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**ECONtribute**  
**Policy Brief No. 036**

**The Role of Social Norms in the Fight Against  
Climate Change**

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June 2023

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## Executive Summary

### Many Germans underestimate the willingness of others to contribute to climate protection

Germans misperceive the prevalent social norms and the willingness of others to act against climate change. The systematic underestimation of climate norms affects peoples' willingness to fight climate change. Correcting these misperceptions can have a positive impact on climate protection.

Of the 2,002 respondents, 71 percent stated that they take personal action against climate change. The respondents' perceptions about peoples' behavior differed: The share of the German population committed to climate protection was estimated at an average of 59 percent. The actual willingness to act against climate change is therefore significantly underestimated (by nearly 70 percent of respondents).

When asked if people in Germany *should* take action against climate change, 85 percent of respondents agreed. However, four out of five respondents underestimate the percentage of people who share their view – the average estimate was 67 percent.

The phenomenon that both the willingness of others to act against climate change and the prevailing social norms are systematically underestimated is a form of pluralistic ignorance. The problematic consequences of such a misperception can be seen in its negative influence on donations to a climate protection organization in our survey.

Many people are conditionally cooperative, i.e., they make their own behavior dependent on the behavior of others. Correcting the misperceptions of others' cooperation could therefore improve individual willingness to act against climate change.

This idea has been tested by briq researchers in a survey experiment in the United States. Correcting the existing misperceptions causally raised the individual willingness to act against climate change and the support for climate policies. The strongest effects are found among individuals who are skeptical about the existence and threat of global warming.

## Results

### Perception of social norms and willingness to act against climate change

Combating climate change is a global cooperation problem. Norms can help to solve such problems by characterizing what is socially and normatively desirable. What are the prevailing behaviors and norms in Germany? Are people aware of them? And what influence do they have on the individual willingness to act against climate change?

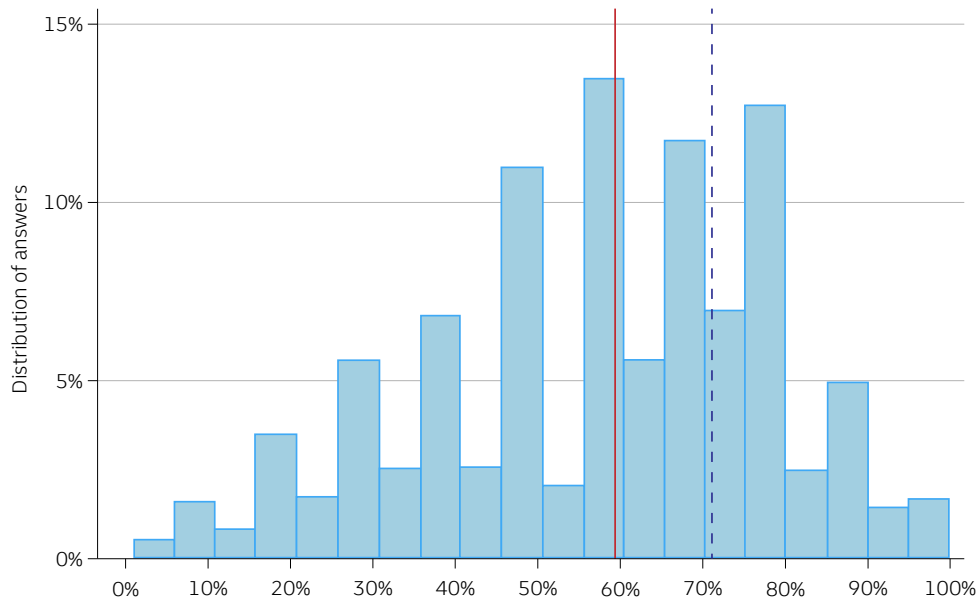
To answer these questions, we administer a survey to a representative sample of 2,002 German adults. We elicit both the prevailing behaviors and norms as well as people’s perceptions.

#### Behavior

We first asked respondents about their behavior, which allow us to establish prevalent behaviors in a representative sample of German adults. Specifically, we ask all respondents whether they “actively try to act against climate change” (yes/no). About 71 percent of Germans said yes. We then asked all respondents to estimate what share of the German population “actively tries to act against climate change”. On average, respondents guessed that this applies to 59 percent of Germans (see Figure 1).

Thus, people significantly<sup>1</sup> underestimate the actual willingness by about 12 percentage points on average. Nearly 70 percent of respondents underestimate the true share of Germans who try to fight global warming.

**Fig. 1: Actual and perceived behavior**



The dashed blue line shows the actual willingness of Germans to act against climate change. The graph represents the distribution of perceived behavior (red line indicates the average).

© briq policy monitor. Representative survey with 2,002 respondents.

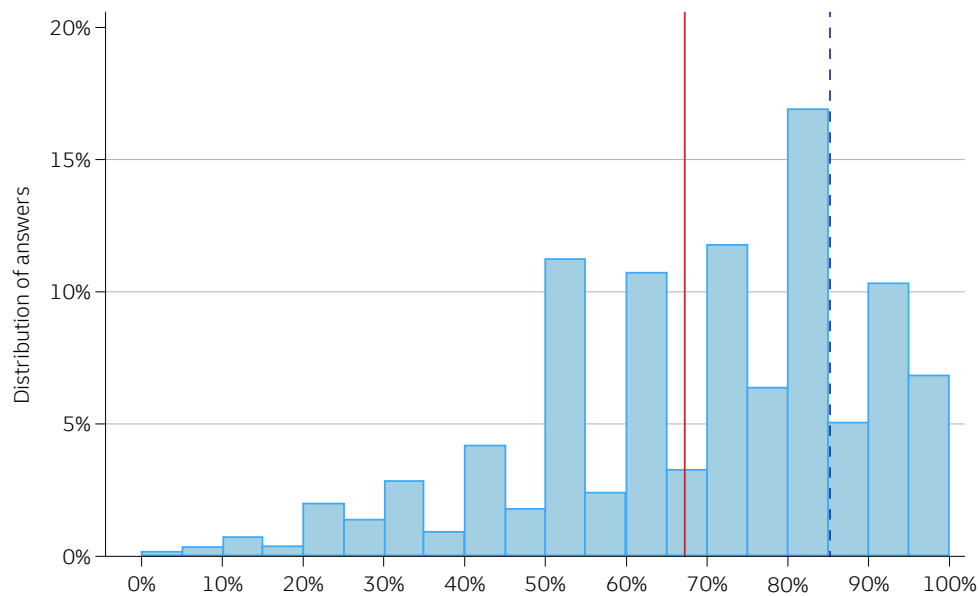
<sup>1</sup> p < 0,001

**Norms**

We first asked respondents about their normative views, which allows us to establish prevalent endorsement of norms in a representative sample of German adults. Specifically, we ask all respondents whether they believe that “people in Germany should actively try to act against climate change” (yes/no). More than 85 percent of respondents said yes. We then asked all respondents to estimate the share of Germans who think “people in Germany should actively try to act against climate change.” On average, respondents guessed that this applies to 67 percent of Germans.

People thus significantly underestimate the prevailing norms by 18 percentage points. Four out of five respondents (82 percent) stated a share below the actual value.

**Fig. 2: Actual and perceived norms**



The dashed blue line shows how many respondents believe that people in Germany should do something about climate change. The graph represents the distribution of perceived norms (red line indicates the average).

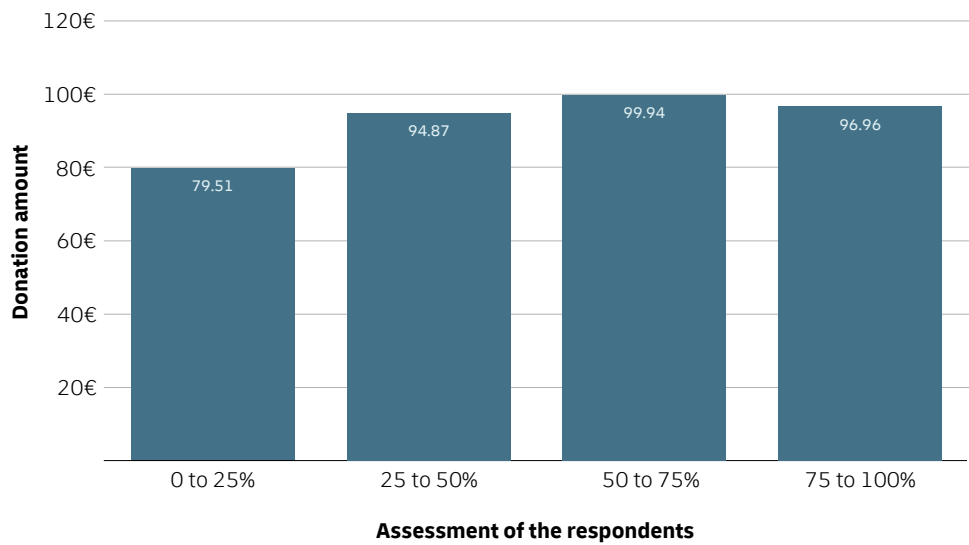
© briq policy monitor. Representative survey with 2,002 respondents.

**Effect on the individual willingness to act against climate change (donation decision)**

The perception of prevalent behaviors and norms affect people’s climate protection actions, measured by using an incentivized donation decision. We asked respondents to divide 198 euros between themselves and a charitable organization that fights global warming. The amount of 198 euros was chosen because, by donating all of it, respondents could offset the annual CO2 emissions of an average German citizen. The more money the respondents are willing to forgo and donate, the higher their willingness to act against climate change (for details see briq policy monitor #3). We incentivize the decision by implementing the choices of a random subset of participants.

Respondents donate more the higher they estimate the willingness of fellow citizens. Interestingly, participants who overestimate the prevalent behaviors exhibit a slightly lower willingness to act against climate change. A possible explanation would be that people might consider their own contribution less important if they believe that enough others take action.

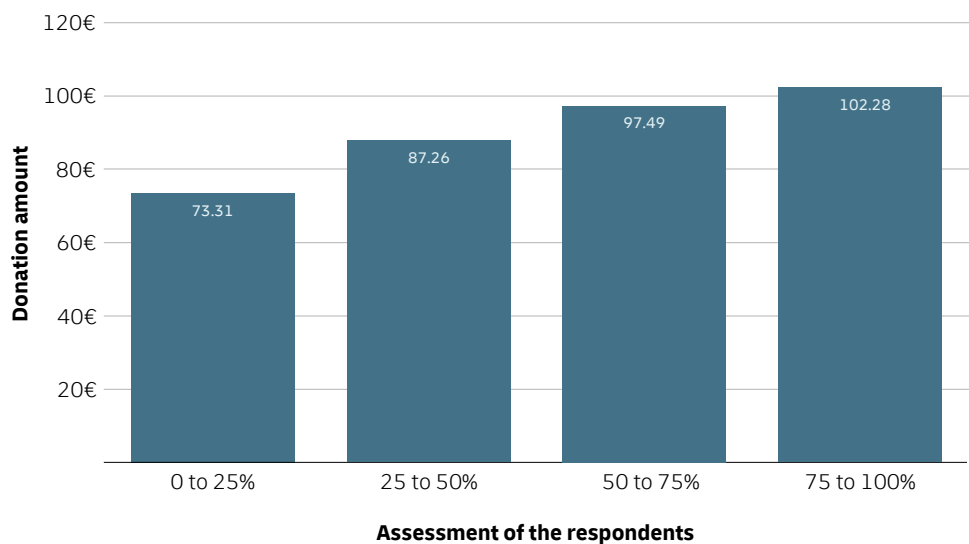
**Fig. 3:** Climate donation by perceived behavior



Percentages refer to respondents' estimate of how widespread the willingness to act against climate change is.  
 © briq policy monitor. Representative survey with 2,002 respondents.

The effects of the perceived *norms* are even more pronounced (see Figure 4). Respondents who (almost) correctly assessed the prevailing norms (+/- 10 percent) donate around 11 percent more than respondents who underestimated the norms.<sup>2</sup>

**Fig. 4:** Climate donation by perceived norms



Percentages refer to respondents' estimate of the share of Germans who think "people in Germany should actively try to act against climate change."

© briq policy monitor. Representative survey with 2,002 respondents.

<sup>2</sup> A one standard deviation increase in perceived norms results in a 7.13 euro increase in donation. Significance level:  $p < 0.01$

The fact that both the willingness of others to act against climate change and the prevailing social norms are systematically underestimated is a form of pluralistic ignorance.<sup>3</sup> The problematic consequences of such a misperception can be seen in its negative influence on the climate donations in our incentivized willingness to act against climate change measure.

### Misperceptions in Germany vs. the U.S.

A recent briq study elicited the same behaviors and norms in the U.S. based on a representative sample of about 8,000 people.<sup>4</sup> The share of the population willing to fight climate change is about 62 percent – nine percentage points lower than in Germany. Regarding social norms, the share of Americans who think that people in the U.S. should try to fight climate change (79 percent) is also somewhat lower than in Germany (85 percent).

The extent of the misperceptions is remarkably similar in both countries: 67 percent of U.S. citizens are too pessimistic about their fellow citizens' willingness to protect the climate; 76 percent underestimate the prevailing social norms. The corresponding figures in Germany are 70 and 82 percent, respectively.

### Correcting misperceived social norms

Is it possible to improve the individual willingness to act against climate change by correcting misperceptions? To test this, a random subset of respondents in the U.S. study were informed about prevailing behaviors and norms. The researchers then measured the individual willingness to act against climate change.<sup>5</sup>

Information about the true share of Americans who try to fight global warming leads to a \$12 increase in donations, while information about the true social norms increases donations by \$16. The U.S. study thus proves a causal effect on climate-friendly behavior. This effect is particularly pronounced among climate skeptics, who have a low propensity to protect the climate.

Given the similarities between the two studies, we assume that the results of the U.S. study can be applied to Germany: Informing people about the true prevailing behaviors and norms could also help Germany in the fight against climate change.

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**3** This refers to a state in which most members of a group share a particular belief, but mistakenly believe that the majority disagrees with them.

**4** Andre, Peter, Teodora Boneva, Felix Chopra, and Armin Falk. „ Misperceived Social Norms and Willingness to Act Against Climate Change.“ (2022).

**5** In the U.S. study, respondents were asked to split \$450 between themselves and atmosfair. The higher amount compared to the German study is due to the higher per capita emissions in the U.S.

## Methods

We collected survey data from a representative sample of 2,002 study participants in Germany. To be eligible to participate in the study, respondents had to reside in Germany and be at least 18 years old. We collected the data in collaboration with the survey company Pureprofile. The experiment was computerized using the Qualtrics online survey tool. The data was collected between July 15 and 28, 2022. To ensure the highest possible quality of answers, all participants have to pass an attention check.

We used a stratified sampling approach to ensure that the samples represent the adult German population in terms of age, gender, and education. 48.25 % are male, the average age of the respondents is 51.8 years, and the median net income per month is between 1,600 and 2,600 euros. 22.98% of respondents live in eastern Germany (including Berlin), and 32.57 % live in cities with more than 100,000 inhabitants.

### Survey items: Norms and behaviors

The questions regarding perceived behavior and norms were introduced by stating “In this research project, we survey many people in Germany and ask them the same questions. Respondents come from all parts of the population and their responses represent the views and attitudes of people in Germany.” Wording of the questions, translated to English:

	Question	Scale
<b>Behavior</b>	Do you actively try to act against climate change?	Yes/No
<b>Perceived Behavior</b>	What do you think? Out of 100 people, how many actively try to act against climate change?	Number between 0 and 100
<b>Norms</b>	Do you think that people in Germany <i>should</i> actively try to act against climate change?	Yes/No
<b>Perceived Norms</b>	What do you think? Out of 100 people, how many think people in Germany <i>should</i> actively try to act against climate change?	Number between 0 and 100

### *Willingness to act against climate change*

We measured the individual willingness with the help of a donation decision. Respondents were given 198 euros, which they could freely divide between themselves and a charitable organization that fights global warming. The amount donated was given to the award-winning charity *atmosfair*, which actively contributes to CO2 mitigation by promoting, developing, and financing renewable energies worldwide. Thereby, a donation saves CO2 that would otherwise be caused by fossil fuels. The amount of 198 euros was chosen because, by donating the full amount, respondents could offset the annual CO2 emissions of an average German citizen. It costs around 25 euros to offset one ton of CO2 emissions. According to World Bank estimates, the average inhabitant of Germany causes around 7.9 tons of CO2 emissions per year. We incentivize the decision by implementing the choices of ten randomly selected participants.

### *Additional measures*

We collect detailed information on individual background characteristics. These include age, gender, education, employment status, net income, number of children, political party preferences, and state of residence. We further obtain an individual-level measure of altruism, patience and reciprocity following the methodology in the Global Preferences Survey.<sup>6</sup>

<sup>6</sup> Falk, Armin, Anke Becker, Thomas Dohmen, Benjamin Enke, David Huffman, and Uwe Sunde. „Global Evidence on Economic Preferences.“ *The Quarterly Journal of Economics* 133, no. 4 (2018): 1645–1692.