



# PEOPLES' CLIMATE VOTE 2024

Methodology

## METHODOLOGY

### 5 METHODOLOGY

Citizens' support for climate-related policies is a key factor in countries raising their climate ambitions and responding to current challenges with solutions.

Given UNDP's unique role in supporting 120 countries in developing and implementing their national climate plans (or NDCs) under the Paris Agreement, through its flagship Climate Promise initiative, it is also a crucial tool for helping governments gauge public perspectives and experiences on climate change. This support extends to policy priorities at both national and global levels, which could be integral to those national pledges.

The Peoples' Climate Vote 2024 provides the latest and most comprehensive insight into global experiences of climate change and appetite for ambitious climate policy. The survey reached countries and communities that had not had the opportunity to share their experiences and views about climate change to a global audience.

The questions for the survey were designed to be relevant to all, regardless of education level, culture, economic status or other demographics of respondents. For demographic information, respondents were asked to identify their age, their gender and when they left education.

The first set of questions asked about people's experiences of climate change, including worry and impacts on their daily lives. The second set of questions asked respondents how well they think different groups are addressing climate change, and the third and final set of questions asked what respondents would like to see happen to address climate change and its impacts. The data was then reviewed by world-renowned experts on climate policy. The survey, conducted by GeoPoll, was collated and processed by analysts at the University of Oxford.

#### **Survey administration**

The Peoples' Climate Vote 2024 survey was administered by <u>GeoPoll</u> by Computer Assisted Telephone Interviewing (CATI). Sampling was primarily done by Random Digit Dialing (RDD) of mobile phone numbers, with quota management for groups defined by age, gender and education. There were some exceptions to this standard approach to RDD:

- In Italy, calls were to landlines for local efficacy reasons.
- In some countries, where required for pragmatic reasons, calls were made at random to the phones of people who had previously been randomly selected for another survey (where possible such respondents were drawn from a pool of those initially selected by RDD).
- For particularly hard to reach groups (such as those under 18 and those with low levels of education), a within-household selection from an RDD call was sometimes used. That is to say, whomever was randomly called was asked if there was anyone fitting the description of the required group at that household, and to pass the phone to that person if so.

Following the RDD framework, samples were restricted to those aged 15 and above in the countries covered. Those between 15 and 17 were asked to pass the phone to a parent or guardian to obtain permission before participating in the survey.

In this report, the term *country*, used interchangeably with *government*, *state* or *economy*, does not imply political independence but refers to any territory for which authorities report separate social or economic statistics. Within-country regional stratification was used where possible,

including in Argentina, Brazil, Canada, China, India, Iran, Italy, Mexico, Russia, the United Kingdom and the United States. For those countries, the number of respondents for each region closely matched the distribution of the population. For other countries, the regional balance of the sample was assessed and managed to ensure broad and adequate coverage, but no claims of perfect within-country regional representation can be made.

The Peoples' Climate Vote 2024 report uses the following seven regions of the word to group countries surveyed: Arab States, Asia and the Pacific, Eastern Europe and Central Asia, Latin America and the Caribbean, Northern America<sup>1</sup>, Sub-Saharan Africa, Western Europe and Northern Europe.

The survey was administered in 87 different languages: Afrikaans, Amharic, Arabic, Azeri, Bahasa Indonesia, Bengali, Berber, Bisayan, Bislama, Burmese, Cebuano, Comorian, Czech, Dari, Dioula, Djerma, Dutch, Dzongkha, English, Ewe, Farsi, Fijian, Fijian Hindi, French, German, Greek, Gujarati, Haitian Creole, Hausa, Hindi, Hiri Motu, Igbo, Ilocano, Iraqi Arabic, Italiano, Japanese, Kannada, Kazakh, Khmer, Kikongo, Korean, Kurdish, Kyrgyz, Laotian, Lingala, Luganda, Malagasy, Malayalam, Mandarin, Marathi, Mooré, Moroccan Arabic, Ndebele, Nepali, Odia, Oromo, Pashto, Pidgin (Nigerian), Pidgin (Solomons), Polish, Portuguese, Punjabi, Rohingya, Romanian, Russian, Samoan, Saraiki, Sepedi, Shona, Sindhi, Sinhala, Somali, Spanish, Standard Moroccan Berber, Swahili, Swedish, Tagalog, Tamil, Telegu, Tigrigna, Tok Pisin, Turkish, Twi, Urdu, Xhosa, Yoruba and Zulu.

Given UNDP's strong commitment to SIDS and LDCs, especially given their high vulnerability to climate change impacts, country selection for surveys included various countries from both groups as a key part of the analysis. LDCs are highlighted in the table below in blue, while SIDS are highlighted in teal.

The analysis of the survey data and key conclusions reflected in the Peoples' Climate Vote 2024 report focus on SIDS and LDCs, as well as other country groupings such as the G20, the EU and BRICS. Our aim was to provide insights across these diverse groups, considering their varying levels of vulnerability to climate change consequences and their impact on global GHG emissions. The survey included all five original countries in the BRICS group and all the individual members of the G20, but not the whole of the EU. The countries included in the Peoples' Climate Vote 2024 survey for each grouping are detailed in the table below:

1 Northern America used throughout the report to refer to Canada and the United States of America.

G20	SIDS	LDCs	EU	BRICS
Argentina	Barbados	Afghanistan	Czechia	Brazil
Australia	Comoros	Bangladesh	France	China
Brazil	Dominican Republic	Benin	Germany	India
Canada	Fiji	Burkina Faso	Greece	Russia
China	Haiti	Cambodia	Italy	South Africa
France	Papua New Guinea	Comoros	Romania	
Germany	Samoa	Democratic Republic of the Congo	Spain	
India	Solomon Islands	Ethiopia		
Indonesia	Vanuatu	Haiti		
Italy		Lao PDR		
Japan		Madagascar		
Mexico		Mozambique		
Republic of Korea		Myanmar		
Russia		Nepal		
Saudi Arabia		Niger		
South Africa		Solomon Islands		
Türkiye		Sudan		
United Kingdom		Tanzania		
United States		Uganda		

The survey was designed to include a range of people within and between countries, covering diverse demographic and geographic groups.

Computer Assisted Telephone Interviewing (CATI) was used in all the countries surveyed. Sample sizes in each country typically varied from 900 to 1,500 respondents. Samples with 500-600 respondents were collected for some Small Island Developing States and a few other small countries. The overall response rate reached 6.8 percent, with a total of 1.9 million calls made to achieve 73,765 interviews. The survey calls commenced in September 2023 and concluded in May 2024. Response rates<sup>2</sup> for each country are provided in the table below, including the percent of completes that used second-hand RDD and whether or not handoffs were used.

2 Response Rates quoted in the table are calculated according to the <u>American Association of Public Opinion</u> <u>Research (AAPOR) definition for Response Rate 1 (RR1)</u>, or the minimum response rate, which is "the number of complete interviews divided by the number of interviews (complete plus partial) plus the number of non-interviews (refusal and break-off plus non-contacts plus others) plus all cases of unknown eligibility (unknown if housing unit, plus unknown, other)."

	Fieldwork start	Fieldwork end	Response Rate*				
Country			No. of complete interviews	% of completes that were second- hand RDD	Handoffs used? Yes/ No	Response rate	
Argentina	2024-02-14	2024-04-10	905	0.0%	No	6.3%	
Barbados	2024-02-06	2024-03-03	617	0.0%	No	5.6%	
Brazil	2024-02-29	2024-03-28	901	0.0%	No	1.6%	
Canada	2024-02-15	2024-04-12	922	0.0%	No	1.6%	
Mexico	2024-02-12	2024-03-27	864	0.0%	No	1.0%	
United States	2024-02-08	2024-04-02	902	0.0%	Yes	2.9%	
Czechia	2024-02-23	2024-04-09	500	0.0%	No	2.6%	
France	2024-02-19	2024-04-03	908	0.0%	No	4.4%	
Germany	2024-02-15	2024-04-04	911	1.1%	No	3.2%	
Greece	2024-02-09	2024-02-27	507	0.0%	No	4.2%	
Italy	2024-02-23	2024-04-09	900	0.0%	No	18.6%	
Poland	2024-02-13	2024-03-02	393	0.0%	No	1.2%	
Romania	2024-02-20	2024-03-29	986	0.7%	No	5.3%	
Spain	2024-02-08	2024-04-03	912	3.9%	No	6.6%	
Sweden	2024-02-22	2024-03-10	431	0.0%	No	3.7%	
The Netherlands	2024-02-19	2024-03-05	238	0.0%	No	2.9%	
United Kingdom	2024-02-15	2024-03-28	900	0.0%	No	7.9%	
Comoros	2024-02-19	2024-03-04	843	0.0%	No	26.9%	
Iran	2024-02-17	2024-03-09	969	0.0%	No	12.8%	
Jordan	2024-02-20	2024-03-08	674	0.0%	No	13.6%	
Saudi Arabia	2024-02-20	2024-04-03	905	0.0%	No	7.9%	
South Africa	2024-04-19	2024-05-05	954	0.0%	Yes	5.1%	
Tunisia	2024-02-17	2024-03-06	863	0.0%	No	4.5%	
Türkiye	2024-02-20	2024-04-02	913	0.0%	Yes	2.7%	
India	2024-02-21	2024-03-14	953	0.0%	No	14.5%	
Indonesia	2024-02-21	2024-04-04	897	0.0%	Yes	10.4%	
China	2024-02-26	2024-03-13	921	0.0%	No	4.9%	

	Fieldwork start	Fieldwork end	Response Rate*				
Country			No. of complete interviews	% of completes that were second- hand RDD	Handoffs used? Yes/ No	Response rate	
Japan	2024-02-19	2024-04-04	900	0.0%	Yes	5.7%	
Republic of Korea	2024-02-19	2024-04-03	900	0.0%	Yes	5.2%	
Kazakhstan	2024-02-21	2024-03-06	485	0.0%	No	2.5%	
Kyrgyzstan	2024-02-21	2024-03-07	964	0.0%	Yes	9.4%	
Australia	2024-02-16	2024-04-14	1001	0.0%	No	1.2%	
Fiji	2024-02-23	2024-04-14	1039	4.8%	Yes	20.7%	
Papua New Guinea	2024-02-22	2024-04-30	880	0.0%	Yes	3.4%	
Samoa	2024-02-22	2024-04-14	995	0.0%	Yes	4.7%	
Solomon Islands	2024-02-20	2024-05-03	878	0.0%	Yes	6.1%	
Vanuatu	2024-02-20	2024-04-29	879	0.0%	Yes	1.4%	
Russia	2024-02-14	2024-03-20	923	0.0%	No	1.2%	
Afghanistan	2023-10-26	2023-11-29	1007	0.0%	No	4.0%	
Algeria	2023-08-07	2023-09-06	1002	0.0%	No	6.2%	
Bangladesh	2023-10-18	2024-01-24	1004	30.0%	No	3.5%	
Benin	2023-08-04	2023-08-26	1038	0.0%	No	16.0%	
Bhutan	2023-09-14	2023-10-05	1033	0.0%	No	11.1%	
Burkina Faso	2023-08-04	2023-08-31	1117	20.0%	No	11.2%	
Cambodia	2023-10-18	2023-12-05	1001	0.0%	No	4.0%	
Colombia	2023-09-15	2023-12-29	1058	70.0%	No	8.0%	
Democratic Republic of the Congo	2023-08-04	2023-09-20	1556	55.0%	No	4.0%	
Dominican Republic	2023-09-13	2023-11-20	1076	0.0%	No	3.1%	
Ecuador	2023-09-12	2023-11-20	1020	50.0%	No	2.5%	
Egypt	2023-08-07	2023-09-06	1062	0.0%	No	15.1%	
Ethiopia	2023-08-05	2023-09-10	1031	2.0%	No	3.3%	
Ghana	2023-08-03	2023-09-29	1026	35.0%	No	4.3%	
Guatemala	2023-09-13	2023-10-04	1085	0.0%	No	4.4%	

			Response Rate*			
Country	Fieldwork start	Fieldwork end	No. of complete interviews	% of completes that were second- hand RDD	Handoffs used? Yes/ No	Response rate
Haiti	2023-10-25	2023-12-06	1002	48.0%	No	1.4%
Honduras	2023-09-14	2023-11-25	1039	49.0%	No	2.2%
Iraq	2023-09-14	2023-10-04	1008	0.0%	No	4.1%
Côte d'Ivoire	2023-08-06	2023-09-06	1059	25.0%	No	6.3%
Kenya	2023-08-08	2024-01-17	1052	19.0%	No	3.1%
Lao PDR	2023-10-18	2023-11-01	1044	0.0%	No	4.7%
Madagascar	2023-08-04	2023-10-03	1049	46.0%	No	1.2%
Morocco	2023-08-05	2023-09-06	1038	0.0%	No	3.2%
Mozambique	2023-08-05	2023-10-24	1063	32.0%	No	1.4%
Myanmar	2023-11-22	2023-12-19	1008	0.0%	No	8.1%
Nepal	2023-11-19	2023-12-05	1003	0.0%	No	7.3%
Nicaragua	2023-09-13	2023-10-05	1074	0.0%	No	24.3%
Niger	2023-08-05	2023-08-24	1112	0.0%	No	10.2%
Nigeria	2024-01-27	2024-02-15	1539	0.0%	No	13.1%
Nigeria	2024-01-27	2024-02-15	1539	0.0%	No	13.1%
Pakistan	2024-02-02	2024-03-07	1245	17.0%	No	2.8%
Paraguay	2023-09-17	2023-10-19	1086	0.0%	No	17.6%
Peru	2023-09-18	2023-12-06	1104	41.0%	No	17.9%
Philippines	2023-09-21	2024-02-19	1020	17.0%	Yes	2.4%
Sri Lanka	2023-11-02	2024-01-19	1010	2.0%	No	14.6%
Sudan	2023-09-20	2023-10-23	1036	0.0%	No	6.3%
Tanzania	2023-09-15	2023-10-04	1027	0.0%	No	4.8%
Uganda	2023-08-05	2023-09-01	1057	62.0%	No	3.5%
Zimbabwe	2023-08-03	2023-11-03	1002	35.0%	No	6.6%

#### **Data processing**

The raw data, while relatively close, does not perfectly represent the socio-demographic profile of each country in terms of age, gender and educational attainment. Data weighting, or rebalancing, techniques were employed to generate estimates of quantities of interest that accurately reflect the joint distribution of these demographics within each country. These more representative estimates offer valuable insights about public opinion across participating countries or groupings of countries.

All global and regional estimates and other cross-country overall estimates were populationweighted, and so the results are strongly influenced by larger countries such as India, China, Russia and the United States.

For demographic information, respondents were asked to identify their gender, their age and when they left their education.

To reconcile the different measures of education from the Peoples' Climate Vote 2024 and the Wittgenstein Centre data, it was necessary to estimate the approximate level of education for each respondent using information on the age the respondent left education, and their actual age. The respondents were asked what year they left education and the following mapping was applied:

- Never attended school → Never attended school (ISCED level 0)
- Left school aged less than 12 → Primary level education (ISCED level 1)
- Left school aged 12 to 19 → Secondary level education (ISCED levels 2 and 3)
- Left education aged 20 or over → Post-secondary level education (ISCED levels 4+)
- Still in education and under 20 years of age  $\Rightarrow$  Secondary level education (ISCED levels 2 and 3)
- Still in education and 20 years or older → Post-secondary level education (ISCED levels 4+)

The joint distribution of age, gender and education from the <u>UN</u> and Wittgenstein data<sup>3</sup> set the expectations of what a perfect random sample of a given size from each country would look like with respect to those socio-demographics. For any given country survey, no overall estimates of public opinion are published unless there are sufficient numbers of respondents from each age-gender-education group (for example, women aged 60+ who never attended school was one group). There were 32 such groups defined by combinations of age (15-17, 18-35, 36-59, 60+), gender (male, female) and age at which education was left (never attended, under 12, 12-19, 20+). Numbers of respondents in each age-gender-education group were considered sufficient if they were within 30 percent of the expected number (given the target overall sample size), within 20 people of the expected number, or there were at least 35 respondents in the group.<sup>4</sup> The purpose of these rules was to guarantee adequate socio-demographic representation, especially regarding groups that may be disenfranchised or more socially excluded. These requirements have also ensured that the eventual overall weighted estimates did not rely on the application of very large weights to very small numbers of actual respondents from hard-to-reach groups.

<sup>3</sup> National population figures, including breakdowns by age and gender, came from the <u>UN's 2022 Revision of the</u> <u>World Population Prospects</u>. Estimates of the numbers of people in a country for each level of education come from the <u>Wittgenstein Centre for Demography and Global Human Capital</u>, using International Standard Classification of Education (ISCED) levels, for different combinations of age and gender within each country.

<sup>4</sup> Surveys for Kyrgyzstan, Morocco and Tunisia narrowly missed these criteria in just one of the 32 age-gendereducation groups, but were nonetheless judged adequate for publication. For Argentina, Fiji, France, Samoa and the Solomon Islands, education categories were merged, resulting in fewer than 32 age-gender-education groups. These were in cases where there was ambiguity regarding the extent of secondary versus primary-only educational attainment and regarding what ages people transition from primary to secondary for older generations. The criteria were still applied, using 16 or 24, instead of 32, age-gender-education groups.

As a result, the weights are fairly modest, with 50 percent of weights between 0.79 and 1.07 and 98 percent between 0.11 and 2.92. Overall estimates are not much affected by within-country-weighting.

The margin of error for percentages quoted in this report will technically vary according to the sample size for each question, country and demographic group being discussed. The country-level estimates have margins of error no larger than + or - 3 percentage points, meaning they are accurate within 3 percentage points of the listed percentage. The margin of error for SIDS and some regions is + or -1, and even lower for big regions and global estimates. Figures for SIDS are a population-weighted average over nine SIDS surveyed. Global, regional and LDC figures are overall estimates, possible given the high levels of population coverage of those groupings.

#### **Survey limitations**

There are four countries (Czechia, Greece, Jordan and the Comoros) where the overall sample size was lower than normal and the sample criteria above were not met for at least two of the age-gender-education groups, but there were still substantial numbers in all the expected age-gender-education groups to enable weighting and overall estimates. Figures for these countries are still provided but they are marked by a \* throughout the report when listed, because the margins of error will be larger and broader reliability of estimates will be somewhat lower.

Surveys from Barbados, the Solomon Islands, Papua New Guinea and Vanuatu achieved many fewer than the required number of respondents from the 15-17-year-old age group and/or from the population without any secondary education. These countries have a simplified weighting scheme and estimates may not adequately reflect the opinions of those groups. For that reason, estimates from those countries are marked by a \*\* throughout the report.

Smaller surveys (with fewer than 490 respondents) were conducted in Kazakhstan, the Netherlands, Poland and Sweden. Although broadly representative of the different age-gendereducation groups within each of those countries, country-level estimates are not presented in this report because of the smaller overall sample size. Results from these smaller surveys do, however, contribute to regional and global estimates.

Estimates for sub-populations within countries (defined by age, gender or education level) are also published if there are at least 200 respondents, so that estimates for that sub-population can be reasonably reliable. The margins of error for some within-country sub-populations (such as for age and education) can be up to + or - 7 percentage points. We also do not publish figures for very small groups: ones that constitute fewer than 3 percent of the population aged over 14. These rules unfortunately mean it is not possible to publish estimates for 15-17 year-olds for any country, nor estimates for some other age and education groups in several countries. However, regional and global estimates are available for those groups.

Figures in graphics are sometimes related to combinations of response categories, for example "very worried" and "quite worried" to obtain an estimate for the percentage who are "worried" overall. Graphics with such estimates are ordered and plotted based on detailed figures, but the numbers presented are rounded to the nearest whole number. Those figures may differ slightly from adding up the rounded estimates for the individual response categories.

#### References for sources of additional data used in analysis and graphics

Energy Institute - Statistical Review of World Energy (2023); The Shift Data Portal (2019) – with major processing by Our World in Data. 'Coal production' [dataset]. Energy Institute, 'Statistical Review of World Energy'; The Shift Data Portal, "Energy production from fossil fuels" [original data]. Retrieved April 24, 2024 from <u>https://ourworldindata.org/grapher/coal-production-by-country</u>

Energy Institute - Statistical Review of World Energy (2023); The Shift Data Portal (2019) – with major processing by Our World in Data. 'Gas production' [dataset]. Energy Institute, 'Statistical Review of World Energy'; The Shift Data Portal, "Energy production from fossil fuels" [original data]. Retrieved April 24, 2024 from <u>https://ourworldindata.org/grapher/gas-production-by-country</u>

Energy Institute - Statistical Review of World Energy (2023) – with major processing by Our World in Data. 'Oil production' [dataset]. Energy Institute, 'Statistical Review of World Energy' [original data]. Retrieved April 24, 2024 from https://ourworldindata.org/grapher/oil-production-by-region

World Bank (2022) 'GDP (current US\$)' [dataset]. Retrieved April 24, 2024 from <u>https://data.</u> worldbank.org/indicator/NY.GDP.MKTP.CD

World Bank (2022) 'GDP per capita (current US\$)' [dataset]. Retrieved April 24, 2024 from <a href="https://data.worldbank.org/indicator/NY.GDP.PCAP.CD">https://data.worldbank.org/indicator/NY.GDP.PCAP.CD</a>







undp.org | ox.ac.uk | peoplesclimate.vote Copyright © UNDP, June 2024. All rights reserved