

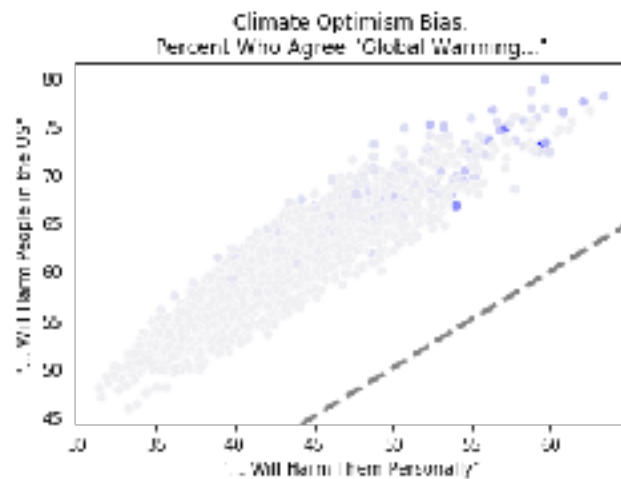
Title: The Climate Ego Gap

American opinions on climate change have come a long way in the past decade. As of 2022, 76% of Americans believe climate change is happening and 60% believe it is human caused. Furthermore, a majority of Americans believe global warming will harm them personally in the future, and is harming others in the United States now, according to the [Yale Climate Change Communications project](#).

These are welcome shifts in opinion, since now is the time for bold plans and responsible investment in our future. Just seven years ago, the Paris Agreement set out a goal of 1.5°C warming (which still amounts to .5 meters of sea level rise and 8% of plants losing half their survivable geographic range). This year's report by the Intergovernmental Panel on Climate Science considers five emissions scenarios — all five of which exceed the 1.5°C goal. In terms of practical policy, current mitigation plans put the planet on a path to 2.7°C warming and “catastrophic changes”, according to the [UNEP Emissions Gap Report](#).

With large majorities of Americans recognizing climate change as an issue, why don't our political leaders exercise this mandate? One reason could be that climate opinions are not as internally consistent as they need to be to mount real political pressure. We don't just have an emissions gap — between countries' commitments and actions — we also have an ego gap — between individuals' sense of harm and responsibility.

The climate ego gap (more accurately called optimism bias) means that people believe that they themselves are less likely to experience the negative impacts of climate change than the average person. Across the board, regardless of individuals' self-perceived harm from climate change, they are 17% more likely to agree that other people in the US will be harmed.



County-level opinion, shaded by population
(source [YCC](#))

The gap looks similar between other opinions as well. People are 15% more likely to agree that citizens “should do more to address global warming”, regardless of how much they themselves will be harmed. (From this data alone, it’s unclear if this particular gap actually indicates altruism or a collective action problem.)

What does this mean for climate communicators? It means we need less abstract scientific projections and (sorry) less coverage of foreign calamities; and instead more personal stories from our own backyard.

What does this mean for elected officials? This kind of cross-comparison on the issues identifies a bright side: some questions have overwhelmingly positive responses, regardless of respondents' other opinions. According to this kind of analysis, people are 18 percentage points more likely to support “tax rebates for people who purchase energy-efficient vehicles or solar panels” and “funding research into renewable energy sources” than any other topic. This support is relatively ‘inelastic’ compared to their other opinions as well: it only rises or drops 0.5% per a 1% change in support of another topic.

Let's dive deeper into this opinion gap and try to find out what explains it. Is it a red/blue thing or an urban/rural thing? Or is it driven by local economic opportunity and robustness? Or how much people love their cars?

I gathered data on urban/rural classifications from the Census Bureau, 2020 presidential election results collected by the New York Times, industry dominance by employment and wages from the Bureau of Economic Analysis, and commuting flows from the Census American Community Survey, all at the county-level and compared it to the Yale Climate Opinion Map survey.

Regressing the opinions on this data revealed a lot of noise, but some consistent patterns. First, the top three indicators of climate opinion were the diversity of employment by industry, the percent of commuters who drove, and the vote margin for Democrats, in that order.

As economic robustness (standard deviation on the percentage of jobs available per industry) decreased, people were .22% and .4% more likely to agree that citizens should do more to address global warming, and that it would harm people in the US. Curiously, the effect went in the opposite direction on the question of personal harm from global warming. The percent vote margin for Democrats consistently added .11-.12% likelihood of agreement to any affirmation of climate change, while the percent of commuters who drove alone decreased the likelihood of agreement by .16-.22%. The percentage of urban population also tended to increase agreement, but with less than half the effect of the vote margin for Democrats. These effects are small, but statistically significant. The effects from cars, voting, and urban persisted in size and significance even after controlling for commonalities at the state level.

Though the regression analysis didn't reveal anything about the ego gap (all the effects were negligible), it does tell us that climate opinion depends somewhat on regional economic health, how much people drive, and also how they vote.