IneqPer Working Paper Series

ISSN XXXX-XXXX

Working Paper No. 2026-02, February 2026

Why citizens support (or resist) climate policy: the role of trust, perceived urgency and equality in Italy

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Suggested citation: Clerici, Eleonora; Trantidis, Alex; Kulic, Nevena; Bellani, Daniela (2026), *Why citizens support (or resist) climate policy: the role of trust, perceived urgency and equality in Italy*, IneqPer Working Paper Series, No. 2026-02.

DOI: 10.5281/zenodo.xxxxxxxx

IneqPer Working Paper Series: www.ineqper.unipv.it

Editore:
Università degli Studi di Pavia – Dipartimento di Scienze Politiche e Sociali
Corso Strada Nuova, 65
27100 – Pavia (Italy)

Why Citizens Support (or Resist) Climate Policy: The Role of Trust, Perceived Urgency and Equality in Italy

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Abstract

This study investigates public support for climate mitigation policies and assesses their fairness through a large-scale conjoint experiment (n=2000) in Italy, focusing on three key drivers: trust in institutions, psychological distance and egalitarianism. The results show that trust in institutions influenced preferences, with the European Union emerging as the most trusted proponent of climate policies, more so than Italian national or regional institutions. The urgency of climate action played a critical role: respondents were significantly more likely to support immediate implementation over delayed approaches. While Italian respondents are sensitive to policies addressing within-country inequality, there is minimal concern for global redistribution. More specifically, policies funded through taxing emissions, or the wealthy were significantly preferred, whereas regressive funding mechanisms reduced support. Respondents perceive climate policies as fairer when they include egalitarian features that support low-income groups and have clear, immediate or gradual implementation timelines rather than uncertain ones. Political orientation moderated preferences, with left-leaning individuals showing stronger egalitarian and urgency concerns.

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1. INTRODUCTION

Climate change and its environmentally associated threats are an urgent issue for government policy worldwide. Over the past few decades, a range of climate mitigation policies have emerged, from global initiatives like the UN Climate Change Conference to regional strategies such as the European Green Deal and the U.S. Green New Deal. However, a sustainable climate transition depends not only on policy design but also on public acceptance and perceptions. For this reason, scholars have increasingly investigated public support for climate mitigation policies and explored ways to strengthen it (Baute, 2024; Bechtel et al., 2022; Bergquist et al., 2020; Kantorowicz, 2022).

Available empirical evidence shows that support for policies is closely tied to people's trust in political institutions (Drews and Van den Bergh, 2015; Kulin et al., 2024; Kitt et al., 2021), their understanding of the scientific consensus (van der Linden et al., 2015), and the extent to which climate change impacts perceptions of urgency and threat felt amidst the citizens (Ding et al., 2011; Drews and Van den Bergh, 2015; Harris and Howe, 2023). Moreover, the support for these policies particularly depends on whether their implementation involves an uneven distribution of costs and benefits, which tends to place a disproportionate burden on lower-income individuals or specific segments of the population (Colantone et al., 2022; Drews and Van den Bergh, 2015; Karakas and Mitra, 2020). In recent years, populist leaders have challenged both climate science and the legitimacy of climate action. Their rhetoric downplays the urgency of the crisis and exploits public mistrust in institutions and experts. By capitalizing on declining public trust in political institutions, populist leaders portray climate policies as elitist projects that disproportionately burden working-class citizens and domestic producers, and this narrative deepens scepticism and erodes support for ambitious action (Huber et al., 2020; Huber et al., 2021; Krange et al., 2021).

Building on this evidence, this study relies on a large-scale conjoint experiment (n=2,000) to explore the role of institutional trust, the timing of action and egalitarian concerns for climate policy support and their fairness assessment. This is the first comprehensive analysis that examines these factors in

combination, providing unique insight into the multiple dimensions of egalitarian concerns. Moreover, the article simultaneously examines policy preferences and fairness evaluations within the context of climate policy. The idea of fairness refers to the individual's perception arising from a process of judgment (Grasso, 2007). The above-mentioned concerns often relate to how the costs and benefits of climate action are distributed and whether the policy-making process is seen as inclusive and just. Fairness can thus be evaluated and justified based on specific actions, which may be deemed more or less appropriate depending on ethical considerations (Pittel and Rübbelke, 2013). In other words, climate fairness goes beyond one specific domain, as each policy can be regarded as fair or unfair in relation to multiple factors. For example, the time perspective may be crucial for perceptions of fairness in terms of intergenerational relations and what is being passed on to future generations (Kverndokk and Rose, 2008). Also, citizens may evaluate as fairer climate change policies that place most of the burden on wealthier people and/or wealthier nations, and supports lower income citizens and/or poorer nations. Finally, the article examines how political orientation along the right-to-left spectrum moderates these relationships in support for climate policies.

Italy offers a compelling case. It combines high industrialization with regional inequalities (Asso, 2020), political polarization (Serani, 2025), and a growing populist movement that fuels mistrust in institutions and casts climate policy as burdensome or exaggerated (Grasso et al., 2024). Although the debate on climate change was not a divisive argument between the right and the left in the past (Cabeza et al., 2024), representatives of the populist parties have recently expressed skepticism toward the scientific consensus on climate change, casting doubts on the urgency and even the existence of the phenomenon, assuming a reductionist perspective. At the same time, Italy participates in the European Green Deal, a EU's climate initiative (Wolf et al., 2021). A conjoint experiment in this context provides unique insights into public attitudes toward climate action in Italy.

Moreover, the Mediterranean has widely been identified as one of the most sensitive regions to climate change (Giorgi, 2006), often described also by the Intergovernmental Panel on Climate

Change as a major global hotspot, with both its ecosystems and human societies highly vulnerable to the impacts of global warming (Nkonya, 2019). The Mediterranean faces increasingly frequent and intense heatwaves (Perkins-Kirkpatrick and Lewis, 2020), and is warming roughly 20% faster than the global average (Lionello and Scarascia, 2018). These temperature surges have caused severe human losses (Ballester et al., 2023), making rising temperatures one of the most alarming signs of climate change in the region.

2. THEORETICAL BACKGROUND

2.1 Trust in institutions

Trust in institutions, which include national governments, international organizations and multilateral participation, influence public approval of costly climate actions and shape policy preferences (Devine et al., 2024; Bechtel et al., 2022). This relationship is well explained by the trust-as-heuristic theory (Hetherington, 2005; Rudolph, 2017), which suggests that trust serves as a cognitive shortcut in complex decision-making contexts (Brewer and Ley, 2012; Siegrist, 2021). As political decision-making and policymaking are often difficult to understand and follow, individuals rely on heuristics – informational shortcuts – to evaluate and comprehend them. One of these heuristics may be trust in institutions both national (at different levels) and international. With specific reference to attitudes towards environmental policy, Fairbrother (2017) notes that public attitudes are shaped not only by views on environmental issues but also by perceptions of the competence and integrity of those proposing the policies. As policy complexity, cost, and uncertainty rise, a gap in support for climate actions tends to emerge between those who trust institutions and those who do not. Empirical evidence reinforces this claim, showing that trust becomes especially influential when uncertainty is higher (Fairbrother, 2019) or when policy outcomes are projected into the distant future (Fairbrother et al., 2021). Recent reviews further affirm that political trust moderates public responses to climate policy design and attributes (Drews and Van den Bergh, 2015; McGrath, 2021). Therefore, according to the trust-as-heuristic theoretical framework, individuals who trust government or other

implementing institutions are more inclined to believe in their capacity to deliver effective climate policies, despite inherent challenges. Conversely, scepticism may lead to opposition not necessarily to the goals themselves, but due to doubts about the ability to implement them successfully (Jacobs and Matthews, 2012; 2017). Consequently, those who are sceptical of government or other implementing institutions are less likely to support the policies or proposals developed by them. Furthermore, trust in institutions is particularly relevant as it is currently low in most democratic nations (Devine et al., 2024) and, thus, it may pose challenges to enacting ambitious climate policies. Within this perspective, we may expect different trust by national and international institutions to influence support for climate actions. While national governments are likely to be distrusted, the cooperation between multiple states is more supportive of adopting costly climate measurements.

2.2 Psychological distance

The psychological distance perspective (Brügger et al., 2016; Keller et al., 2022) offers insight into how individuals perceive objects and events as either concrete or abstract. When something feels psychologically close and more urgent, it tends to be represented more concretely; conversely, when it feels psychologically distant and less urgent, it is perceived more abstractly. Due to this ability to explain how individuals perceive (and, consequentially, respond to) events or objects, psychological distance theory is often adopted to study attitudes and preferences towards complex issues and policies, such as the ones related to climate change (Maiella et al., 2020).The perceptions are shaped by factors such as geographical distance (e.g., impacts on distant or developing countries), hypothetical scenarios (e.g., likelihood of events), temporal perspectives (e.g., impact on future vs. current generations), and social impact (e.g., effects on other people) (Maiella et al., 2020; Liberman and Trope, 2008). In particular, perceptions of temporality regarding climate impacts significantly affect public concern and engagement (Pahl et al., 2014). When communities anticipate immediate risks or perceive a lack of urgency, this can diminish the perceived need for action, thereby affecting mitigation and adaptation efforts. Consequently, when climate change is often viewed as a distant threat, this reduces motivation to support actions. Public concern regarding climate change varies

significantly based on the perceived immediacy of risks to oneself or one's community (Pidgeon, 2012). A study on psychological distance implementing factorial analysis in China shows that people are more likely to take climate change seriously and act when they believe it will personally affect them, whether through direct experience, proximity to disasters, or personal reflection (Ma et al., 2023). This aligns with findings from Akerlof et al. (2010), who report that individuals often view the health risks associated with climate change as more pertinent to populations in distant areas rather than to themselves. Cologna et al. (2025) reveal that people's support for climate policies can be moderated by how they attribute extreme weather events to climate change, highlighting the necessity of linking observable events with broader climate narratives to stimulate action. Similarly, Çıplak (2022) asserts that people with a more pronounced future time orientation are more aware of climate issues and motivated to engage in preventative measures. Within this perspective, we expect that perceived urgency is associated with preferences for policies with immediate actions and higher fairness evaluations.

2.3 Egalitarianism over Climate policy

The idea of egalitarianism is connected to perceptions of social justice and egalitarian concerns regarding the distribution of the costs of climate policy (Posner and Sunstein, 2008; Posner and Weisbach, 2010). These perceptions are increasingly recognized as critical dimensions for understanding the social acceptance and public legitimacy of climate change policies. Climate change already creates situations that expose and exacerbate existing social and economic inequalities, with the burden of its effects disproportionately falling on the most vulnerable populations, both within countries and across the globe.

Egalitarian values are, of course, an intersubjective notion - what they mean in any situation differs from person to person. However, as climate policies shift economies towards low-carbon solutions, it is crucial that these measures are designed to prevent further widening of income and wealth gaps (Byskov et al., 2021). Scholars and activists emphasize the need for climate policies that address

these disparities by focusing on egalitarian solutions in that sense (Jafino et al., 2021). Lower-income households are more vulnerable to climate impacts but are frequently the least able to afford the necessary adaptations or bear the costs of policy shifts, such as carbon pricing or fuel taxes (Hallegatte et al. 2018). Some studies suggest that people may see some green policies like linking carbon taxes to fuel prices as unfair for the poor (for the US see Povitkina et al., 2021) and that should be financed by taxing the rich (for the German case see Baute, 2024). Carbon pricing mechanisms, though essential for mitigating climate change, often have regressive effects, placing a relatively heavier financial burden on lower-income households (Nguyen, 2023; Grainger and Kolstad, 2010). In short, the distribution of the costs of climate change adaptation often mirrors class and income inequalities. Transitioning to renewable energy can be smoother if it happens in ways that help address broader social inequities and supports vulnerable communities.

At the international level, the unequal contribution of emissions between rich and poor countries is another critical aspect in egalitarian principles over climate policy. Poorer nations contribute far less to global emissions but some of them face the worst impacts. Wealthier nations have historically contributed most greenhouse gas emissions (Bruckner et al., 2022, p. 311-320), and are called upon to shoulder more responsibility in both reducing emissions and funding adaptation and mitigation efforts in poorer countries. This inequality has led to calls for a fairer distribution of climate costs, with wealthier nations paying a larger share of the global mitigation bill (Taconet et al., 2020). Consequently, egalitarian concerns engulf the idea of a proper redistribution of funds among countries (Milanovic, 2016; Sachs, 2014).

Are citizens aware of these questions and do they care? People are more likely to consider egalitarian policies that target those who are the most responsible and do not disproportionately affect vulnerable or economically disadvantaged groups (Colantone et al., 2022). People are more supportive of policies that are proportional to current and historical emissions and take account of someone's 'ability to pay' (Cai et al., 2020; Bechtel and Scheve, 2013), as well as policies that have consulted

all groups that are likely to be affected and are considerate of them. Several studies highlight that perceived equality plays a key role in shaping public support for climate policies, particularly those involving economic trade-offs or behavioural change (Leiserowitz, 2005; 2006; Maibach et al., 2009; Poortinga et al., 2019; Klinsky et al., 2012). In this light, we expect egalitarian concerns to positively influence the support in policy preferences and fairness evaluation.

2.4 Political orientation

Political orientation has consistently emerged as a significant predictor of environmental and climate concerns (Lorteau, et al., 2024). Typically, political liberals express higher levels of climate acceptance and concern compared to conservatives (Egan and Mullin, 2017; Mildenberger et al., 2022). Right-wing populist rhetoric often appeals to a sense of economic and cultural grievance, portraying climate policies as unjust, disproportionately affecting working-class individuals, and undermining national sovereignty (Schaller and Carius, 2019). In this framework, the perceived fairness of climate action is crucial: populist leaders capitalize on concerns that the costs of climate change mitigation will be unevenly distributed, exacerbating economic inequalities. As a result, political orientation can shape how individuals interpret the fairness of climate action and the role of government in addressing it (Hornsey et al., 2016; Lorteau et al., 2024).

Moreover, the political polarization surrounding climate change has a direct impact on public trust in science. Right-wing populists have effectively framed climate change as a divisive issue, dismissing science as exaggerated or a tool for political control (Schaller and Carius, 2019). This contributes to a wider erosion of trust in scientific institutions, particularly among their supporters. The psychological distance thesis, which suggests that people perceive climate change as a distant, abstract problem, also interacts with political orientation. For right-wing populist voters, climate change may be perceived as a distant or irrelevant issue, far removed from their immediate concerns of economic hardship or cultural preservation. This psychological distancing is likely to exacerbate

the gap in urgency between different political groups, with climate change seen as less pressing by those sceptical of science.

The recent successes of right-wing populist movements in shaping political discourse have amplified the role of ideological polarization in climate perceptions (Kulin et al., 2021). As populist leaders downplay the urgency of climate action and promote climate denial or inaction, they effectively undermine public trust in institutions that advocate for strong climate policies (Kulin et al., 2024; Kulin and Sevä, 2024). This dynamic creates a feedback loop: as trust in scientific and governmental institutions erodes, the political will for collective action tends to weaken, hindering progress toward addressing the climate crisis.

3. METHODS

3.1 Operationalizing trust and psychological distance

Trust in institutions is operationalized by distinguishing between national and international actors proposing or supporting a policy. Several studies and survey data provide insights into citizens' trust in institutions. Among these, the Multipurpose Survey "Aspects of Daily Life"[2] conducted by the Italian Statistical Institute (Istat) found that, in 2021, 37% of citizens assign trust levels equal to or above 6 (on a scale from 1 to 10) to the Italian government, while 41.6% expressed the same level of trust in Regional government (with 12.8% scoring between 8 and 10). The same survey[3] revealed a noticeable polarization in trust towards the European Parliament: 43.5% of respondents gave scores between 1 and 5, while 41.6% gave scores between 8 and 10. This difference between national and European trust, with minor variations, has remained relatively stable over time. However, Eurofound's data (2018) revealed a significant decline in trust in both the European Union and the national government between 2001 and 2017. Nevertheless, throughout this period, Italians consistently reported higher levels of trust in the EU than in their own government. Finally, the

[2] https://www.istat.it/it/files/2022/05/Fiducia-cittadini-istituzioni2021.pdf.
[3] Ibidem.

European Social Survey (2023-2024) showed that Italians reported an average trust level of 4.3 for the Italian Parliament, 4.5 for the European Parliament, and 4.9 for the United Nations.

Therefore, based on these previous data, the actors are represented by a) the Italian regional governments and b) The Italian state as national actors, and c) The European Union and d) The United Nations as international ones.

The psychological distance theory is reflected in the policy implementation timeline. If the threat is perceived as close and real, there will be a preference for acting right now. If the threat is not perceived as close and real, there will be a preference for acting over years or in the future in an unspecified moment. Hence, psychological distance is defined as the time of beginning of policy in three levels, and as acting: Right now, incrementally over a midterm period of 20 years or when the effects will be felt in the future.

3.2 Operationalizing Egalitarian concerns

The debate over climate change action is not just about the policies themselves but also about how the costs and benefits of such actions are distributed across countries, communities, and individuals. Political orientation, perceptions of fairness, and economic ideologies may play critical roles in shaping public preferences for these distributive aspects. In the context of climate change, these preferences often crystallize into two broad categories: egalitarian and non-egalitarian.

We understand egalitarian preferences as preferences for a fairer distribution of costs towards those countries who have historically contributed least to the problem and those who are most vulnerable to its impacts and may be impacted the most from the consequences of climate change as well as the impact of policy adjustments. In contrast, non-egalitarian preferences center on contributions based on capacity and willingness to act, often downplaying the role of historical responsibility or disparities in vulnerability. Specifically, we specify egalitarian preferences in our experiment as follows:

a) **who finances it:** Major burden on rich countries with higher GDP per capita. The argument for a progressive distribution of the financial burden of climate action is grounded in the principle of historical responsibility. Richer countries, which have historically emitted more greenhouse gases, are seen as having a greater duty to contribute financially to climate mitigation and adaptation.

b) **who benefits from it**: Favouring poor countries (with lower GDP per capita) and favouring countries currently more impacted by climate change. From an egalitarian viewpoint, the benefits of climate action should primarily go to the poorest nations and communities, as they are the most vulnerable to and affected by climate change.

c) **the sources of funding:** By taxing emissions and fossil fuel (e.g., petrol, electricity, etc.) and by taxing wealthiest of individuals and companies. Funding climate action through targeted taxes on the wealthy or high-emission activities is a common egalitarian approach, reflecting the idea that those who have benefited the most from industrialization and resource exploitation should bear the highest costs.

d) **the accompanying socio-economic policies**: Socio-Economic support for low-income groups more impacted by climate change (in terms of training and retraining of workers, public services, subsidies for low-income households, etc.). Egalitarian preferences for climate policy emphasize the need for redistributive policies to ensure that vulnerable groups are not disproportionately harmed by climate action.

On the other hand, non-egalitarian preferences are defined as:

a) **who finances it**: Equal contribution from all countries proportional to their GDP per capita. Non-egalitarian preferences often advocate for proportional responsibility where each country contributes to climate action based on its economic capacity, suggesting that the financial burden should be shared equally in relation to national wealth, without necessarily accounting for historical emissions or vulnerabilities.

b) **who benefits from it**: Favouring those countries that take actions to reduce climate change regardless of the GDP per capita. Non-egalitarian preferences focus more on incentivizing action rather than ensuring equal benefits for those most impacted. In this view, countries that actively demonstrate a proactive stance in reducing emissions through green technologies or sustainable practices should receive more benefits, even if they are economically wealthier.

c) **the sources of funding**: By cutting other expenditures of the public budget and by a tax on all citizens (e.g., a small percentage of the income tax). Non-egalitarian policies may advocate for climate action to be funded through broad-based taxation, including cuts to other public budgets or across-the-board taxes on citizens. This approach often entails a universal contribution, where the financial burden is shared by all members of society, regardless of income or wealth (e.g., small taxes on income, consumption, or carbon emissions).

d) **the accompanying socio-economic policies**: Economic support for companies to reduce pollution (e.g., for better facilities, greener electricity, etc.). Non-egalitarian preferences may prioritize supporting businesses and industries that actively reduce their environmental impact through subsidies or tax incentives. This policy is based on the idea that market-based solutions are more effective than direct redistributive policies.

The divide between egalitarian and non-egalitarian preferences for climate action reflects broader philosophical differences about justice, fairness, and the role of government in addressing global challenges. Yet the difference can be subtle. The option 'proportional to their GDP per capita' connotes some degree of egalitarian adjustment for the distribution of the burden among richer and poorer countries but fairness claim is weaker due to the historical record of emissions by region. Here, the option ‘higher burden on the richer countries’ signals comparatively higher egalitarian concerns. The egalitarian concern is thus higher when rich countries experience higher burden whereas a weaker fairness concern is reflected in the option that adopts a contribution proportional to the GDP per capita.

3.3 Conjoint design

Conjoint experiments allow for simultaneous presentation of multiple causal factors at the time and enable testing what attributes causally increase or decrease the attractiveness of a climate mitigation policy. A fully randomized conjoint design (Hainmueller et al., 2014) is employed in which each respondent has the same chance of receiving attributes and in which attributers are fully independent from one another. The conjoint experiment is a good fit for questions around climate change policies and is often used in policies science research to test policy preferences (Bansak et al., 2019). One of the main reasons for its attractiveness in this research lies in the suitability to study socially sensitive topics due to the full randomization of its attributes (Teele et al., 2018). The conjoint experiment was embedded in a survey that is representative for the Italian population in terms of gender, age, macro area, education and employment status of respondents, and therefore exhibits a high level of external validity. In total 6 attributes are included with 2 to 4 dimensions each (2x3x4x2x4x3=576 unique profiles). Each respondent had to choose between two policy combinations from the full set of possible profiles, so called choice sets with each respondent seeing two combinations. Each respondent had a unique combination of policy options (randomly and with replacement, Chrzan and Orme, 2000). While some overlap between profiles may occur, no two profiles within a single choice set are identical across all attributes (Chrzan and Orme, 2000). Moreover, as opposed to other forms of survey experiments, a conjoint experiment is employed because of its capacity to make a trade-off between options on preferences and choice behaviour, revealing which features are most relevant based on their opinions and beliefs (Baute, 2024; Bergquist et al., 2020; Devine et al., 2024). This tool can identify the causal impact of specific policy features on overall support and determine which combinations of features are likely to garner majority support.

Each policy package possesses specific dimensions derived from the theoretical framework. Table 1 with all attributes and its levels is below.

Table 1. Attributes and attribute characteristics in the conjoint design

Theoretical framework	Dimension	Levels
Climate egalitarianism	Who mostly finances the policy	Major burden on rich countries
		Equal contribution from all countries proportional to their GDP per capita
	Cross-country redistribution of the global funds	Favouring poor countries
		Favouring countries currently more impacted by climate change
		Favouring those countries that take actions to reduce climate change regardless of the GDP per capita
	Source of financing the program package	By taxing emissions and fossil fuel
		By taxing wealthiest of individuals and companies
		By cutting other expenditures of the public budget
		By a tax on all citizens
	Accompanying socio-economic policies	Economic support for companies to reduce pollution
		Economic support for low-income groups more impacted by climate change
Trust in institutions (national vs. international)	Proposed and supported by	The individual Italian Regions
		The Italian state
		The European Union
		The United Nations
Psychological distance theory (temporal)	When the policy should start	Right now
		Incrementally over 20 years
		When the effects will be felt in the future

Outcome variables

Each respondent was asked to provide an answer to two questions: 1) Which proposal would you prefer to be implemented? (A or B) 2) On a 10-point scale where 1 means "Unfair" and 10 means "Fair", how would you describe the policy package that you chose?

3.4 Survey

The conjoint experiment is administered within an online cross-sectional survey (Computer Assisted online survey, CAWI), targeted to the population aged 18-70. The survey relies on a non-probability sampling method known as quota sampling, with quotas related to age, gender, macro-region, education, and employment status (for further information and categories see the appendix). CAWI is chosen based on cost-quality estimation as well as its suitability to address the issue of social

desirability bias (respondents are free to independently provide their own answers to potentially sensitive perception-related questions).

The sample size of the survey experiment on climate change preferences is limited to 2,000 respondents.

3.5 Post-experimental analysis

We use ordinary least square regression with clustered standard errors. The post-experimental analyses are performed on the whole sample of respondents without using individual level controls and thus averaged for all respondents. Subsequently, the analyses were repeated for groups with different political orientation. Additional analyses by gender, education, age groups, income quartiles, type of occupation, climate change literacy, and by having or intending to have children were also performed and are available in the appendix.

4. RESULTS

Results contain information on two independent but inter-related outcomes from the Ordinary Least Square regression: the choice of preferred policy and the assessment of fairness on chosen policies. These are related to conjoint experiment variables of trust (proposal and support of policy by the individual Italian Regions, The Italian state, The European Union, The United Nations), of urgency (Policies that start Right now, incrementally over a midterm period of 20 years or when the effects will be felt in the future) and of (non-) egalitarianism (Who finance the policy, Who benefits from it, The sources of funding and accompanying socio-economic policies). The rationale for the choice of dimensions and the experimental design follows in the method section. Robustness checks with logistic and multi-level regression are available in the appendix. The empirical section follows the pre-registered hypothesis that are available at (link here blinded for review).

4.1 Climate policy preference

Results are based on OLS regression without respondent-level controls, averaged across the full sample after excluding missing values (N = 7,980). In other words, we look at causal effects of

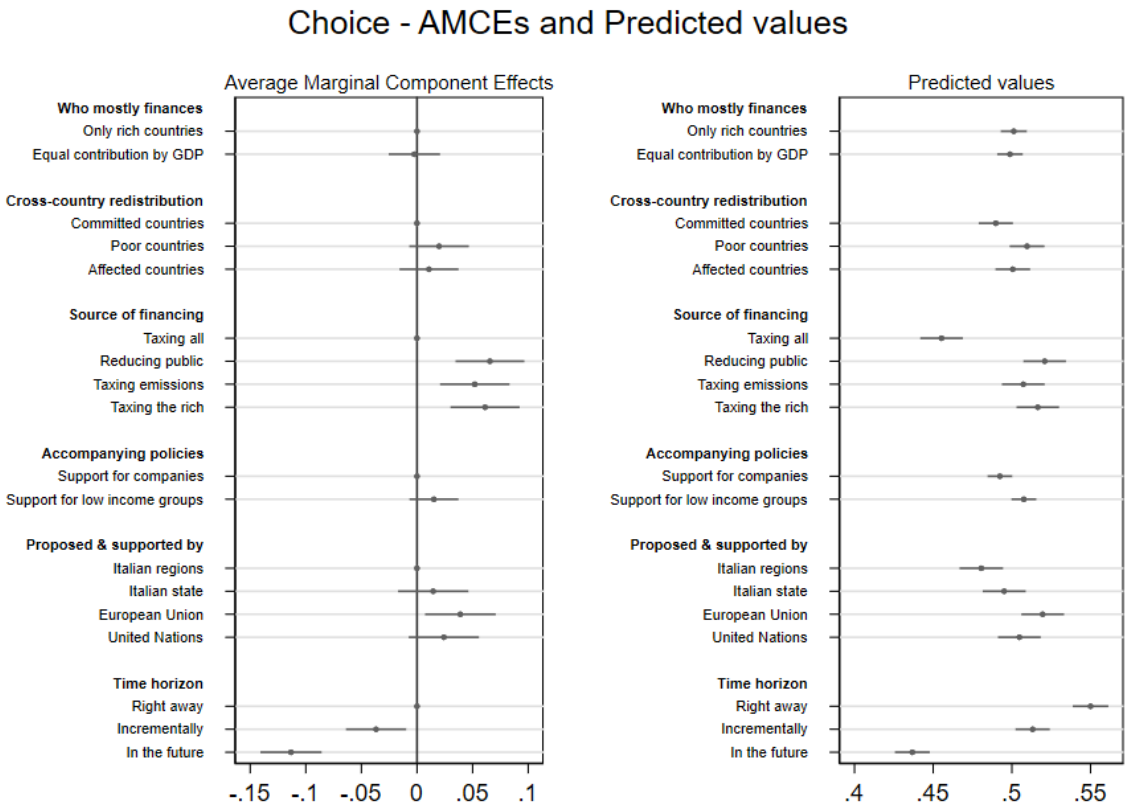
attributes as opposed to their baseline averaged over all heterogeneous characteristics of respondents. Figure 1 shows the Average Marginal Component Effects (AMCEs) of policy attributes and the predicted likelihood of selecting the preferred policy package, with 95% confidence intervals. The corresponding tables and descriptive statistics are available in the appendix.

The coefficients present the above-mentioned operationalized attributes. The first test regards the *trust in institutions*, and their role for preferred policy package. More specifically, the model differentiates the proponents and supporters of policy between national (Italian state or Italian regions) and international institutions (European Union and United Nations). We observe that the European Union is most trusted institution because the policy packages proposed and supported by it are more likely to be chosen by 3 percentage points ($p<0.05$) compared to those proposed by Italian regions, although the effect is small in size and less than 0.1 SD. There are no statistically significant differences between the AMCE related to Italian state and the one related to the Italian regions and taken as a reference point. A similar conclusion can be drawn regarding the AMCE of the United Nations and the one of the Italian regions. The second dimension that was tested in the model is related to the *psychological distance* theory and is presented as the policy implementation timeline. Respondents are more likely to choose a policy package that contains an immediate start of the policy compared to a policy package that contains information about incremental implementation of the package or indefinite date. More specifically, the package that is implemented incrementally is 3 percentage points (less than 0.1 SD, $p<0.01$) less likely to be chosen, while the likelihood drops by 11 percentage points (0.2 SD, $p<0.01$) if instead the package contains an indefinite date of implementation.

When considering the *role of egalitarianism* in the choice of a preferred policy package, we distinguish between two possible sub-dimensions: (i) within-country socio-economic inequality, understood as differences in access to resources among income groups, and (ii) between-country inequality, referring to disparities in living standards and conditions across countries. Each of these

is reflected in two distinct aspects: who finances and who benefits from climate policies at the global level, and the sources of funding and the accompanying socio-economic measures at the national level. The figure highlights that concerns about *global inequality* are not strong drivers in policy preferences on climate. On average, there is no statistically significant difference in the choice of preferred package between attributes - such as when mostly rich countries finance the policy as an egalitarian feature or when countries equally contribute in terms of their GDP per capita as a non-egalitarian feature, net of other attributes. Similar findings result from the second dimension of global egalitarianism, where the choice of the preferred package is not influenced by the attributes such as favouring poor countries with lower GDP per capita or favouring countries currently more impacted by climate change. Indeed, there is no statistically significant difference between these two dimensions and favouring those countries that take actions to reduce climate change regardless of the GDP per capita, which was taken as an example of a non-egalitarian dimension. Regarding *national equality*, we observe that respondents are more sensitive to this dimension in comparison to the global equality, in particular for what concerns the source of finance for the climate policy. The results show that the likelihood of choosing the preferred climate package increases by 5 or 6 percentage points (0.1 SD, $p<0.01$), if the package contains taxing emissions or taxing the rich respectively in comparison to a non-egalitarian characteristic such as taxing all. Interestingly, we observe a statistically significant difference between the two non-egalitarian features, as reducing public expenditures increases the likelihood of choosing a package by 6 percentage points (0.1 SD, $p<0.01$) in comparison to the baseline of taxing all citizens. However, the concerns for egalitarianism at the national level are not visible in the role of accompanying policies. No difference was found between support offered for companies and support offered to low-income groups that compensate for the damage to more affected and disadvantaged groups.

Figure 1: Average Marginal Component Effects (AMCEs) of policy attributes and the predicted likelihood of selecting the preferred policy package, with 95% confidence intervals from the OLS regression (N=7,980).



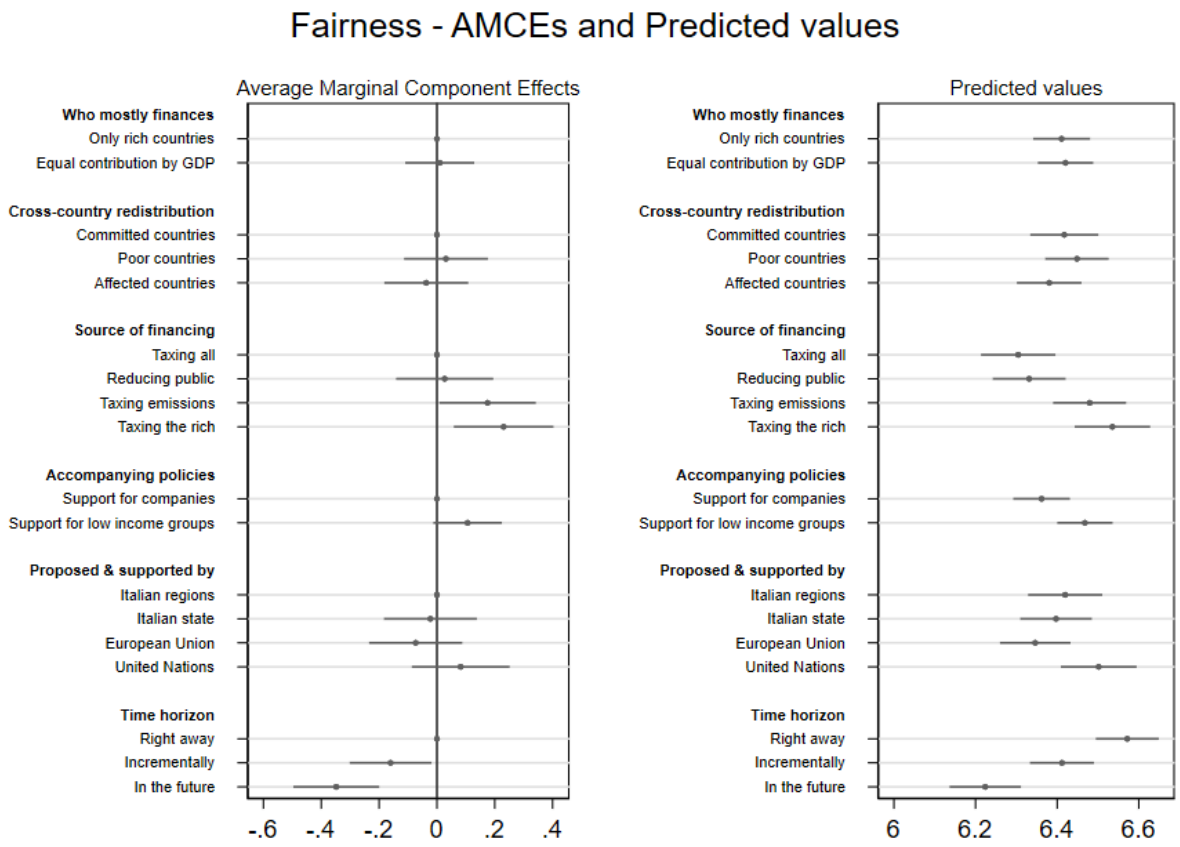
Note: Estimates are based on OLS regression without respondent-level controls, averaged across the full sample (N =7,980). Predicted values are also derived from this model. See Appendix for full methodological details.

4.2 Climate policy fairness

The second dependent variable is fairness of chosen policy package (Figure 2). The left panel displays the marginal effects, while the right panel shows the predicted values. Each respondent is asked to evaluate the level of fairness from 1 to 10. The coefficients in the regression show the role of each attribute in the evaluation of fairness for the chosen packages. The three perspectives are considered in relation to fairness with similar results with the preferred choice. Policies with uncertain *date of implementation* are considered less fair compared to those with immediate start and those that are implemented slowly over time, while no difference is found for the proponents of policies as a

measure of *trust in institutions*. The results confirm that respondents will evaluate as fairer the policy mix with more egalitarian features. In other words, *egalitarian concerns* matter for fairness of chosen packages only in relation to national components of inequality, and only in one specific dimension that considers redistribution of national income across citizens. The respondents are more likely to evaluate as fair the policies that include taxing the rich (0.23, $p<0.01$) and taxing the emissions (0.16, $p<0.05$) compared to taxing all citizens. The effects amount from 0.1 to 0.15 SD. There is no statistically significant difference in results between the two non-egalitarian features. This is slightly different result in comparison to the previously analysed choices, where respondents show more sensibility and nuance between the two non-egalitarian features compared to their fairness evaluation. Unlike the previous models, another attribute that matters for fairness belong to the dimension of accompanying socio-economic polices, where climate policies that support low-income groups increase the positive evaluation of fairness by 0.11 points ($p<0.1$).

Figure 2. Average Marginal Component Effects (AMCEs) of policy attributes of the preferred policy package and the fairness of the chosen policy package, with 95% confidence intervals from the OLS regression (N=3,990)



Note: Estimates are based on OLS regression without respondent-level controls. As the fairness question pertains only to the chosen policy, the sample is halved (N = 3,990). Predicted values are derived from the same model. See Appendix for full methodological details.

4.3 Heterogeneity by political orientation

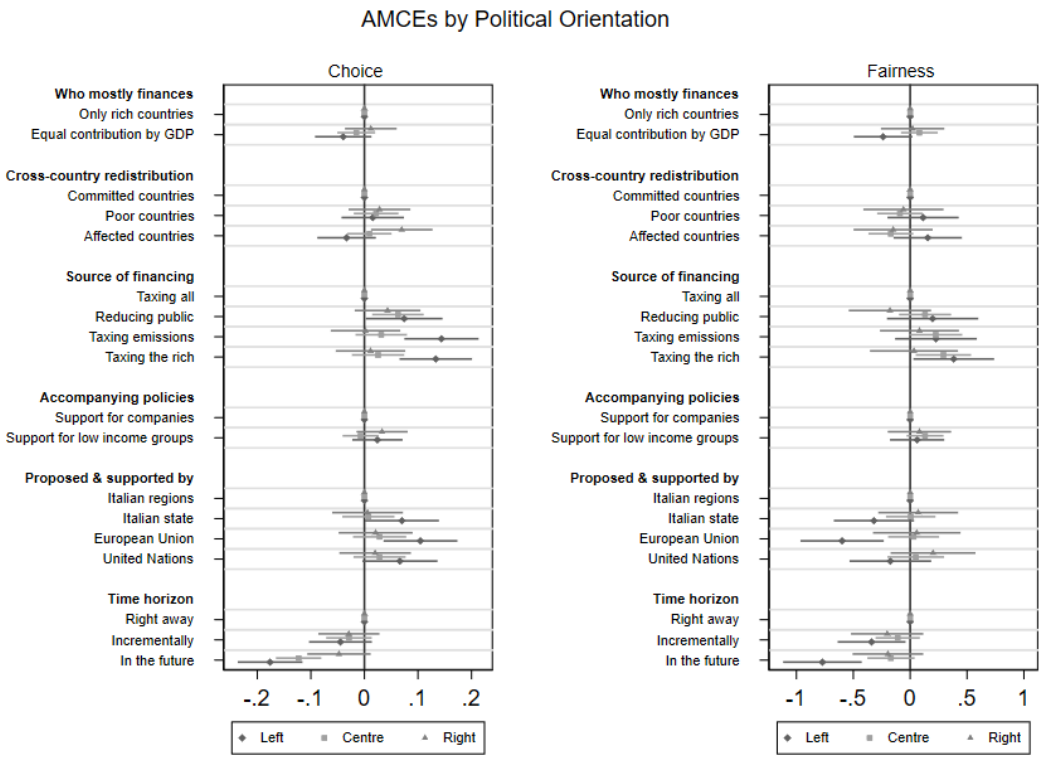
Figure 3 represents the differences in evaluation of attributes for the choice of preferred package and the fairness of the chosen policy package by the political orientation of respondents. We compare three groups, those who are politically positioned as left, centre and right while those who chose not to respond are kept apart (n=1,652, 3,352, and 1,824, respectively; non-respondents n=1,152[4]). Interestingly, the political orientation does not alter significantly the general results found for *trust in institutions*, except for those oriented as centre who are less likely by 8 percentage points ($p<0.1$) to choose a package by the European Union. The left is more likely than right to choose programs supported by European union or Italian state compared to regions, but these differences are not

[4] 14.4% of respondents refused to answer the question on political orientation, which is consistent with findings from other surveys.

statistically significant. The dimension of *psychological distance* plays out differently for the left and right. Those that are considered right are more likely by 13 percentage points (0.2 SD, $p<0.01$) than left to choose policies with an uncertain start date.

The global inequality dimension capturing which countries mostly finance the climate policy includes two options, when only rich countries finance the policy and when contribution by countries are equal. There are no difference between these two options for any of the group of respondents in relation to their political orientation. The impact of cross-country redistribution of the global funds is however different by political orientation of respondents: compared to the left, those who are positioned right are more likely to choose a policy package that distributes the funding to the affected countries rather than committed or poor countries (by 11 percentage points, $p<0.05$). No significant difference between groups is found between poor and committed countries. Regarding the aspects of *within country inequality*, interesting results emerge. Political orientation significantly moderates the effect of all attributes on preferred package regarding the source of financing. Respondents who are positioned left are more egalitarian in the choice of preferred policy package than those who are right or in centre in relation to both taxing emissions and taxing rich, by 11 to 14 percentage points ($p<0.05$). Regarding the second dimension of *within country inequality* that refers to accompanying socio-economic policies, no difference is found between left, right and centre in choosing a policy package with support for low-income groups.

Figure 3. Average Marginal Component Effects (AMCEs) of policy attributes of the selected policy and of the fairness of the chosen policy package, with 95% confidence intervals, across political orientation.

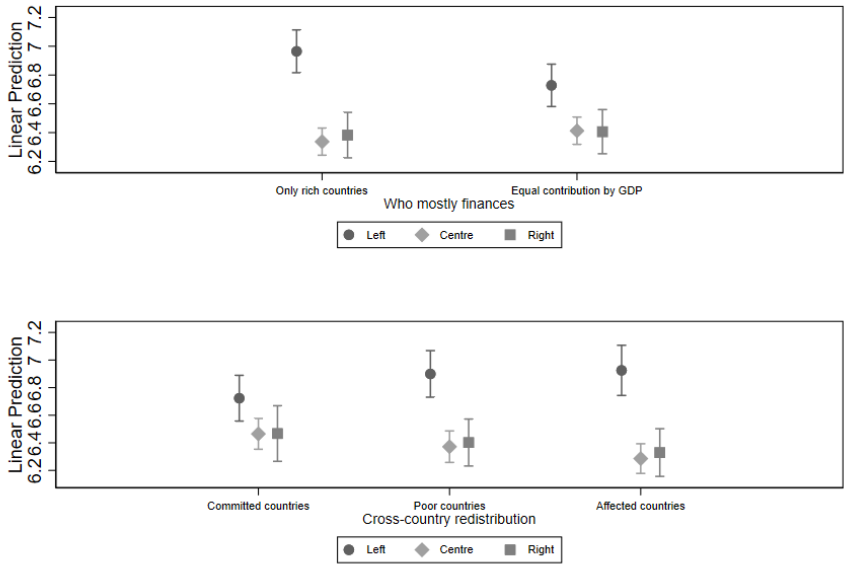


Note: Estimates are based on OLS regression without respondent-level controls. The sample for the policy selection model includes 7,980 respondents, while the fairness model refers to 3,990 respondents. See Appendix for full methodological details.

The respondents of left and right orientation differ on the weight they give to attributes when assessing the *fairness* of climate change policies. Interestingly, those oriented as right or centre, evaluate proposals from the European Union as fairer by 0.61 ($p<0.05$) compared to those at left. Those who are oriented as right or centre consider fairer by 0.52 point ($p<0.05$) the policy package with uncertain start of policies compared to those at left. When it comes to who mostly finances the policy, the respondents defined as centre oriented, compared to the left oriented, are more likely by 0.32 points ($p<0.05$) to evaluate as fair policy mix with equal contribution by all countries compared to the disproportioned effort of the rich countries. No difference, however, are found between left and right orientation on fairness assessment. Similar results are found for another dimension of global inequality, because centre-oriented respondents are less likely by 0.41 ($p<0.05$) to consider fair the policies that contain the focus on effected countries compared to those committed to climate related

investments in reference to those on the left. *Figure 4* contains predicted values along these two dimensions. The figure shows that politically left oriented respondents assign the highest fairness scores to highly egalitarian options. Regarding both dimensions of within country inequality related to sources of within country financing and accompanying socio-economic policies, no statistically significant difference by political orientation have been found.

Figure 4. Predicted values with 95% confidence intervals from the OLS regression examining the interaction between political orientation and policy attributes related to financing and cross-country redistribution.



Note: Estimates are averaged across respondents (N = 3,990). See Appendix for full methodological details.

4.4 Heterogeneity by other groups

In this section we report some key findings on whether and how different group characteristics moderate the preference for policy packages in line with the pre-registration, based on the perspective on trust in institutions, the psychological distance theory (Brügger et al., 2016; Keller et al., 2022) and egalitarian orientation perspective. The conditional average marginal component effects are calculated for several groups such on low and highly educated, young and old respondents, high and low income, among people with skilled and unskilled occupations, by gender, by the intention to have

children and the presence of children and by prior knowledge. Regarding the trust in international institutions and in particular the EU, most trustworthy are men, the higher educated, younger individuals (e.g. 25-34), individuals with middle low income and in skill occupations, as well as those who (intend to) have children, whereas the prior knowledge does not show clear patterns as both those with medium low knowledge and high knowledge are more likely to support policies financed by the EU.

Regarding the psychological distance, climate is perceived as a higher threat that needs immediate action, particularly by women, the higher educated, the youngest and the oldest respondents, those with relatively higher income, in skilled occupations, with and with the intention to have children, and moderately knowledgeable about the topic. On average, respondents with medium to high education, medium to high income, women, age groups 55-70, respondents with lower prior knowledge are more likely to express egalitarian concerns in both outcomes while there is no a clear consensus between skilled and unskilled respondents as well as those with and without children in how egalitarian features are assessed for policy choice and fairness. The information on those analyses is available in the supplementary material.

5. DISCUSSION AND CONCLUSION

This study investigates the determinants of public support for climate change mitigation policies and perceptions of their fairness in Italy through a conjoint experiment in the context of rising threat of climate crisis for future generations (Gualdi, 2025). It adds to the growing body of literature aimed at exploring the drivers for citizens' support for climate mitigation policies through survey experiment methodologies (for a more comprehensive review, see Drews and Van den Bergh, 2015; Bergquist et al., 2020). Some of the previous studies covered Germany (Baute, 2024; Schönhage et al., 2024), United States (Bergquist et al., 2020), Switzerland and the United Kingdom (Rhein and Bernauer, 2025) and Poland (Kantorowicz, 2022) or performed a cross-country survey experiment in France, Germany, the United Kingdom, and the United States (Bechtel et al., 2022), or Sweden,

Spain, South Korea, and China (Fairbrother et al., 2021). Within the literature, this article analyses how trust in institutions, perceived proximity to climate change impacts (based on psychological distance theory) and respondents' ideology (e.g., egalitarian orientations) shape preferences for climate policy and their perceived fairness in Italy. The few other studies focusing on the Italian context covered very specific measures such as those for wind energy (Caporale et al., 2024) and energy saving investment choices (Faccioli et al, 2024).

Building on a set of (pre-registered) theoretical assumptions, we expected that people's choices for climate change policies would be influenced by the trust in institutions, the timing of policies, and egalitarian concerns. Similarly, we expected that evaluated fairness of policies would reflect these aspects. Overall, we find partial confirmation of our initial expectations.

First, trust in institutions, particularly the European Union, was associated with greater support for proposed policies. However, this trust did not significantly shape fairness perceptions. These findings align with existing literature. For example, Bechtel et al. (2022) also found that multilateralism increases support for climate policy. When a policy is proposed and supported by a coalition of countries, such as the European Union, support tends to rise.

Second, psychological distance emerged as the most consistent driver of preferences. Respondents preferred policies that begin immediately over those with uncertain or delayed timelines, aligning with the hypothesis that perceived urgency boosts support. This preference was consistent across political orientations, reinforcing the idea that climate action perceived as immediate and relevant garners broader public backing. These findings are consistent with psychological distance literature and with a previous conjoint study by Rhein and Bernauer (2025), which found that reducing uncertainty about long-term policy benefits can help mitigate the negative impact of high short-term costs on public support.

Third, egalitarian concerns mattered, but primarily within the national context. Respondents favored policies funded through progressive taxation or emissions charges over regressive schemes. However, concern for global redistribution was limited, and accompanying socio-economic measures, such as support for low-income groups, had only a weak influence on fairness evaluations. This suggests that domestic equity resonates more strongly than global justice in shaping attitudes toward climate policy. Compared to previous studies, our findings are partially aligned. For example, Baute's conjoint experiment (2024) found that German citizens generally favored packages including social investment policies funded by increased taxes on the wealthy. Likewise, the study by Bergquist et al. (2020) in the U.S. showed that integrating social and economic programs can broaden support for climate policies. While we found similar support for progressive financing schemes, Italians did not prefer social investment programs but did evaluate them as fairer.

Fourth, our study shows a gap between how people choose and what they perceive as fair regarding certain features. This discrepancy highlights the complexity of public opinion, where preferences do not always align with normative judgments. This gap is particularly evident when it comes to the distribution of costs and benefits within countries or the trust in institutions. However, further misalignment is visible in the interaction with political orientation, particularly in the domain of the distribution of costs and benefits across countries.

Finally, we examined how political views moderate preferences for policy packages and their perceived fairness. In the Italian context, this is particularly relevant, as climate change was historically a depoliticized issue until recently (Cabeza et al., 2024; Lewis et al., 2019; Biancalana and Ladini, 2022). Left-leaning respondents showed stronger egalitarian preferences and a greater sense of urgency, whereas right-leaning and centrist respondents were more tolerant of delayed action and less supportive of redistributive mechanisms. Interestingly, centre-right respondents perceived policies proposed by the European Union or with vague start dates as fairer, possibly reflecting a preference for technocratic or gradualist approaches. These findings align with previous research

(Hornsey et al., 2016), which showed that political orientation is a significant predictor of environmental and climate concerns. Although much of the research on ideological divides comes from the U.S. and their generalizability raised concerns (Fairbrother, 2022), European studies indicate that while ideology influences climate attitudes in Western Europe, its impact is weaker or absent in Central and Eastern Europe (McCright et al., 2016). In this study, we find that individuals with leftist ideologies report stronger egalitarian and more proactive attitudes than those on the right.

In summary, Italians tend to support climate policies that: (i) address domestic inequality through progressive funding mechanism, (ii) are backed by trusted institutions (especially the EU), and (iii) demonstrate urgency. Fairness perceptions follow a similar logic but are more narrowly influenced by income redistribution and support for disadvantaged groups. Our findings reveal that support for climate action is more conditional on near-term benefits and national equity than on abstract global justice. Furthermore, impressive heterogeneity in terms of perceptions of fairness are found among different political opinions. And, surprisingly, we observe that not only right oriented respondents but also those oriented at centre embrace a similar point of view in this term. One potential interpretation is that right and centre-oriented individuals are more sensitive to the short-term drawbacks of climate change policies, such as rising energy costs and job losses among low-skilled workers, that, in turn, can further deepen income and consumption disparities.

The distributional dimensions of climate policy provide valuable insights into public perceptions of fairness among Italian respondents. The findings reveal a pronounced preference for policies that address domestic inequality, particularly those that propose taxing carbon emissions or targeting the wealthy to finance climate initiatives. This suggests a strong public inclination toward redistributive measures aimed at enhancing equity within national borders. Notably, however, the study also uncovers a limited concern for global redistribution. While fairness within the country appears to resonate strongly with respondents, this sentiment does not extend to support for international wealth transfers in the context of climate action. This distinction between domestic and global equity

concerns represents a significant contribution to the literature, offering a more refined understanding of how fairness considerations influence climate policy acceptance. Future research could build on these findings to explore whether similar patterns emerge in other national contexts.

Our findings offer important implications for climate policy design. First, domestic redistributive mechanisms, such as progressive taxation and targeted support for lower-income groups, may enhance the perceived fairness and political feasibility of climate mitigation. Second, supranational organizations can play a major role in advancing climate action, particularly in contexts where national trust is low. However, the public's limited concern for global equality highlights a challenge for international climate justice narratives, especially in advanced economies. Overall, effective and publicly accepted climate policy must not only be scientifically sound but also socially and politically legitimate grounded in fairness, credible institutional backing, and a sense of urgency that bridges the gap between abstract threat and immediate relevance.

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