domestic societies. May include the preservation of autonomy of religious, linguistic heritages within the country including special educational provisions	per607
Multiculturalism -	Multiculturalism: Negative. The enforcement or encouragement of cultural integration. Appeals for cultural homogeneity in society	per608
Refugees +	Favourable mentions of, or need for, assistance to people who left their homes because of the war (for instance, on the territory of ex-Yugoslavia) or were forcibly displaced.	per706_2
Cultural Autonomy +	Cultural Autonomy: Positive. Favourable mentions of cultural autonomy	per607_1

C Additional Results

C.1 Parametric multilateral resistance term

The confounding influence that the attractiveness of alternative destinations exerts on the bilateral migration rate, known as the multilateral resistance term, can generate biases in the estimation of the push and pull factors of migration in a gravity equation. In an alternative specification of the baseline estimating gravity equation (Equation (2)), I account for multilateral resistance in two ways. Since the equation is estimated using OLS and not PPML, the use of fixed effects is not enough to account for outward and inward multilateral resistance indexes (Fally, 2015). For this reason, I also account for "inward" multilateral resistance term to migration (Anderson and Van Wincoop, 2003) parametrically.[14] The parametric version of the multilateral resistance term is constructed for each of the six weather vectors W (fourth-order polynomial of temperature and second-order polynomial of precipitation) as follows:

$$MR_{odt} = \sum_{k \neq d} \omega_{ok} W_{kt} \tag{C1}$$

where ω_{ok} is the ratio of asylum applications from origin country o to destination country k over the total asylum applications received by country k in the first available year. This weighting scheme accounts for the relative propensity to apply for asylum in each country k among the EU27+UK set of destination countries. The weighted average of weather conditions across the k destination countries except for d accounts for changes in the attractiveness of alternative destinations that would otherwise be inflated in $\boldsymbol{W_{ot}}$. The six dyad-specific time-varying regressors are included in the estimating equation in the multilateral resistance term $\boldsymbol{MR_{odt}}$. This approach also allows me to account for costs of migration common to all asylum seekers within a particular bilateral link comprising both a time-invariant component, captured by the fixed effects, and a time-varying component as a function of networks and weather conditions

[14] Since the objective of the gravity equation is to estimate the impact of weather fluctuations on asylum seeker outflows, the "outward" multilateral resistance term that captures alternative source countries' conditions is not necessary for this context.

in other destinations. Since these variables do not entirely capture the factors affecting changes in attractiveness and are not theoretically-founded, the inclusion of these parametric controls is to be interpreted only as a robustness test on the stability of the estimates associated with origin weather variation (Head and Mayer, 2014). The resulting estimating equation is written as

$$\log\left(AsyApp_{odt}\right) = f(\boldsymbol{W_{ot}}; BIL_{od}; \alpha) + g(\boldsymbol{MR_{odt}}; \beta) + \theta_{od} + \mu_{dt} + \chi_{rt} + u_{odt} \qquad \text{(C2)}$$

Table C1 displays the coefficients associated with the uninteracted origin temperature and precipitation from Equation (2) respectively omitting and accounting for the multilateral resistance term both non-parametrically, with the additional suite of fixed effects, and parametrically, with the $\boldsymbol{MR_{odt}}$ matrix. Both temperature and precipitation estimates substantially vary across the four specifications, suggesting that accounting also parametrically for multilateral resistance changes the semi-elasticity of migration to origin weather.

To construct the predicted measure of asylum seekers induced by weather, I do not include the estimated fixed effects (Ortega and Peri, 2014). Hence, the instrument is obtained only from the estimated semi-elasticities to weather fluctuations. This may potentially reduce the predictive power, however, it increases the confidence in isolating the variation in asylum applications solely induced by changes in temperature and precipitation. For this reason, I interpret the finding as the effect of weather-induced asylum applications, as I will refer to them throughout the paper.

Table C1. Gravity model for asylum applications accounting for multilateral resistance

	(Log) Asylum Applications			
	(1)	(2)	(3)	(4)
Temperature origin	-2.055**	-1.782**	-2.133**	-1.925**
	(0.601)	(0.634)	(0.602)	(0.634)
Temperature origin^2	0.0456	0.0411	0.0478	0.0434
	(0.0289)	(0.0293)	(0.0290)	(0.0294)
Temperature origin^3	0.00208	0.00167	0.00214	0.00181
	(0.00184)	(0.00190)	(0.00184)	(0.00191)
Temperature origin^4	-0.0000445	-0.0000313	-0.0000471	-0.0000355
	(0.0000366)	(0.0000392)	(0.0000366)	(0.0000393)
Precipitation origin	20.07	57.91	26.15	63.51
	(66.69)	(69.39)	(67.09)	(69.81)
Precipitation origin^2	5016.9	-31071.0	4780.5	-32224.7
	(48460.4)	(51003.8)	(48429.6)	(50950.6)
Multilateral weather			X	X
p-value (Multilateral weather = 0)			0.000	0.000
Country-pair FE	X	X	X	X
Origin FE	X	X	X	X
Year FE	X		X	
Destination FE	X		X	
Destination-by-year FE		X		X
Region of origin-by-year FE		X		X
Number of country pairs	2084	2084	2084	2084
Number of origin countries	141	141	141	141
Destination Sample	EU27 + UK	EU27 + UK	EU27 + UK	EU27 + UK
Mean Outcome	3.733	3.733	3.733	3.733
SD Outcome	1.858	1.858	1.858	1.858
N	25951	25951	25951	25951
adj. R^2	0.747	0.796	0.748	0.796

Notes: The estimated equation always uses origin-specific seasonal temperature and precipitation. Robust standard errors, clustered at the origin-year level, in parentheses. Interaction terms between all weather variables and bilateral controls are included in the regression but not displayed. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

C.2 Gravity equation accounting for weather in host countries

To introduce additional bilateral source of variation in the predicted values of asylum demands, I include a second-order polynomial in temperature and precipitation in host countries as a measure of pull factors. The econometric specification is written as

$$\log\left(AsyApp_{odt}\right) = f(\boldsymbol{W_{ot}}, BIL_{od}, \alpha) + g(\boldsymbol{W_{dt}}, \beta) + \theta_{od} + \chi_{rt} + u_{odt} \tag{C3}$$

This alternative specification does not account for destination-by-year fixed effect, collinear with the pull factors. Predicted values of asylym demands are then constructed as $\widehat{AsyApp}_{dt} = \sum_{o \neq d} \exp\left(\widehat{\alpha}_M X_{odt} + \widehat{\beta}_M W_{dt}\right)$. Table D4 displays the results for the three different alternative measures of temperature and precipitation.

C.3 Destination-specific response function to weather fluctuations

To account for the fact that weather deviations in the origin country have differential effects for each destination country, I estimate destination-specific response functions. I estimate the following equation in a pooled sample of origin-specific asylum demands to the EU27 + UK destination countries.

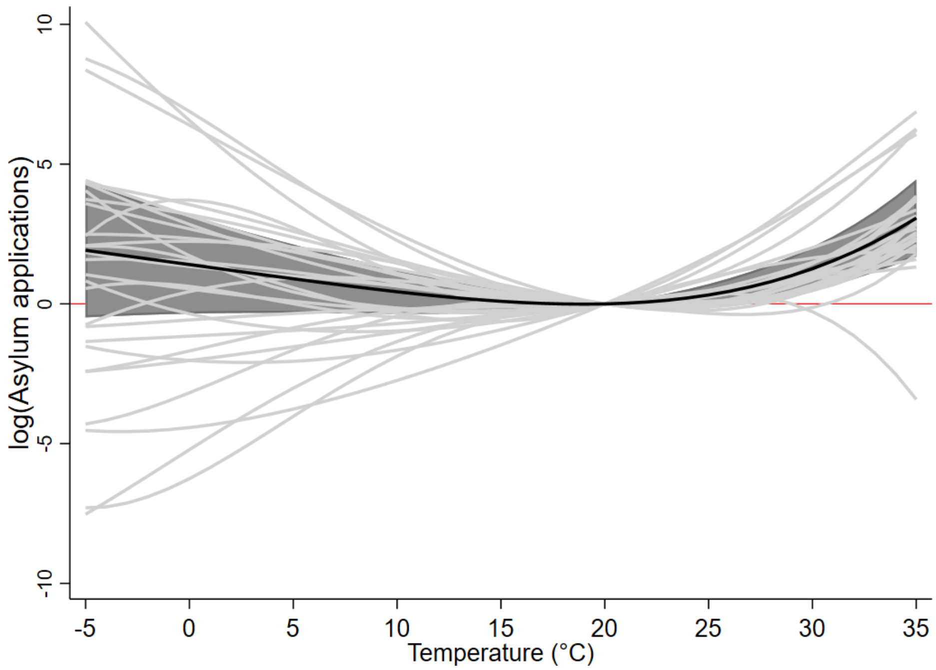
$$\log\left(AsyApp_{odt}\right) = f(\boldsymbol{W_{ot}}, \alpha_d) + \theta_{od} + \psi_{dt} + \chi_{rt} + u_{odt} \tag{C4}$$

where I use the same vector of origin weather $\boldsymbol{W_{ot}}$ including a fourth-order polynomial of daily average temperatures, summed across the maize growing season and a second-order polynomial of daily precipitation across the growing season and estimate destination-specific functions of this vector. This alternative specification serves two purposes. First, by estimating destination-specific responses to weather fluctuations in origin countries, the predicted values obtained leveraging only weather variation are time-varying and pair-specific. Second, the equation now accounts for multilateral resistance in an alternative manner by allowing the effect of push factors to be different across destinations while controlling for time-varying destination-specific effects. Figure C1 displays the destination-specific response functions to season-total temperature in origin countries.

C.4 Weather-induced anomalies in asylum applications lead to higher acceptance rate

Weather anomalies and climate change are not valid criteria for asylum applications (UN, 1951). There are two main channels through which weather fluctuations can increase asylum demands. On the one hand, asylum applications can increase due to economic reasons, on the other one, they can increase due to conflict or persecution, for instance, as a result of crop failures or tightening of natural resource constraints. Only

Figure C1. Destination-specific response functions to temperature in origin countries over maize growing season



Notes: The figure plots the predicted asylum applications-temperature response function for each destination country for the applications coming from non-OECD countries in the EU27+UK. Regression estimates are from a fourth-order polynomial in daily average temperature over the maize growing season weighted by maize area in each grid cell. The response function is estimated in a regression model that controls for a quadratic function in season-total precipitation, as well as destination-by-year, region-of-origin-by-year, dyad-specific fixed effects. The solid black line reports the pooled average response function as displayed in Figure 2 and its associated 95% confidence interval using country-year clustered standard errors.

in the latter case, asylum applications could be deemed valid by the host countries. I test whether application decisions respond positively to weather-induced asylum demands, providing an indirect test of the validity of weather-induced asylum applications as in Missirian and Schlenker (2017b).

I compute anomalies in weather-induced asylum demands as the predicted change in the number of applications from an origin country to a destination country as explained by deviations in the weather variables from their respective sample averages. The weather-induced application anomaly from origin o to destination d in year t is

$$n_{odt} = e^{\boldsymbol{W_{ot}}\widehat{\alpha}+\widehat{\theta_{od}}+\widehat{\pi_t}+\widehat{\lambda_o}+\widehat{\mu_d}+\widehat{\psi_{dt}}+\widehat{\chi_{rt}}+\frac{\widehat{\sigma_u^2}}{2}} - e^{\overline{\boldsymbol{W_{ot}}}\widehat{\alpha}+\widehat{\theta_{od}}+\widehat{\pi_t}+\widehat{\lambda_o}+\widehat{\mu_d}+\widehat{\psi_{dt}}+\widehat{\chi_{rt}}+\frac{\widehat{\sigma_u^2}}{2}} \tag{C5}$$

where the parameters are the coefficients from the baseline gravity in Equation (2) of log asylum applications on weather, and $\widehat{\sigma_u^2}$ is the predicted variance of the error term from the same regression. Then, I examine asylum decisions (acceptances) d_{odt} in the following two years.

$$d_{odt} = \sum_{\tau=0}^{2} \gamma \; n_{od(t-\tau)} + \theta_{od} + \pi_t + \lambda_o + \mu_d + \psi_{dt} + \chi_{rt} + \nu_{odt} \tag{C6}$$

Table C2 displays the coefficients on how weather-induced asylum anomalies translate into additional acceptances accounting for up to two-year lagged application anomalies. Accounting for both recognized refugee status and complementary protections granted (column 2), contemporaneous and one-year lagged anomalies are positive and statistically significant and the sum of the three coefficients is 45.23 (p-value: 0.001) for the baseline fourth-order polynomial model in temperature. These findings suggest that weather-induced shocks to applications are deemed valid by host countries at a much higher rate. I find that weather shocks induce people to flee and be recognized as needing international protection through refugee status.

Table C2. Weather-induced asylum application anomalies and acceptance

	(1)	(2)
n_{odt}	31.80*	36.25**
	(18.59)	(17.73)
n_{odt-1}	12.22***	18.90***
	(3.148)	(3.742)
n_{odt-2}	1.207	7.947
	(5.624)	(6.327)
Outcome	Recognized decisions	Recognized decisions & Complementary Protection
p-value ($\gamma_1 + \gamma_2 + \gamma_3 = 0$)	0.024	0.001
F-Stat ($\gamma_1 + \gamma_2 + \gamma_3 = 0$)	5.076	10.822
Mean Outcome	150.547	513.577
Average acceptance rate	0.061	0.326
N	19125	19125
adj. R^2	0.362	0.442

Notes: The estimated equation includes origin-, destination-, origin-destination, year-, region-of-origin-by-year, destination-by-year fixed effects. Robust standard errors, clustered at the origin-destination pair level, in parentheses. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

C.5 Additional individual level results

Table C3. Weather-induced asylum applications and environmental values. Baseline results with all coefficients.

Dep. variable	Climate concern in European Elections (*Mean: 0.068*)		Climate change as political priority (*Mean: 0.106*)	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
log(Asylum Applications)	-0.00147	0.0226**	0.00746	0.0431**
	(0.00384)	(0.0106)	(0.00651)	(0.0207)
Male	-0.0119***	-0.0118***	-0.00795**	-0.00777**
	(0.00395)	(0.00395)	(0.00367)	(0.00363)
Education categories (baseline: Up to 15 years)				
Between 16 and 19 years	0.0126***	0.0124***	0.00752**	0.00717**
	(0.00225)	(0.00221)	(0.00274)	(0.00278)
20 years or older	0.0377***	0.0378***	0.0193***	0.0193***
	(0.00451)	(0.00451)	(0.00404)	(0.00403)
Still studying	0.0483***	0.0478***	0.0299***	0.0293***
	(0.00693)	(0.00691)	(0.00757)	(0.00770)
No education	-0.0159	-0.0160	-0.0323***	-0.0309***
	(0.00978)	(0.00994)	(0.0110)	(0.0106)
Unemployed	-0.00673*	-0.00592*	-0.00812**	-0.00735**
	(0.00331)	(0.00314)	(0.00346)	(0.00352)
Left Political Orientation	0.0343***	0.0342***	0.0234***	0.0232***
	(0.00943)	(0.00943)	(0.00770)	(0.00768)
Average Temperature previous five years (°C)	-0.144***	-0.146***	-0.000460	-0.0149
	(0.0346)	(0.0473)	(0.0462)	(0.0417)
Average Temperature^2 previous five years (°C)	0.000923	-0.00230	-0.000915	-0.00147
	(0.00206)	(0.00354)	(0.00119)	(0.00138)
Total Precipitation previous five years (m)	-42.74***	-34.27**	32.84**	26.22**
	(12.32)	(14.46)	(12.04)	(10.59)
Total Precipitation^2 previous five years (m)	37982.1***	21882.3	-20203.4	-17776.2
	(10801.5)	(14900.4)	(13120.0)	(12896.4)
Average Temperature (°C)	-0.0271*	0.00246	-0.0149	-0.00198
	(0.0145)	(0.0201)	(0.0160)	(0.0144)
Average Temperature^2 (°C)	0.00320***	0.00344***	0.00116*	0.00117
	(0.000589)	(0.000907)	(0.000674)	(0.000691)
Total Precipitation (m)	18.21***	18.53***	-7.168**	-6.689**
	(3.899)	(4.320)	(3.157)	(3.033)
Total Precipitation^2 (m)	-15416.6***	-17287.7***	8099.0*	7189.3*
	(3830.3)	(3943.3)	(4124.2)	(3741.5)
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Statistic		14.434		21.435
N	106614	106614	130068	130068
Number of countries	28	28	28	28

Notes: The table replicates Table 1 reporting all individual controls included in the regressions. The 2SLS estimates use the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C4. Weather-induced asylum applications and environmental values. Heterogeneity by age. 2SLS estimates.

Dep. variable	Climate concern in European Elections			Climate change as political priority		
	(1)	(2)	(3)	(4)	(5)	(6)
log(Asylum Applications)	0.0264**	0.0233*	0.0181	0.0514**	0.0374**	0.0386
	(0.0108)	(0.0118)	(0.0124)	(0.0209)	(0.0169)	(0.0264)
Sample	14-40	41-59	60+	14-40	41-59	60+
Country FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
Age FE	X	X	X	X	X	X
Region-by-year FE	X	X	X	X	X	X
Country-age linear trends	X	X	X	X	X	X
F-Stat	15.657	13.808	13.840	24.611	20.910	19.226
N	35938	36455	34221	44395	44428	41245

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (columns 1 and 2, see Table B1 for exact wording and additional details on the construction of the variable). In columns (3) and (4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). All columns report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C5. Weather-induced asylum applications and environmental values. Heterogeneity by gender. 2SLS estimates.

Dep. variable	Climate concern in European Elections		Climate change as political priority	
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.0160*	0.0137	0.0454**	0.0400
	(0.00916)	(0.00819)	(0.0183)	(0.0241)
Sample	Female	Male	Female	Male
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Stat	20.414	21.154	27.587	21.963
N	58446	48168	70963	59103

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (columns 1 and 2, see Table B1 for exact wording and additional details on the construction of the variable). In columns (3) and (4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). All columns report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C6. Weather-induced asylum applications and individuals' environmental values

Dep. variable	Climate concern in European Elections							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
log(Asylum Applications)	0.403*	0.287	0.365*	0.255	0.427	0.229*	0.408	0.217*
	(0.205)	(0.182)	(0.200)	(0.155)	(0.268)	(0.128)	(0.256)	(0.106)
Local weather controls	X	X	X	X	X	X	X	X
Individual controls	X	X	X	X	X	X	X	X
Country FE	X	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X	X
Age FE	X	X	X	X	X	X	X	X
Region-by-year FE	X	X	X	X	X	X	X	X
Country-age linear trends	X	X	X	X	X	X	X	X
F-Statistic	6.368	3.582	7.773	3.424	3.419	6.027	3.413	7.264
N	19936	30660	19939	30055	28236	18931	28056	16011

Notes: The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. Columns report the 2SLS estimates using the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C7. Asylum applications and Google Trends. OLS and 2SLS estimates.

Google Trends for	Climate change		Climate protests		Migration		Refugee	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
log(Predicted Asylum Applications)	0.333		-0.705**		-1.037		-0.624	
	(0.381)		(0.308)		(0.690)		(0.738)	
log(Asylum Applications)		0.372		-0.786*		-1.157		-0.696
		(0.415)		(0.433)		(0.826)		(0.966)
Country FE	X	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X	X
Outcome Mean	11.15		2.38		23.92		9.36	
Outcome SD	5.96		3.82		18.32		9.36	
F-Stat		17.318		17.318		17.318		
N	444	444	444	444	444	444	444	444

Notes: Country-level estimates regressing annual average Google Searches for "Climate change" (columns 1-2), "Climate protests" (columns 3-4), "Migration" (columns 5-6), "Refugee" (columns 7-8) on the instrument (odd columns) and the actual flows instrumented with the instrument (even columns). The gravity-predicted (log) of asylum applications is obtained from the predicted values from Equation (C3) in the text. All columns control for country and survey year fixed effects. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C8. Weather-induced asylum applications and environmental values. Heterogeneity by destination country. 2SLS estimates.

Dep. variable	Climate concern in European Elections		Climate change as political priority	
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.00807	0.0193*	0.0213	0.0515*
	(0.00585)	(0.0115)	(0.0167)	(0.0301)
Destination country sub-sample	Below median	Above median	Below median	Above median
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Stat	13.865	11.286	14.272	12.929
N	49384	57228	59095	70972

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (columns 1 and 2, see Table B1 for exact wording and additional details on the construction of the variable). In columns (3) and (4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). Odd columns report the estimates in the sub-sample of countries below the median number of asylum demands received, even columns report the estimates in the sub-sample of countries above the median number of asylum demands received (Austria, Belgium, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Spain, Sweden, United Kingdom). All columns report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C9. Weather-induced asylum applications and perception of climate change as a global problem

Dep. variable	CC World Problem (*Mean: 0.37*)		CC Seriousness(1-10) (*Mean: 7.57*)	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.00646	0.00108	0.0239	-0.129
	(0.00666)	(0.0113)	(0.0451)	(0.110)
Weather Controls	X	X	X	X
Individual Controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Statistic		20.995		21.172
N	116879	116879	116110	116110
Number of countries	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-2 is a dummy equal to 1 if the respondent reports climate change or global warming as the most serious problem the world is currently facing as a whole. The dependent variable in columns 3-4 is a categorical variable ranging from 1 to 10 that indicates the level of seriousness of climate change as a world problem perceived by the respondent (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. Columns (2) and (4) report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C10. Weather-induced asylum applications and migration as political priority

Dep. variable	Migration EU Election (*Mean: 0.078)*		Migration Pol Priority (*Mean: .085)*	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.0135	0.00585	0.0126	0.0383**
	(0.00999)	(0.0163)	(0.00853)	(0.0162)
Local weather controls	X	X	X	X
Individual controls	X	X	X	X
Country FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Statistic		14.434		21.434
N	106613	106614	130067	130068
Number of countries	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-2 is a dummy equal to 1 if the respondent reports migration as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 3-4 is a dummy equal to 1 if the respondent reports migration as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. Columns (2) and (4) report the 2SLS estimates using the predicted asylum applications from the gravity equation with bilateral fixed effects using destination-specific coefficients of weather fluctuations in origin countries. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C11. Weather-induced asylum applications and environmental values. Heterogeneity by political orientation. 2SLS estimates.

Dep. variable	Climate concern in European Elections		Climate change as political priority	
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.0250**	0.0191	0.0444**	0.0326
	(0.0100)	(0.0174)	(0.0187)	(0.0327)
Sample	Right-wing	Left-wing	Right-wing	Left-wing
Local weather controls	X	X	X	X
Individual controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Stat	24.332	16.237	25.334	11.061
N	79947	26666	97464	32604

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (columns 1 and 2, see Table B1 for exact wording and additional details on the construction of the variable). In columns (3) and (4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). All columns report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared annual average temperature and total precipitation in the country; Population), and country, survey year, birth-year and country by year of birth fixed effects. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C12. Weather-induced asylum applications and environmental values. Heterogeneity by education. 2SLS estimates.

Dep. variable	Climate concern in European Elections		Climate change as political priority	
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.0174*	0.0103	0.0334**	0.0633
	(0.00901)	(0.0107)	(0.0142)	(0.0386)
Sample	Non Tertiary	Tertiary	Non Tertiary	Tertiary
Local weather controls	X	X	X	X
Individual controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Stat	14.028	16.635	22.434	23.388
N	73229	33382	89513	40555

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (columns 1 and 2, see Table B1 for exact wording and additional details on the construction of the variable). In columns (3) and (4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). All columns report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C13. Weather-induced asylum applications and environmental values. Heterogeneity by eligibility to vote. 2SLS estimates.

Dep. variable	Climate concern in European Elections		Climate change as political priority	
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.0340^{**}	0.0147	0.0378	0.0431^{**}
	(0.0132)	(0.00904)	(0.0382)	(0.0176)
Voting Age	Below	Above	Below	Above
Local weather controls	X	X	X	X
Individual controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Stat	32.155	20.089	48.265	30.174
N	2412	16979	2999	20815

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed and below the age of thirty years old. Odd columns report estimates on the sub-sample of individuals interviewed below the age eligible to vote in national and European elections; even columns report the estimates on the sub-sample of individuals interviewed above the age eligible to vote in the elections. The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (columns 1 and 2, see Table B1 for exact wording and additional details on the construction of the variable). In columns (3) and (4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). All columns report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared average temperature and total precipitation in the country), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

C.6 Additional country level results

Table C14. Weather-induced asylum applications and environmentalism in national elections

Dep. variable	National Elections Environmentalism Index			
	OLS	2SLS	2SLS	2SLS
	(1)	(2)	(3)	(4)
Log(Asylum Applications)	-0.0729	0.215	0.232	0.371
	(0.107)	(0.260)	(0.343)	(0.501)
Local weather controls	X	X	X	X
Country controls	X		X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Regional linear time trends				X
F-Statistic		22.366	16.030	13.664
N	119	119	119	119
Number of countries	27	27	27	27

Notes: The table reports the OLS (columns 1) and 2SLS (columns 2 to 4) coefficients on (log) of total asylum applications in the years between one national election round and the other. The dependent variable is the normalized index of environmentalism of national elections where the share of quasi-sentences that positively referred to the environment in each party's manifesto is weighted by its vote share in the national elections. In columns 2 to 4, the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. Robust standard errors, clustered at the country level, in parentheses. Country Controls: (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old. Weather Controls: Linear and squared average temperature and total precipitation in the country. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

C.7 Party-level empirical approach

In Section 6.3, I explore the aspects of the supply side and the political dynamics of the party system, by investigating whether changes in asylum applications have determined a shift in the supply side of the climate-related political process. I use the information on parties' political agenda related to the environment from the *Manifesto Project Database* (MPD) to measure the degree of environmentalism of each party in national elections. Using a similar approach to Moriconi et al. (2019), I exploit within-party variation in the environmental political agenda across elections. The econometric specification writes as follows:

$$environmentalism_{pdt} = \beta_1 \log\left(\sum_{\tau=1}^{s} AsyApp_{d,t-\tau}\right) + X'_{dt}\boldsymbol{\gamma} + Z'_{pt}\boldsymbol{\delta} + \alpha_p + \mu_d + \lambda_t + \varepsilon_{pdt} \tag{C7}$$

where $environmentalism_{pdt}$ is the normalized share with mean equal to 0 and standard deviation equal to 1 of quasi-sentences that positively referred to policies in favor of protecting the environment and fighting climate change in the political manifesto of party p in country d in election year t. The main variable of interest is $\sum_{\tau=1}^{s} AsyApp_{d,t-\tau}$, i.e., the cumulative number of asylum applications between one election and the other. In X'_{dt}, I include country-level socio-economic and environmental characteristics averaged over the period between two consecutive elections in a country that may confound the effect of migration flows on electoral outcomes. The use of party-specific fixed effects α_p and country-specific fixed effects μ_d identifies the effect of asylum applications on the political agendas only through changes within parties over time. Any time-invariant feature of countries and parties will not affect identification, since it will be filtered out by these fixed effects. Election-year fixed effects (λ_t) capture common trends over time. Standard errors are clustered at the country level. The inclusion of party- and country-fixed effects guarantees the identification of the effect of weather-induced asylum seeker flows on parties' environmental preferences only through changes in agendas for parties that were present in at least two elections. This approach captures changes in the agendas of existing parties in response to changes in weather-induced flows, rather than the entry or exit of new parties.

In the baseline specification, each party running in multiple elections has the same weight. Nevertheless, small parties do not have the same influence on the political system as large parties, and may change their positions more easily. When I weigh each party by the percentage of votes gained in the elections, I find no significant effect. Results are also robust to considering parties that gained at least 5% of votes, to rule out entry/exit or mergers and splits of small parties and potential measurement error in their agendas. Similar results are found using alternative instruments (Appendix Table D23), while I find a larger and significant negative effect on party environmentalism when only including larger parties that gained at least 10, 15, or 20% of votes in the elections (Appendix Table D24). I also examine the presence of heterogeneous effects by party family masked in the average treatment effect but find small and largely imprecise estimates across the seven party families (Appendix Table D25).

Moriconi et al. (2019) show that inflows of less-educated immigrants induce European parties to endorse platforms less favorable to social welfare. To investigate whether asylum demands drive similar mechanisms, I consider alternative dimensions of the manifesto of parties, including attitudes towards refugees, Europe, and multiculturalism (see Appendix Table B3 for the exact definition). I find a negligible negative effect that is not statistically significant across all outcomes (Appendix Table D26) in response to higher asylum applications.

Table C15. Weather-induced asylum applications and environmental agenda of parties.

	Party's Environmentalism (Mean=0)			
	(1)	(2)	(3)	(4)
	OLS	2SLS	2SLS	2SLS
log(Asylum Applications)	-0.0739**	-0.0254	-0.154	-0.158
	(0.0359)	(0.103)	(0.112)	(0.116)
Weights			Votes	Votes
Votes				Above 5%
Right-left ideological index	X	X	X	X
Country controls	X	X	X	X
Local weather controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Party FE	X	X	X	X
F-Stat		32.570	28.076	27.312
N	641	641	634	469
adj. R^2	0.723	0.082	0.120	0.115

Notes: The analysis is over a sample of parties that are running in multiple elections. The table reports the coefficients associated with (log) of the sum of asylum applications in the period between one election year and the other. The dependent variable is the (normalized) share of quasi-sentences that positively referred to the environment in each party's manifesto in the national elections. Column (1) reports the OLS estimates, and columns (2) to (4) display the 2SLS estimates where (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. Robust standard errors, clustered at the country level, in parentheses. All columns control for the normalized right-left ideological index provided in the MPD. Country controls: averages between two elections of (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old, and in the year of the elections. Weather controls: averages between two elections of linear and squared temperature and precipitation and in the year of the elections. All columns control for country, year, and party fixed effects. Columns (3) and (4) weigh each party's observation by the vote gained in the national elections. Column (4) only considers parties that gained at least 5% of the votes. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

D Robustness Checks

D.1 Robustness Checks for Gravity Equation

Table D1. Gravity model for asylum applications in non-OECD origin countries & EU destination countries with dyadic controls

	(1) Log Asylum Applications	(2) Log Asylum Applications	(3) Log Asylum Applications
Temperature	-1.436*	-1.782**	-1.803*
	(0.759)	(0.885)	(0.912)
Temperature^2	0.0824**	0.0411	0.0440
	(0.0414)	(0.0321)	(0.0312)
Temperature^3	0.000838	0.00167	0.00189
	(0.00133)	(0.00191)	(0.00217)
Temperature^4	-0.0000331	-0.0000313	-0.0000432
	(0.0000381)	(0.0000424)	(0.0000421)
Temperature * Contiguity	0.803***	0.438	0.407
	(0.220)	(0.283)	(0.302)
Temperature * Common Language	-0.0391	0.188	0.403
	(0.245)	(0.366)	(0.356)
Temperature * Common Colonial History	0.690***	0.427**	0.398*
	(0.232)	(0.202)	(0.214)
Temperature* Log(distance)	0.192**	0.212*	0.217*
	(0.0927)	(0.108)	(0.110)
Temperature^2 * Contiguity	0.0135	0.0222*	0.0161
	(0.0101)	(0.0127)	(0.0116)
Temperature^2 * Common Language	-0.0148	-0.00947	-0.0386
	(0.0198)	(0.0435)	(0.0400)
Temperature^2 * Common Colonial History	-0.0129	-0.00911	-0.00710
	(0.00950)	(0.00954)	(0.00962)
Temperature^2 * Log(distance)	-0.0107**	-0.00532	-0.00568
	(0.00499)	(0.00391)	(0.00377)
Temperature^3* Contiguity	0.0000449	-0.0000907	-0.000164
	(0.000237)	(0.000813)	(0.000845)
Temperature^3* Common Language	0.00109	0.000372	0.00165
	(0.00143)	(0.00193)	(0.00179)
Temperature^3* Common Colonial History	-0.00105*	-0.000375	-0.000279
	(0.000573)	(0.000474)	(0.000563)
Temperature^3* Log(distance)	-0.000131	-0.000205	-0.000236
	(0.000155)	(0.000221)	(0.000250)
Temperature^4 * Contiguity	-0.0000167	-0.0000253	-0.0000149
	(0.0000113)	(0.0000216)	(0.0000214)
Temperature^4 * Common Language	-0.0000160	-0.00000441	-0.0000220
	(0.0000260)	(0.0000276)	(0.0000261)
Temperature^4 * Common Colonial History	0.0000290*	0.0000122	0.00000904
	(0.0000160)	(0.00000875)	(0.0000119)
Temperature^4 * Log(distance)	0.00000527	0.00000436	0.00000582
	(0.00000469)	(0.00000507)	(0.00000498)
Precipitation	13.96	57.91	28.07
	(61.82)	(58.40)	(53.17)
Precipitation^2	1322.5	-31071.0	-13403.8
	(42959.9)	(55904.3)	(46178.8)
Precipitation * Contiguity	19.86	11.38	7.539
	(23.97)	(50.60)	(49.79)
Precipitation * Common Language	2.262	8.100	9.380
	(5.220)	(6.195)	(5.725)
Precipitation * Common Colonial History	10.02	2.529	-4.058
	(15.02)	(21.68)	(19.06)
Precipitation* Log(distance)	-1.665	-6.851	-3.423
	(6.900)	(6.530)	(6.008)
Precipitation^2 * Contiguity	30550.1	15682.9	24834.9
	(20185.6)	(46456.1)	(47742.0)
Precipitation^2 * Common Language	-984.3	-2068.1	-3416.1
	(2459.8)	(3198.1)	(2768.5)
Precipitation^2 * Common Colonial History	490.4	1716.9	3725.7
	(5056.8)	(7668.4)	(6566.9)
Precipitation^2 * Log(distance)	-233.0	3414.2	1481.8
	(4802.8)	(6220.4)	(5181.1)
Weather	Annual	Maize GS over maize area	Maize GS over pop density
Country-pair FE	X	X	X
Destination-year FE	X	X	X
Region of origin-by-year FE	X	X	X
Number of country pairs	2084	2084	2084
Number of origin countries	141	141	141
Destination Sample	EU27 + UK	EU27 + UK	EU27 + UK
Mean Outcome	3.733	3.733	3.733
Dep Var SD	1.858	1.858	1.858
N	25951	25951	25951
adj. R^2	0.796	0.796	0.796

Notes: Standard errors are clustered by origin country-year. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Column (1) uses annual weather, column (2) uses weather weighted by maize area over maize-growing season, column (3) uses weather weighted by population over maize-growing season.

Table D2. Gravity model for asylum applications without bilateral controls interactions.

	(Log) Asylum Applications		
	(1)	(2)	(3)
Temperature origin	0.121	-0.0905	-0.0806
	(0.0988)	(0.0747)	(0.0771)
Temperature origin^2	-0.00453	-0.000517	-0.000177
	(0.00316)	(0.00219)	(0.00220)
Temperature origin^3	-0.000194**	0.0000301	0.00000463
	(0.0000856)	(0.0000766)	(0.0000851)
Temperature origin^4	0.00000852***	0.00000287	0.00000281
	(0.00000293)	(0.00000212)	(0.00000221)
Precipitation origin	0.581	3.096	1.875
	(3.515)	(4.675)	(4.491)
Precipitation origin^2	-820.6	-2278.6	-1302.9
	(1452.4)	(1853.8)	(1690.7)
Weather	Annual	Maize GS over maize area	Maize GS over pop density
Country-pair FE	X	X	X
Destination-by-year FE	X	X	X
Region of origin-by-year FE	X	X	X
Number of country pairs	2138	2138	2138
Number of origin countries	145	145	145
Destination Sample	EU27 + UK	EU27 + UK	EU27 + UK
Mean Outcome	3.751	3.751	3.751
SD Outcome	1.873	1.873	1.873
N	26533	26533	26533
adj. R^2	0.798	0.799	0.799

Notes: The table reports the coefficients associated with the weather variables in origin country in Equation (2) in the text. The sample is restricted to non-OECD 145 origin countries and to EU27 member countries + UK as destinations. Standard errors are clustered by origin country-year. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Column (1) uses annual weather, column (2) uses weather weighted by maize area over maize growing season, column (3) uses weather weighted by population over maize growing season. The estimated fixed effects are not used in building the predictors for asylum applications. All regressions control for country-pair, destination-by-year, and region-of-origin-by-year fixed effects.

Table D3. Gravity model for asylum applications with lags of weather

	(Log) Asylum Applications			
	(1)	(2)	(3)	(4)
Temperature origin	-0.0905	-0.0745	-0.118	-0.136*
	(0.0747)	(0.0739)	(0.0747)	(0.0739)
Temperature origin^2	-0.000517	-0.000805	0.000291	0.000464
	(0.00219)	(0.00218)	(0.00221)	(0.00221)
Temperature origin^3	0.0000301	0.0000431	0.000118	0.000158*
	(0.0000766)	(0.0000777)	(0.0000886)	(0.0000908)
Temperature origin^4	0.00000287	0.00000269	0.000000433	-0.000000152
	(0.00000212)	(0.00000207)	(0.00000223)	(0.00000228)
Precipitation origin	3.096	7.652	6.963	4.693
	(4.675)	(5.198)	(5.393)	(5.505)
Precipitation origin^2	-2278.6	-3691.6*	-2861.5	-2162.3
	(1853.8)	(2056.9)	(2013.5)	(2023.6)
L1.Temperature origin		-0.0879	-0.0901	-0.121
		(0.0806)	(0.0777)	(0.0774)
L1.Temperature origin^2		0.000103	0.000468	0.00248
		(0.00231)	(0.00230)	(0.00230)
L1.Temperature origin^3		0.0000770	0.0000886	0.000136
		(0.0000795)	(0.0000813)	(0.0000937)
L1.Temperature origin^4		0.00000113	0.000000591	-0.00000161
		(0.00000213)	(0.00000214)	(0.00000224)
L1.Precipitation origin		8.156	10.55*	9.637*
		(5.079)	(5.418)	(5.559)
L1.Precipitation origin^2		-3606.5*	-4332.6**	-3174.5
		(1972.5)	(2056.5)	(2094.9)
L2.Temperature origin			-0.126	-0.125
			(0.0890)	(0.0882)
L2.Temperature origin^2			0.00446*	0.00574**
			(0.00252)	(0.00247)
L2.Temperature origin^3			0.000164*	0.000166*
			(0.0000985)	(0.0000994)
L2.Temperature origin^4			-0.00000413	-0.00000511**
			(0.00000260)	(0.00000254)
L2.Precipitation origin			7.458	8.168
			(5.287)	(5.654)
L2.Precipitation origin^2			-3135.3	-2986.7
			(2063.5)	(2165.7)
L3.Temperature origin				-0.249***
				(0.0961)
L3.Temperature origin^2				0.00612**
				(0.00258)
L3.Temperature origin^3				0.000308***
				(0.000100)
L3.Temperature origin^4				-0.00000725***
				(0.00000261)
L3.Precipitation origin				7.050
				(5.717)
L3.Precipitation origin^2				-2574.3
				(2190.6)
Country-pair FE	X	X	X	X
Destination-by-year FE	X	X	X	X
Region of origin-by-year FE	X	X	X	X
Mean Outcome	3.751	4.029	4.175	4.276
SD Outcome	1.873	1.844	1.828	1.820
N	26533	21890	19109	16942
adj. R^2	0.799	0.799	0.805	0.811

Notes: The table reports the coefficients associated with the weather variables in origin country in Equation (2) in the text. The sample is restricted to non-OECD 145 origin countries and to EU27 member countries + UK as destinations. Standard errors are clustered by origin country-year. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All regressions use weather weighted by maize area over maize growing season with different lags of weather. All regressions control for country-pair, -by-year, and region-of-origin-by-year fixed effects.

Table D4. Gravity model for asylum applications with destination weather

	(Log) Asylum Applications		
	(1)	(2)	(3)
Temperature origin	-1.650**	-2.036***	-2.102***
	(0.657)	(0.603)	(0.615)
Temperature origin^2	0.0793**	0.0448	0.0470
	(0.0316)	(0.0289)	(0.0293)
Temperature origin^3	0.000990	0.00206	0.00237
	(0.00119)	(0.00183)	(0.00188)
Temperature origin^4	-0.0000350	-0.0000445	-0.0000578
	(0.0000328)	(0.0000366)	(0.0000352)
Precipitation origin	-16.45	18.63	-9.071
	(55.75)	(66.72)	(63.21)
Precipitation origin^2	28112.6	4645.8	22074.1
	(36210.8)	(48527.1)	(41935.2)
Temperature destination	-0.0564**	-0.0467**	-0.0472**
	(0.0231)	(0.0229)	(0.0228)
Temperature destination^2	0.00391***	0.00395***	0.00395***
	(0.000889)	(0.000879)	(0.000880)
Precipitation destination	6.303*	6.304*	6.292*
	(3.814)	(3.803)	(3.804)
Precipitation destination^2	1034.1	1160.2	1241.9
	(4398.2)	(4393.4)	(4396.6)
Weather	Annual	Maize GS over maize area	Maize GS over pop density
Country-pair FE	X	X	X
Region of origin-by-year FE	X	X	X
Mean Outcome	3.748	3.748	3.748
SD Outcome	1.873	1.873	1.873
N	25957	25957	25957
adj. R^2	0.749	0.749	0.749

Notes: The table reports the coefficients associated with the weather variables in the origin country in Equation (2) in the text. The sample is restricted to non-OECD 141 origin countries and to EU27 member countries + UK as destinations. Standard errors are clustered by origin country-year. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

D.2 Robustness Checks for Individual Level Analysis

Table D5. Weather-induced asylum applications and individuals' environmental values. Accounting for shift-share weather in origin countries.

Dep. variable	Climate concern in European Elections (*Mean: 0.068*)		Climate change as political priority (*Mean: .106*)	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.00209	0.0313**	0.0147*	0.0532**
	(0.00463)	(0.0138)	(0.00825)	(0.0214)
Weighted weather in origin countries	X	X	X	X
Local weather controls	X	X	X	X
Individual Controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Statistic		16.931		39.206
N	106614	106614	130068	130068
Number of countries	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-2 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 3-4 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications are the cumulative asylum applications in a country in the five years preceding the survey year, as defined in Equation 1. Columns (2) and (4) report the 2SLS estimates using the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation). All columns control for a fourth-order polynomial of seasonal temperature and a second-order polynomial of total precipitation in all origin countries of asylum demands weighted by baseline propensity to migrate to that host country. All columns include country, survey year, age, region-by-survey-year fixed effects, and country-by-age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D6. Weather-induced asylum applications and individuals' environmental values. 2SLS estimates. Alternative specifications.

Dep. variable	Climate concern in European Elections (*Mean: 0.068*)			Climate change as political priority (*Mean: 0.106*)		
	(1)	(2)	(3)	(4)	(5)	(6)
log(Asylum Applications)	0.0217**	0.0222**	0.0232**	0.0427**	0.0432**	0.0476**
	(0.0102)	(0.0104)	(0.0108)	(0.0202)	(0.0208)	(0.0218)
Local weather controls	X	X	X	X	X	X
Individual controls	X	X	X	X	X	X
Country FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
Region-by-year FE	X	X	X	X	X	X
Country-by-age FE	X			X		
Birth cohort FE	X			X		
Country-by-birth cohort FE		X	X		X	X
Country-age linear trends	X	X		X	X	
F-Statistic	21.341	21.367	21.427	27.410	27.317	27.438
N	106547	106613	106542	130010	130067	130004
Number of countries	28	28	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-3 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 4-6 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. All columns report the 2SLS estimates using the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation). Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D7. Weather-induced asylum applications and individuals' environmental values. 2SLS estimates. Alternative Instruments.

Dep. variable	Climate concern in European Elections (*Mean: 0.068*)			Climate change as political priority (*Mean: 0.106*)		
	(1)	(2)	(3)	(4)	(5)	(6)
log(Asylum Applications)	0.0205^{**}	0.0134^{*}	0.0181^{*}	0.0417^{*}	0.0458^{**}	0.0495^{**}
	(0.00972)	(0.00788)	(0.00893)	(0.0203)	(0.0197)	(0.0200)
Local weather controls	X	X	X	X	X	X
Individual controls	X	X	X	X	X	X
Country FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
Age FE	X	X	X	X	X	X
Region-by-year FE	X	X	X	X	X	X
Country-age linear trends	X	X	X	X	X	X
Instrument	w/ MR	Destination-weather	Destination-specific	w/ MR	Destination-weather	Destination-specific
F-Statistic	22.384	20.107	19.944	27.810	26.549	28.592
N	106614	106614	106614	130068	130068	130068
Number of countries	28	28	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-3 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 4-6 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. Each column uses a different instrument for predicted weather-induced asylum applications, constructed from the predicted values in the estimation of Equation (C2), (C3) and (C4). All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D8. Weather-induced asylum applications and individuals' environmental values. 2SLS estimates. Alternative time windows.

Dep. variable	Climate concern in European Elections (*Mean: 0.068*)				Climate change as political priority (*Mean: 0.106*)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
log(Asylum Applications)	0.0226^{**}	0.0209^{**}	0.0154^{*}	0.0174^{**}	0.0431^{**}	0.0383^{*}	0.0369^{*}	0.0359^{*}
	(0.0106)	(0.00993)	(0.00798)	(0.00807)	(0.0207)	(0.0212)	(0.0196)	(0.0188)
Local weather controls	X	X	X	X	X	X	X	X
Individual controls	X	X	X	X	X	X	X	X
Country FE	X	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X	X
Age FE	X	X	X	X	X	X	X	X
Region-by-year FE	X	X	X	X	X	X	X	X
Country-age linear trends	X	X	X	X	X	X	X	X
Window exposure	5 years	4 years	4 years (excl. contemp.)	5 years (excl. contemp.)	5 years	4 years	4 years (excl. contemp.)	5 years (excl. contemp.)
F-Statistic	22.106	17.934	20.835	26.397	27.252	28.695	31.225	31.223
N	106614	106614	106614	106614	130068	130068	130068	130068
Number of countries	28	28	28	28	28	28	28	28

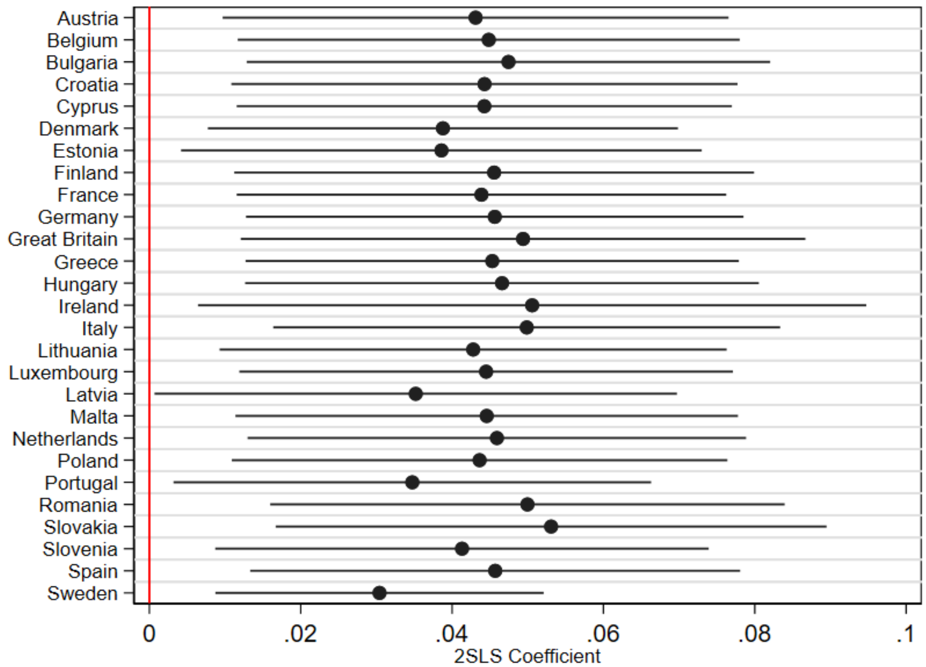
Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-3 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 4-6 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. The 2SLS estimates are obtained using the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D9. Weather-induced asylum applications and individuals' environmental values. 2SLS estimates. Alternative treatments.

Dep. variable	Climate concern in European Elections		Climate change as political priority	
	(1)	(2)	(3)	(4)
Asylum Applications	0.0151*	0.0244***	0.0213*	0.0204**
	(0.00776)	(0.00629)	(0.0120)	(0.00927)
Local weather controls	X	X	X	X
Individual controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
Regressor	log annual flow	weather-induced asylum anomaly	log annual flow	weather-induced asylum anomaly
F-Statistic	29.737		11.569	
N	106614	106614	130068	130068
Number of countries	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-2 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 3-4 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). The first two columns report the 2SLS estimates where Asylum Applications is the log of asylum applications in a given country in the survey year and is instrumented using the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. Columns 3-4 report the OLS estimates where Asylum Applications is the measure of weather-induced asylum application spikes n_{dt} constructed in Appendix Section C.4. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure D1. 2SLS estimate of weather-induced asylum applications on climate concern as a political priority leaving out one country



Notes: This figure reports the 2SLS coefficient estimates of the effect of weather-induced asylum applications on Climate change as political priority when each country in the y-axis is excluded once at a time from the estimation sample. The whiskers indicate the 90% standard error confidence intervals.

Table D10. Asylum applications and individuals' environmental values using volcanic eruptions and earthquakes in origin country.

Dep. variable	Climate concern in European Elections (*Mean: 0.068*)		Climate change as political priority (*Mean: .106*)	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
log(Asylum Applications)	-0.00147	0.00396	0.00746	0.0176
	(0.00384)	(0.0115)	(0.00651)	(0.0294)
Local weather controls	X	X	X	X
Individual controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Statistic		12.393		5.062
N	106614	106614	130068	130068
Number of countries	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-2 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 3-4 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. Columns (2) and (4) report the 2SLS estimates using the predicted asylum applications constructed from the gravity-predicted asylum application flows using earthquakes and volcanic eruptions from EM-DAT data. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D11. Weather-induced asylum applications and individual concern on other topics. 2SLS estimates.

Dep. variable	Economic growth EU Election	Euro EU Election	Terrorism EU Election	Food safety EU Election	Terrorism Pol Priority
	(1)	(2)	(3)	(4)	(5)
log(Asylum Applications)	-0.00226	-0.0458	-0.00383	-0.0193	0.0126
	(0.0165)	(0.0814)	(0.00804)	(0.0130)	(0.0153)
Weather Controls	X	X	X	X	X
Individual Controls	X	X	X	X	X
Country FE	X	X	X	X	X
Year FE	X	X	X	X	X
Age FE	X	X	X	X	X
Region-by-year FE	X	X	X	X	X
Country-age linear trends	X	X	X	X	X
F-Statistic	14.434	9.437	14.434	14.434	21.434
N	106614	53799	106614	106614	130068
Number of countries	28	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable is a dummy equal to 1 if the respondent reports economic growth (in col. 1), euro single currency (col. 2), terrorism (col. 3) and food safety (col. 4) as a theme that the European Parliament should give priority to when deliberating. The dependent variable in column 5 is a dummy equal to 1 if the respondent reports terrorism as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Appendix Table B1 for exact wording). The estimates refer to the 2SLS coefficients obtained using the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D12. Weather-induced asylum applications and environmental values. No top-5 countries of origin for asylum seekers. 2SLS estimates.

Dep. variable	Climate concern in European Elections		Climate change as political priority	
	(1)	(2)	(3)	(4)
log(Asylum Applications)	-0.000120	0.0160*	0.0145*	0.0507***
	(0.00437)	(0.00854)	(0.00760)	(0.0178)
Country FE	X	X	X	X
Year FE	X	X	X	X
Age FE	X	X	X	X
Region-by-year FE	X	X	X	X
Country-age linear trends	X	X	X	X
F-Stat		23.737		22.552
N	106614	106614	130068	130068

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (columns 1 and 2, see Table B1 for exact wording and additional details on the construction of the variable). In columns (3) and (4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). Asylum demands do not account for the top-5 countries of origin for asylum seekers in the sample (Afghanistan, Iraq, Russian Federation, Serbia, Syria). All columns report the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D13. Country average climate concern and leads of actual and predicted asylum demands.

Dep. variable	Asylum Applications		5-year Asylum Applications		Predicted Asylum Applications	
	(1)	(2)	(3)	(4)	(5)	(6)
Climate concern in European Elections	-2.045		0.132		-2.498	
	(3.103)		(4.075)		(2.382)	
Climate change as political priority		1.483		1.659		1.005
		(1.282)		(1.224)		(0.674)
Local weather controls	X	X	X	X	X	X
Country FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
N	83	164	83	164	83	164
adj. R^2	0.883	0.872	0.903	0.930	0.962	0.973

Notes: All estimates are obtained from country-level regressions. The main regressors are country-average responses for Climate concern in European Elections and Climate change as political priority. The first two columns use one-year ahead asylum applications, columns 3 and 4 use five-year ahead cumulative asylum applications, and columns 5 and 6 use the one-year ahead predicted weather-induced asylum applications. The predicted measure of weather-induced asylum applications is constructed from the estimation of Equation (C4). All columns control for linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation, and country, and survey year fixed effects. Robust standard errors, clustered at the country level, in parentheses. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D14. 2SLS Estimates: Exposure to weather-induced asylum demands by age range

	(1) Climate concern in European Elections (*Mean: 0.079*)	(2) Climate change as political priority (*Mean: 0.099*)
Log(Exposure$_{16-24}$)	0.0235**	0.0390**
	(0.00959)	(0.0180)
F-statistic	48.091	54.376
N	17554	21661
Log(Exposure$_{25-33}$)	0.00990	0.0409***
	(0.00635)	(0.0139)
F-statistic	41.019	37.483
N	21324	26359
Log(Exposure$_{34-42}$)	0.00889	0.0403**
	(0.00661)	(0.0150)
F-statistic	41.939	40.211
N	24389	30320
Log(Exposure$_{43-51}$)	0.00815	0.0209
	(0.00673)	(0.0135)
F-statistic	38.166	36.681
N	25698	31544
Log(Exposure$_{52-60}$)	0.00605	0.0167
	(0.00792)	(0.0145)
F-statistic	40.667	37.419
N	27558	33144
Log(Exposure$_{61-69}$)	0.00971	0.0286**
	(0.00573)	(0.0131)
F-statistic	34.782	35.594
N	24344	29936
Log(Exposure$_{70-78}$)	0.00484	0.00553
	(0.00740)	(0.0255)
F-statistic	28.925	22.865
N	15234	18158
Log(Exposure$_{79+}$)	0.0120	0.0304
	(0.0376)	(0.0352)
F-statistic	21.008	22.046
N	5269	6315
Weather Controls	X	X
Individual Controls	X	X
Country FE	X	X
Year FE	X	X
Age FE	X	X
Birth-cohort FE	X	X
Region-by-year FE	X	X
Country-age linear trends	X	X

Notes: Each cell reports the 2SLS estimate of the coefficient associated with the (log) exposure to asylum applications as the (log) of the cumulative asylum applications in the country in a given age range of an individual. The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed and whose exposure period occurs in the time period in which asylum application data are available (i.e., after 2000). The dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (columns 1 and 3, see Table B1 for exact wording and additional details on the construction of the variable). In columns (2) and (4) the dependent variable is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating (see Table B1 for exact wording and additional details on the construction of the variable). The 2SLS estimates use the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. Robust standard errors, clustered at the country level, in parentheses. Individual controls: Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented. Weather Controls: Exposure to average temperature and precipitation over the same time period in which exposure to asylum applications is measured and contemporaneous linear and quadratic terms of temperature and precipitation. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D15. Formative age exposure to weather-induced asylum applications and individuals' environmental values. 2SLS estimates. Alternative Instruments.

Dep. variable	Climate concern in European Elections (*Mean: 0.079*)			Climate change as political priority (*Mean: 0.099*)		
	(1)	(2)	(3)	(4)	(5)	(6)
log(Asylum Applications)	0.0213**	0.0222***	0.0260**	0.0379**	0.0386**	0.0497***
	(0.00905)	(0.00799)	(0.0104)	(0.0177)	(0.0153)	(0.0177)
Weather Controls	X	X	X	X	X	X
Individual Controls	X	X	X	X	X	X
Country FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
Age FE	X	X	X	X	X	X
Birth-cohort FE	X	X	X	X	X	X
Region-by-year FE	X	X	X	X	X	X
Country-age linear trends	X	X	X	X	X	X
Instrument	w/ MR	Destination-weather	Destination-specific	w/ MR	Destination-weather	Destination-specific
F-Statistic	47.711	3.310	53.500	51.456	2.848	42.149
N	17554	17554	17554	21661	21661	21661
Number of countries	28	28	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-3 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 4-6 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. Each column uses a different instrument for predicted weather-induced asylum applications, constructed from the predicted values in the estimation of Equation (C2), (C3) and (C4). All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, birth-year, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D16. Exposure to weather-induced asylum applications and individuals' environmental values. 2SLS estimates. Alternative definitions for formative age.

Dep. variable	Climate concern in European Elections						Climate change as political priority					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
log(Asylum Applications)	0.0235**	0.0379**	0.0130*	0.0123*	0.01097	0.01196*	0.0383**	0.0461*	0.0282*	0.0286*	0.0307**	0.0303**
	(0.00959)	(0.0160)	(0.00721)	(0.00750)	(0.00772)	(0.00716)	(0.0153)	(0.0261)	(0.0147)	(0.0148)	(0.0138)	(0.0129)
Weather Controls	X	X	X	X	X	X	X	X	X	X	X	X
Individual Controls	X	X	X	X	X	X	X	X	X	X	X	X
Country FE	X	X	X	X	X	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X	X	X	X	X	X
Age FE	X	X	X	X	X	X	X	X	X	X	X	X
Birth-cohort FE	X	X	X	X	X	X	X	X	X	X	X	X
Region-by-year FE	X	X	X	X	X	X	X	X	X	X	X	X
Country-age linear trends	X	X	X	X	X	X	X	X	X	X	X	X
Formative age	16-24	16-25	17-24	17-25	18-24	18-25	16-24	16-25	17-24	17-25	18-24	18-25
F-Statistic	26.020	20.808	27.368	27.073	29.487	29.414	46.347	33.767	45.758	44.988	43.767	44.128
N	17554	9542	18230	18230	18704	18704	21661	11915	22384	22384	22956	22956
Number of countries	28	28	28	28	28	28	28	28	28	28	28	28

Notes: The sample is restricted to survey respondents that have the same nationality as the country in which they are interviewed. The dependent variable in columns 1-6 is a dummy equal to 1 if the respondent reports climate change as a theme that the European Parliament should give priority to when deliberating. The dependent variable in columns 7-12 is a dummy equal to 1 if the respondent reports climate change as a theme that should be discussed as a matter of priority during the electoral campaign for the next European Parliament elections (see Table B1 for exact wording and additional details on the construction of the variable). Asylum Applications is the sum of the asylum applications in a given country in the five years preceding the survey year, as defined in Equation 1. The 2SLS estimates use the predicted asylum applications constructed from the gravity-predicted asylum application flows as described in Equation (2) in the text. All columns control for individual characteristics (Gender, Education (Up to 15 years; 16-19 years; 20 years or older; still studying; no education), Unemployed, Left-wing oriented) and country-level covariates (Linear and squared five-year average temperature and total precipitation, linear and squared annual temperature and total precipitation), and country, survey year, age, birth-year, region-by-survey-year fixed effects and country by age linear trends. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

D.3 Robustness Checks for Country Level Analysis

Table D17. Green party votes and leads of actual and predicted asylum demands

Dep. variable	Actual asylum demands	Predicted asylum demands
	(1)	(2)
% EP Green Party votes	0.0454	-0.00227
	(0.0300)	(0.00860)
Country Controls	X	X
Weather Controls	X	X
Country FE	X	X
Year FE	X	X
N	42	42
adj. R^2	0.957	0.999

Notes: The table reports the OLS estimates associated with the % of Green party votes in EP elections on the leads of actual and predicted weather-induced asylum demands in logarithm as constructed in Equation (C3). Robust standard errors, clustered at the country level, in parentheses. Country Controls: (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old. Weather Controls: Linear and squared average temperature and total precipitation in the country. All columns account for country- and year-specific fixed effects. F-statistic refers to the Kleibergen-Paap F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D18. Weather-induced asylum applications and Green party votes in European Parliament elections. 2SLS estimates. Alternative instruments.

Dep. variable	% Green Party votes in EP elections (*Mean: 9.84)*			
	2SLS	2SLS	2SLS	2SLS
	(1)	(2)	(3)	(4)
Log(Asylum Applications)	-2.952	-2.733	-3.255	-3.670
	(1.745)	(1.751)	(2.083)	(2.371)
Instrument	w/out MR	w/ MR	Destination-weather	Destination-specific
Country Controls	X	X	X	X
Weather Controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
F-Statistic	18.779	16.925	14.819	16.805
N	65	65	65	65
Number of countries	20	20	20	20

Notes: The table reports the 2SLS coefficients on (log) of total asylum applications in the five years preceding the European Parliament elections. The dependent variable is the share of votes of Green parties in European Parliament elections after 2000 in an EU country. Respectively, in each column, asylum demands are instrumented with its predicted counterpart as described in Equations (2), (C2), (C3) and (C4). Country Controls: (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old between the two election rounds and in the year of the elections, voter turnout. Weather Controls: Linear and squared average temperature and total precipitation in the country between the two election rounds and in the year of the elections. All columns control for country- and year-specific fixed effects. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the Kleibergen-Paap F-statistic for weak instrument. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D19. Weather-induced asylum applications and other parties' votes in EP elections. 2SLS estimates. Other parties.

Dep. variable: % votes	Socialist/Left	Social democrats	Liberal	Christian democrats	Conservative	Nationalist
	(1)	(2)	(3)	(4)	(5)	(6)
log(Asylum Applications)	4.399	-1.287	-0.884	-0.447	2.434	-4.895**
	(2.840)	(1.617)	(3.839)	(2.807)	(2.376)	(2.059)
Country Controls	X	X	X	X	X	X
Weather Controls	X	X	X	X	X	X
Country FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
N	67	99	83	65	73	84
F-stat	15.273	16.410	25.556	10.922	13.949	22.641
Number of countries	20	27	24	18	20	25

Notes: The table reports the 2SLS coefficients on (log) of total asylum applications in the five years preceding the European Parliament elections. The dependent variable is the share of votes of other parties by party family as classified in the Manifesto database in European Parliament elections after 2000 in an EU country. The (log) of total asylum applications in the five years preceding the elections is instrumented with the gravity-predicted (log) of total asylum applications described in Equation (2) in the text. Country Controls: (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old between the two election rounds and in the year of the elections, voter turnout. Weather Controls: Linear and squared average temperature and total precipitation in the country between the two election rounds and in the year of the elections. All countries control for country-specific, year-specific fixed effects. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the Kleibergen-Paap F-statistic for weak instrument. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D20. Weather-induced asylum applications and electoral turnout in EP elections

Dep. variable	% Voter Turnout (*Mean: 46.134*)			
	OLS	2SLS	2SLS	2SLS
	(1)	(2)	(3)	(4)
Log(Asylum Applications)	1.097	-3.785	-2.428*	-3.256*
	(1.617)	(3.061)	(1.360)	(1.912)
Country Controls	X	X	X	X
Weather Controls	X	X	X	X
Country FE	X		X	X
Year FE	X	X	X	X
Regional linear time trends				X
F-Statistic		9.468	15.536	11.083
N	65	65	65	65
Number of countries	28	28	28	28

Notes: The table reports the OLS (column 1) and 2SLS (columns 2 to 4) coefficients on (log) of total asylum applications in the five years preceding the European Parliament elections. The dependent variable is the share of electoral turnout in European Parliament elections after 2000 in an EU country. The (log) of total asylum applications in the five years preceding the elections is instrumented with the gravity-predicted (log) of total asylum applications described in Equation (2) in the text. The sample is the same as in baseline results using Green party votes. Country Controls: (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old between the two election rounds and in the year of the elections, voter turnout. Weather Controls: Linear and squared average temperature and total precipitation in the country between the two election rounds and in the year of the elections. All countries control for country-specific, year-specific fixed effects. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the Kleibergen-Paap F-statistic for weak instrument. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D21. Weather-induced asylum applications and environmentalism in national elections. 2SLS Estimates. Alternative instruments.

Dep. variable	National Elections Environmentalism Index			
	(1)	(2)	(3)	(4)
log(Asylum Applications)	0.232	0.193	0.602	0.300
	(0.343)	(0.252)	(0.806)	(0.381)
Instrument	w/out MR	w/ MR	Destination-weather	Destination-specific
Country Controls	X	X	X	X
Weather Controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
N	119	119	119	119
F-Stat	16.030	24.236	12.467	13.813

Notes: The dependent variable is the normalized index of environmentalism of national elections where the share of quasi-sentences that positively referred to the environment in each party's manifesto is weighted by its vote share in the national elections. The table reports the coefficients associated with (log) of the sum of asylum applications in the period between one election year and the other. Respectively, in each column, asylum demands are instrumented with its predicted counterpart as described in Equations (2), (C2), (C3) and (C4). All columns control for the normalized right-left ideological index provided in the MPD. Country controls: averages between two elections of (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old, and in the year of the elections. Weather controls: averages between two elections of linear and squared temperature and precipitation and in the year of the elections. All columns control for country, year, and party fixed effects. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D22. Weather-induced asylum applications and other dimensions of national elections. 2SLS Estimates.

	Europe +	Europe -	Multiculturalism +	Multiculturalism -	Refugees +	Cultural Autonomy +
	(1)	(2)	(3)	(4)	(5)	(6)
log(Asylum Applications)	0.226	0.0865	-0.232	0.156	-0.186	0.287
	(0.182)	(0.174)	(0.160)	(0.343)	(0.150)	(0.353)
Country Controls	X	X	X	X	X	X
Weather Controls	X	X	X	X	X	X
Country FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
F-Stat	16.030	16.030	16.030	16.030	16.030	16.030
N	119	119	119	119	119	119

Notes: The dependent variable is the normalized index of each topic of national elections where the share of quasi-sentences that referred to each topic as described in Table B3 in each party's manifesto is weighted by its vote share in the national elections. The table reports the coefficients associated with (log) of the sum of asylum applications in the period between one election year and the other, obtained using an instrumental variable approach, where the instrument is constructed using the predicted values in Equations (C3), Country controls: averages between two elections of (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old, and in the year of the elections. Weather controls: averages between two elections of linear and squared temperature and precipitation and in the year of the elections. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

D.4 Robustness Checks for Party Level Analysis

Table D23. Weather-induced asylum applications and environmental agenda of parties. 2SLS estimates. Alternative instruments.

	Party's Standardized Environmentalism			
	(1)	(2)	(3)	(4)
Panel A: Unweighted				
log(Asylum Applications)	-0.119	-0.123	-0.103	0.523
	(0.107)	(0.105)	(0.0842)	(0.975)
F-Stat	51.412	61.676	57.782	10.524
Panel B: Weighted by votes				
log(Asylum Applications)	-0.194*	-0.194*	-0.0989	-0.404
	(0.111)	(0.103)	(0.0738)	(0.876)
F-Stat	40.407	48.326	58.945	0.362
Instrument	w/out MR	w/ MR	Destination-weather	Destination-specific
Right-left ideological index	X	X	X	X
Country Controls	X	X	X	X
Weather Controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Party FE	X	X	X	X
N	520	520	520	520

Notes: The analysis is over a sample of parties that are running in multiple elections. The table reports the coefficients associated with (log) of the sum of asylum applications in the period between one election year and the other. The dependent variable is the (normalized) share of quasi-sentences that positively referred to the environment in each party's manifesto in the national elections. All columns report the 2SLS estimates where (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications respectively described in Equations (2), (C2), (C3) and (C4). All columns control for the normalized right-left ideological index provided in the MPD. Country controls: averages between two elections of (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old, and in the year of the elections. Weather controls: averages between two elections of linear and squared temperature and precipitation and in the year of the elections. All columns control for country, year, and party fixed effects. Panel B weighs each party's observation by the vote gained in the national elections. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D24. Weather-induced asylum applications and environmental agenda of parties. 2SLS estimates. Alternative vote cutoffs.

	Party's Standardized Environmentalism			
	(1)	(2)	(3)	(4)
Panel A: Unweighted				
log(Asylum Applications)	-0.0583	-0.334**	-0.365**	-0.347**
	(0.108)	(0.145)	(0.165)	(0.153)
F-Stat	32.421	25.869	20.066	15.168
Panel B: Weighted by party votes				
log(Asylum Applications)	-0.158	-0.274*	-0.314*	-0.297*
	(0.116)	(0.147)	(0.160)	(0.148)
F-Stat	27.312	23.909	19.597	14.649
Votes above	5%	10%	15%	20%
Right-left ideological index	X	X	X	X
Country Controls	X	X	X	X
Weather Controls	X	X	X	X
Country FE	X	X	X	X
Year FE	X	X	X	X
Party FE	X	X	X	X
N	469	293	210	170

Notes: The analysis is over a sample of parties that are running in multiple elections. The table reports the coefficients associated with (log) of the sum of asylum applications in the period between one election year and the other. The dependent variable is the (normalized) share of quasi-sentences that positively referred to the environment in each party's manifesto in the national elections. All columns report the 2SLS estimates where (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications respectively described in Equations (C3). Panel B weighs each party's observation by the vote gained in the national elections. Column (1) only considers parties that gained at least 5% of the votes, column (2) only considers parties that gained at least 10% of the votes, column (3) only considers parties that gained at least 15% of the votes, column (4) only considers parties that gained at least 20% of the votes. All columns control for the normalized right-left ideological index provided in the MPD. Country controls: averages between two elections of (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old, and in the year of the elections. Weather controls: averages between two elections of linear and squared temperature and precipitation and in the year of the elections. All columns control for country, year, and party fixed effects. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D25. Weather-induced asylum applications and environmental agenda by party family. 2SLS Estimates.

	Green/Ecologist (1)	Socialist/Left (2)	Social democrats (3)	Liberal (4)	Christian democrats (5)	Conservative (6)	Nationalist (7)
Panel A: Unweighted							
log(Asylum Applications)	-3.200	-0.542	-0.274	-0.0154	0.872	0.353	-0.0183
	(2.885)	(2.005)	(0.171)	(0.149)	(1.104)	(0.206)	(0.0777)
F-Stat	1.289	2.491	25.802	47.751	2.713	10.025	46.526
Panel B: Weighted by party votes							
log(Asylum Applications)	-3.498	4.474	-0.355**	0.0478	-5.050	0.440	-0.0829
	(3.845)	(14.88)	(0.155)	(0.156)	(24.31)	(0.293)	(0.0916)
F-Stat	1.605	2.080	34.013	64.349	2.060	5.542	50.383
Right-left ideological index	X	X	X	X	X	X	X
Country Controls	X	X	X	X	X	X	X
Weather Controls	X	X	X	X	X	X	X
Country FE	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X
Party FE	X	X	X	X	X	X	X
N	52	73	105	84	72	66	68

Notes: The analysis is over a sample of parties that are running in multiple elections. The table reports the coefficients associated with (log) of the sum of asylum applications in the period between one election year and the other. The dependent variable is the (normalized) share of quasi-sentences that positively referred to the environment in each party's manifesto in the national elections. Each column only considers the parties belonging to a specific party family as defined by the Manifesto database. The coefficients reported are the 2SLS estimates where (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. All columns control for the normalized right-left ideological index provided in the MPD. Country controls: averages between two elections of (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old, and in the year of the elections. Weather controls: averages between two elections of linear and squared temperature and precipitation and in the year of the elections. All columns control for country, year, and party fixed effects. Panel B weighs each party's observation by the vote gained in the national elections. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table D26. Weather-induced asylum applications and other dimensions of parties' manifestos. 2SLS Estimates.

	Europe + (1)	Europe - (2)	Multiculturalism + (3)	Multiculturalism - (4)	Refugees + (5)	Cultural Autonomy + (6)
Panel A: Unweighted						
log(Asylum Applications)	-0.269	0.0538	0.0161	-0.0953	-0.0899	-0.164
	(0.314)	(0.103)	(0.172)	(0.0791)	(0.0886)	(0.159)
F-Stat	51.412	51.412	51.412	51.412	51.412	51.412
Panel B: Weighted by party votes						
log(Asylum Applications)	-0.0494	0.0756	-0.0217	-0.135	0.000911	-0.000171
	(0.181)	(0.0803)	(0.0829)	(0.0894)	(0.000963)	(0.00318)
F-Stat	40.407	40.407	40.407	40.407	40.407	40.407
Right-left ideological index	X	X	X	X	X	X
Country Controls	X	X	X	X	X	X
Weather Controls	X	X	X	X	X	X
Country FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
Party FE	X	X	X	X	X	X
N	520	520	520	520	520	520

Notes: The analysis is over a sample of parties that are running in multiple elections. The table reports the coefficients associated with (log) of the sum of asylum applications in the period between one election year and the other. The dependent variable is the (normalized) share of quasi-sentences that refers to each dimension as described in Table B3 in each party's manifesto in the national elections. The coefficients reported are the 2SLS estimates where the (log) of asylum applications is instrumented with the gravity-predicted (log) of asylum applications described in Equation (2) in the text. Robust standard errors, clustered at the country level, in parentheses. All columns control for the normalized right-left ideological index provided in the MPD. Country controls: averages between two elections of (log) GDP per capita, % tertiary education, unemployment rate, population rate between 18 and 23 years old, and in the year of the elections. Weather controls: averages between two elections of linear and squared temperature and precipitation and in the year of the elections. All columns control for country, year, and party fixed effects. Panel B weighs each party's observation by the vote gained in the national elections. Robust standard errors, clustered at the country level, in parentheses. F-statistic refers to the K-P F-statistic for weak instruments. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.