# International Attitudes Toward Global Policies

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#### Abstract

A global carbon price funding a global basic income, called the "Global Climate Scheme" (GCS), 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 8,000 respondents in the U.S., France, Germany, Spain and the UK, 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, as a list experiment shows no evidence of social desirability bias, majorities are also willing to sign a real-stake petition, and global redistributive policies rank high in the prioritization of policies. Conjoint analyses reveal that a progressive candidate would not significantly lose voting share by endorsing the GCS in any country, and may even gain 11 p.p. in France. Likewise, a platform is more likely to be preferred if it contains the GCS or a global tax on millionaires. Accurate beliefs about the level of support for the GCS 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 capand-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 countriest. 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 complementary surveys on 8,000 American and European 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  $CO_2$  emissions (the questions of this survey on national policies are analysed in another paper<sup>32</sup>). We then conduct complementary surveys in the U.S. and four European coun-

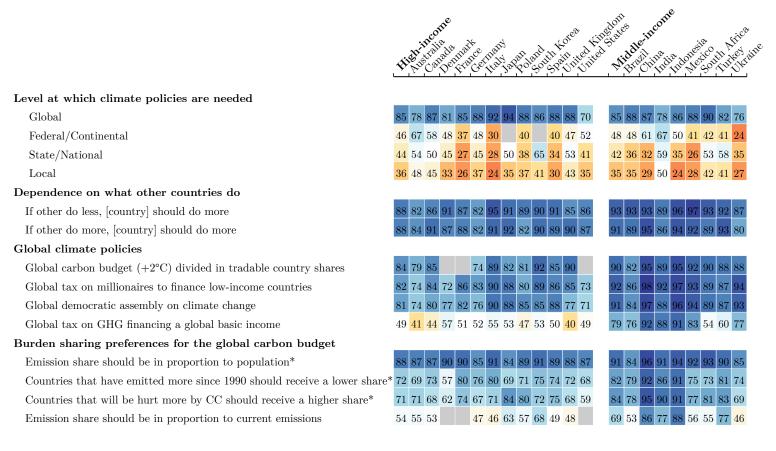
tries to study in detail the sincerity and rationales behind the support for the GCS, the attitudes toward various global policies, global redistribution, and universalistic values. The U.S. survey has been divided in two waves: *US1* and *US2*, with respectively 3,000 and 2,000 respondents. The European survey, called *Eu*, combines the two U.S. waves (just without one question of US2 that used results from US1). The Eu survey comprises 3,000 respondents representative of France, Germany, Spain and the UK, along the dimensions of gender, income, age, highest diploma, country, and degree of urbanisation. The U.S. samples are representative along the same dimensions (with *region* instead of *country*) as well as along ethnicity. Tables 3-4 confirm that our samples closely match population frequencies.

# 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 for supporting climate policies identified in the literature: <sup>32,34,73</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 infrastructure 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,

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.



we ask how the carbon budget should be divided among countries. Consistent with the literature (see Appendix A.1.2), 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. The support for this policy is also tested, and there the redistributive effects are specified to the respondents: the \$30 per month basic income would lift the 700 million people who earn less than \$2/day out of extreme poverty, and fossil price increases would cost the typical person in their country a certain amount (that is provided). Despite their sim-

ilarity, the global tax is less supported than the global quota, and it even fails to obtain a relative majority in Anglo-saxon countries. This lower support is likely due to the facts 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

The remainder of the paper analyzes the results from the complementary surveys in the U.S. and Eu.

#### 2.3.1 Global Climate Scheme

In the complementary surveys, we describe the Global Climate Scheme, explain its distributive effects (specifying the amounts at stake, cf. Appendix E), 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% (in the U.S.) or the top 1% (in Europe) to finance cash transfers to all adults (calibrated to offset 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 both 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 the GCS is at 54% in US1 and 76% in Eu, and the support for NR is very close, at 56 and 72%, respectively (Figure 12).44 bi

#### 2.3.2 Global wealth tax

Consistent with the global survey's results, a "tax on millionaires of all countries to finance low-income countries" receives an absolute majority support of more than 69% in every country, only 4 p.p. lower than a national millionaires tax overall (Figure 4). To random subsamples, we ask respondents how should the revenues of a global tax

Figure 2: Support for the GCS, NC and the combination of GCS, NR and C. (Questions 18, 20 and 24;  $n_{\text{US}} = n_{\text{Eu}} = 3,000$ ,  $n_{\text{FR}} = 729$ ,  $n_{\text{DE}} = 929$ ,  $n_{\text{ES}} = 543$ ,  $n_{\text{UK}} = 749$ )

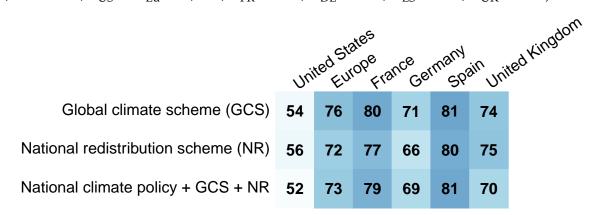
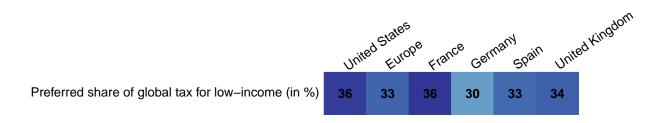


Figure 3: Percent of wealth tax that should go to low-income countries (mean):



on individual wealth in excess of \$5 million be shared with low-income countries, after describing how much revenues such a tax would raise in their country vs. in low-income countries.<sup>1</sup> To some respondents (n = 891), we ask what percentage of the global tax revenues should be pooled to finance low-income countries. In each country, at least 88% of respondents answer a positive amount, with an overall average of 30% (Germany) to 36% (U.S., France) (Figure 3). To some other respondents (n = 859), we ask whether they would prefer that each country retains the revenues it collected or that half of the revenues be pooled to finance low-income countries. About half of the people prefer to channel half of the tax revenues to low-income countries.

<sup>&</sup>lt;sup>1</sup>Namely, a 2% tax on net wealth above \$5 million would raise each year €5 billion in Spain, €16 billion in France, £20 billion in the UK, €44 billion in Germany, \$430 billion in the U.S., and \$1 billion in all low-income countries taken together (28 countries, home to 700 million people).

Figure 4: Relative support for various global policies (percentage of *somewhat* or *strong support*, after excluding *indifferent* answers).  $n_{\rm US} = n_{\rm Eu} = 3,000, n_{\rm FR} = 729, n_{\rm DE} = 929, n_{\rm ES} = 543, n_{\rm UK} = 749, n_{\rm US, global/national wealth tax} = 2,000$ 

	United States			in Unit		
Payments from high–income countries to compensate low–income countries for climate damages	55	71	72	70	78	70
High-income countries funding renewable energy in low-income countries	68	82	82	82	87	81
High-income countries contributing \$100 billion per year to help low-income countries adapt to climate change	60	76	77	79	79	71
Cancellation of low-income countries' public debt	46	53	53	43	63	61
Democratise international institutions (UN, IMF) by making a country's voting right proportional to its population	58	71	69	69	78	72
Removing tariffs on imports from low-income countries	62	73	58	73	82	83
A minimum wage in all countries at 50% of local median wage	63	80	80	78	81	83
Fight tax evasion by creating a global financial register to record ownership of all assets	62	87	90	86	92	87
A maximum wealth limit of \$10 billion (US) / €100 million (Eu) for each human	46	62	58	62	66	67
National tax on millionaires	74	86	81	87	92	88
Global tax on millionaires	70	84	84	84	90	83

# 2.3.3 Other global policies

We also test support for other global policies (Figure 4). All receive relative majority support in each country except two: the "cancellation of low-income countries' public debt" and "a maximum wealth limit" (the latter obtains relative majority support in Eu but not in the U.S., despite the cap being defined as \$10 billion the U.S. instead of  $\in$ /£100 million in Eu). Climate-related policies are particularly popular: "high-income countries funding renewable energy in low-income countries" obtains absolute majority support everywhere while loss and damages compensation (which was approved at the COP27) receives a relative support of 55% (U.S.) to 79% (Spain).

### 2.3.4 Foreign aid

After providing the amount "spent on foreign aid to reduce poverty in low-income countries" (in proportion to their country's government spending and GDP), less than 15% state that their country's foreign aid should be reduced while 61% state that it should be increased, including 17% who support an unconditional increase. To the 44% who answer that aid should be increased but only if some conditions are respected, we later ask them what condition(s) should be required (Figure 19). 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 not diverted" (chosen by 74%), "that recipient countries comply with climate targets and human rights" (67%), and "that other high-income countries also increase their foreign aid" (47%). 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 (Figure 20).

Figure 5: [Asked to those who wish an increase of foreign aid at some conditions.] Conditions at which foreign aid should be increased. (Question 36)

	United States France Germany United States					in Unite
That recipient countries comply with climate targets and human rights	61	72	76	70	75	66
That recipient countries cooperate to fight illegal migrations	36	49	46	53	55	39
That other high–income countries also increase their foreign aid	45	51	52	51	50	49
That this is financed by increased taxes on millionaires	36	38	33	41	37	41
That we can be sure the aid reaches people in need and money is not diverted	68	78	79	80	75	76

# 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

Figure 6: [Asked to those who wish a decrease or stability of foreign aid.] Reasons why foreign aid should not be increased. (Question 37)

	United States France Germany United States				in Unite	sd Kind	
Aid perpetuates poverty as it makes people feel less responsible for themselves	20	30	31	35	27	24	
Aid is not effective as most of it is diverted	28	53	48	57	56	49	
Aid is a pressure tactic for high–income countries that prevents low–income countries from developing freely	11	16	15	14	22	13	
[Country] is not responsible for what happens in other countries	31	30	28	30	17	37	
Charity begins at home: there is already a lot to do to support the [country] people in need	44	63	51	62	70	69	

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

By asking *how many* policies within a list respondents support and varying the list among respondents, a list experiment allows identifying the tacit support for a policy of interest. The tacit support is estimated as the difference in the average number of policies supported between two groups, whose list differ only by the inclusion (or not) of that policy <sup>54</sup>. List experiments have been used to reveal a social desirability bias that silences racism in Southern U.S. <sup>75</sup> or the opposition to the invasion of Ukraine in Russia <sup>28</sup>. As shown in Table 1, the tacit support for the GCS measured through the list experiment is not significantly lower than the direct stated support. Thus, we cannot reject an absence of social desirability bias in our case.

#### 2.4.2 Petition

We ask the respondents whether they are willing to sign a petition (either for the GCS or NR) and inform them that "we will send the results to the [head of state]'s office, informing [them] what share of [fellow citizens] are willing to endorse the [Global Climate

Table 1: Number of supported policies in the list experiment depending on the presence of the Global Climate Scheme (GCS) in the list.

	Numbe	er of supported p	olicies
	All	US	Eu
List contains: GCS	0.626***	0.524***	0.729***
	(0.028)	(0.041)	(0.037)
Support for GCS	0.649	0.542	0.757
Social desirability bias	-0.021	-0.019	-0.028
90% C.I. for the bias	[-0.07; 0.03]	[-0.09; 0.03]	[-0.09; 0.03]
Constant	1.313	1.147	1.481
Observations	5,950	3,000	2,950
$\mathbb{R}^2$	0.089	0.065	0.126

/ National Redistribution] Scheme". Both policies still obtain majority support when the support is framed as a real-stake petition. In the U.S., we cannot reject equality between the support in the real-stake petitions and the simple questions (GCS: p = .30; NR: p = .76). In Eu, the support is significantly lower in the petition, by 7 p.p. for the GCS ( $p = 10^{-5}$ ) and 4 p.p. for NR (p = .01). Although a few Europeans are not willing to sign a petition for a policy they are supposed to support, this affects both policies tested, and the willingness to sign a real-stake petition is still strong: 69% for the GCS and 67% for NR.

#### 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 the National Redistribution Scheme and a national climate policy ("Coal exit" in the U.S., "Thermal insulation plan" in Eu, denoted C). Indeed, 54% of U.S. respondents and 73% of Eu ones 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 the support for the GCS conditional on NR, at 55% in the U.S. (n = 750) and 76% in Eu (n = 750) and 76% in Eu (n = 750) and 76% in Eu (n = 750)

<sup>&</sup>lt;sup>2</sup>We run paired weighted *t*-tests, i.e. we test the equality in support for a policy on the subsample of respondents who are questioned about this policy for the petition.

750), is not significantly different from the support for the GCS alone. This suggests that rejection to the GCS is not driven by the cost of the policy on oneself. The second branch shows that the support for C conditional on NR is somewhat higher, at 62% in the U.S. (n = 750) and 85% in Eu (n = 750). However, the third one shows no significant preference for C compared to GCS (both conditional on NR), neither in Eu, where GCS is preferred by 53% (n = 750) nor in the U.S., where C is preferred by 53% (n = 750). The fourth branch shows that 55% in the U.S. (n = 750) and 79% in Eu (n = 750) prefer the combination of C, NR and the GCS to NR alone.

In other words, there is majority support for the GCS and for a national climate policy C, which are seen as neither complement nor substitute; a few people seem to like a national climate policy and dislike a global one, but as many people prefer a global rather than a national policy; and there is no evidence that some people require a National Redistribution to support the GCS.

In the third analysis, we present to two random branches of the sample hypothetical progressive and conservative platforms that differ only by the presence (or not) of the GCS in the progressive platform. Table 2 shows that a progressive candidate would not significantly lose voting share by endorsing the GCS in any country, and may even gain 11 p.p. in voting intention in France.

Table 2: Preference for a progressive platform depending on whether it includes the GCS or not.

		Pr	efers the Pr	rogressive pla	atform	
	All	United States	France	Germany	United Kingdom	Spain
GCS in Progressive platform	0.025* (0.015)	0.029 (0.022)	0.110*** (0.041)	0.014 (0.033)	0.007 (0.040)	-0.030 (0.039)
Constant	0.624	0.603	0.551	0.7	0.55	0.778
Observations R <sup>2</sup>	5,173 0.001	2,619 0.001	605 0.013	813 0.0002	661 0.00005	475 0.001

*Note:* The 14% of *None of them* answers have been excluded from the regression samples. GCS has no significant influence on them.

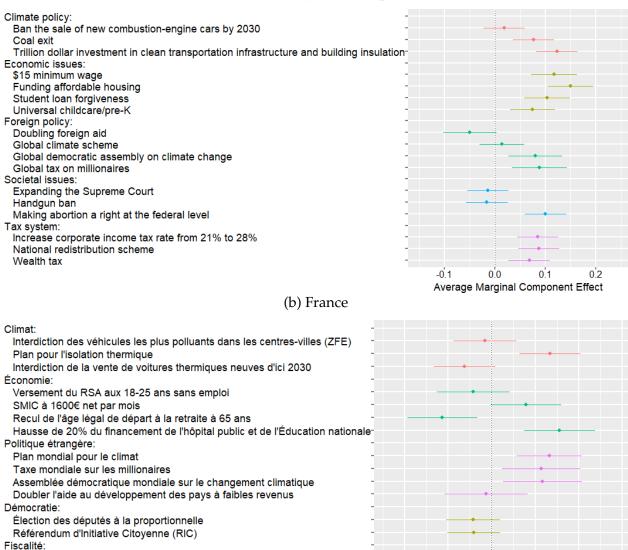
Our last two analyses make people choose between two random platforms. In Eu, respondents are prompted to imagine that a left- or center-left coalition will win the next election and are asked what platform they would prefer that coalition to have campaigned on. In the U.S., the question is framed as a hypothetical duel in a Democratic primary, and

asked only to non-Republicans (n = 2,218), i.e. the respondents who choose *Democrat*, Independent, Non-Affiliated or Other for their political affiliation. 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 7). 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. In the UK, Germany, and France, a platform is about 9 to 13 p.p. more likely to be preferred if it includes the GCS rather than no foreign policy.<sup>3</sup> This effect is between 1 and 4 p.p. and no longer significant in the U.S. and in Spain. Moreover, a platform that includes a global tax on millionaires rather that no foreign policy is 9 to 13 p.p. likely to be preferred in all countries but Spain (not significant at +4 p.p.). Likewise, a global democratic assembly on climate change has a significant effect of 8 to 12 p.p. in the U.S., Germany, and France. These effects are large, and not far from the effects of the policies most influential on the platforms, which range between 15 and 18 p.p. in most countries (and 27 p.p. in Spain), and all relate to improved public services (in particular healthcare, housing and education).

<sup>&</sup>lt;sup>3</sup>This is the Average Marginal Component Effect computed following Hainmueller et al. <sup>54</sup>.

Figure 7: Effects of the presence of a policy (rather than none from this domain) in a random platform on the likelihood that it is preferred to another random platform. (Question 27)

# (a) U.S. (Asked only to non-Republicans)



0.0

Average Marginal Component Effect

0.1

0.2

0.3

Plan de redistribution nationale

Rétablissement de l'impôt sur la fortune (ISF)

#### (c) Germany

Klimaschutz:

Verpflichtende Solaranlagen auf allen geeigneten Dächern

Plan zur Wärmedämmung

Verbot des Verkaufs von Neuwagen mit Verbrennungsmotor bis 2030

Wirtschaftspolitik:

Erhöhung des Regelsatzes des Bürgergelds auf bis zu 600€ pro Monat

Bürgerversicherung als gerechtere Sozialversicherung

Staatsschuldenquote auf unter 60% reduzieren

Investitionen für Gigabit-Netzwerke bereitstellen

Außenpolitik:

Globales Klimaprogramm

Globale Steuer auf Millionäre

Globale demokratische Versammlung zum Klimawandel

Verdoppelung der Mittel für die Entwicklungshilfe in einkommensschwachen Ländern-

Gesellschaft:

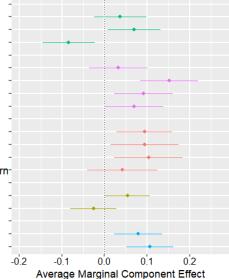
Volksentscheid auf Bundesebene

Cannabis-Legalisierung

Steuerpolitik:

Nationales Umverteilungsprogramm

Die Vermögenssteuer wieder in Kraft setzen



#### (d) Spain

Política climática:

100% de electricidad producida con energías renovables en 2040

Plan de aislamiento térmico

Prohibir la venta de coches nuevos con motor de combustión para 2030

Asuntos económicos:

Más necesidades sanitarias dentro del sistema público (cuidado dental, gafas, salud mental):

Ingreso Básico Garantizado de 600€ al mes

Jornada laboral de 34 horas semanales

Inversión en el sistema educativo y universalización de la educación preescolar

Política exterior:

Plan climático global

Impuesto mundial a los millonarios

Asamblea democrática mundial sobre el cambio climático

Duplicar la ayuda exterior a los países de renta baja

Asuntos sociales

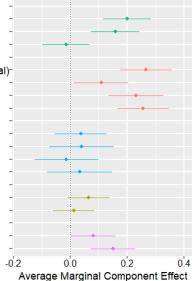
Reformar la ley electoral para hacer el Senado más proporcional

Abolición de la prostitución

Sistema fiscal:

Plan de redistribución nacional

Aumentar los impuestos sobre las rentas superiores a 100.000 euros anuales



#### (e) UK

15

Climate policy

Ban of most polluting vehicles in city centers (low-emission zones)

Thermal insulation plan

Ban the sale of new combustion-engine cars by 2030

Economic issues:

£150 billion to upgrade schools, hospitals, care homes and council houses

Real Living Wage of £11 per hour for all workers aged 16 and over

Reduce the average full-time weekly working hours to 32

Re-establish neighbourhood policing and recruit 2,000 more frontline officers

Foreign policy:

Global climate scheme

Global tax on millionaires

Global democratic assembly on climate change

Doubling foreign aid

Societal issues:

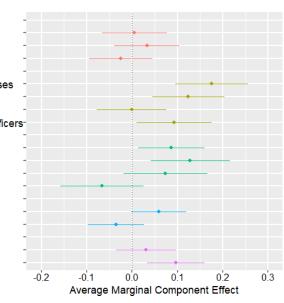
Strict enforcement of immigration and border legislation

Legalization of cannabis

Tax system:

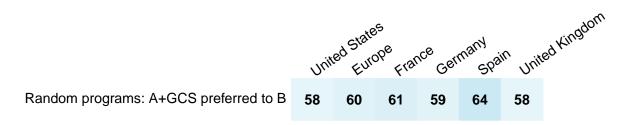
National redistribution scheme

Wealth tax



The fifth analysis draws random platforms in a similar ways, except that candidate A's platform always contains the GCS while B's includes no foreign policy. In this case, A is chosen by 60% in Eu and 58% in the U.S. (Figure 8). In the U.S. for example, our conjoint analyses indicate that a candidate at the Democratic primary would have more chances to obtain the nomination by endorsing 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>48</sup>

Figure 8: Preference for a random platform A that also includes the Global Climate Scheme and a random platform B that does not. (Question 28; in the U.S., asked only to non-Republicans.)



#### 2.4.4 Prioritization

At the end of the survey, we pick six policies at random (and uniformly) among the policies used in the last conjoint analyses, and ask respondents to allocate 100 points among them (using sliders), 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. In each country, the GCS ranks in the middle of all policies or at a higher rank, with an average number of points from 15.4 (U.S.) to 23.3 (Germany). In Germany, the GCS is the most prioritized policy and the global tax on millionaires the second most. The global tax on millionaires ranks at worst in sixth position in every country, and receives an average number of points from 19.4 (Spain) to 22.6 (Germany). This question further reveals the potential mismatch between policies prioritized by the public and those enacted by legislators. Indeed, to "ban the sale of new combustion-engine cars by 2030" is one of the three least prioritized policies, with an average of 8.3 (France) to 11.7 (UK), and yet the European Union and California have enacted to phase out new combustion-engine cars by 2035.

# 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 find limited evidence for pluralistic ignorance in an incentivized question on the perceived support (Figure 9). Americans have quite accurate beliefs regarding the level of support for the GCS. Indeed, the mean (resp. quartiles) perceived support is 51.5% (resp. 35, 51, 68%) vs. an actual support of 53%. Europeans underestimate the support by 16 p.p., but 65% of them correctly guess that the GCS obtains a majority (mean of 58.7% and quartiles of 43, 61, 74% vs. an actual support of 75%). For the record, the second-order beliefs are equally accurate for the National Redistribution Scheme in the U.S., and equally underestimated in Eu.

Figure 9: Beliefs regarding the support for the GCS and NR. (Questions 19 and 21)

	Unite	ad States Euro	be kian	ice Gell	<sub>nany</sub> Spai	n Unite
Belief about GCS	51	59	61	56	64	57
Support for the GCS	53	75	81	71	81	75
Belief about NR	55	58	60	53	63	60
Support for NR	54	72	77	66	80	75

#### 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, 21% choose "sentient beings (humans and animals)", 22% "humans", 33% their fellow citizens (or "Europeans"), 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 of left-wing voters. When asked what should their country's diplomats defend in international climate negotiations, only 12% prefer their country's "interests, even if it goes against global justice"; 29% prefer global justice (mitigated or not by national interests) and the bulk of respondents (38%) prefer their country's "interests, to the extent it respects global justice". Furthermore, when asked to judge the extent to which climate change, global poverty and inequality in their country are an issue, climate change is generally viewed as the biggest problem (with a mean of 0.59 once we recode answers between -2 and 2), followed by global poverty (0.42) and national inequality (0.32). Finally, we elicit unversalistic values through a lottery experiment. We automtically enroll the respondents in a lottery with one \$100 prize. Respondents have to choose which share of the prize to keep for themself vs. give to a person living in poverty. The charity donation is destined either for an African or a fellow citizen, depending on the respondent's random branch. We observe no significant variation in the willingness to donate in function of the recipient's origin in Eu, and a donation lower by 2 p.p. for the African in the U.S. (the average donation is 34%). Moreover, the slightly lower donations to Africans are entirely driven by right-wing voters or non-voters. Overall, answers to these broad value questions are consistent with half of Americans and three quarters of Europeans supporting global policies like the GCS, given that people are almost as much willing to give to poor Africans than to poor fellow citizens, find that global issues are among the biggest problems, almost half of them are universalist when they vote, and most of them wish that their 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 surveys in the U.S. and four European countries confirm 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 emissions trading system, and a global basic income funded by its revenues. A list ex-

periment 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 progressive candidate should not lose voting shares by endorsing the GCS, and should even get a voting share 11 p.p. higher in France. Likewise, a candidate endorsing the GCS would win votes at a U.S. Democratic primary, while in Europe, a progressive platform including the GCS would be preferred to a platform not including it. Besides a potential lack of sincerity or weak opinions, we dismiss another hypothesis that could have explained 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, we now need to study new explanations.

We see four potential explanations for the scarce mention of globally redistributive policies in the public debate and political platforms. 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 univeralistic values, of the support for the GCS, or of the electoral advantage of endorsing it among policy makers. Second, people or policy makers may believe that globally redistributive policies are politically infeasible in some key (potentially foreign) countries like the U.S. We intend to test these hypotheses by running a survey on Members of the European Parliament. Third, 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 people's univeralistic values. Fourth, most people and perhaps even most policy makers may have simply never heard of specific global redistributive policies, let alone built their political ideas upon it. Being unaware of prominent global policy proposals, people or policy makers would cautiously doubt that they are well-specified or technically implementable, and would therefore dismiss them as unrealistic. 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".

If any (or several) of the remaining hypotheses is confirmed by evidence, we could

<sup>&</sup>lt;sup>4</sup>The project was preregistered in the Open Science Foundation registry (osf.io/fy6gd).

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 between January and March 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>32</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).

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 global 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 industralized countries rather than just one's own country.

In surveys in Brazil, Germany, Japan, the UK and the U.S.,  $Ghassim^{48}$  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 48 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" 42. 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" 45. In surveys in Argentina, China, India, Russia, Spain, and the U.S., Ghassim et al. 49 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>81</sup> find that Americans and French people prefer an international settlement of climate justice even if it empedes on sovereignty. In a 2013 survey in China, Germany and the U.S., Schleich et al. <sup>96</sup> show that more than three quarter of people think that international climate agreements reached so far are not successful and that future agreements are important. In Finland, Sivonen <sup>97</sup> finds that a carbon tax 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, ISSP <sup>66</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>67</sup> uncover 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 receiving 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 follows 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. 96 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. 25 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 15 find agreement that rich countries should pay more and historical emissions matter, but that rich countries should not be the only ones 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 to 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. 26 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.  $^{81}$  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. 81 contain many other results, for example majorities prefers 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>31</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>91</sup> shows that 83% of Americans support a multilateral effort to cut world hunger in half. PIPA <sup>92</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>72</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>5</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 (controling for desired aid), they argue that the gap between actual and desired and is due to political influence of the rich who defend their vested interests. In Kaufmann et al. <sup>72</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>50</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>84</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>62</sup> offer a critical review of the literature and show that the strong support for poverty alleviation largely stems from intrinsic altruism. Indeed, citing DFID<sup>33</sup> and PIPA<sup>91</sup>, they note that 47% of British people find that the aid is wasted (mainly due to corruption), while Americans estimate that less than a quarter of the aid

 $<sup>^5</sup>$ Kaufmann et al.  $^{72}$  offer the best results on desired aid because (as Hudson & van Heerde  $^{62}$  criticize), other studies did not take into acount misperceptions of actual 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>58</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>88</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>6</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>40</sup> finds that the average Americans favors a 0.8% linear tax rate on unspecified wealth until \$2 million (the highest wealth level tested), and a 3% linear rate on inherited wealth. In 21 OECD countries, the OECD <sup>85</sup> uncovers strong majority support for higher taxes on the rich to support the poor (with nearly 70% overall agreement and less than 20% disagreement). Isbell <sup>65</sup> finds similarly high level of support in 34 African countries. In the UK, Patriotic Millionaires <sup>87</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>39</sup> measure universalism, by asking American respondents to split \$100 between a random stranger and a random person with the same income but

<sup>&</sup>lt;sup>6</sup>We did not find any using the combination of "survey" or "attitudes" with "wealth tax" or "global wealth tax" in Google Scholar.

closer to them. They distinguish different facets of universalism, and define *foreign universalism* 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" Enke et al. <sup>38</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>29</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 18 show this for Americans and Indians, who both overestimate their country's emissions at one third of global total. Beiser-McGrath & Bernauer 16 show this in the U.S. and China using an experimental design. McEvoy & Cherry 79 show that Americans mostly invoke leadership and morality to justify unliteral climate action. Using a range of methods, Aklin & Mildenberger 2 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 80 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>86</sup> showed that, towards the end of the civil rights movement, 47% of Americans believed that most white people favored segregation while only 18% actually did so. PIPA<sup>91</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>98</sup> show that Americans underestimate the support for climate policies by

nearly half, while Drews et al. <sup>35</sup> document pluralistic ignorance of carbon tax support in Spain. Geiger & Swim <sup>47</sup> show that pluralistic ignorance about concern for climate change leads people to talk less about it as many 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>60</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>53</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>53</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>10,20,69,93</sup>.

While many endorse the egalitarian allocation of emissions permits, economists also considered this outcome as politically irrealistic. 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>100</sup>.

Gollier & Tirole <sup>51</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 and grandfathering rules if set in between. Using a similar formula in the context of a tax, Cramton et al. <sup>30</sup> (summarized in <sup>77</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>102</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 and burden-sharing rules. The IMF <sup>64</sup> also supports global carbon pricing or, as a first step, a carbon price floor. They propose either differentiated prices among countries, or interna-

tional transfers, and estimate that a price of  $75/tCO_2$  in 2030 would be compatible with a 2°C trajectory.

Other authors have advanced more radical ideas. Weitzman <sup>104</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>41</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 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>82</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>83</sup>

Following the labor theory of value, a strand of economists have argued that global inequalities stem from unequal exchange in international trade. 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 4,94 Taking stock, Hickel 59 proposes to globally establish minimum wages at 50% of the local median wage. Hickel 59 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>90</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>74</sup> compute the optimal linear income tax rates for all countries in two ways: globally centralized 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 per capita). 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.2.3 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>46</sup> find that UCT outperform a food subsidy; Haushofer & Shapiro <sup>57</sup> find significant impacts on health, economic outcomes, and psychological well-being; Egger et al. <sup>36</sup> find large positive spillovers on non-recipient people, and minimal inflation. Reviews of extant research confirm the positive outcomes of UCT. <sup>11,99</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>56</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>55</sup>

#### A.2.4 Global democracy

The idea of world federalism follows a long tradition, dating back at least to Kant<sup>71</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. Before World War II, feminist and pacifist Maverick Lloyd & Schwimmer<sup>78</sup> founded the *Campaign for World Government*, defending direct representation at the global scale. Einstein<sup>37</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. Besides the UNPA, various scholars have proposed different models of global democracy, ranging from deliberative spaces to a world federation. 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, and a similar *World Citizens' Assembly* should soon follow.

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

Figure 10: Correct answers to comprehension questions. (Questions 15-17)

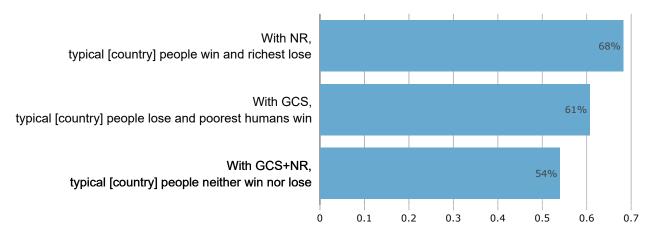


Figure 11: Number of correct answers to comprehension questions. (Questions 15-17)

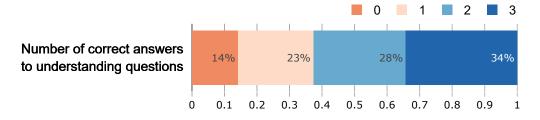


Figure 12: Support for the GCS, NC and the combination of GCS, NR and C. (Questions 18, 20 and 24)

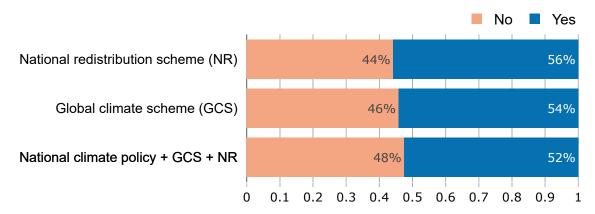


Figure 13: List experiment. (Question 22)

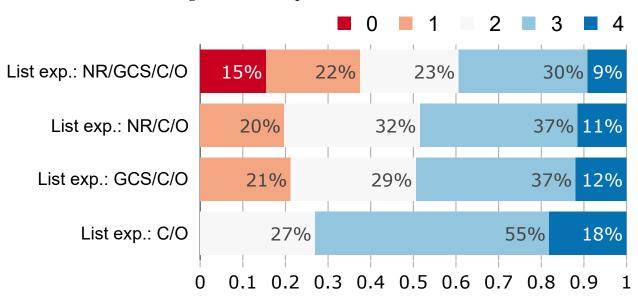


Figure 14: Conjoint analyses. (Questions 23-28)

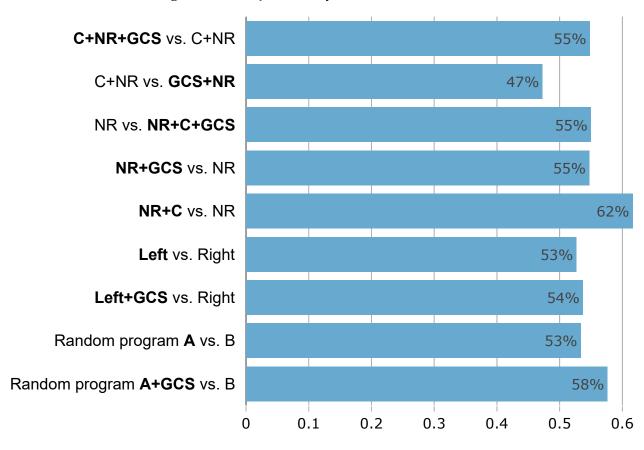


Figure 15: Donation in case of lottery win. (Question 30)

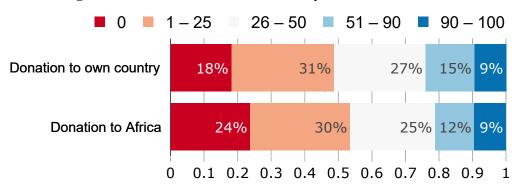


Figure 16: Willingness to sign real-stake petition for the GCS or NR. (Question 32)

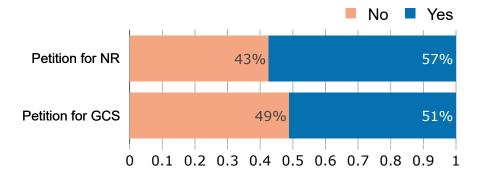


Figure 17: Support for various global policies. (Questions 33 and 34)

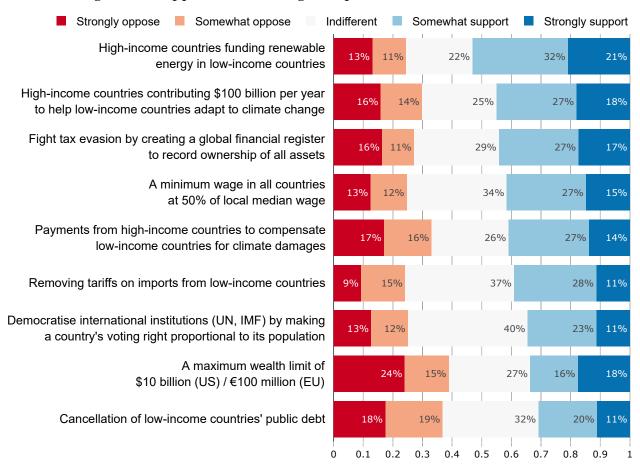


Figure 18: Attitudes regarding the evolution of U.S. foreign aid. (Question 35)

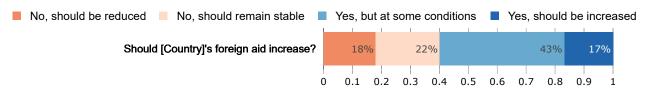


Figure 19: [Asked to those who wish an increase of foreign aid at some conditions.] Conditions at which foreign aid should be increased. (Question 36)

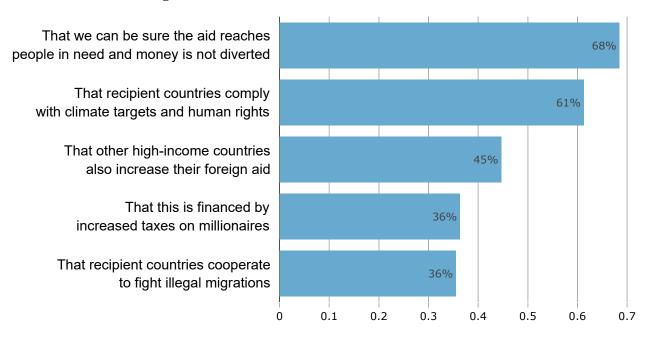


Figure 20: [Asked to those who wish a decrease or stability of foreign aid.] Reasons why foreign aid should not be increased. (Question 37)

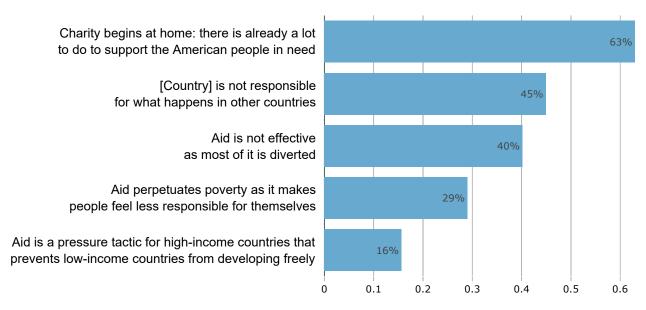


Figure 21: Preferred approach of U.S. diplomats at international climate negotiations. (Question 38)

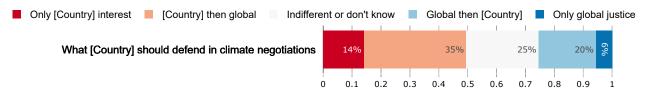


Figure 22: Extent to which selected issues are viewed as important problems. (Question 46)

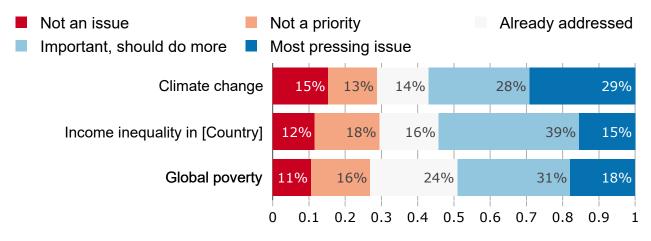
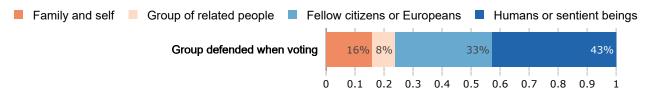


Figure 23: Group defended when voting. (Question 47)



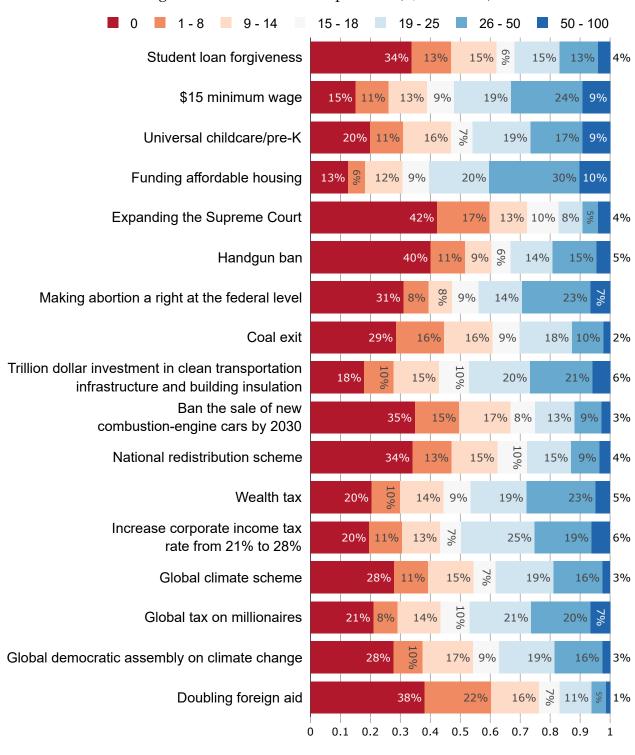


Figure 24: Prioritization of policies. (Question 48)

# C Questionnaire of US1 survey

Background of respondent Socio-demographics, political view Global climate scheme (G) and National redistribution (R) Description, comprehension questions, support, second-order belief List experiment

Assessment of hidden support for the Global climate scheme (G), National redistribution scheme (R), Coal exit (C) and Marriage only for opposite-sex couples (O) Conjoint analysis (a): support for G conditional on R+C Preference between G+R+C vs. R+C, support for G+R+C Conjoint analysis (b): support for G or C conditional on R Preference for C+R vs. G+R Conjoint analysis (c): influence of G endorsement on vote for President Among 2024 fictitious platforms, preference for. Democrat vs. Republican Democrat (incl. G) vs. Republican Only for non-Republican respondents Conjoint analysis (d): influence of G endorsement on vote at Democratic primary Preference among two fictitious candidates at the 2024 Democratic primary, with platforms randomly drawn. In the second question, Bundle A contains G and Bundle B does **Donation lottery** In case of a win, share given to a poor American African Petition Realistic global redistributive policies Support for rich countries funding compensation, mitigation, adaptation, for global taxes or fair-trade policies; should foreign aid increase or decrease (how and why) Values, prioritization of policies, and feedback Values include amount donated to charities, interest in politics, vote in last election, universalistic vs. egoistic values, split of 100 points among 6 policies, open-field for feedbac

Figure 25: 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;
  Natice 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; Eigth 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 10]

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: <u>National redistribution scheme</u>: 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 10]

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.

<u>National redistribution scheme:</u> 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 10] 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 nei*ther gain nor lose from both schemes combined. Now, here are the last two policies:

<u>Coal exit:</u> 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. <u>Click here for the reminder of the first two policies.</u> [Clicking displays the previous summarized descriptions.]

- 18. Do you support the Global climate scheme? [Figure 12] *Yes; No*
- 19. According to you, what percentage of Americans answer Yes to the previous question? [Figure 9]

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 12] Yes; No
- 21. According to you, what percentage of Americans answer Yes to the previous question? [Figure 9]

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 13*]

[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 NR/C/O]

- National redistribution 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

## **Conjoint analyses**

23. Among the two following bundles of policies, which one would you prefer? [*Figure* 14]

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

same time.

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

Bundle A; Bundle B

- 24. Do you support Bundle A (combining Coal exit, the National redistribution scheme, and the Global climate scheme)?[Figure 12] Yes; No
- 25. [new page] Among the two following bundles of policies, which one would you prefer? [Figure 14]

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]

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

[ $Branch\ NR\ vs.\ NR + C + GCS$ ]

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

 $[Branch\ NR + GCS\ vs.\ NR]$ 

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

 $[Branch\ NR + C\ vs.\ NR]$ 

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

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

Democrat	Republican
Increase corporate income tax rate	Decrease the payroll tax
from 21% to 28%	
Coal exit	Permit completion of the Keystone
	pipeline
Trillion dollar investment in	Withdrawal of the Paris agreement
childcare, healthcare, education and	
housing	
\$15 minimum wage	Marriage only for opposite-sex
	couples
National redistribution scheme	Strict enforcement of immigration
	and border legislation
[Global climate scheme / no row]	[ / 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 14 and 7]

	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 14]

5		
	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]
Foreign policy	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 15]

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 16*]

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 17]

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 17]
  - 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 18*]
  - 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 19*]
  - 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 20]
  - 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 21]

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 22]
  - 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 23]
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 24]

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 3: Sample representativeness of the complementary surveys.

	US1				US2		EU		
	Pop.	Sample	Weighted sample	Pop.	Sample	Weighted sample	Pop.	Sample	Weighted sample
Sample size		3,000	3,000		516	516		2,950	2,950
Gender: Woman Gender: Man	0.51 0.49	0.52 0.47	0.51 0.49	0.51 0.49	0.65 0.34	0.65 0.34	0.51 0.49	0.49 0.51	0.51 0.49
Income_quartile: 1 Income_quartile: 2 Income_quartile: 3 Income_quartile: 4	0.25 0.25 0.25 0.25	0.27 0.24 0.25 0.23	0.25 0.25 0.25 0.25	0.25 0.25 0.25 0.25	0.53 0.31 0.13 0.04	0.53 0.31 0.13 0.04	0.25 0.25 0.25 0.25	0.28 0.23 0.25 0.24	0.25 0.25 0.25 0.25
Age: 18-24 Age: 25-34 Age: 35-49 Age: 50-64 Age: 65+	0.12 0.18 0.24 0.25 0.21	0.12 0.15 0.25 0.27 0.21	0.12 0.18 0.24 0.25 0.21	0.12 0.18 0.24 0.25 0.21	0.09 0.19 0.29 0.27 0.16	0.09 0.19 0.29 0.27 0.16	0.10 0.15 0.24 0.26 0.25	0.11 0.17 0.25 0.24 0.23	0.10 0.15 0.24 0.26 0.25
Diploma_25_64: Below upper secondary Diploma_25_64: Upper secondary Diploma_25_64: Post secondary	0.06 0.28 0.34	0.02 0.25 0.40	0.05 0.28 0.34	0.06 0.28 0.34	0.06 0.41 0.30	0.06 0.41 0.30	0.13 0.23 0.29	0.14 0.19 0.34	0.13 0.23 0.29
Race: White only Race: Hispanic Race: Black	0.60 0.18 0.13	0.67 0.15 0.16	0.61 0.19 0.14	0.60 0.18 0.13	0.14 0.46 0.37	0.14 0.46 0.37			
Region: Northeast Region: Midwest Region: South Region: West	0.17 0.21 0.38 0.24	0.20 0.22 0.39 0.20	0.17 0.21 0.38 0.24	0.17 0.21 0.38 0.24	0.16 0.15 0.47 0.22	0.16 0.15 0.47 0.22			
Urban: TRUE	0.73	0.78	0.74	0.73	0.83	0.83			
Employment_18_64: Inactive Employment_18_64: Unemployed	0.20 0.02	0.16 0.07	0.16 0.08	0.20 0.02	0.19 0.15	0.19 0.15	0.17 0.03	0.15 0.05	0.15 0.05
Vote: Left Vote: Center-right or Right Vote: Far right	0.32 0.30	0.47 0.31	0.45 0.31	0.32 0.30	0.53 0.15	0.53 0.15	0.30 0.28 0.10	0.33 0.32 0.10	0.32 0.32 0.10
Country: FR Country: DE Country: ES Country: UK							0.24 0.33 0.18 0.25	0.25 0.33 0.17 0.25	0.24 0.33 0.18 0.25
Urbanity: Cities Urbanity: Towns and suburbs Urbanity: Rural							0.43 0.33 0.25	0.50 0.32 0.18	0.43 0.33 0.25

*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

Table 4: Sample representativeness for each European country.

	FR				DE			ES		UK		
	Pop.	Sam.	Wght.	Pop.	Sam.	Wght.	Pop.	Sam.	Wght.	Pop.	Sam.	Wght.
Sample size		729	729		979	979		513	513		749	749
Gender: Woman	0.52	0.50	0.52	0.51	0.52	0.51	0.51	0.52	0.51	0.50	0.43	0.50
Gender: Man	0.48	0.50	0.48	0.49	0.48	0.49	0.49	0.48	0.49	0.50	0.57	0.50
Income_quartile: 1 Income_quartile: 2 Income_quartile: 3 Income_quartile: 4	0.25	0.31	0.25	0.25	0.29	0.25	0.25	0.25	0.25	0.25	0.26	0.25
	0.25	0.17	0.25	0.25	0.25	0.25	0.25	0.31	0.25	0.25	0.19	0.25
	0.25	0.19	0.25	0.25	0.28	0.25	0.25	0.27	0.25	0.25	0.26	0.25
	0.25	0.33	0.25	0.25	0.18	0.25	0.25	0.16	0.24	0.25	0.28	0.25
Age: 18-24	0.12	0.12	0.12	0.09	0.14	0.09	0.08	0.09	0.08	0.10	0.07	0.10
Age: 25-34	0.15	0.14	0.15	0.15	0.17	0.15	0.12	0.17	0.13	0.17	0.20	0.17
Age: 35-49	0.24	0.31	0.24	0.22	0.26	0.22	0.28	0.25	0.28	0.24	0.18	0.24
Age: 50-64	0.24	0.19	0.24	0.28	0.23	0.28	0.27	0.28	0.27	0.25	0.30	0.25
Age: 65+	0.25	0.24	0.25	0.26	0.21	0.26	0.25	0.21	0.24	0.24	0.25	0.24
Diploma 25_64: Below upper secondary	0.11	0.19	0.11	0.10	0.14	0.10	0.24	0.14	0.25	0.12	0.09	0.12
Diploma 25_64: Upper secondary	0.26	0.16	0.26	0.27	0.20	0.27	0.16	0.16	0.16	0.21	0.23	0.21
Diploma 25_64: Post secondary	0.26	0.30	0.26	0.29	0.31	0.29	0.28	0.40	0.28	0.33	0.36	0.33
Urbanity: Cities	0.47	0.52	0.47	0.37	0.47	0.37	0.52	0.61	0.52	0.40	0.41	0.40
Urbanity: Towns and suburbs	0.19	0.19	0.19	0.40	0.35	0.40	0.22	0.28	0.23	0.42	0.43	0.42
Urbanity: Rural	0.34	0.29	0.34	0.23	0.18	0.23	0.26	0.11	0.25	0.18	0.16	0.18
Employment_18_64: Inactive	0.20	0.19	0.18	0.15	$0.14 \\ 0.04$	0.11	0.20	0.12	0.12	0.16	0.16	0.17
Employment_18_64: Unemployed	0.04	0.05	0.05	0.02		0.03	0.07	0.11	0.12	0.02	0.03	0.04
Vote: Left	0.23	0.19	0.21	0.37	0.44	0.44	0.33	0.38	0.40	0.25	0.28	0.29
Vote: Center-right or Right	0.26	0.30	0.29	0.28	0.27	0.29	0.18	0.23	0.22	0.36	0.44	0.41
Vote: Far right	0.23	0.22	0.22	0.08	0.07	0.07	0.09	0.08	0.09	0.01	0.03	0.03

*Note*: This table displays summary statistics of the samples alongside actual population frequencies. In this Table, weights are defined at the country level. 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

To specify the GCS, we use the IEA's 2DS scenario <sup>63</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>61</sup> contributing to the Report of the High-Level Commission on Carbon Prices <sup>101</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>7</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 footprints per adult: that they will decrease by the same proportion in each country. We use data from the Global Carbon Project<sup>89</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:  $\frac{S_c}{n^y}R$ . Using findings from Ivanova & Wood <sup>68</sup> for Europe and Fremstad & Paul <sup>43</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 26. For the record, Table 5 also provides an estimate of average net gains (computed with b = 2019and y = 2030).

<sup>&</sup>lt;sup>7</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>&</sup>lt;sup>8</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

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 70, a 100% renewable scenario<sup>52</sup> as well as Shared Socioeconomic Pathways (SSPs), which include consistent trajectories of population, emissions, and carbon price 12,44,95,103. 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. 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 overestimated in our computations.

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 than the other option) and in Europe ( $\in 5$  or £10 higher).

<sup>&</sup>lt;sup>9</sup>Computations with alternative methods can be found on our public repository.

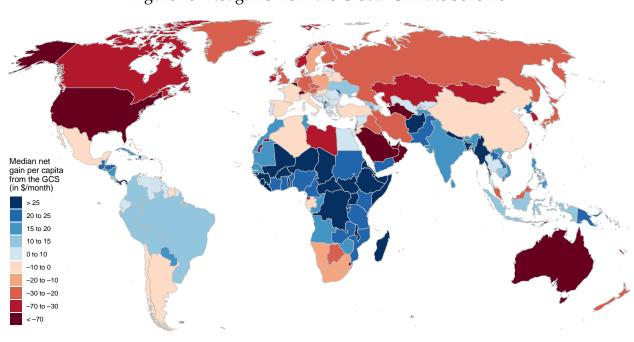


Figure 26: Net gains from the Global Climate Scheme.

Table 5: Estimated net gain from the GCS in 2030 and carbon footprint by country.

	0		0	
030 and carbon fo	otprint by co	untry.	Mexico	2
_	Mean	$CO_2$	Ukraine	2
	net gain	_	Uzbekistan*	4
	from	footprint per adult	Argentina	5
	the GCS	in 2019	Thailand	7
	(\$/month)		Egypt	12
	(\$/111011111)	$(tCO_2/y)$	Indonesia	13
udi Arabia	-92	24.0	Colombia	15
ited States	-76	21.0	Brazil	15
stralia	-59	17.6	Vietnam	16
nada	-55	16.7	Peru	16
outh Korea	-49	15.6	Morocco	16
iwan	<b>-4</b> 1	14.0	North Korea*	17
ermany	-30	11.7	India	18
ıssia	-28	11.5	Philippines	18
pan	-27	11.3	Pakistan	22
alaysia	-21	10.0	Bangladesh	24
ın	-19	9.5	Nigeria	25
land	-18	9.5	Kenya	25
ited Kingdom	-18	9.4	Myanmar*	26
ina	-14	8.6	Sudan*	26
ly	-12	8.4	Tanzania	27
uth Africa	-11	8.0	Afghanistan*	27
ance	-10	7.8	Uganda	28
ıq*	-7	7.4	Ethiopia	28
		7.0	Venezuela	29
pain	-6	7.0	venezueia	29

Algeria\*

6.0

-1

*Note*: Asterisks denote countries where footprint is missing and territorial emissions is used instead. Values differ from Figure 26 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 6: 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	0.092	0.073	0.076	21.564	0.018	
Income quartile: 3	-0.006	-0.006	-0.022*	-0.714	-0.009	
1	(0.011)	(0.011)	(0.012)	(3.218)	(0.006)	
Income quartile: 4	0.001	0.001	$-0.030^{***}$	0.499	-0.002	
1	(0.013)	(0.013)	(0.011)	(2.856)	(0.007)	
Diploma: Post secondary	0.001	0.001	-0.009	-3.516	0.004	
,	(0.016)	(0.016)	(0.015)	(3.331)	(0.010)	
Age: 25-34	0.004	0.004	-0.001	1.736	0.004	
0	(0.010)	(0.010)	(0.009)	(2.752)	(0.006)	
Age: 35-49	$-0.054^{***}$	$-0.054^{***}$	0.006	-0.792	-0.033**	
3	(0.017)	(0.017)	(0.020)	(2.640)	(0.013)	
Age: 50-64	$-0.040^{**}$	$-0.040^{**}$	-0.008	3.768	-0.033**	
3	(0.016)	(0.016)	(0.018)	(3.087)	(0.014)	
Age: 65+	$-0.028^*$	$-0.028^*$	$-0.047^{***}$	4.687*	-0.043****	
3	(0.017)	(0.017)	(0.016)	(2.694)	(0.013)	
Race: Black	0.056***	0.056***	-0.055****	7.896*	$-0.052^{***}$	
	(0.021)	(0.021)	(0.016)	(4.585)	(0.012)	
Race: Hispanic	0.037***	0.037***	0.010	7.738**	0.004	
1	(0.013)	(0.013)	(0.014)	(3.083)	(0.009)	
Gender: Man	0.013	0.013	0.154***	-2.635	0.044	
	(0.031)	(0.031)	(0.055)	(1.979)	(0.037)	
Region: Northeast	-0.050****	-0.050****	0.020**	0.160	0.002	
0	(0.008)	(0.008)	(0.009)	(2.576)	(0.005)	
Region: South	-0.001	-0.001	0.004	-5.474	-0.005	
	(0.013)	(0.013)	(0.013)	(5.304)	(0.008)	
Region: West	-0.006	-0.006	0.009	-0.962	-0.004	
	(0.011)	(0.011)	(0.012)	(4.978)	(0.007)	
Urban	0.006	0.006	$-0.022^*$	-5.075	-0.002	
	(0.014)	(0.014)	(0.013)	(4.983)	(0.009)	
urban	-0.003	-0.003	0.010	4.989**	-0.005	
	(0.010)	(0.010)	(0.011)	(2.428)	(0.006)	
Observations	4,500	4,500	2,854	2,688	2,688	
$\mathbb{R}^2$	0.023	0.023	0.030	0.005	0.018	