

# International Attitudes Toward Global Policies

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## Abstract

The “Global Climate Scheme” (a global carbon price funding a global basic income) would be an effective and progressive way to combat climate change and poverty. Yet, such policy is mostly absent from political platforms and the policy debate. Using surveys on 40,000 respondents in 20 countries covering 72% of global CO<sub>2</sub> emissions, we document majority support for this and other global policies. Using a complementary survey on 3,000 U.S. respondents, we test several hypotheses that could reconcile strong stated support with a lack of salience of these issues. The complementary analyses show that the stated support is mostly sincere, although we cannot rule out insincerity for 3% to 9% of the population from the willingness to sign a real-stake petition and a list experiment, respectively. Global redistributive policies rank high (though not highest) in the prioritization of policies. Conjoint analyses reveal that the Democratic party would not significantly lose votes if it endorsed the Global Climate Scheme, while a candidate at the Democratic primary would actually win votes by doing so. Accurate beliefs about the level of support for the scheme dismisses the hypothesis of pluralistic ignorance of the support. Strong universalistic attitudes are confirmed in more general questions, suggesting that the support cannot be explained away by malleable opinion or experimenter demand. In sum, our findings indicate that global policies are genuinely supported by a majority of the population. Public opinion is therefore not the reason that they do not prominently enter political debates.

**JEL codes:** P48, Q58, H23, Q54

**Keywords:** Climate change, global policies, cap-and-trade, perceptions, survey.

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## 1 Introduction

Extreme poverty and climate change are among the most critical issues of our time. The first could be solved by redistributive transfers, the second by capping global emissions. A fair and effective policy to tackle these two problems is the “Global Climate Scheme” (GCS), which combines these two solutions. The GCS consists of a global cap-and-trade system, where emission rights are auctioned each year to polluting firms, and of a global basic income, funded by the auction revenues.

In this paper, we study attitudes toward global policies that address climate change, global poverty or inequalities, with a focus on the GCS. Using an international survey on climate attitudes, we document majority support for global policies like the GCS in 20 among the largest countries. Yet, such global policies are nowhere to be seen in policy debates. Why? To explain this paradox (absence of the policy despite majority stated support), we run a complementary survey on 3,000 U.S. respondents and test different hypotheses: insincerity of support for the GCS, pluralistic ignorance (i.e. false belief that most do not support it), defavorable electoral outcomes for a candidate that would support it, or low priority given to global issues. Furthermore, we also study attitudes toward other global policies, global redistribution, and universalistic values.

## 2 Results

### 2.1 Data

**Beware, data collection is still ongoing (we have 80% of the final sample) so results are partial and not definitive. Please do not cite at this stage.**

We measure stated support for different global policies using a survey on climate attitudes conducted in 2021 on 40,680 respondents from 20 countries covering 72% of global CO<sub>2</sub> emissions (the questions of this survey on national policies are analysed in another paper<sup>31</sup>). We then conduct a representative survey on 3,000 U.S. respondents to study in

Figure 1: Support for global climate policies.

Share of *Somewhat* or *Strongly* support among non-indifferent answers (in percent,  $n = 40,680$ ). The color blue denotes a relative majority.

	High-income												Middle-income									
	Australia	Canada	Denmark	France	Germany	Italy	Japan	Poland	South Korea	Spain	United Kingdom	United States	Brazil	China	India	Indonesia	Mexico	South Africa	Turkey	Ukraine		
Level at which climate policies are needed																						
Global	85	78	87	81	85	88	92	94	88	86	88	88	70	85	88	87	78	86	88	90	82	76
Federal/Continental	46	67	58	48	37	48	30	40	40	47	52			48	48	61	67	50	41	42	41	24
State/National	44	54	50	45	27	45	28	50	38	65	34	53	41	42	36	32	59	35	26	53	58	35
Local	36	48	45	33	26	37	24	35	37	41	30	43	35	35	35	29	50	24	28	42	41	27
Dependence on what other countries do																						
If other do less, [country] should do more	88	82	86	91	87	82	95	91	89	90	91	85	86	93	93	93	89	96	97	93	92	87
If other do more, [country] should do more	88	84	91	87	88	82	91	92	82	90	89	90	87	91	89	95	86	94	92	89	93	80
Global climate policies																						
Global carbon budget (+2°C) divided in tradable country shares	84	79	85			74	89	82	81	92	85	90		90	82	95	89	95	92	90	88	88
Global tax on millionaires to finance low-income countries	82	74	84	72	86	83	90	88	80	89	86	85	73	92	86	98	92	97	93	89	87	94
Global democratic assembly on climate change	81	74	80	77	82	76	90	88	85	85	88	77	71	91	84	97	88	96	94	89	87	93
Global tax on GHG financing a global basic income	49	41	44	57	51	52	55	53	47	53	50	40	49	79	76	92	88	91	83	54	60	77
Burden sharing preferences for the global carbon budget																						
Emission share should be in proportion to population*	88	87	87	90	90	85	91	84	89	91	89	88	87	91	84	96	91	94	92	93	90	85
Countries that have emitted more since 1990 should receive a lower share*	72	69	73	57	80	76	80	69	71	75	74	72	68	82	79	92	86	91	75	73	81	74
Countries that will be hurt more by CC should receive a higher share*	71	71	68	62	74	67	71	84	80	72	75	68	59	84	78	95	90	91	77	81	83	69
Emission share should be in proportion to current emissions	54	55	53			47	46	63	57	68	49	48		69	53	86	77	88	56	55	77	46

detail the sincerity and rationales behind the support for the GCS, the attitudes toward various global policies, global redistribution, and universalistic values.

## 2.2 International support

The global survey shows strong support for climate policies enacted at the global level (Figure 1). When asked “At which level(s) do you think public policies to tackle climate change need to be put in place?”, 70% (in the U.S.) to 94% (in Japan) choose the global level. Meanwhile, the European level is chosen by less than half of the European respondents while the federal level is chosen by only 52% of U.S. respondents. More local levels are generally chosen less than broader ones. This preference for the global level is consistent with (at least) two of the three key motives to support climate policies identified in the literature: <sup>31,32,70</sup> effectiveness and fairness (the third being self-interest).

Several global policies obtain an absolute majority support in all countries: “a tax on all millionaires in dollars around the world to finance low-income countries that comply with international standards regarding climate action [which] would finance infrastruc-

ture and public services such as access to drinking water, healthcare, and education”, “a global democratic assembly whose role would be to draft international treaties against climate change [where] each adult across the world would have one vote to elect members of the assembly” (though this one receives only 48% of support in the U.S.), and an international emissions trading system where “countries that emit more than their national share would pay a fee to countries that emit less than their share”. In high-income countries, this global quota obtains 64% of absolute (i.e. *somewhat* or *strong*) support and 84% of relative support (i.e. excluding *indifferent* answers). The support is even higher in middle-income countries, though one should interpret the results with caution in middle-income countries as their samples are only representative of the online population (young, graduated and urban people are over-represented). After the support for the global quota, we ask how the carbon budget should be divided among countries. The preferred burden-sharing rule is to allocate the rights to emit on an equal per capita basis: this fairness principle secures an absolute majority support in all countries, and a relative majority support never below 84%. Taking into account historical responsibilities or vulnerability to climate damages is also popular, though less consensual, while grand-fathering (i.e. allocating emission shares in proportion to current emissions) comes last everywhere. The Global Climate Scheme, i.e. a global quota where emission rights are allocated on an equal per capita basis, has the same distributive effects as a global carbon tax that would fund a global basic income. We also test the support for this policy, but here we specify to the respondents the distributive effects: that the \$30 per month basic income would lift the 700 million people who earn less than \$2/day out of extreme poverty, and that fossil price increases would cost the typical person in their country a certain amount (that we specify). Despite their similarity, the global tax is less supported than the global quota, and it even fails to obtain a majority in Anglo-saxon countries. This lower support is likely due to the fact that distributive effects are made salient in the case of the tax, and that people may find a quota more effective than a tax to reduce emissions. This interpretation is consistent with the level of support for the global quota once we make the distributive effects salient, which we do in the complementary surveys.

## **2.3 Stated support for various policies**

### **2.3.1 Global Climate Scheme**

In the complementary U.S. survey, we describe the Global Climate Scheme, explain its distributive effects (specifying the amounts at stake), test the understanding that typical people would lose in high-income countries and that the poorest humans would win using an incentivized question, and then give the correct answer. We proceed the same way for a National Redistribution Scheme (NR) that would tax the top 5% to finance cash transfers offsetting the monetary loss of the GCS for the median emitter, expecting people to find out at the comprehension question that the richest would lose and the typical people in their country would win. Then, we summarize the schemes to make sure that the respondents remember them. Right after, we ask a last incentivized question of comprehension, and latter give the expected answer that a typical fellow citizen would neither win nor lose with the GCS and NR combined. Finally, we directly ask the support for the GCS and for NR in a simple *Yes/No* question: the stated support for each is at 54% ( $n = 3,000$ ).

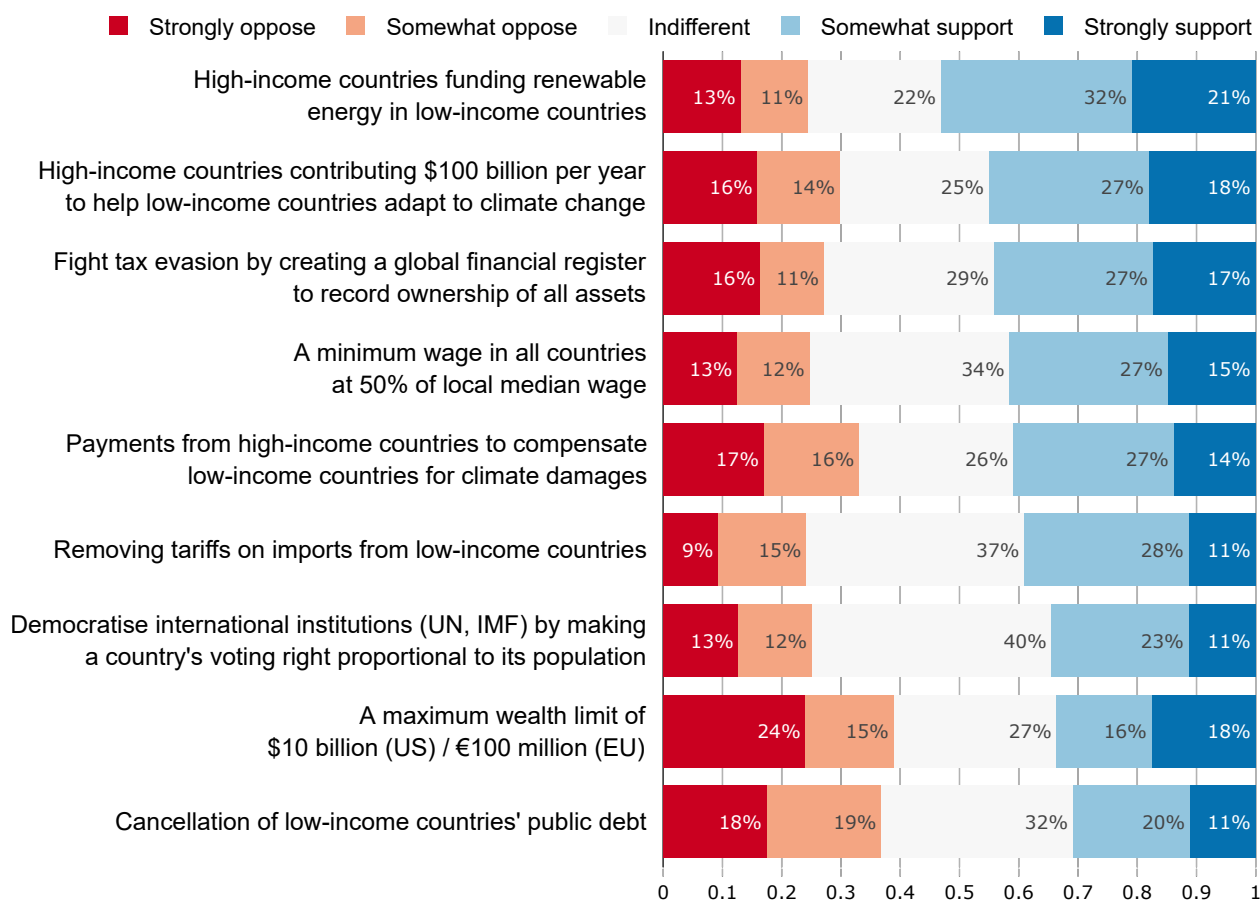
### **2.3.2 Other global policies**

We also test support for other global policies (Figure 2). All receive relative majority support but two: “a maximum wealth limit of \$10 billion” and the “cancellation of low-income countries’ public debt”. Climate-related policies are particularly popular: “high-income countries funding renewable energy in low-income countries” obtains absolute majority support while loss and damages compensation (which was approved at the COP27) receives a relative support of 57%.

### **2.3.3 Foreign aid**

After explaining that “0.4% of U.S. government spending (that is, 0.2% of U.S. GDP) is spent on foreign aid to reduce poverty in low-income countries”, less than 20% state that U.S. foreign aid should be reduced while 57% state that it should be increased, including 14% who support an unconditional increase. To the 43% who answer that aid should be increased but only if some conditions are respected, we later ask them what condition(s) should be required. The three conditions most chosen are all largely respected by the Global Climate Scheme: “that we can be sure the aid reaches people in need and money is

Figure 2: Support for various global policies in the U.S. ( $n = 3,000$ ).



not diverted” (chosen by 74%), “that recipient countries comply with climate targets and human rights” (59%), and “that other high-income countries also increase their foreign aid” (44%). On the other side, not wishing to increase their country’s foreign aid is mostly justified by prioritizing one’s fellow citizens or viewing each country as responsible for its own fate.

## 2.4 Sincerity of support

We use several methods to assess the sincerity of the support for the Global Climate Scheme: a list experiment, a real-stake petition, conjoint analyses, and the prioritization of policies. All methods suggest that the support is either completely sincere, or the share of insincere answers is limited.

### 2.4.1 List experiment

The tacit support for the GCS measured through the list experiment is 46%, i.e. 8 p.p. lower than at the direct question. This may be the sign of a social norm pushing some people to state that they support the GCS although they secretly do not. Still, if there is a social norm in favor of the GCS, there is a similar norm in favor of the National Redistribution Scheme, as the gap between the tacit and direct support for it is comparable (at 7 p.p.).

Table 1: Number of supported policies in the list experiment in function of the composition of the list. *G* stands for the Global Climate Scheme and *R* for the National Redistribution Scheme ( $n = 3,000$ ).

Number of supported policies	
Mean	1.364
List contains: <i>G</i>	0.464*** (0.054)
List contains: <i>R</i>	0.494*** (0.053)
List contains: $G \times R$	-0.001 (0.091)
Observations	1,799
$R^2$	0.111

### 2.4.2 Petition

When told that “we will send the results to the U.S. President’s office, informing him what share of American people are willing to endorse the Global Climate Scheme”, 4 p.p. fewer people are willing to sign a petition for the GCS than to simply state their support. For the National Redistribution Scheme, the proportion of support is not significantly different in the petition and in the simple question.

### 2.4.3 Conjoint analyses

In our *conjoint analyses*, we ask respondents to make five choices between pairs of political platforms. The first conjoint analysis suggests that the GCS is supported for itself,

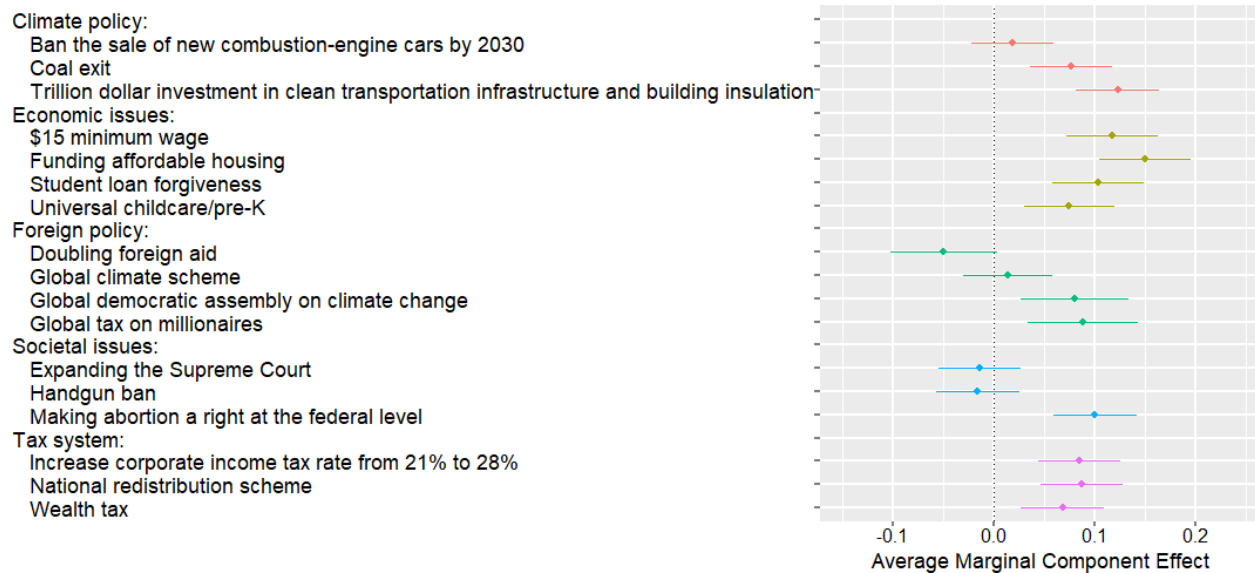


independently of being complemented by a national climate policy (“Coal exit”, denoted C) or the National Redistribution Scheme. Indeed, 55% of ( $n = 3,000$ ) respondents prefer the combination of C, NR and the GCS to the combination of C and NR alone, indicating a similar support for the GCS conditional on NR and C than for the GCS alone. For the second analysis, we split the sample into four random branches. Results from the first branch show that 55% ( $n = 750$ ) prefer the combination of C, NR and the GCS to NR alone. The second shows that the support for the GCS conditional on NR, at 59% ( $n = 750$ ), is somewhat higher than the direct support for the GCS. The third, that the support for C conditional on NR is even higher, at 63% ( $n = 750$ ). This is confirmed by the fourth, showing that 52% ( $n = 750$ ) prefer C to the GCS, both conditional on NR. In other words, there is majority support for the GCS and for C, slightly more people prefer C but C does not act as a substitute for the GCS, and some people find the GCS complementary to NR though the number of people requiring NR to support the GCS remains small.

The third analysis suggests that a Democratic candidate would not significantly lose voting share at the 2024 presidential election if he or she were to endorse the GCS. To estimate this, we present to two random branches of the sample hypothetical Democratic and Republican platforms that differ only by the presence (or not) of the GCS in the Democratic platform. Although the share of respondents choosing “None of them” is slightly higher (at 13% instead of 11%) when the Democratic platform includes the GCS, the share choosing the Democrat is not significantly lower (52% in both cases).

Our last two analyses is run on the subsample of non-Republicans ( $n = 2,000$ ), i.e. the respondents who choose *Democrat*, *Independent*, *Non-Affiliated* or *Other* for their political affiliation. We frame the choice between two platforms as a hypothetical duel at the 2024 Democratic primary and force the respondents to choose between candidate A or B. In the fourth analysis, a policy (or an absence of policy) is randomly drawn for each platform in each of five categories: *economic issues*, *societal issues*, *climate policy*, *tax system*, *foreign policy* (Figure 11). Except for the category *foreign policy*, which features the GCS 42% of the time, the policies are prominent progressive policies and they are drawn uniformly. When a platform features the GCS and not the other, the one with the GCS is chosen 53% (which is significantly more than half) of the time ( $n = 3,000$ ). The fifth analysis draws random Democratic platforms in a similar ways, except that candidate A’s platform always contains the GCS while candidate B includes no foreign policy. In this case, 61% of respondents choose A ( $n = 3,000$ ). In short, our conjoint analyses indicate that a candidate at the Democratic primary would have more chances to obtain the nomination by en-

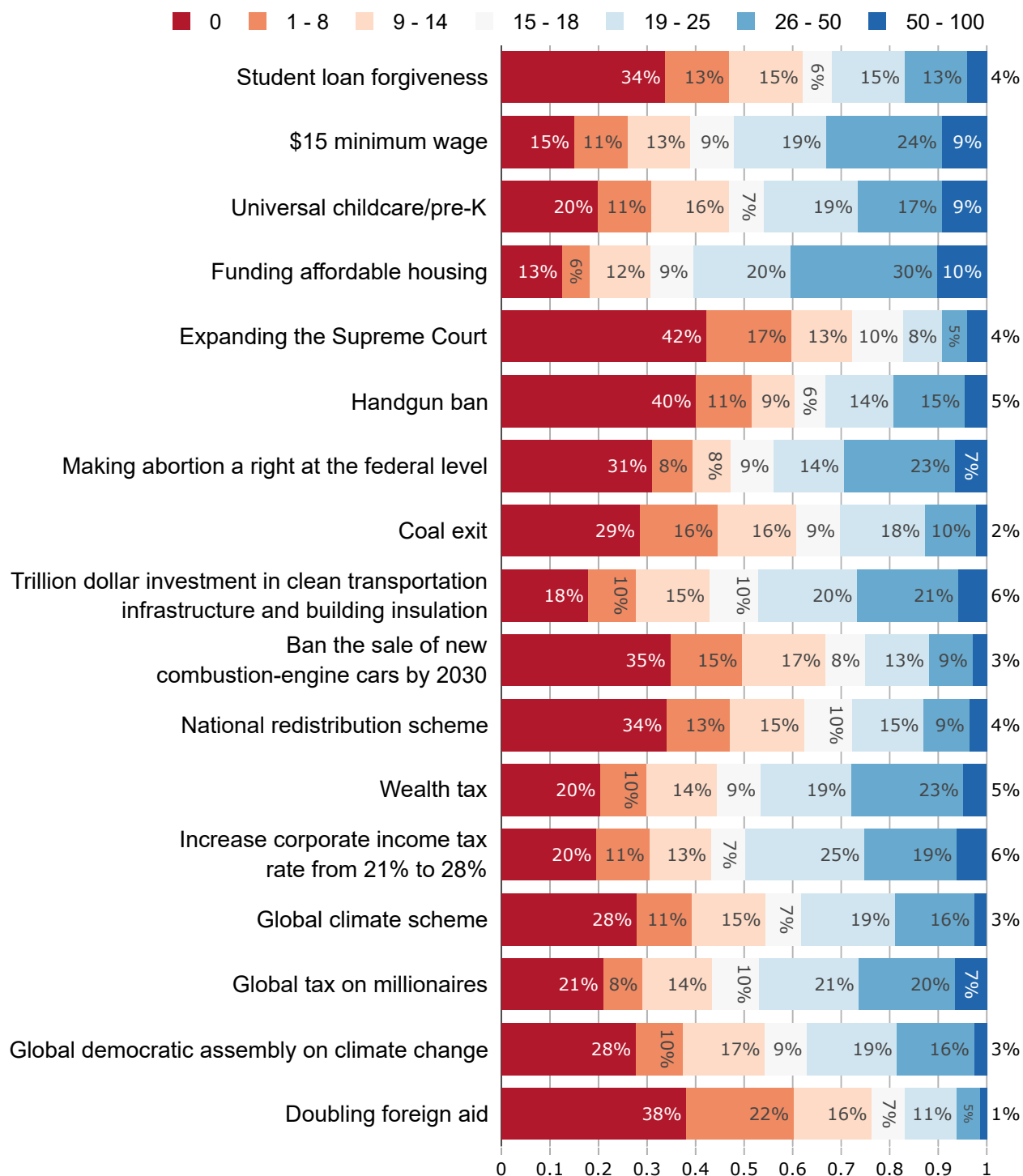
Figure 3: Conjoint analysis (asked only to non-Republicans). Average Marginal Component Effects (relative to the baseline: an absence of policy of that category) of policies in the choice of candidate for a hypothetical duel in the 2024 Democratic primary, where both platforms are randomly drawn ( $n = 2,000$ ).



dorsing the GCS, and this endorsement would not penalize her or him at the presidential election. This result reminds the finding that 12% of Germans shift their voting intention from SPD and CDU/CSU to the Greens and the Left when they are told that the latter parties support global democracy.<sup>46</sup>

At the end of the survey, we pick six policies at random (and uniformly) among the progressive policies used in the last conjoint analyses, and ask respondents to allocate 100 points (using sliders) among them, with the instruction that “the more you give points to a policy, the more you support it”. For each policy presented, the average support is thus 16.67 points (Figure 4). The GCS ranks in the middle of all policies (9th. out of 17), with an average number of points of 15.3 which is only slightly lower than average. It is higher than to “ban the sale of new combustion-engine cars by 2030” (13.4) and “coal exit” (10.0), but lower than the third climate policy: “trillion dollar investment in clean transportation infrastructure and building insulation” (20.3). The support for other globally redistributive policies is variable: “Doubling foreign aid” is the least supported policy (8.4), while the “Global tax on millionaires” is one of the five policies with more than 20 points (20.2), and the “global democratic assembly on climate change” is just below the GCS (14.5). The most supported policies are “Funding affordable housing” (28.5), “\$15 minimum wage” (23.8), and “Universal childcare/pre-K” (22.1).

Figure 4: Prioritization of policies. Each respondent faces six policies taken at random from the ones below and allocates 100 points among them to signal the strength of their support for each one ( $n = 3,000$ ).



## 2.5 Second-order beliefs

To explain a strong support for the GCS despite its absence from political platforms and the public debate, we hypothesized pluralistic ignorance, i.e. that most people and policy-makers wrongly perceive the GCS as unpopular. People would then hide their support for such globally redistributive policies, knowing that advocating for them would be vain. We do not find any evidence of pluralistic ignorance in an incentivized question on the perceived support. On the contrary, people have quite accurate beliefs regarding the level of support for the GCS. Indeed, the mean (resp. quartiles) perceived support is 52.0% (resp. 36, 53, 69%,  $n = 1,500$ ) vs. an actual support of 53%. For the record, the second-order beliefs are equally accurate for the National Redistribution Scheme, with mean (resp. quartiles) perceived support of 54.7% (resp. 40, 55, 71%,  $n = 1,500$ ) vs. 56%.

## 2.6 Universalistic values

We ask broad question on people's values, to see whether their core values are consistent with universalism. Asked what group they defend when they vote ( $n = 3,000$ ), 19% choose "sentient beings (humans and animals)", 25% "humans", 34% "Americans", 15% "My family and myself", and the rest (7%) choose another group (mostly "My State or region" or "People sharing my culture or religion"). The first two categories can be described as universalist, and they represent close to one out of two people. The share of universalist even constitutes a majority (at 51%) of non-Republicans. When asked what should U.S. diplomats defend in international climate negotiations, only 14% prefer "U.S. interests, even if it goes against global justice"; 25% prefer global justice (mitigated or not by U.S. interests) and the bulk of respondents (37%) prefer "U.S. interests, to the extent it respects global justice" ( $n = 3,000$ ). Furthermore, when asked to judge the extent to which climate change, global poverty and U.S. inequality are an issue, climate change is generally viewed as the biggest problem (with a mean of 0.40 once we recode answers between  $-2$  and  $2$ ), followed by global poverty (0.20) and U.S. inequality (0.19,  $n = 3,000$ ). Finally, we elicit universalistic values through a lottery experiment. We automatically enroll the respondents in a lottery with one \$100 prize. Respondents have to choose which share of the prize to keep for themselves vs. give to a person living in poverty. The charity donation is destined either for an Africa or an American, depending on the respondent's random branch. We observe no significant variation in the willingness to donate in function of the recipient's origin (the average donation is around \$33). Overall, answers to these broad

value questions are consistent with half of Americans supporting global policies like the GCS, given that people are as much willing to give to poor Africans than to poor Americans, they find that global issues are among the biggest problems, almost half of them are universalist when they vote, and most of them wish that U.S. diplomats take into account global justice.

### 3 Discussion

In 20 among the largest countries, we find strong majority support for global climate policies, even in high-income countries that would financially lose from the globally redistributive policies that we test. The complementary survey in the U.S. confirms these results. For example, there is a strong support for global taxes on the wealthiest, and majority support for our main policy of interest, a Global Climate Scheme that would establish both carbon pricing at the global level through an emission trading system, and a global basic income funded by its revenues. A list experiment and a real-stake petition show that the support for the GCS is mostly sincere. This genuine support is confirmed by the prioritization of this global climate policy above some prominent national climate policies, and consistent with close to half of the population holding universalistic (rather than nationalistic or egoistic) values. Moreover, the conjoint analyses reveals that a Democratic candidate should not lose voting shares by endorsing the GCS. Besides a potential lack of sincerity and weak opinions, we dismiss another hypothesis to explain the scarcity of global policies in the public debate despite a strong support: that people underestimate the support of their fellow citizens. As we ruled out all hypotheses of our registration plan,<sup>1</sup> we now need to study new explanations.

We see four potential explanations for the scarce mention of globally redistributive policies in the public debate. Among the new hypotheses, the first two are variations of pluralistic ignorance, and the last two represent complementary (rather than substitute) explanations. First, there may be pluralistic ignorance of universalistic values, of the support for the GCS, or of the electoral advantage of endorsing it *among policy makers*. We intend to test this hypothesis by running a survey on Congress staffers and Members of the European Parliament. Second, there may be a more subtle form of pluralistic ignorance: although people correctly predict what people would answer to a survey question, they may view globally redistributive policies as unrealistic, perhaps because they have

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<sup>1</sup>The project was preregistered in the Open Science Foundation registry ([osf.io/fy6gd](https://osf.io/fy6gd)).

never reflected upon the fact that many people across the world hold universalistic values and are supportive of global solidarity. Third, most people and perhaps even most policy makers may have simply never heard of the GCS, let alone built their political ideas upon it. The ignorance of the GCS itself seems supported by the feedback fields, where the most common answer is a variation upon “thank you for this interesting, thought-provoking survey”. Fourth, most institutions are national: the largest scale votes take place at the national level, most media target a national audience, most commentators frame their discourse from a national perspective, and relations to foreign countries as conflictual. The prominence of national institutions may create a nationalistic bias in political thoughts, silencing the universalistic values of people.

If any (or several) of the remaining hypotheses is confirmed by evidence, we could draw the same conclusion: There is a strong support for global policies that address climate change and global inequality, even in high-income countries, and the frontier of what is considered politically realistic might soon shift on this issue. Uncovering evidence for this might actually contribute itself to garner more attention to global policies in the public debate.

## Methods

**Data collection.** The paper relies on two different surveys. The first survey was conducted between March 2021 and March 2022 on 40,680 respondents from 20 countries (between 1,465 and 2,488 respondents per country). The second, denoted US1, was conducted on 3,000 U.S. respondents in January and February 2023. We used the survey companies *Dynata* and *Respondi*. Stratified quotas ensure that the samples are representative along the dimensions of gender, age (5 brackets), income (4), region (4), education level (3), as well as ethnicity (3) for the U.S. To correct for small remaining imbalances, we apply survey weights throughout the analysis, constructed using the quotas variables as well as the degree of urbanity, and trimmed between 0.25 and 4. Appendix D confirms that our samples are representative

**Data quality.** The median duration is 28 minutes for the global survey and 15 minutes in the US1 survey. To ensure the best possible data quality, we exclude respondents who fail an attention test or rush through the survey (i.e. answer in less than 11.5 minutes in the global survey or 4 minutes in US1).

**Questionnaires and raw results.** The questionnaire and raw results of the global survey can be found in the Appendix of the companion paper.<sup>31</sup> The US1 raw results are reported in Appendix

B while the US1 survey structure and questionnaire are given in Appendix C. The questionnaires are the same as the ones given *ex ante* in the registration plan ([osf.io/fy6gd](https://osf.io/fy6gd)).

**Incentives.** To encourage respondents to answer accurately and truthfully, several questions of the US1 survey use incentives. For each of the three comprehension questions that follow the policies' descriptions, we reward three (randomly drawn) respondents with the correct answer with a \$50 gift certificate. For each of the questions asking respondents to guess the share of support for the GCS and NR, we reward three people who are closest to the true value with a \$50 gift certificate. For the donation lottery question, we randomly draw one respondent and split the \$100 prize between the NGO GiveDirectly and the winner according to the winner's choice. In total, our incentives scheme distributes gift certificates (and donation) for a value of \$850. Finally, respondents have an incentive to answer truthfully to the petition question, given that they know that the results to that question (the share of respondents supporting the policy) will be transmitted to the U.S. President's office.

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## A Literature review

### A.1 Attitudes and perceptions

#### A.1.1 Population attitudes on global policies

Carattini et al.<sup>24</sup> test the support for different variants of a global carbon tax, but their samples are representative only along gender and age, and as respondents face only one variant, the sample size for a given variant is about 167 respondents per country. They find more than 80% of support for any variant in India, between 50 and 65% in Australia, the UK and South Africa, and 43 to 59% of support in the U.S., depending on the variant. The support for a global carbon tax funding an equal dividend for each human is close to 50% in high-income countries (e.g. at 44% in the U.S.), consistently with what we find in the OECD survey (see Figure 1). Using a conjoint analysis in the U.S. and Germany, Beiser-McGrath & Bernauer<sup>17</sup> find that the support for a carbon tax increases by up to 50% if it applies to all industrialized countries rather than just one's own country.

In surveys in Brazil, Germany, Japan, the UK and the U.S., Ghassim<sup>46</sup> finds 55 to 74% of support for "a global democracy including both a global government and a global parliament, directly elected by the world population, to recommend and implement policies on global issues". Using an experiment, he also finds that, in countries where the government stems from a coalition, voting shares would shift by 8 (Brazil) to 12 p.p. (Germany) from parties who are said to oppose global democracy to parties that supposedly support it. For example, the Greens and the Left gained respectively 9 and 3 p.p. in vote intentions while the SPD and the CDU-CSU each lost 6 p.p., when Germans respondents were told that (only) the former parties support global democracy. Ghassim<sup>46</sup> also document survey results which show strong majorities support in each of 18 countries for the direct election of one's country's UN representative. Similarly, in each of 10 countries, there are clear majorities in favor of "a new supranational entity [taking] enforceable global decisions in order to solve global risks"<sup>40</sup>. Actually, already in 1946, 54% of Americans agreed (and 24% disagreed) that "the UN should be strengthened to make it a world government with the power to control the armed forces of all nations"<sup>43</sup>. In surveys in Argentina, China, India, Russia, Spain, and the U.S., Ghassim et al.<sup>47</sup> find support for UN reform that would make United Nations' decisions binding, give veto powers at the Security Council to a few other major countries, and complement the highest body of the UN with a chamber of directly elected representatives.



Relatedly, Meilland et al.<sup>77</sup> find that Americans and French people prefer an international settlement of climate justice even if it impedes on sovereignty. In a 2013 survey in China, Germany and the U.S., Schleich et al.<sup>93</sup> show that more than three quarter of people think that international reached so far are not successful and that future agreements are important. In Finland, Sivonen<sup>94</sup> finds that a carbon receives higher support if enacted at the global level (54%) rather than at the national level (40%).

These specific questions are in line with the answers to more general questions. In each of 36 countries, Group<sup>51</sup> find near consensus that “for environmental problems, there should be international agreements that [their country] and other countries should be made to follow” (overall, 82% agree and 4% disagree). In each of 29 countries, ISSP<sup>64</sup> find near consensus that “Present economic differences between rich and poor countries are too large” (overall, 78% agree and 5% disagree).

### **A.1.2 Population attitudes on climate burden sharing**

Despite their differences in the description of the fairness principles, the surveys on burden-sharing rules show consistent attitudes. Or at least, their various results can be made compatible with the following interpretation. Concerning emissions reductions, most people want that every country engage in strong decarbonization effort together, with a global quota converging to climate neutrality in the medium run. Concerning the financial effort, most people support high-emitting countries paying and low-income countries receive funding. The most supported rules are those that appear equitable, in particular an equal right to emit per person.

This interpretation helps understanding the apparent differences between articles, which approach burden sharing from different angles: cost sharing (i.e. in money terms), effort sharing (in terms of emissions reductions), or resource sharing (in terms of rights to emit). Extant papers adopt the cost sharing or effort sharing approaches and preclude any country being a net receiver of money. Also, by focusing on either the financial or the decarbonization effort, these surveys miss the other half of the picture, which can explain why some papers find strong support for the ability-to-pay principle while others find strong support for grandfathering (defined as emissions reductions being the same in every country). The literature follow these approaches to stick to the terms used by the UNFCCC. Yet, we argue that the resource sharing approach is preferable to uncover attitudes, as it unambiguously describes the distributive implications of each rule while achieving an efficient location of emissions reductions and explicitly allowing for mone-

tary gains for some countries.

Now, let us summarize the different papers' results in the light of this clarification. Schleich et al.<sup>93</sup> find an identical ranking in the support for the burden-sharing principles in China, Germany, and the U.S.: polluter-pays followed by ability-to-pay, equal emissions per capita, and grandfathering. Note that the authors do not allow for emissions trading in their description of equal *emissions per capita*, which may explain its relatively low support. Yet, the relative support for egalitarianism also depends on how *the other* rules are described. Indeed, Carlsson et al.<sup>25</sup> find that Swedes prefer that "all countries are allowed to emit an equal amount per capita" rather than options where emissions are reduced in relation to current or historical emissions for which it is explicitly written that high-emitting countries "will continue to emit more than others". Bechtel & Scheve<sup>15</sup> find agreement that rich countries should pay more and historical emissions matter, but that rich countries should not be the only one to make the efforts. More precisely, their conjoint analysis in France, Germany, the UK and the U.S. shows that a climate agreement is 15 p.p. more likely to be preferred (to a random alternative) if it includes 160 countries rather than 20, and 5 p.p. less likely to be preferred if "only rich countries pay" compared other burden-sharing rules: "rich countries pay more than poor", "countries pay proportional to current emissions" or "countries pay proportional to historical emissions". Using a choice experiment, Carlsson et al.<sup>26</sup> find that the least preferred option in China and the U.S. is when low-emitting countries are exempted from any effort. Ability-to-pay is appreciated in both countries, though the preferred option in China is another one, which accounts for historical responsibility. In the U.S. and France, Meilland et al.<sup>77</sup> find that the most favored fairness principle is that "all countries commit to converge to the same average of total emissions per inhabitant, compatible with a controlled climate change". Furthermore, in each country, 73% disagree with grandfathering defined as "countries which emitted a lot of carbon in the past have a right to continue emitting more than others in the future". Meilland et al.<sup>77</sup> contain many other results, for example majorities prefer to hold countries accountable for their consumption-based rather than territorial emissions, and the median choice regarding historical responsibility is to hold a country accountable for their post-1990 emissions (rather than post-1850 or just their current emissions). Finally, in each of 28 (among the largest) countries, Dabla-Norris et al.<sup>30</sup> find strong majority for "all countries" to the question "Which countries do you think should be paying to reduce carbon emissions?". Asked to choose between a cost sharing based on *current* vs. *accumulated historic emissions*, a majority prefers *current emissions*

in all countries but China and Saudi Arabia (where the two options are close to equally preferred).

### A.1.3 Population attitudes on foreign aid

There is an extensive literature on attitudes toward foreign aid in donor countries. Its main insights are that most people overestimate the amount of foreign aid and that only a minority wants a cut in foreign aid compared to actual amounts, especially once they know them.

PIPA<sup>88</sup> shows that 83% of Americans support a multilateral effort to cut world hunger in half. PIPA<sup>89</sup> shows that in each of 20 countries, a majority thinks that developed countries “have a moral responsibility to work to reduce hunger and severe poverty in poor countries”, with an average agreement of 81%. In 7 OECD countries, they find that at least 75% are willing to pay for a program to cut hunger in half (at an estimated cost of e.g. \$50 a year for each American).

Kaufmann et al.<sup>69</sup> find that in each of 24 countries, perceived aid is overestimated, on average by a factor 7. In most countries, desired aid is larger than perceived aid.<sup>2</sup> They show that those in the top income quintile desire aid 0.13 p.p. lower than those in the bottom 40% – which is very close to what we find. Then, using a theoretical model as well as correlations between the level of lobbying and the actual aid (controlling for desired aid), they argue that the gap between actual and desired aid is due to political influence of the rich who defend their vested interests. In Kaufmann et al.<sup>69</sup>, the U.S. is an outlier: desired aid is at the other countries’ average (3% of GNI), but as misperceptions are enormous, perceived aid is twice as large as desired aid. Indeed, Gilens<sup>48</sup> shows that even American with high political knowledge misperceive actual aid, and finds that 17% fewer of them want to cut aid when we provide them specific information about aid amount. Similarly, Nair<sup>81</sup> finds that the relatively low support for aid in the U.S. is driven by information on global distribution, as people underestimate their rank by 27 centiles on average and overestimate the global median income by a factor 10.

Hudson & van Heerde<sup>60</sup> offer a critical review of the literature and show that the strong support for poverty alleviation largely stems from intrinsic altruism. Indeed, citing committee DFID<sup>84</sup> and PIPA<sup>88</sup>, they note that 47% of British people find that the aid is wasted due mainly to corruption, while Americans estimate that less than a quarter of the

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<sup>2</sup>Kaufmann et al.<sup>69</sup> offer the best results on desired aid because (as Hudson & van Heerde<sup>60</sup> criticize), other studies did not take into account misperceptions of actual aid.

aid reaches people who really need it and more than half ends up in the hands of corrupt government officials. And yet, most people still support aid, suggesting that they have nonutilitarian motives for doing so. Consistent with Henson et al.<sup>56</sup>, Bauhr et al.<sup>13</sup> find that support for aid is reduced by perception of corruption in recipient countries. However, this effect is reduced by the aid-corruption paradox: most corrupt countries need more help. Bodenstein & Faust<sup>21</sup> further show that right-wing Europeans or those who perceive strong corruption in their country are more likely to agree that recipient countries should “follow certain rules regarding democracy, human rights and governance as a condition for receiving EU development aid.” Using a 2002 Gallup survey as well as the 2006 World Values Survey, and consistently with Bayram<sup>14</sup>, Paxton & Knack<sup>85</sup> show that the main determinants for wanting more aid are trust, ideology, interest in politics, and being a woman (all positively associated).

#### A.1.4 Population attitudes on rich tax

We are not aware of any previous survey on a global wealth tax,<sup>3</sup> though surveys consistently show strong level of support from national wealth taxes. By asking how much taxes per year should a person with a certain income and wealth level pay, Fisman et al.<sup>38</sup> finds that the average Americans favors a 0.8% linear tax rate on unspecified wealth until \$2 million, and a 3% linear rate on inherited wealth. In 21 OECD countries, OECD<sup>82</sup> find strong majority support for higher taxes on the rich to support the poor (with nearly 70% overall agreement and less than 20% disagreement), while Isbell<sup>63</sup> finds similarly high level of support in 34 African countries. In the UK, Millionaires<sup>78</sup> find 69% support (and 7% opposition) for a 1.1% tax on wealth in excess of £10 million. In the U.S., Americans for Tax Fairness<sup>5</sup> find 67 to 71% support to “raise taxes for those earning more than \$400,000 a year”, “raise the income tax rate for those earning over \$1 million a year by 10 percentage points”, or “apply a 2% tax on an individual’s wealth above \$50 million each year, and 3% on wealth above \$1 billion”.

#### A.1.5 Population attitudes on ethical norms

**Universalism** Enke et al.<sup>37</sup> measure universalism, by asking American respondents to split \$100 between a random stranger and a random person closer to them with the same income. They distinguish different facets of universalism, and define *foreign universalism*

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<sup>3</sup>We did not find any using the combination of “survey” or “attitudes” with “wealth tax” or “global wealth tax” in Google Scholar.

as giving to a foreigner rather than a fellow citizen. They find a home bias for most people, which may partly be due to concerns for inequality, as the split involves two persons with the same income, with the foreigner most certainly living in a poorer country than the American and thus enjoying a higher social status. That being said, a home bias probably remains once removing the concern for inequality, as 84% of Americans agree that “taking care of problems at home is more important than giving aid to foreign countries”<sup>88</sup>. Enke et al.<sup>36</sup> measure universalism and analyze its correlates in 7 countries, and Cappelen et al.<sup>23</sup> deploy this method in 60 countries. In a lab experiment with students in the U.S., Cherry et al.<sup>28</sup> show that a substantial share of people prefer policies detrimental to them due to their egalitarian worldview.

**Free-riding** Although researchers have long explained the lack of climate action by free-riding, surveys consistently show that people support climate mitigation in their country even if other countries defect. Bernauer & Gampfer<sup>18</sup> show this for Americans and Indians, who both overestimate their country’s emissions at one third of global total. Beiser-McGrath & Bernauer<sup>16</sup> show this in the U.S. and China using an experimental design. McEvoy & Cherry<sup>75</sup> show that Americans mostly invoke leadership and morality to justify unilateral climate action. Using a range of methods, Aklin & Mildemberger<sup>2</sup> show that the empirical evidence for free-riding is not compelling, and that climate inaction can be equally well explained by distributive conflicts. Finally, through a review of the literature, McGrath & Bernauer<sup>76</sup> show that climate attitudes are largely nonreciprocal, and primarily driven by values and perceptions of the policies, rather than by considerations of what other countries do.

#### **A.1.6 Second-order beliefs**

Allport<sup>3</sup> introduced the concept of pluralistic ignorance: a shared misperception concerning others’ beliefs. The concept became notorious when O’Gorman<sup>83</sup> showed that, towards the end of the civil rights movement, 47% of Americans believed that most white people favored segregation while only 18% did so. PIPA<sup>88</sup> has shown that 75% of Americans are willing to pay \$50 a year to cut world hunger in half (the cost of the program), but only 32% think that the majority would be willing to pay. Andre et al.<sup>6</sup> have documented pluralistic ignorance of climate-friendly norms in the U.S. Similarly, Sparkman et al.<sup>95</sup> show that Americans underestimate the support for climate policies by nearly half, while Drews et al.<sup>33</sup> document pluralistic ignorance of carbon tax support in Spain. Geiger &

Swim<sup>45</sup> show that pluralistic ignorance concern about climate change leads people to talk less about it as they self-silence themselves.

## A.2 Proposals and analyses of global policy-making

### A.2.1 Global carbon pricing

Economists generally consider global carbon pricing as the benchmark climate policy, as it would efficiently correct the carbon emissions externality. For example, Hoel<sup>58</sup> shows that an international carbon tax can be designed so that it is both efficient and satisfies whatever distributional objectives one might have. Concerning the distributional objective, Grubb<sup>52</sup>, Agarwal & Narain<sup>1</sup> and Bertram<sup>19</sup> were the first advocates of an equal right to emit for each human. As Grubb<sup>52</sup> states it: “by far the best combination of long term effectiveness, feasibility, equity, and simplicity, is obtained from a system based upon tradable permits for carbon emission which are allocated on an adult per capita basis”. The support for such solution has been renewed ever since<sup>10,20,66,90</sup>.

While many endorse the egalitarian allocation of emissions permits, economists also considered this outcome as politically unrealistic. Thus, they tweaked their (integrated assessment) models by assigning more weight to rich countries’ interests to preserve the current level of inequalities between countries, precluding any transfer between them<sup>97</sup>. Gollier & Tirole<sup>49</sup> synthesize the distributional decision with a *generosity* parameter which would allocate emissions permit to countries in proportion to their population if set to one, in proportion to their emissions (on the start date of the policy) if set to zero, and as a mixture of the egalitarian rule and grandfathering if set in between. Using a similar formula in the context of a tax, Cramton et al.<sup>29</sup> (summarized in<sup>73</sup>) propose that countries around the average emission per capita fix the generosity parameter, so that it is strategically chosen to maximize the tax rate, and to fix the tax rate at the minimum price proposed by participating countries. Negotiations would exclude countries with low ambition beforehand; and the treaty would impose trade sanctions on non-participating countries. van den Bergh et al.<sup>99</sup> propose a “dual-track transition to global carbon pricing”: an expanding climate club that would integrate existing and new emissions trading systems, and a reorientation of UNFCCC negotiations towards a global carbon price, including burden-sharing rules. The IMF<sup>62</sup> also supports global carbon pricing or, as a first step, a carbon price floor. They propose either differentiated prices among countries, or international transfers, and estimate that a price of \$75/tCO<sub>2</sub> in 2030 would be compatible

with a 2°C trajectory.

Other authors have advanced more radical ideas. Weitzman<sup>101</sup> envisions a World Climate Assembly with proportional representation at the global scale, so that the median (human) voter would choose the carbon price level. To finance an adaptation fund, Chancel & Piketty<sup>27</sup> propose a global *progressive* carbon tax (or a progressive tax on air tickets as a first step), so that rich people (who are high emitters) contribute more to the public good. Fleurbaey & Zuber<sup>39</sup> highlight that, given that current emitters are probably richer than future victims of climate change damages, climate policies deserve a *negative* discount rate. Said differently, we cannot abstract the climate issue from global inequalities, and an ethical response requires global redistribution.

### A.2.2 Climate burden sharing

### A.2.3 Global redistribution

Addressing global poverty, inequalities and climate change are at the heart of the universally agreed Sustainable Development Goals (SDG). Bolch et al.<sup>22</sup> have pointed out that low-income countries generally do not have enough domestic resources to eliminate their poverty gap in the short run. This shows that international transfers would be needed to rapidly end global poverty. In *Beyond the Welfare State*, Gunnar Myrdal<sup>79</sup> called for a *welfare world*. He used his Nobel lecture to recommend an increase of foreign aid to low-income countries as “The type of marginal foreign aid we have provided, is clearly not enough to meet their barest needs.”<sup>80</sup>

Following the labor theory of value, a strand of economists have argued that global inequalities stem from unequal exchange in international trade.<sup>8</sup> Indeed, the stark disparity in wages between countries implies that one unit of labor exported by an American commands five units of labor embodied in goods imported to the U.S., while Ethiopians need to export 50 units of labor to get one in their imports. Alsamawi et al.<sup>4</sup>, Reyes et al.<sup>91</sup> Taking stock, Hickel<sup>57</sup> proposes to establish global minimum wage at 50% of local median wage. Hickel<sup>57</sup> also suggests other solutions against global inequality, which inspired our questionnaire: cancellation of low-income countries’ public debt, fair trade (in particular no tariffs from high-income countries, reduced patent protections, reduced farming subsidies in rich countries), measures against tax evasion (e.g. a global financial register), land reform, and a fair international climate policy.

Piketty<sup>87</sup> prominently defends a progressive wealth tax at the global level, though he



did not specify whether the revenues should fund international transfers.

Kopczuk et al.<sup>71</sup> compute the optimal linear income tax rates for all countries in two ways: globally and decentralized (i.e. in each country, without international transfers). They show that the average decentralized rate is 41%. The global one 62%, which would finance a basic income of 250\$/month (higher than 73 countries' GDP). From a current global Gini index of 0.695, they show that decentralized optimal taxation would barely reduce global inequality to 0.69, while global taxation would bring the Gini down to 0.25. Current foreign aid can only be rationalized if the U.S. attaches 2,000 less value to a citizen in poorest countries than to an American (or 1,000 less if half of the transfers are diverted due to corruption).

#### **A.2.4 Basic income**

Unconditional cash transfers (UCT) are increasingly seen as an effective way to end extreme poverty. Indeed, positive results from randomized controlled trials are accumulating: Gangopadhyay et al.<sup>44</sup> find that UCT outperform a food subsidy; Haushofer & Shapiro<sup>55</sup> find significant impacts on health, economic outcomes, and psychological well-being; Egger et al.<sup>34</sup> find large positive spillovers on non-recipient, and minimal inflation. Reviews of extant research confirm the positive outcomes of UCT.<sup>11,96</sup>

Although delivering cash to remote places and avoiding fraud is challenging in regions without a proper civil register, mobile phones could be used as tools for banking and biometric identification.<sup>54</sup> While many places are still lacking internet access, progress is rapid in satellite internet access, and some argue that it could soon become cheap and ubiquitous.<sup>53</sup>

#### **A.2.5 Global democracy**

The idea of world federalism follows a long tradition, dating back at least to Kant<sup>68</sup>, who argued that this was the necessary condition for perpetual peace. International organizations were eventually created to foster peace, though the League of Nations and its successor, the United Nations, never succeeded in avoiding military conflicts. Many have argued that we need stronger and more democratic global institutions competent to address global challenges like extreme poverty, climate change, wars, pandemics, or financial stability. feminist and pacifist Maverick Lloyd & Schwimmer<sup>74</sup> founded the *Campaign for World Government*, defending direct representation at the global scale. Einstein<sup>35</sup>



called for the subordination of the UN Security Council to the General Assembly, and the direct election of UN delegates. Since 2007, individuals and institutions from more than 150 countries have endorsed the appeal for a United Nations Parliamentary Assembly (UNPA), including 1,800 member of parliament, heads of state, as well the European Parliament, the Pan-African Parliament, and the Latin-American Parliament. The UNPA calls for a gradual implementation of a democratic assembly, starting with a consultative assembly composed of members of national parliaments, allowing for the direction election of its members in voluntary countries, and evolving toward a world parliament able to adopt binding regulations once all members are directly elected.<sup>72</sup> Besides the UNPA, various scholars have proposed different models of global democracy, ranging from deliberative spaces to a world federation.<sup>7</sup> While the most radical proposals are still out of sight, an assembly of random citizens representative of the world population has already been convened. It has produced a joint statement at the COP26,<sup>9</sup> and a similar *World Citizens' Assembly* should soon follow.

## B Raw results from the first U.S. complementary survey

Figure 5: Correct answers to comprehension questions. (Questions 15-17)

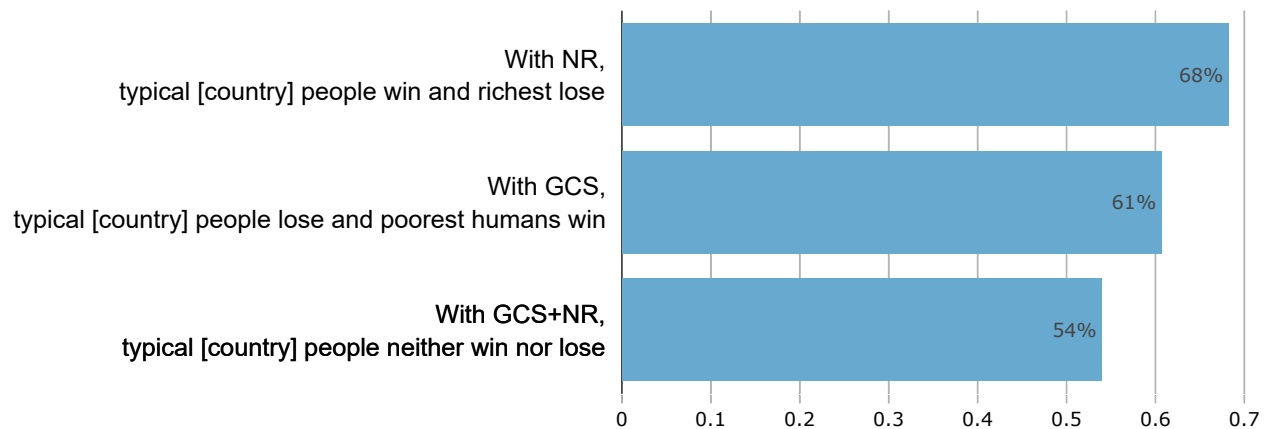


Figure 6: Number of correct answers to comprehension questions. (Questions 15-17)



Figure 7: Support for the GCS, NC and the combination of GCS, NR and C. (Questions 18, 20 and 24)

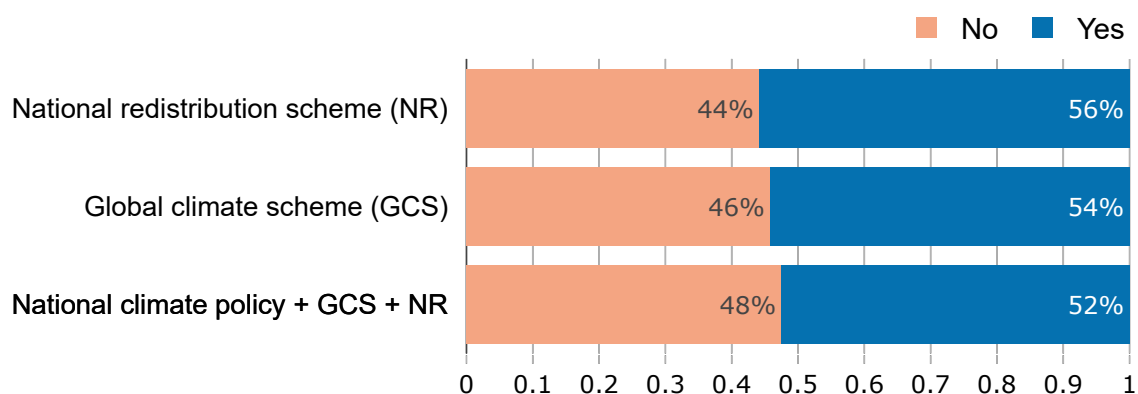


Figure 8: Beliefs regarding the support for the GCS and NR. (Questions 19 and 21)

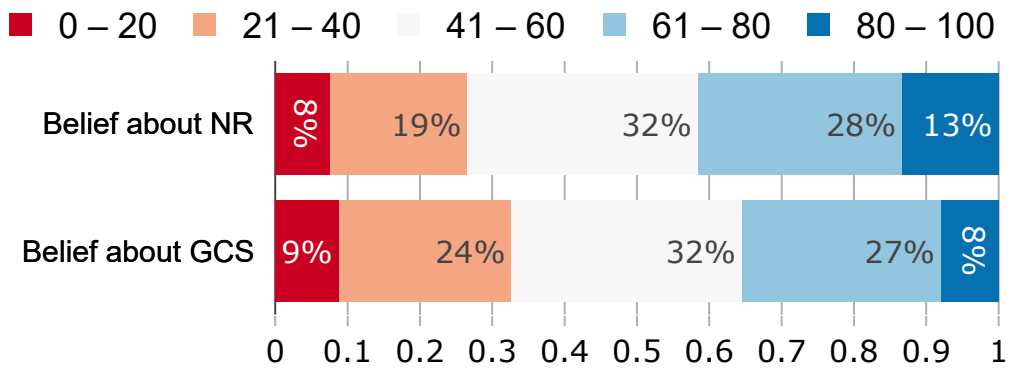


Figure 9: List experiment. (Question 22)

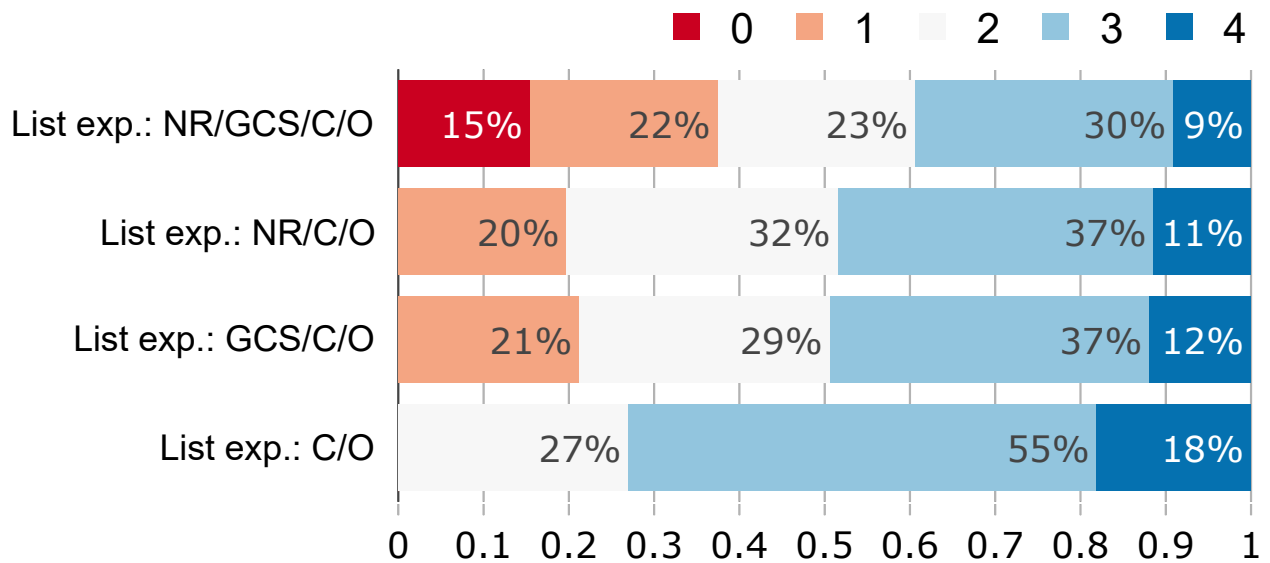


Figure 10: Conjoint analyses. (Questions 23-28)

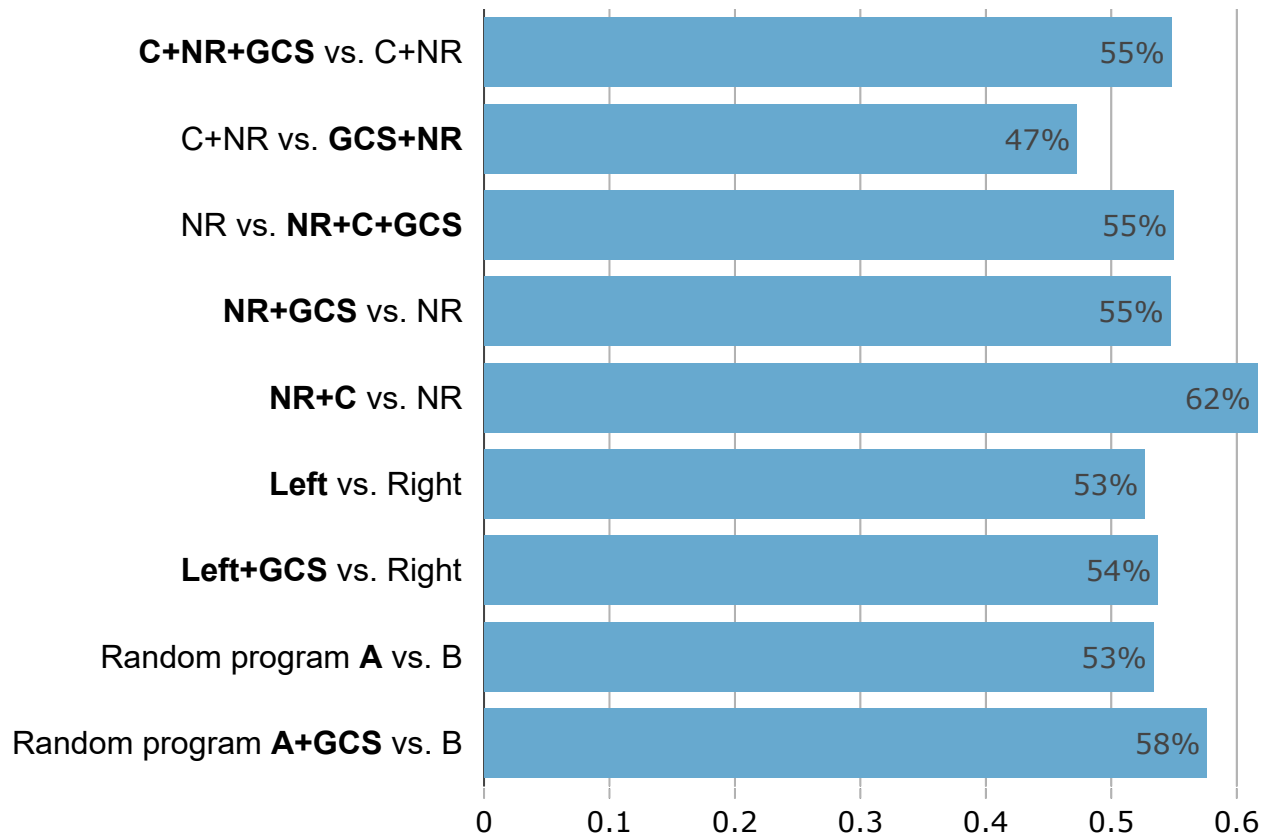


Figure 11: [Asked only to non-Republicans] Conjoint analysis n°4: random programs at the Democratic primary. (Question 27)

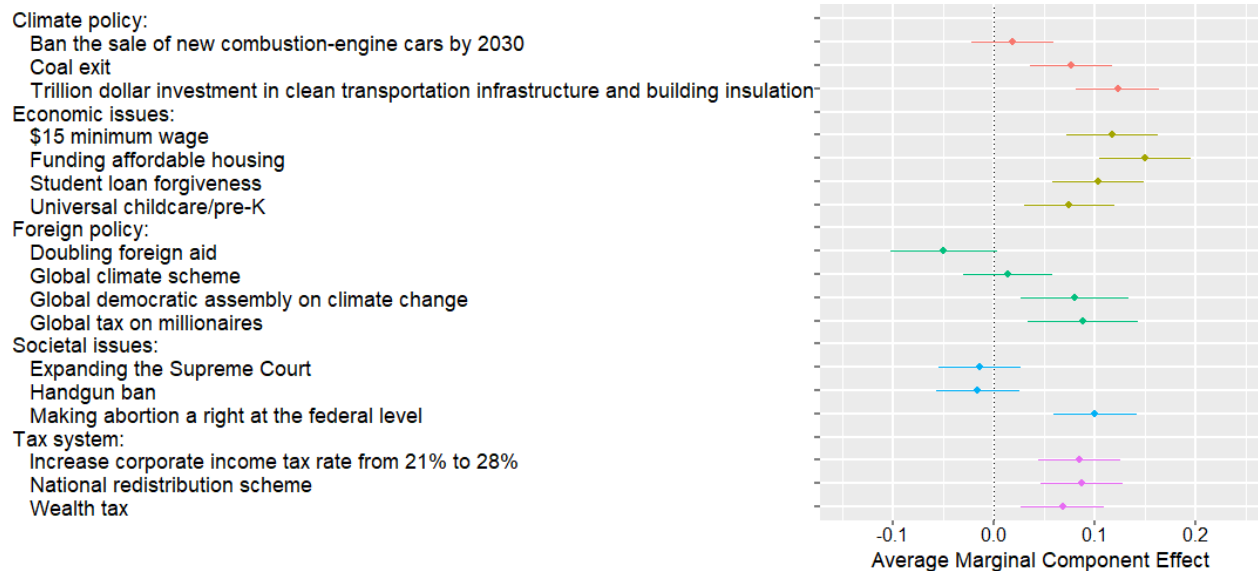


Figure 12: Donation in case of lottery win. (Question 30)

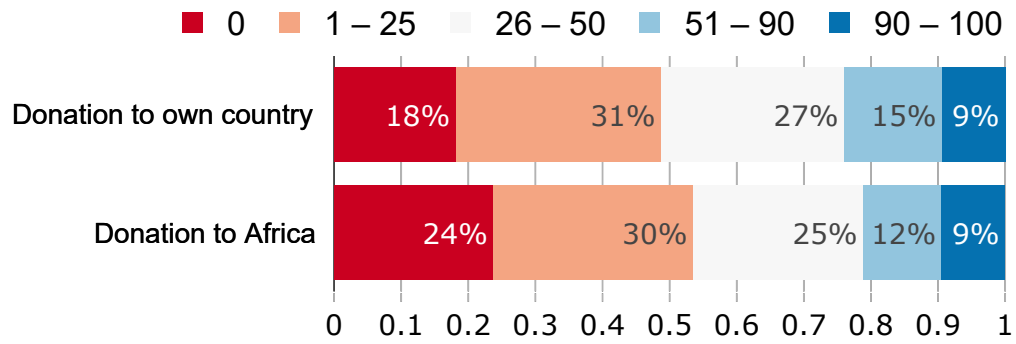


Figure 13: Willingness to sign real-stake petition for the GCS or NR. (Question 32)

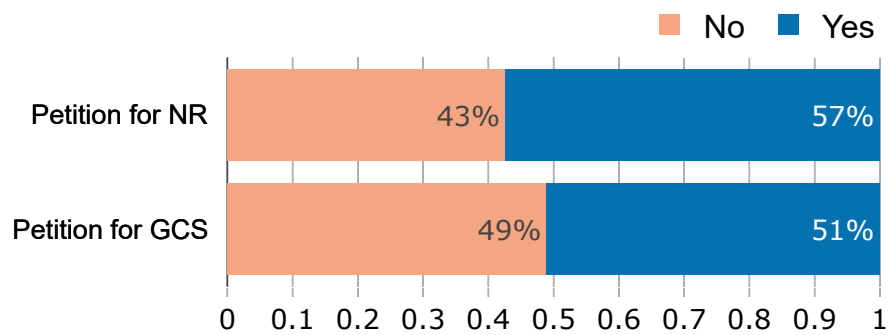


Figure 14: Support for various global policies. (Questions 33 and 34)

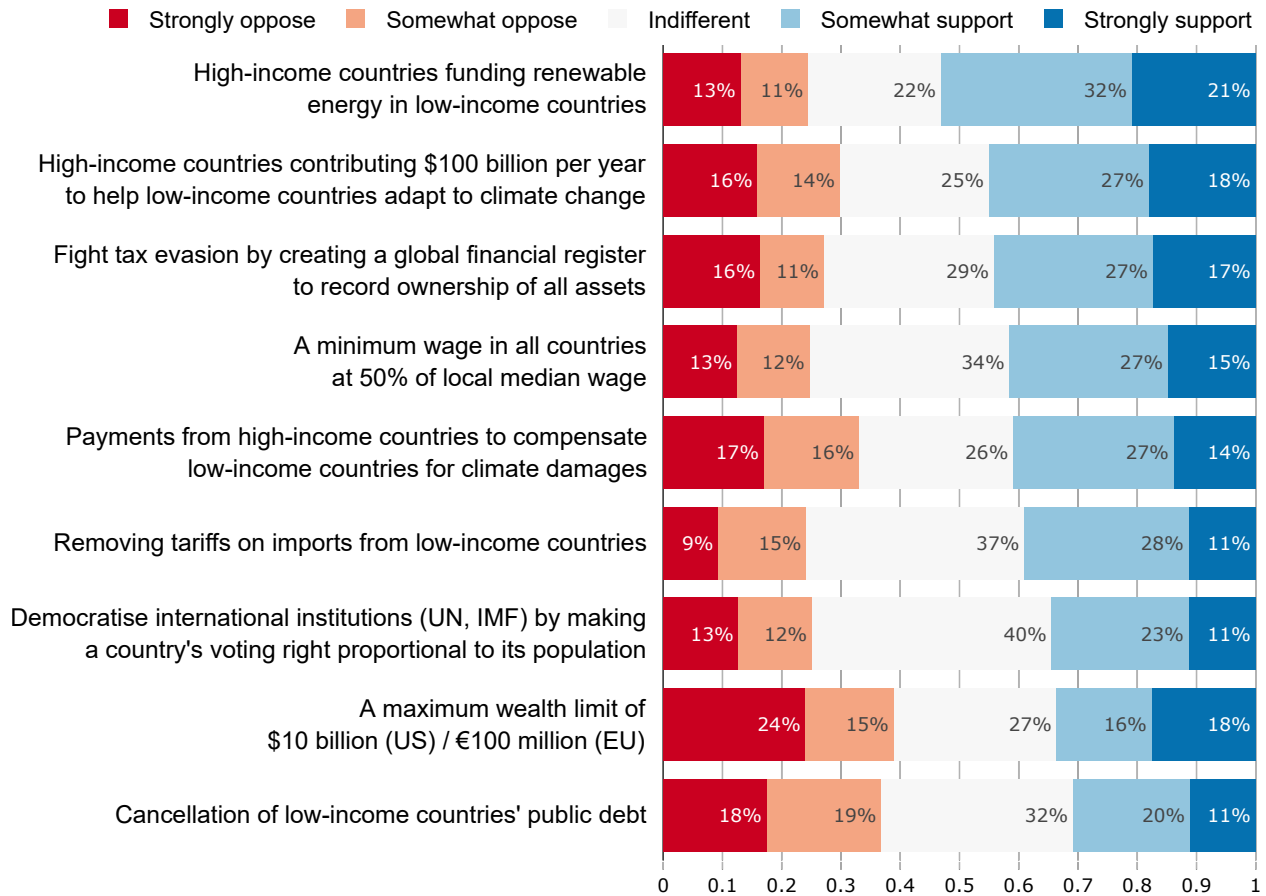


Figure 15: Attitudes regarding the evolution of U.S. foreign aid. (Question 35)

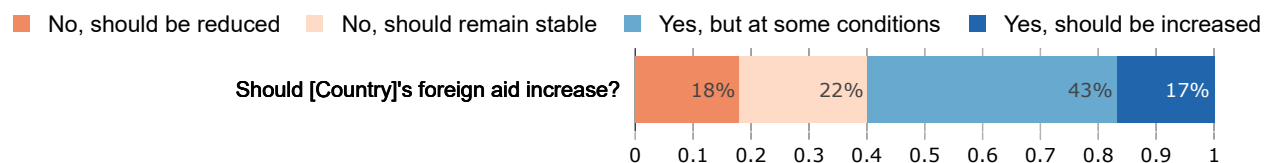


Figure 16: [Asked to those who wish an increase of foreign aid at some conditions.] Conditions at which foreign aid should be increased. (Question 36)

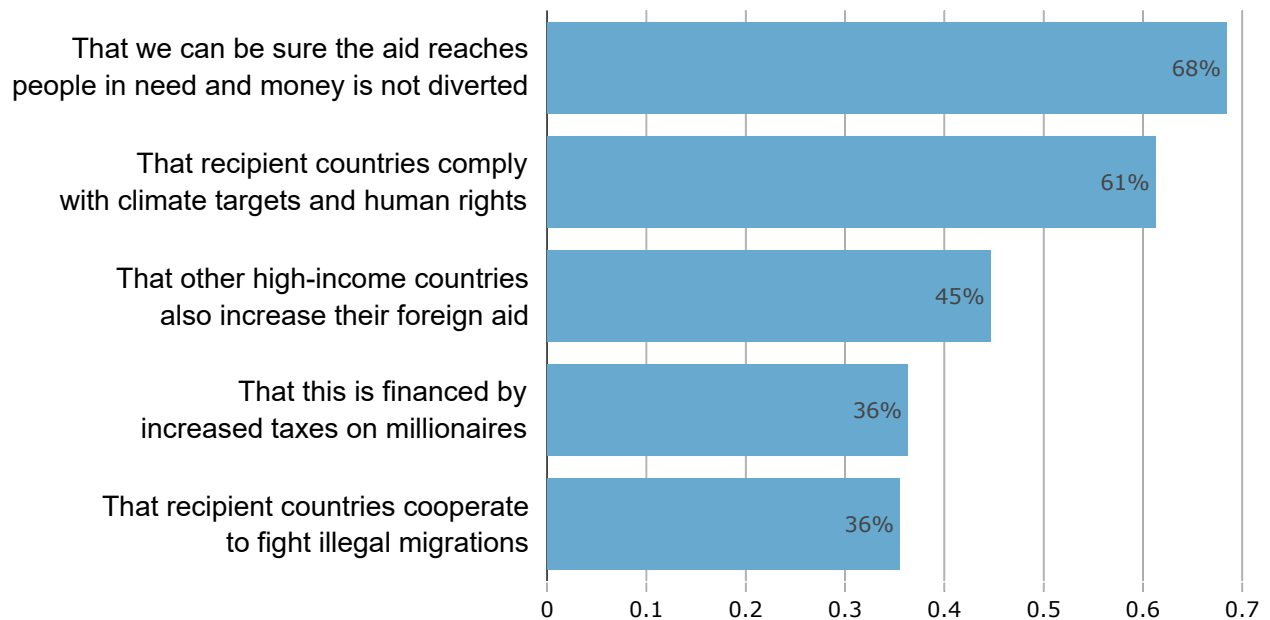


Figure 17: [Asked to those who wish a decrease or stability of foreign aid.] Reasons why foreign aid should not be increased. (Question 37)

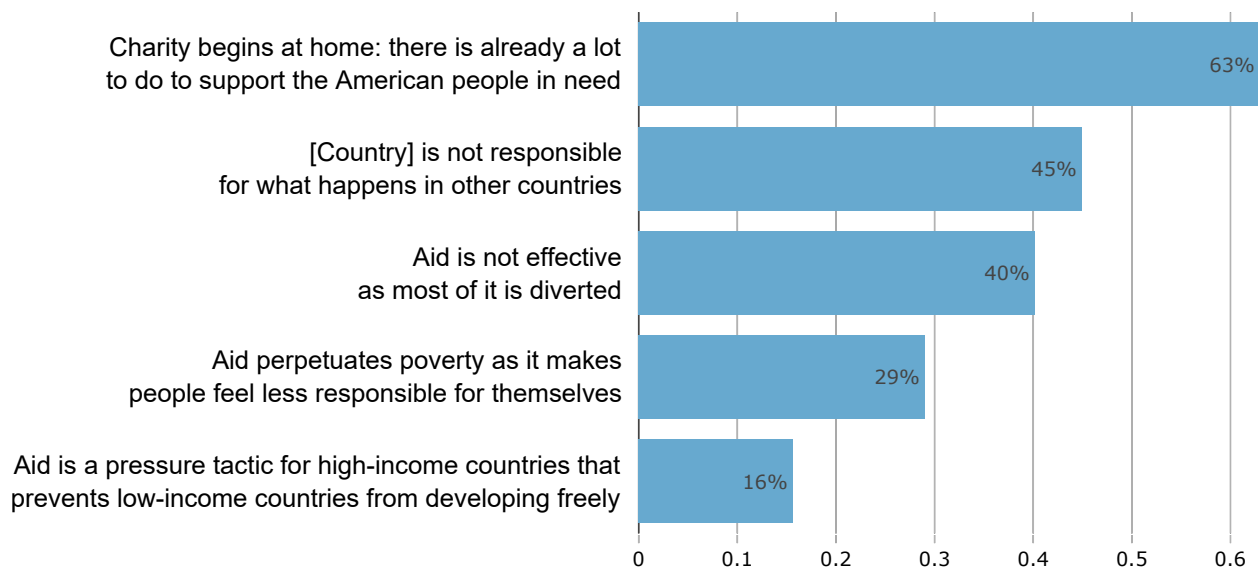


Figure 18: Preferred approach of U.S. diplomats at international climate negotiations. (Question 38)

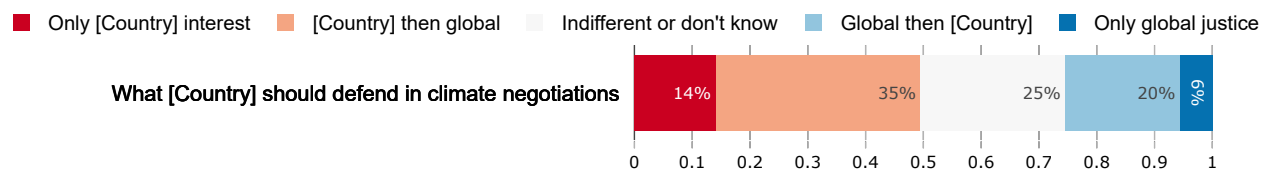


Figure 19: Extent to which selected issues are viewed as important problems. (Question 46)

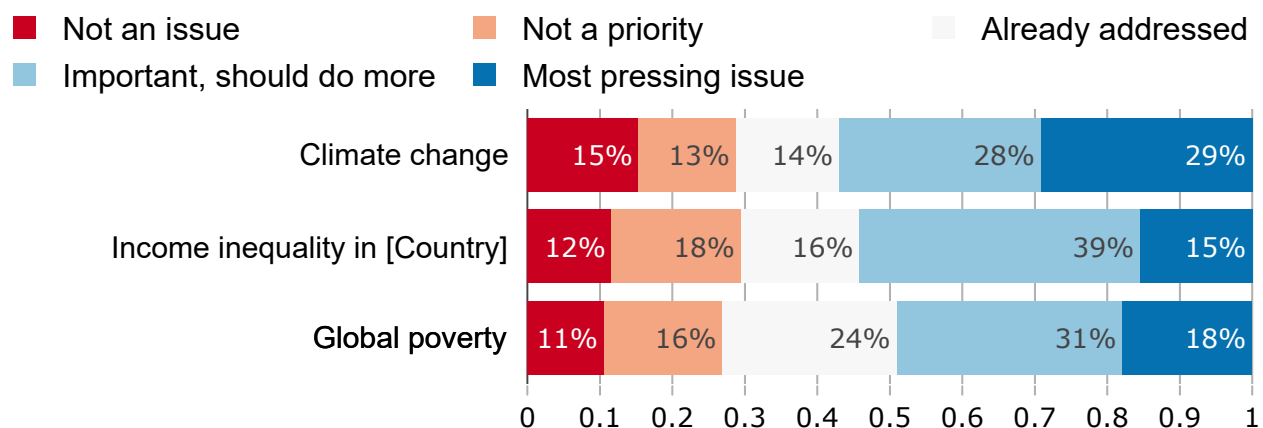


Figure 20: Group defended when voting. (Question 47)

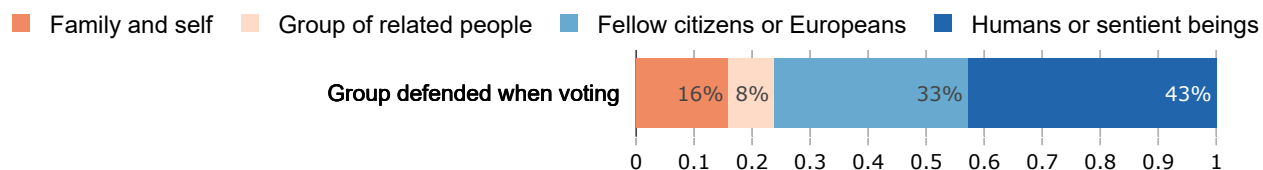
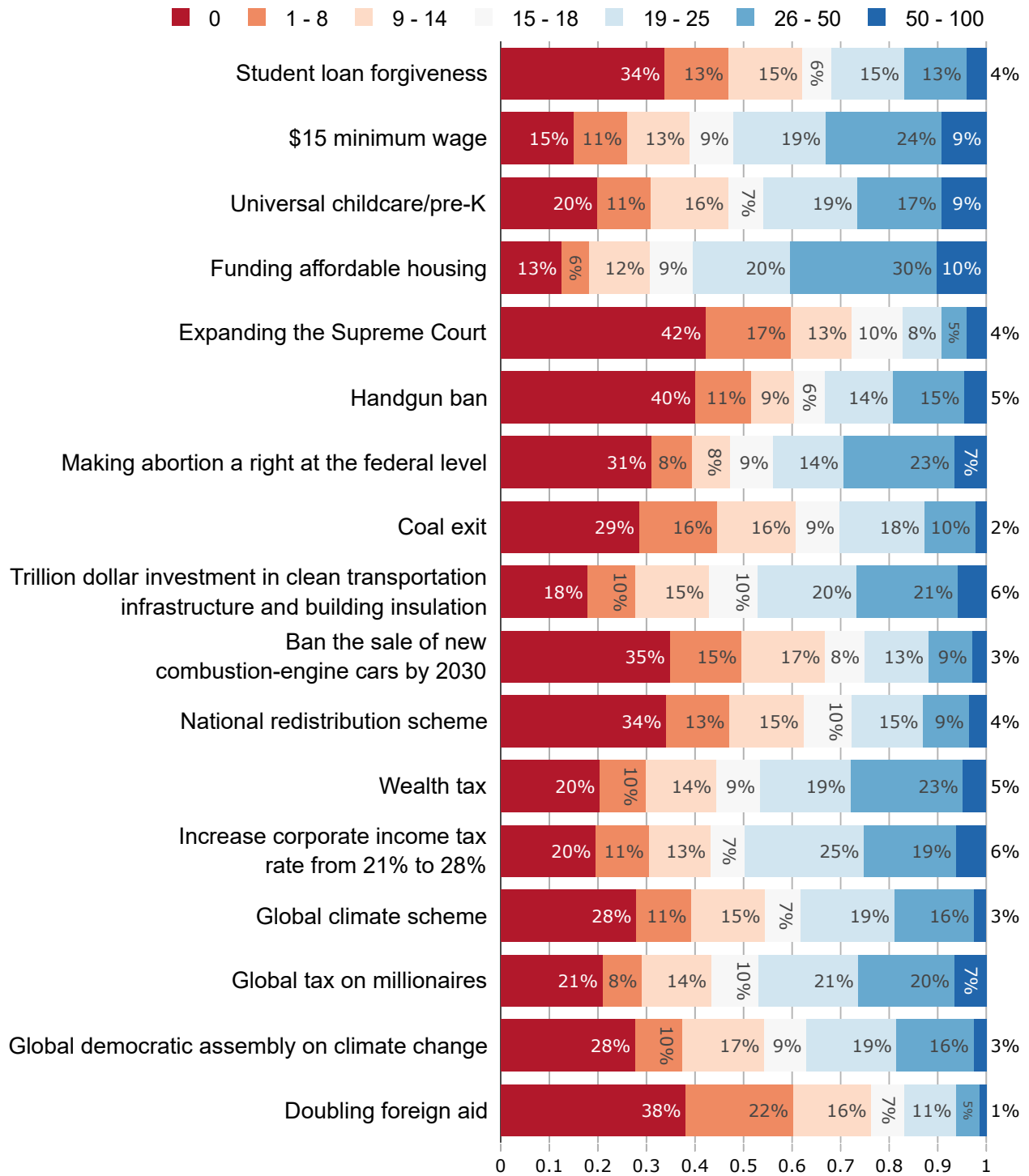


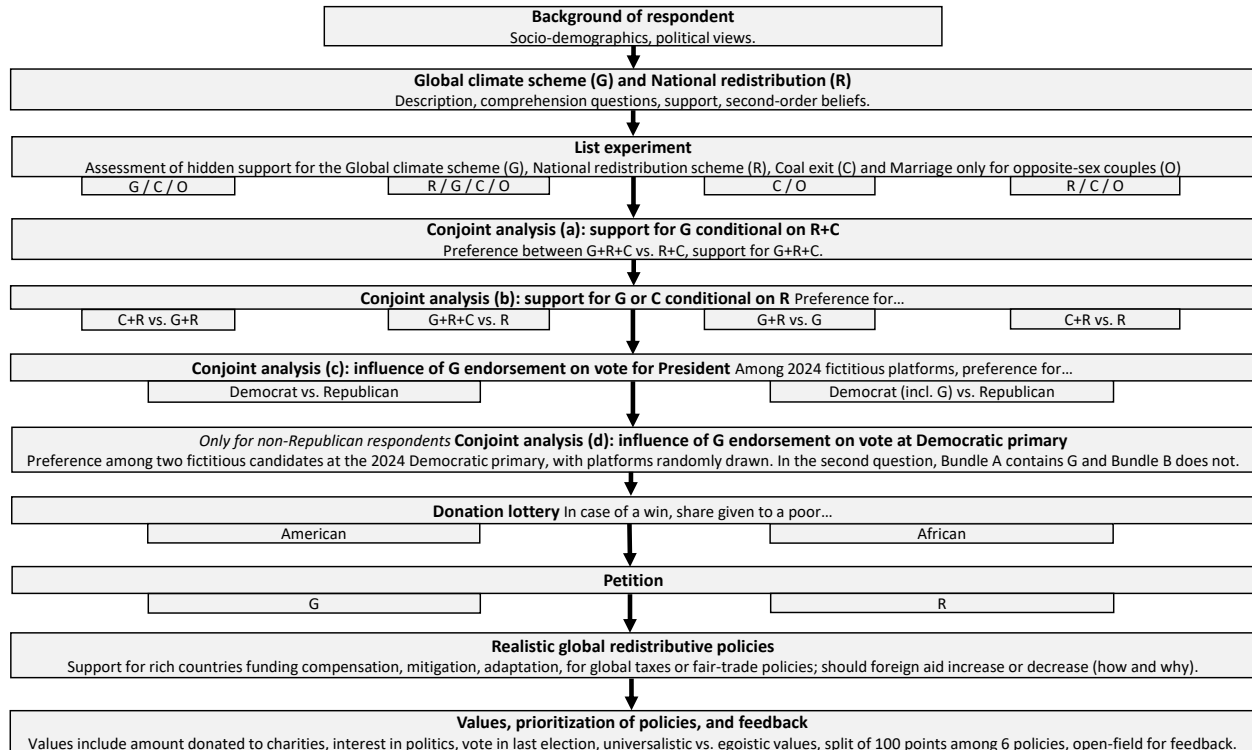


Figure 21: Prioritization of policies. (Question 48)



## C Questionnaire of US1 survey

Figure 22: US1 survey structure



## Socio-demographic characteristics

### 1. Welcome to this survey!

This survey is **anonymous** and is conducted for **research** purposes on a representative sample of 3,000 American people.

It takes **10 to 15 min** to complete.

The survey contains lotteries and awards for those who get the correct answer to some understanding questions.

If you are attentive and lucky, **you can win up to \$350 in points**. (See **terms and conditions**).

Please answer every question carefully.

**Do you agree to participate in the survey?**

*Yes; No*

**2. What is your gender?**

*Woman; Man; Other*

**3. How old are you?**

*Below 18; 18 to 20; 21 to 24; 25 to 29; 30 to 34; 35 to 39; 40 to 44; 45 to 49; 50 to 54; 55 to 59; 60 to 64; 65 to 69; 70 to 74; 75 to 79; 80 to 84; 85 to 89; 90 to 99; 100 or above*

**4. What is your ZIP code?**

**5. Do you live with your partner (if you have one)?**

*Yes; No*

**6. How many people are in your household? The household includes: you, the members of your family who live with you, and your dependants.**

*1; 2; 3; 4; 5 or more*

**7. What race or ethnicity do you identify with? (Multiple answers are possible)**

*White; Black or African American; Hispanic; Asian; American Indian or Alaskan Native; Native Hawaiian or Pacific Islander; Other: {open field}; Prefer not to say*

**8. What is the *annual* gross income of your household (before withholding tax)? This includes all income: wages, self-employment earnings, Social Security benefits, pensions, investment income, welfare payments, and income from other sources.**

*Less than \$20,000; between \$20,001 and \$35,000; between \$35,001 and \$42,000; between \$42,001 and \$50,000; between \$50,001 and \$65,000; between \$65,001 and \$82,000; between \$82,001 and \$103,000; between \$103,001 and \$130,000; between \$130,001 and \$145,000; between \$145,001 and \$165,000; between \$165,001 and \$250,000; More than \$250,000; I prefer not to answer*

**9. What is the highest level of education you have completed?**

*Primary school or less; Eighth grade; Some high school; Regular high school diploma/GED or alternative credential; Some college, no degree; 2-year college degree or associates degree (for example: AA, AS); Bachelor's degree (for example: BA, BS); Master's degree or above (MA, MS, MEng, MEd, MSW, MBA, MD, DDS, DVM, LLB, JD, PhD);*

10. What is your employment status?

*Full-time employed; Part-time employed; Self-employed; Student; Retired; Unemployed (searching for a job); Inactive (not searching for a job)*

11. Are you a homeowner or a tenant? (Multiple answers are possible)

*Tenant; Owner; Landlord renting out property; Hosted free of charge*

12. [Asked if lives with partner] What is the estimated value of your household's assets (in U.S. dollars)?

Include here all your possessions (home, car, savings, etc.) net of debt. For example, if you own a house worth \$300,000 and you have \$100,000 left to repay on your mortgage, your assets are \$200,000.

I estimate my household's assets net of debt to be:

*Less than \$0 (I have a net debt); Close to \$0; Between \$4,000 and \$120,000; Between \$120,000 and \$380,000; More than \$380,000*

13. [Asked if does not live with partner] What is the estimated value of your assets (in U.S. dollars)?

Include here all your possessions (home, car, savings, etc.) net of debt. For example, if you own a house worth \$300,000 and you have \$100,000 left to repay on your mortgage, your assets are \$200,000.

I estimate my assets net of debt to be:

*Less than \$0 (I have a net debt); Close to \$0; Between \$4,000 and \$60,000; Between \$60,000 and \$190,000; More than \$190,000*

14. What do you consider to be your political affiliation, as of today?

*Republican; Democrat; Independent; Other; Non-Affiliated*

## Global climate scheme

In the following, we describe two policies, on which we will survey your opinion. To check that you have attentively read the descriptions, **we will ask some understanding questions afterwards: those who get correct answers can win up to \$150.**

**Global climate scheme:** At the Paris agreement in 2015, all countries have agreed to contain global warming “well below +2 °C”. To limit global warming to this level, **there is a maximum amount of greenhouse gases we can emit globally.**

To meet the climate target, a limited number of permits to emit greenhouse gases can be created globally. Polluting firms would be required to buy permits to cover their emissions. Such a policy would **make fossil fuel companies pay** for their emissions and progressively raise the price of fossil fuels. **Higher prices would encourage people and companies to use less fossil fuels, reducing greenhouse gas emissions.**

In accordance with the principle that each human has an equal right to pollute, the revenues generated by the sale of permits could finance a global basic income. **Each adult in the world would receive \$30/month**, thereby lifting out of extreme poverty the 700 million people who earn less than \$2/day.

**The typical American would lose out financially \$85 per month** (as he or she would face \$115 per month in price increases, which is higher than the \$30 they would receive). The policy could be put in place as soon as countries totaling more than 60% of global emissions agree on it. Countries that would refuse to take part in the policy could face sanctions (like tariffs) from the rest of the World and would be excluded from the basic income.

15. Who would win or lose financially in the Global climate scheme? [Figure 5]

Three respondents with the expected answer will get \$50 in points.

*Typical Americans would win and the 700 million poorest humans would win.; Typical Americans would win and the 700 million poorest humans would lose.; Typical Americans would lose and the 700 million poorest humans would win.; Typical Americans would lose and the 700 million poorest humans would lose.*

[new page] For your information, the expected answer was *Typical Americans would lose and the 700 million poorest humans would win* from the Global climate scheme. Now, here is the second policy:

Now, here is the second policy: **National redistribution scheme:** This policy would **increase taxes on the top 5%** and provide cash transfers to all adults. More precisely, **each American adult would receive \$85 per month** (that is \$1,000 per year). This would be financed by an increase of the federal income tax on household income in excess of \$315,000 per year, leaving taxes unchanged for income below \$315,000. See more details.

16. Who would win or lose financially in the National redistribution? [Figure 5]

Three respondents with the expected answer will get \$50 in points.

*Typical Americans would win and the richest Americans would win.; Typical Americans would win and the richest Americans would lose.; Typical Americans would lose and the richest Americans would win.; Typical Americans would lose and the richest Americans would lose.*

[new page] For your information, the expected answer was *Typical Americans would win and the richest Americans would lose* from the National redistribution scheme.

To help you with the next question, here is a reminder of the policies:

**Global Climate scheme:**

To limit global warming and reach the international climate objective, the Global climate scheme would **impose a maximum amount of greenhouse gases we can emit globally.**

It would **make polluters pay** for their emissions, which in turn would increase fossil fuel prices and discourage polluting activities.

The revenues would finance a **global basic income** of \$30 per month for all humans, lifting out of extreme poverty the poorest billion people.

Considering the basic income and the fuel price increases, **the typical American would lose out financially \$85 per month.**

**National redistribution scheme:** This policy would **increase taxes on the top 5%** and provide cash transfers to all adults. More precisely, **each American would receive \$85 per month.** This would be financed by an increase of the federal income

tax on household income in excess of \$315,000 per year, leaving taxes unchanged for income below \$315,000 per year.

17. If both the Global climate scheme and the National redistribution scheme are implemented, how would a typical American be financially affected? [Figure 5]

Three respondents with the expected answer will get \$50 in points.

*A typical American would lose out financially.; A typical American would neither gain nor lose.; A typical American would gain financially.*

[new page] For your information, the expected answer was that *A typical American would neither gain nor lose* from both schemes combined. Now, here are the last two policies:

**Coal exit:** To reduce CO2 emissions, this policy would require all U.S. coal power plants to be phased out by 2030. Coal would be replaced by renewable sources like wind and solar panels as well as stronger reliance on gas power plants.

**Marriage only for opposite-sex couples:**

This policy is a proposed amendment to the U.S. Constitution that would legally define marriage as a union of one man and one woman.

Now, we will ask your opinion on the four policies.

[Click here for the reminder of the first two policies.](#) [Clicking displays the previous summarized descriptions.]

18. Do you support the Global climate scheme? [Figure 7]

Yes; No

19. According to you, what percentage of Americans answer Yes to the previous question? [Figure 8]

The three people who are closest to the true value get \$50 in panel points.

*Percentage of Americans in favor of Global climate scheme* [slider from 0 to 100]

20. Do you support the National redistribution scheme? [Figure 7]

Yes; No

21. According to you, what percentage of Americans answer Yes to the previous question? [Figure 8]

The three people who are closest to the true value get \$50 in panel points.

*Percentage of Americans in favor of National redistribution* [slider from 0 to 100]

22. Beware, this question is quite unusual. Among the policies below, **how many** do you support? [Figure 9]

[Four random branches. Branch GCS/NR/C/O]

- Global climate scheme
- National redistribution scheme
- Coal exit
- Marriage only for opposite-sex couples

0; 1; 2; 3; 4

[Branch GCS/C/O]

- Global climate scheme
- Coal exit
- Marriage only for opposite-sex couples

0; 1; 2; 3

[Branch C/O]

- Coal exit
- Marriage only for opposite-sex couples

0; 1; 2

[Branch NR/C/O]

- National redistribution scheme
- Coal exit
- Marriage only for opposite-sex couples

0; 1; 2; 3



## Conjoint analyses

23. Among the two following bundles of policies, which one would you prefer? [Figure 10]

Note that for each bundle, all policies of the bundle would be implemented at the same time.

<b>Bundle A</b>	<b>Bundle B</b>
Coal exit National redistribution scheme Global climate scheme	Coal exit National redistribution scheme

*Bundle A; Bundle B*

24. Do you support Bundle A (combining Coal exit, the National redistribution scheme, and the Global climate scheme)? [Figure 7]

*Yes; No*

25. [new page] Among the two following bundles of policies, which one would you prefer? [Figure 10]

Note that for each bundle, all policies of the bundle would be implemented at the same time.

[Four random branches. Branch C + NR vs. GCS + NR]

<b>Bundle A</b>	<b>Bundle B</b>
Coal exit National redistribution scheme	Global climate scheme National redistribution scheme

[Branch NR vs. NR + C + GCS]

<b>Bundle A</b>	<b>Bundle B</b>
National redistribution scheme	National redistribution scheme Coal exit Global climate scheme

[Branch NR + GCS vs. NR]

Bundle A	Bundle B
National redistribution scheme Global climate scheme	National redistribution scheme

[Branch NR + C vs. NR]

Bundle A	Bundle B
National redistribution scheme Coal exit	National redistribution scheme

Bundle A; Bundle B

26. [new page] Imagine if the Democratic and Republican presidential candidates in 2024 campaigned with the following policies in their platforms.

Which of these candidates would you vote for? [Figure 10]

[Two random branches: with and without the final row.]

Democrat	Republican
Increase corporate income tax rate from 21% to 28% Coal exit  Trillion dollar investment in childcare, healthcare, education and housing \$15 minimum wage  National redistribution scheme  [Global climate scheme / no row]	Decrease the payroll tax  Permit completion of the Keystone pipeline Withdrawal of the Paris agreement  Marriage only for opposite-sex couples Strict enforcement of immigration and border legislation [ / no row]

Democrat; Republican; None of them

27. [new page] [Asked only to non-Republicans] Imagine that at the 2024 Democratic party presidential primaries, the two main candidates campaign with the following key policies in their platforms.

Which of these candidates do you prefer? [Figures 10 and 11]

	Candidate A	Candidate B
[Policy field in random order]	[Random policy]	[Random policy]
[Policy field in random order]	[Random policy]	[Random policy]
[Policy field in random order]	[Random policy]	[Random policy]
[Policy field in random order]	[Random policy]	[Random policy]
[Policy field in random order]	[Random policy]	[Random policy]

*Candidate A; Candidate B*

28. [new page] [Asked only to non-Republicans] Imagine that at the 2024 Democratic party presidential primaries, the two main candidates campaign with the following key policies in their platforms.

Which of these candidates do you prefer? [Figure 10]

	Candidate A	Candidate B
[Policy field in random order]	[Random policy]	[Random policy]
[Policy field in random order]	[Random policy]	[Random policy]
[Policy field in random order]	[Random policy]	[Random policy]
[Policy field in random order]	[Random policy]	[Random policy]
<b>Foreign policy</b>	Global climate scheme	-

*Candidate A; Candidate B*

## Donation lottery

29. Please select “A little” (this is a test to see if you are paying attention).  
*Not at all; A little; A lot; A great deal*
30. [Two random branches] By taking this survey, you are automatically entered into a lottery to win \$100 in panel points. This lottery is unrelated to the previous ones that rewarded answers’ accuracy. In a few days you will know whether you have been selected in the lottery. The payment will be made to you in the same way as your compensation for this survey, so no further action is required on your part.

Should you be selected in the lottery, you can also donate a part of this additional compensation to [American / African] people living in poverty through the charity GiveDirectly. The charity GiveDirectly provides small amounts of cash to people in need in [the U.S / Africa].

**In case you are winner of the lottery, what share of the \$100 would you donate to [American / African] people living in poverty through GiveDirectly?** [Figure 12]

*Amount donated to [American / African] people in need (in \$) [slider from 0 to 100]*

31. Please select “A little” (this is a test to see if you are paying attention).

*Not at all; A little; A lot; A great deal*

## Petition

32. [Two random branches] Would you be willing to sign a petition for the [Global climate / National redistribution] scheme? [Figure 13]

As soon as the survey is complete, we will send the results to the U.S. President’s office, informing him what share of American people are willing to endorse the [Global climate / National redistribution] scheme. (You will NOT be asked to sign, only your answer here is required and remains anonymous.) *Yes; No*

## Other policies

33. The following policies are discussed at international negotiations on how to deal with climate change. [Figure 14]

Do you support or oppose the following policies?

- Payments from high-income countries to compensate low-income countries for climate damages
- High-income countries funding renewable energy in low-income countries
- High-income countries contributing \$100 billion per year to help low-income countries adapt to climate change

*Strongly oppose; Somewhat oppose; Neither support nor oppose; Somewhat support; Strongly support*

34. Do you support or oppose the following global policies? [Figure 14]

- Cancellation of low-income countries' public debt
- Democratise international institutions (UN, IMF) by making a country's voting right proportional to its population
- Removing tariffs on imports from low-income countries
- A minimum wage in all countries at 50% of local median wage
- Fight tax evasion by creating a global financial register to record ownership of all assets
- A maximum wealth limit of \$10 billion for each human

*Strongly oppose; Somewhat oppose; Neither support nor oppose; Somewhat support; Strongly support*

35. Currently, 0.4% of U.S. government spending (that is, 0.2% of U.S. GDP) is spent on foreign aid to reduce poverty in low-income countries. [Figure 15]

Do you support the U.S. transferring more money to low-income countries?

*Yes, U.S. foreign aid should be increased.; Yes, but only if some conditions are met.; No, U.S. foreign aid should remain stable.; No, U.S. foreign aid should be reduced.*

36. [Asked only if *Yes, but only if some conditions are met.* is chosen] What conditions should be required for the U.S. to increase its foreign aid? (Multiple answers possible) [Figure 16]

*That recipient countries comply with climate targets and human rights.; That recipient countries cooperate to fight illegal migrations.; That other high-income countries also increase their foreign aid.; That this is financed by increased taxes on millionaires.; That we can be sure the aid reaches people in need and money is not diverted.; Other: [open field]*

37. [Asked only if *No, U.S. foreign aid should remain stable.* or *No, U.S. foreign aid should be reduced.* is chosen] Why do you oppose the U.S. increasing its foreign aid? (Multiple answers possible) [Figure 17]

*Aid perpetuates poverty as it makes people feel less responsible for themselves.; Aid is not*

*effective as most of it is diverted.; Aid is a pressure tactic for high-income countries that prevents low-income countries from developing freely.; The U.S. is not responsible for what happens in other countries.; Charity begins at home: there is already a lot to do to support the American people in need.; Other: [open field]*

## Values and politics

38. In international climate negotiations, would you prefer U.S. diplomats to defend U.S. interests or global justice? [Figure 18]

*U.S. interests, even if it goes against global justice; U.S. interests, to the extent it respects global justice; ndifferent or don't know; Global justice, to the extent it respects U.S. interests; Global justice, even if it goes against U.S. interests*

39. How much did you give to charities in 2022?

*I did not make donations to charities last year.; Less than \$100.; Between \$101 and \$500.; Between \$501 and \$1,000.; Between \$1,001 and \$5,000.; More than \$5,000.*

40. To what extent are you interested in politics?

*Not at all; A little; Moderately; A lot; A great deal*

41. Where would you rate yourself on a scale of 1 to 5, where 1 means you think the government should do only those things necessary to provide the most basic government functions, and 5 means you think the government should take active steps in every area it can to try and improve the lives of its citizens?

*Desired involvement of government [slider from 1 to 5]*

42. **On economic policy matters**, where do you see yourself on a scale of 1 to 5, where 1 is Left (favoring equality and government interventions) and 5 is Right (favoring free competition and little government intervention)?

*Left (1) to Right (5) on economic issues [slider from 1 to 5]*

43. Did you vote in the 2020 U.S. presidential election?

*Yes; No: I didn't have the right to vote in the U.S.; Prefer not to say*

44. [Asked if voted] Which candidate did you vote for in the 2020 U.S. presidential election?

*Biden; Trump; Jorgensen; Hawkins; Prefer not to say*

45. [Asked if did not vote] Even if you did not vote in the 2020 U.S. presidential election, please indicate the candidate that you were most likely to have voted for or who represents your views more closely.

*Biden; Trump; Jorgensen; Hawkins; Prefer not to say*

46. To what extent do you think the following issues are a problem? [Figure 19]

- Income inequality in the U.S.
- Climate change
- Global poverty

*Not an important issue for me; An issue but there are other priorities; An issue but we already do what we can; An important issue, we should do more; One of the most pressing issue of our time*

47. What group do you defend when you vote? [Figure 20]

*Sentient beings (humans and animals); Humans; Americans; People sharing my culture or religion; My State; My town; My relatives and/or colleagues; My family and myself*

## Prioritization

48. In this question, you have 100 points that you can allocate to different policies. The more you give points to a policy, the more you support it.

How do you allocate the points among the following policies? [Figure 21]

You can adjust the number of points either using the slider or entering the number of your choice on the right-hand-side. **The sum of points must equal exactly 100.** By pushing the last slider to the right, the total will automatically adjust to 100. Please read the 6 options before making your choice.

- Student loan forgiveness
- \$15 minimum wage
- Universal childcare/pre-K
- Funding affordable housing
- Expanding the Supreme Court

- Handgun ban
- Making abortion a right at the federal level
- Coal exit
- Trillion dollar investment in clean transportation infrastructure and building insulation
- Ban the sale of new combustion-engine cars by 2030
- National redistribution scheme
- Wealth tax
- Increase corporate income tax rate from 21% to 28%
- Global climate scheme
- Global tax on millionaires
- Global democratic assembly on climate change
- Doubling foreign aid

[slider from 0 to 100]

## Feedback

49. Do you feel that this survey was politically biased?

*Yes, left-wing biased; Yes, right-wing biased; No, I do not feel it was biased*

50. The survey is nearing completion. You can now enter any comments, thoughts or suggestions in the field below.

[open-ended field]

51. Lastly, are you interested to be interviewed by a researcher (through videoconferencing) for 30 min?

This is totally optional and will not be rewarded.

*Yes; No*



## D Representativeness of the surveys

Table 2: Sample representativeness for the first U.S. complementary survey.

	FR			DE			ES			U	
	Pop.	Sample	Weighted sample	Pop.	Sample	Weighted sample	Pop.	Sample	Weighted sample	Pop.	Sample
		620	620		757	757		543	543		644
an	0.52	0.49	0.54	0.51	0.53	0.58	0.51	0.55	0.60	0.50	0.26
	0.48	0.51	0.46	0.49	0.47	0.42	0.49	0.45	0.40	0.50	0.74
le: 1	0.25	0.30	0.27	0.25	0.28	0.23	0.25	0.27	0.23	0.25	0.32
le: 2	0.25	0.17	0.17	0.25	0.25	0.24	0.25	0.32	0.33	0.25	0.29
le: 3	0.25	0.22	0.22	0.25	0.29	0.30	0.25	0.25	0.25	0.25	0.20
le: 4	0.25	0.32	0.34	0.25	0.18	0.23	0.25	0.15	0.19	0.25	0.19
	0.12	0.08	0.06	0.09	0.18	0.15	0.08	0.17	0.15	0.10	0.02
	0.15	0.17	0.16	0.15	0.21	0.20	0.12	0.15	0.14	0.17	0.10
	0.24	0.33	0.37	0.22	0.20	0.22	0.28	0.23	0.26	0.24	0.12
	0.24	0.20	0.19	0.28	0.23	0.26	0.27	0.25	0.27	0.25	0.28
	0.25	0.23	0.22	0.26	0.18	0.18	0.25	0.19	0.19	0.24	0.48
es	0.47	0.51	0.43	0.37	0.47	0.40	0.52	0.67	0.62	0.40	0.37
ns and suburbs	0.19	0.18	0.18	0.40	0.34	0.34	0.22	0.27	0.29	0.42	0.46
al	0.34	0.30	0.39	0.23	0.18	0.25	0.26	0.06	0.08	0.18	0.17
4: Below upper secondary	0.11	0.22	0.18	0.10	0.17	0.16	0.24	0.10	0.09	0.12	0.10
4: Upper secondary	0.26	0.15	0.24	0.27	0.11	0.18	0.16	0.15	0.23	0.21	0.18
4: Post secondary	0.26	0.33	0.30	0.29	0.36	0.33	0.28	0.38	0.33	0.33	0.23
18-64: Inactive	0.20	0.18	0.16	0.15	0.16	0.14	0.20	0.16	0.15	0.16	0.14
18-64: Unemployed	0.04	0.05	0.05	0.02	0.04	0.04	0.07	0.10	0.10	0.02	0.03
	0.23	0.18	0.17	0.37	0.42	0.42	0.33	0.37	0.38	0.25	0.27
ght or Right	0.26	0.31	0.32	0.28	0.26	0.27	0.18	0.22	0.22	0.36	0.50
	0.23	0.23	0.24	0.08	0.07	0.08	0.09	0.08	0.07	0.01	0.03

*Note:* This table displays summary statistics of the samples alongside actual population frequencies. Detailed sources for each variable and country population frequencies, as well as the definitions of regions, diploma, urbanity, employment, and vote are available in

## E Net gains from the Global Climate Scheme

We use the IEA’s 2DS scenario<sup>61</sup>, which is consistent with limiting the global average temperature increase to 2°C with a probability of at least 50%. The paper by Hood<sup>59</sup> contributing to the Report of the High-Level Commission on Carbon Prices<sup>98</sup> presents a price corridor compatible with this emissions scenario, from which we take the midpoint. The product of these two series provides an estimate of the revenues expected from a global carbon price. We then use the UN median scenario of future population aged over 15 years (*adults*, for short). We derive the basic income that could be paid to all adults by recycling the revenues from the global carbon price: evolving between \$20 and \$30 per month, with a peak in 2030. Accounting for the lower price levels in low-income countries, an additional income of \$30 per month would allow **670 million people** to escape extreme poverty, defined with the threshold of \$2.15 per day in purchasing power parity.<sup>4</sup>

To estimate the increase in fossil fuel expenditures (or *cost*) in each country by 2030, we make a key assumption concerning the evolution of the carbon footprint per adult: that they will decrease by the same proportion in each country. We use data from the Global Carbon Project<sup>86</sup>. In 2030, the average carbon footprint of a country  $c$ ,  $e_c$ , evolves from baseline year  $b$  proportionally to the evolution of its adult population  $\Delta p_c = p_c^{2030}/p_c^b$ . Thus, the global share of country  $c$ ’s carbon footprint in year  $y$ ,  $s_c$ , is proportional to  $\sigma_c = e_c^y \Delta p_c$ , and as countries’ shares sum to 1,  $s_c = \frac{\sigma_c}{\sum_k \sigma_k}$ . Multiplying country  $c$ ’s emission share with global revenues in 2030,  $R$ , and dividing by  $c$ ’s adult population in year  $y$ , yields its average cost per adult:  $\frac{s_c}{p_c^y} R$ . Using findings from Ivanova & Wood<sup>65</sup> for Europe and Fremstad & Paul<sup>41</sup> for the U.S., we approximate the median cost as 90% of the average cost. Finally, the net gain is given by the basic income (\$30 per month) minus the cost. We provided consistent estimates of net gains in all surveys (using  $y = b = 2015$ ), though in the global survey we gave the average net gains vs. the median ones in the complementary surveys. The latter are shown in Figure 23. For the record, Table 3 also provides an estimate of *average* net gains (computed with  $b = 2019$  and  $y = 2030$ ).<sup>5</sup>

<sup>4</sup>By taking the **ratio** of the World Bank series relating the GDP per capita of Sub-Saharan Africa in **PPP** and **nominal**, we obtain the purchasing power of \$1 in this region: \$2.4 in 2019.

<sup>5</sup>2015 was the last year of data available when the global questionnaire was conceived (**OECD data** was then used – it does not cover all countries but give identical rounded estimates than those recomputed from the Global Carbon Project data for our complementary surveys). 2030 was chosen as the reference year as it is the date at which global carbon price revenues are expected to peak (and the GCS redistributive effects would be largest), and the GCS could not realistically enter into force before that date. In the surveys, we chose  $y = b = 2015$  rather than  $b = 2019$  and  $y = 2030$  to get more conservative estimates of the monthly cost in the U.S. (\$20 higher) and in Europe (€5 or £10 higher).

Estimates of the net gains from the Global Climate Scheme are necessarily imprecise, given the uncertainties surrounding the carbon price required to achieve emissions reductions as well as each country's trajectory in terms of emissions and population. These values are highly dependent on future (non-price) climate policies, technical progress, and economic growth of each country, which are only partially known. Integrated Assessment Models have been used to derive a Global Energy Assessment<sup>67</sup>, a 100% renewable scenario<sup>50</sup> as well as Shared Socioeconomic Pathways (SSPs), which include consistent trajectories of population, emissions, and carbon price<sup>12,42,92,100</sup>. Instead of using some of these modelling trajectories, we relied on a simple and transparent formula, for a number of reasons. First and foremost, those trajectories describe territorial emissions while we need consumption-based emissions to compute the incidence of the GCS. Second, the carbon price is relatively low in trajectories of SSPs that contain global warming below 2°C (less than \$35/tCO<sub>2</sub> in 2030), so we conservatively chose a method yielding a higher carbon price (\$90 in 2030). Third, modelling results are available only for a few macro regions, while we wanted country by country estimates. Finally, we have checked that the emissions per capita given by our method are broadly in line with alternative methods, even if it tends to overestimate net gains in countries which will decarbonize less rapidly than average.<sup>6</sup> For example, although countries' decarbonization plans should realign with the GCS in place, India might still decarbonize less quickly than the European Union, so India's gain and the EU's loss might be exaggerated in our computations.

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<sup>6</sup>Computations with alternative methods can be found on [our public repository](#).

Figure 23: Net gains from the Global Climate Scheme.

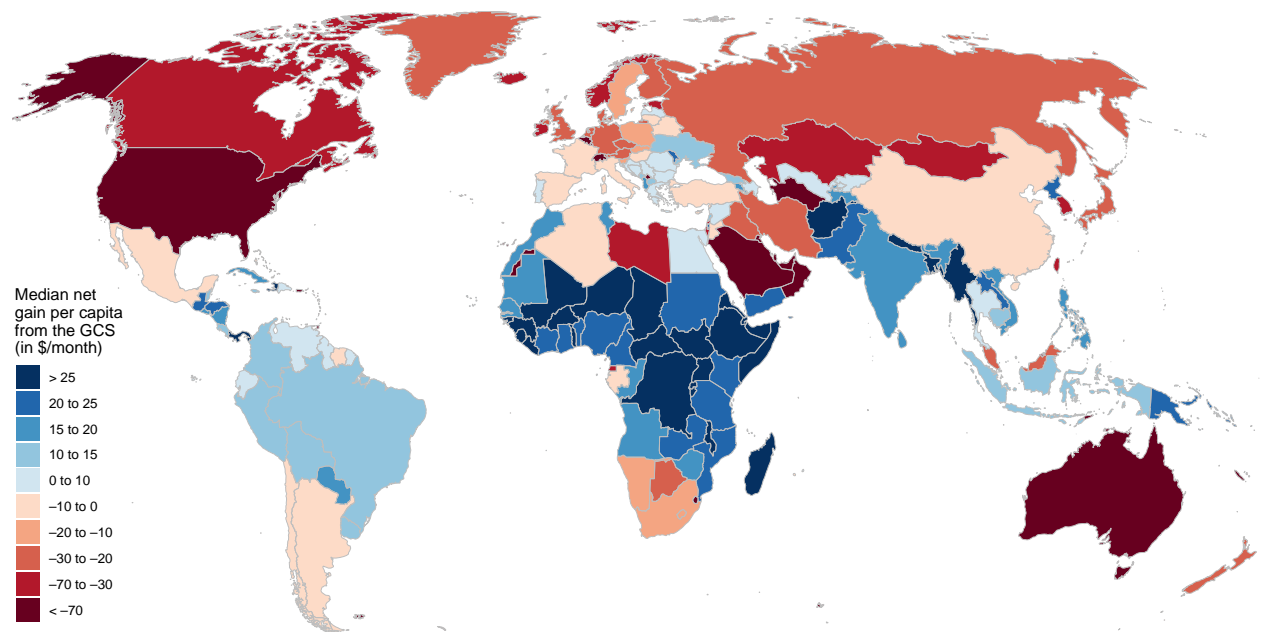


Table 3: Estimated net gain from the GCS in 2030 and carbon footprint by country.

	Mean net gain from the GCS (\$/month)	CO <sub>2</sub> footprint per adult in 2019 (tCO <sub>2</sub> /y)			
			Ukraine	2	5.6
			Uzbekistan*	4	5.1
			Argentina	5	4.9
			Thailand	7	4.6
			Egypt	12	3.6
			Indonesia	13	3.3
Saudi Arabia	-92	24.0	Colombia	15	3.0
United States	-76	21.0	Brazil	15	2.9
Australia	-59	17.6	Vietnam	16	2.9
Canada	-55	16.7	Peru	16	2.8
South Korea	-49	15.6	Morocco	16	2.7
Taiwan	-41	14.0	North Korea*	17	2.5
Germany	-30	11.7	India	18	2.4
Russia	-28	11.5	Philippines	18	2.3
Japan	-27	11.3	Pakistan	22	1.6
Malaysia	-21	10.0	Bangladesh	24	1.1
Iran	-19	9.5	Nigeria	25	1.0
Poland	-18	9.5	Kenya	25	0.9
United Kingdom	-18	9.4	Myanmar*	26	0.9
China	-14	8.6	Sudan*	26	0.9
Italy	-12	8.4	Tanzania	27	0.5
South Africa	-11	8.0	Afghanistan*	27	0.5
France	-10	7.8	Uganda	28	0.4
Iraq*	-7	7.4	Ethiopia	28	0.3
Spain	-6	7.0	Venezuela	29	0.3
Turkey	-2	6.2	DRC*	30	0.1

*Note:* Asterisks denote countries where footprint is missing and territorial emissions is used instead. Values differ from Figure 23 as this table present estimates of *mean* net gain per adult in 2030, not at the present. Only the countries with more than 20 million adults (covering 87% of the global total) are shown.

## F Attrition analysis

Table 4: Attrition analysis for the US1 survey.

	Dropped out	Dropped out after socio-eco	Failed attention test	Duration (in min)	Duration below 4 min
	(1)	(2)	(3)	(4)	(5)
Mean	0.091	0.074	0.073	21.595	0.018
Income quartile: 2	−0.006 (0.012)	−0.006 (0.012)	−0.015 (0.012)	−0.896 (3.255)	−0.008 (0.006)
Income quartile: 3	0.0004 (0.014)	0.0004 (0.014)	−0.023** (0.011)	0.424 (2.872)	−0.002 (0.007)
Income quartile: 4	−0.003 (0.016)	−0.003 (0.016)	−0.003 (0.014)	−3.557 (3.326)	0.004 (0.010)
Diploma: Post secondary	−0.001 (0.011)	−0.001 (0.011)	0.002 (0.009)	1.765 (2.759)	0.004 (0.006)
Age: 25-34	−0.037** (0.017)	−0.037** (0.017)	0.017 (0.019)	−0.980 (2.712)	−0.031** (0.014)
Age: 35-49	−0.019 (0.016)	−0.019 (0.016)	−0.003 (0.017)	3.429 (3.147)	−0.032** (0.014)
Age: 50-64	−0.012 (0.016)	−0.012 (0.016)	−0.041*** (0.016)	4.482 (2.746)	−0.043*** (0.013)
Age: 65+	0.068*** (0.020)	0.068*** (0.020)	−0.047*** (0.016)	7.702* (4.623)	−0.051*** (0.013)
Race: Black	0.037*** (0.013)	0.037*** (0.013)	0.011 (0.014)	7.882** (3.131)	0.005 (0.009)
Race: Hispanic	0.041*** (0.014)	0.041*** (0.014)	0.015 (0.016)	2.383 (2.564)	−0.004 (0.008)
Gender: Man	−0.051*** (0.009)	−0.051*** (0.009)	0.022** (0.009)	0.314 (2.580)	0.003 (0.005)
Region: Northeast	−0.003 (0.014)	−0.003 (0.014)	0.002 (0.013)	−5.448 (5.347)	−0.005 (0.008)
Region: South	−0.010 (0.012)	−0.010 (0.012)	0.007 (0.012)	−0.929 (5.031)	−0.005 (0.007)
Region: West	0.003 (0.015)	0.003 (0.015)	−0.024* (0.013)	−5.211 (5.030)	−0.001 (0.009)
Urban	−0.004 (0.011)	−0.004 (0.011)	0.011 (0.010)	5.009** (2.451)	−0.006 (0.007)
Observations	4,226	4,226	2,817	2,661	2,661
R <sup>2</sup>	0.020	0.020	0.028	0.005	0.017