

# Can the rest of the world save itself from climate breakdown without the US?

**With Trump expected to skip the UN climate summit, the question will be: what's possible if the most powerful nation is pulling away from action?**

**'Americans are waking up': two thirds say climate crisis must be addressed**

**Mark Hertsgaard**

@markhertsgaard

Mon 16 Sep 2019 13.33 BST

Last modified on Mon 16 Sep 2019 16.31 BST



Schoolchildren march through the city centre in Cambridge, England, during a climate change protest in April.  
Photograph: Stefan Rousseau/PA

*This story originally appeared in [the Nation](#). It is republished here as part of the Guardian's partnership with [Covering Climate Now](#), a global collaboration of more than 250 news outlets to strengthen coverage of the climate story.*

As world leaders converge on New York City for the **United Nations** climate action Summit on 23 September, they enter what may be the most consequential week in climate politics since Donald Trump's surprise election as president of the United States in 2016. Trump, of course, announced soon after taking office that he was withdrawing the US from the Paris agreement, the landmark treaty signed at the last big UN climate summit in 2015. António Guterres, the UN secretary general, convened this week's summit precisely because the US and most other countries remain far from honoring their Paris pledges to reduce heat-trapping emissions enough to prevent catastrophic climate disruption.

The events of the coming days – including a global climate strike on 20 September by the activists whose protests in the past year have pushed the term “climate emergency” into news reports around the world – may help answer a question that has loomed over humanity since Trump's election: can the rest of the world save itself from climate breakdown if the richest, most powerful nation on earth is pulling in the opposite direction?

Adopted in December 2015, **the Paris agreement** stands as the strongest achievement of climate diplomacy since governments first debated the issue at the UN Earth Summit in 1992. In a shock to climate insiders, the agreement not only committed signatory governments to limit temperature rise to the relatively less dangerous level of 2C. It also obliged governments to keep temperature rise “well below” 2C and, in a major victory for the most vulnerable countries, to strive for 1.5C. That half-degree may not sound like much, but it spells the difference between life and death for low-lying coastal nations such as Bangladesh and island states such as the Maldives – two of many places that, science says, would literally disappear beneath the waves with more than 1.5C of warming.

The announced US withdrawal from the Paris agreement was big news but also widely misunderstood news. Despite Trump's bluster, the US withdrawal still has not happened. Precisely to guard against such capriciousness, the negotiators in Paris stipulated that every signatory was legally bound to remain in the agreement until four years after the treaty took effect, which would only happen after countries responsible for 55% of global greenhouse gas emissions ratified it. Thus, the Paris agreement did not take effect until 4 November 2016. That means the US cannot leave until 4 November 2020 – which, not by accident, is one day after the US 2020 presidential election. If Trump loses that election, his successor almost certainly would move to keep the US in the Paris

agreement.

Trump is not expected to attend this week's summit; the US delegation will instead be led by Andrew Wheeler, a former coal company lobbyist who is now the administrator of the Environmental Protection Agency. In keeping with Trump's denial of climate science and his administration's dismantling of environmental regulations and accelerating of fossil fuel development, Wheeler testified to the US Senate last January that he would not call climate change "the greatest crisis" facing humanity.

Which highlights a question that may shape whether this summit turns out to be a success, a failure, or something in between. What role will the US play? Will it be a spoiler, actively seeking to disrupt progress? Will it be a braggart who, as Wheeler boasted (inaccurately) in that testimony, represents "the gold standard for environmental progress"? Or will it be more like the addled uncle at the family reunion whose babblings provoke eye-rolls and are ignored?

### **A 3-5C temperature rise could 'destroy civilization'**



Luis Alfonso de Alba, left, special envoy for the United Nations 2019 climate action summit, speaks at the UN headquarters in New York. Photograph: Li Muzi/Xinhua/Barcroft Media

"Don't bring a speech, bring a plan!" For months now, that's what Guterres has been telling heads of state and government. Instead of the endless blah-blah-blah heard at most UN meetings, Guterres wants this summit to be more like "show-and-tell", a meeting where governments share concrete and replicable

examples of how they are cutting emissions and boosting resilience to the climate impacts already unfolding. As such, the summit aims to address a glaring deficiency of the Paris agreement. In part, because the agreement made emissions cuts voluntary, global emissions have continued to increase since 2015. On **current trends**, the earth is heading towards 3-5C of temperature rise – enough, scientists warn, to destroy civilization as we know it.

“The secretary general has very clearly demanded that all participants identify very concrete measures that can be implemented immediately,” Luis Alfonso de Alba, Guterres’s special envoy for the summit, said in an interview with **Covering Climate Now**, a collaboration of 250 news outlets around the world to strengthen coverage of the climate story. “What we need is for all actors to put in practice their commitments [and to] recognize that whatever they had in mind before, they need to do much more – because climate change is running faster than we are, the situation is much more serious than we thought.”

Asked how the world can meet the “well below 2C” target when the current US government is doing all it can to increase global warming, Alba, a career diplomat from Mexico, steered clear of criticizing the Trump administration. “We need higher political will not only in one country but in a number of them,” he said, before adding: “We’re very much impressed by what states, cities and businesses are doing in the US to move into renewables ... We are quite confident that the US will contribute to solutions, even if the decision to withdraw by the current administration is maintained.”

Indeed, then governor Jerry Brown announced at a climate summit last September that he signed an executive order committing California, the world’s fifth-biggest economy, to achieve zero carbon emissions by 2045. This summer, New York state, whose economic output is roughly equivalent to Russia’s, passed a law requiring the state to achieve 100% carbon-free electricity by 2040. The **Under2 Coalition**, a group of more than 220 state and local governments around the world representing 43% of the global economy, is likewise committed to keeping temperature rise well below 2C.

The climb remains very steep, however. Scientists with the UN Intergovernmental Panel on Climate Change declared last October in their landmark **Special Report on Global Warming of 1.5C** that humanity had to slash emissions by 45% by 2030, on the way to net-zero by 2050, to hit the 1.5C target. Failure to do so would condemn many millions of people, particularly in

poor and vulnerable countries, to destitution and death and make irreversible global warming more likely. Such dramatic emissions reductions, the scientists added, would require the transformation of the global energy, agricultural, transportation and other sectors at a speed and scale without precedent in human history.

China, the other climate superpower along with the US, will therefore have to do better as well. China won plaudits in the lead-up to the Paris summit in 2015 by closing many of its coal-fired power plants. But coal burning in China has recently crept back up, and Beijing has also financed construction of coal plants in other countries, particularly in support of its massive “Belt and Road” initiative to construct ports, railways and other infrastructure across Asia to the Middle East, Africa and Europe. Alba commends China for promising to go beyond the emissions reductions it pledged in Paris, but he adds, “We are asking them to do much more and in particular to green the Belt and Road initiative. It’s quite important because of the scale of that initiative that they do not support coal plants but instead renewable energy.”

## **New era of climate activism offers hope**



The environmental activists Greta Thunberg, Alexandria Villasenor and friends protest at the UN headquarters in New York on 6 September. Photograph: Europa Newswire/Rex/Shutterstock

When Guterres gavel the summit’s plenary session to order next Monday, the 12-year deadline outlined by the IPCC scientists will have shrunk closer to 11. Meanwhile, the burning of the Amazon, Hurricane Dorian’s devastation of the

Bahamas, this summer's heatwaves across much of the northern hemisphere, and countless less-heralded disasters illustrate that climate disruption is no longer a worrisome future specter but a punishing current reality.

Alba nevertheless draws hope from the heightened public concern and activism against the climate threat. "Compared to 10 years ago, the level of public involvement is very different," Alba said, "and that's to a large extent because the news media is talking about it more and young activists are demanding action."

In the United States, activists with the Sunrise Movement and other groups have protested against Democratic and Republican politicians alike and demanded that the government implement a **Green New Deal**. Championed by Representative Alexandria Ocasio-Cortez, the progressive congresswoman from New York, and modeled on the New Deal jobs and investment programs President Franklin Roosevelt implemented to pull the US out of the Great Depression in the 1930s, the Green New Deal calls for the government to kickstart the transformations of energy and other sectors the IPCC says are needed. Such a massive investment program will also, the activists say, create millions of jobs and reduce economic inequality. Central to the plan is "climate justice", the notion that poor and non-white individuals and communities have suffered worst from climate change and therefore should get precedence for the jobs and opportunities flowing from a Green New Deal.



Alexandria Ocasio-Cortez greets audiences following a televised town hall event on the Green New Deal in the Bronx borough of New York City in March. Photograph: Jeenah Moon/Reuters

Activist pressure has helped make the Green New Deal the de facto position of the Democratic party in the US, while also spreading the idea overseas. Each of the leading Democratic candidates in the race to replace Trump has endorsed one version or another of a Green New Deal. Bernie Sanders **proposes** a particularly robust program that will, he promises, “end unemployment” by creating 20m new jobs and also help developing nations dump fossil fuels in favor of renewables.

Guterres has gone out of his way to boost the visibility of the climate youth, most notably Greta Thunberg, the Swedish teenager who is the best-known face of the climate movement. Thunberg’s “School Strike For Climate”, begun a year ago in her home town of Stockholm, spread like wildfire around the world, inspiring hundreds of thousands of students to skip classes and take to the streets to demand that governments, in Thunberg’s words, “act like the house is on fire – because it is”. Guterres has invited Thunberg to keynote a special one-day youth climate summit on 21 September and also to address world leaders at the plenary session on 23 September.

Alba recognizes that the public is sometimes skeptical of UN conferences, and he acknowledges that the UN “does not have the means to enforce” the commitments made by governments in the Paris agreement. Instead, he puts his faith, again, in the ability of public pressure to compel governments to do the right thing. “As in many other parts of international law,” he says, “the

enforcement rests in the follow-up and the ‘name and shame’ role of civil society – to expose that a country is not complying with what they’ve committed to. The media plays an important role there, and so do activists.”

Meanwhile, Alba’s own teenage son has given him advice on how to make the case for action: don’t talk so much about the future that youth will inherit but rather about the climate disasters happening now. “He had a point,” says Alba. “This is an emergency we need to deal with today, not tomorrow. Talking about 2030 and 2050 is important because science gives us those dates for achieving certain objectives, but there’s the danger that it tells people that we have time to make these changes. And that is a mistake.”

## 'Americans are waking up': two thirds say climate crisis must be addressed

**Major CBS News poll released as part of Covering Climate Now, a collaboration of more than 250 news outlets around the world to strengthen coverage of the climate story**

**Plus climate cartoons: [an illustrated guide to the new climate poll](#)**

**Oliver Milman** *in New York*

@olliemilman

Sun 15 Sep 2019 13.15 BST

Last modified on Mon 16 Sep 2019 13.58 BST



The dome of the US Capitol is seen behind the smokestacks of the Capitol Power Plant, a coal-burning plant in Washington DC. Photograph: Jim Lo Scalzo/EPA

Two-thirds of Americans believe climate change is either a crisis or a serious problem, with a majority wanting immediate action to address global heating and its damaging consequences, major new polling has found.

Amid a Democratic primary shaped by unprecedented alarm over the climate crisis and **an insurgent youth climate movement** that is sweeping the world, the polling shows substantial if uneven support for tackling the issue.

More than a quarter of Americans questioned in the new CBS News poll consider climate change a “crisis”, with a further 36% defining it as a “serious problem”. Two in 10 respondents said it was a minor problem, with just 16% considering it not worrisome at all.

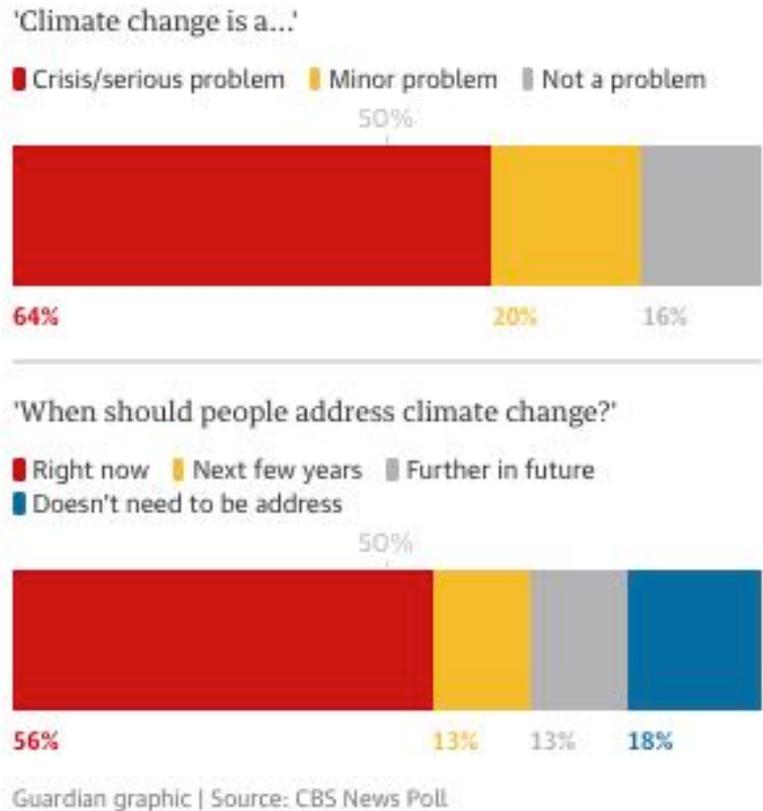
More than half of polled Americans said they wanted the climate crisis to be confronted right away, with smaller groups happy to wait a few more years and just 18% rejecting any need to act.

“Americans are finally beginning waking up to the existential threat that the climate emergency poses to our society,” said Margaret Klein Salamon, a clinical psychologist and founder of the **Climate Mobilization Project**. “This is huge progress for our movement – and it’s young people that have been primarily responsible for that.”

But while nearly all of those questioned accept that the climate is changing,

there appears to be lingering confusion over why and scientists' confidence over the causes.

### Most Americans say climate change is at least a serious problem, and a majority think people need to address it right now



There is a consensus among climate scientists that the world is heating up due to human activities such as burning fossil fuels for electricity generation and transportation, as well as cutting down forests. However, just 44% of poll respondents said human activity was a major contributor to climate change. More than a quarter said our impact was minor or nonexistent.

There is an even starker split on the findings of climate scientists. According to the CBS poll, 52% of Americans say “scientists agree that humans are a main cause” of the climate crisis, with 48% claiming there is disagreement among experts.

“This remains a vitally important misunderstanding – if you believe global warming is just a natural cycle, you’re unlikely to support policies intended to reduce carbon pollution, like regulations and taxes,” said Anthony Leiserowitz, director of the [Yale Program on Climate Change Communication](#), which has

made similar findings in its own, long-running polling.

“These results also again confirm a longstanding problem, which is that many Americans still believe scientists themselves are uncertain whether human-caused global warming is happening.

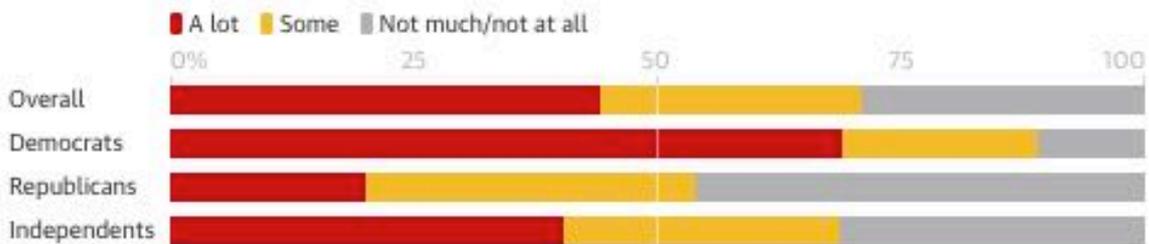
“Our own and others’ research has repeatedly found that this is a critical misunderstanding, promoted by the fossil fuel industry for decades, in order to sow doubt, increase public uncertainty and thus keep people stuck in the status quo, in a ‘wait and see’ mode.”

Similar to previous polls, the CBS research finds sharp ideological differences in attitudes to the climate crisis. While nearly seven in 10 Democratic voters understand that humans significantly influence the climate and 80% want immediate action, just 20% of Republicans think humans are a primary cause and barely a quarter want rapid action.

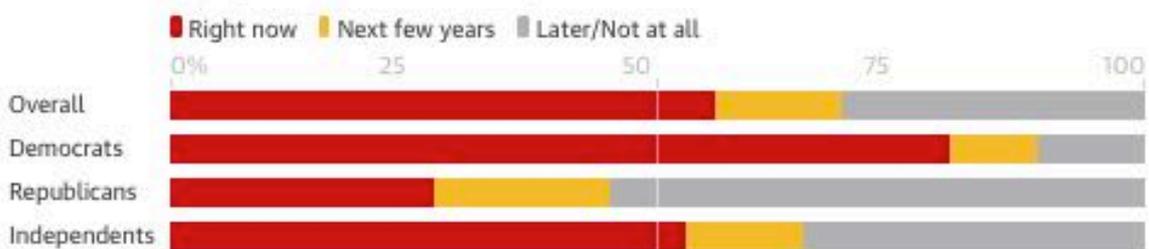
On the science, nearly three-quarters of Democrats said almost all experts agree that humans are driving climate change, with just 29% of Republicans saying the same.

## CBS research finds ideological differences in attitudes to the climate crisis

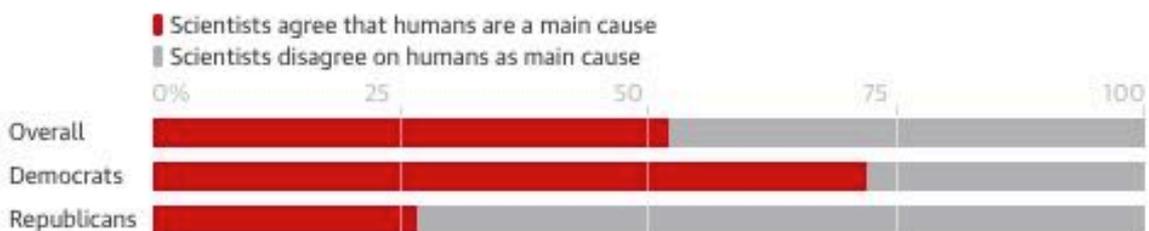
'How much does human activity contribute to climate change?'



'When should people address climate change?'



'Do you think all climate scientists agree that human activity is a main cause of climate?'



Guardian graphic | Source: CBS News Poll

Age is another key variable. While 70% of 18- to 29-year-olds think climate change is a serious problem or crisis, just 58% over 65 concur. Younger people are far more likely to consider it a personal responsibility to address the climate crisis and to believe that a transition to 100% renewable energy is viable. Young people have been galvanized by climate science being taught in schools as well as a spreading global activist movement spearheaded by Greta Thunberg, the Swedish teenager who started a wave of school walkouts to demand action. Thunberg **recently arrived in the US on a solar-powered yacht**, ahead of a major United Nations climate summit in New York on 23 September.

This generational divide even cuts across party affiliation, with two-thirds of Republican voters aged under 45 considering it their duty to address the climate crisis, according to the CBS poll. Just 38% of Republicans aged over 45 feel the

same.

“Younger Republicans are much more convinced climate change is a crisis and are supportive of action than older Republicans – which has big implications for the future of the party,” said Leiserowitz.

Around three-quarters of all respondents said they understand that climate change is melting the Arctic, raising sea levels and causing warmer summers. A further two-thirds accept that hurricanes will be made more severe by global heating. Hurricane Dorian, which recently devastated parts of the Bahamas, made 38% of Americans more concerned about the climate crisis, with 56% unswayed.

Leiserowitz said that the relationship between extreme weather events and concern over climate change is a complex one, with people already worried the most likely to say that their alarm has increased when a major storm or flood hits.

Regardless of concern over climate change there appears to be skepticism among Americans about how much humans can do about it. Just 19% said humans can stop rising temperatures and the associated impacts, with nearly half thinking it possible to slow but not stop the changes and 23% refusing to believe humans can do anything at all.

This may well influence the views of leading presidential contenders' climate plans. Democratic hopeful Bernie Sanders, for example, has **proposed** a rapid remodeling of society where planet-warming emissions from transport and power generation are eradicated within just 11 years.

“By saying we should merely slow and not reverse global warming, we are passively accepting the deaths of billions of people,” said Margaret Klein Salamon, of the **Climate Mobilization Project**.

“The only thing that can protect us is an all-out, all-hands-on-deck mobilization, like we did during the second world war. Avoiding the collapse of civilization and restoring a safe climate should be every government's top priority – at the national, state and local levels.”

# Most American teens are

# frightened by climate change, poll finds, and about 1 in 4 are taking action



Young climate activists participate in a climate strike demonstration outside the White House on Friday in Washington. (Jahi Chikwendiu/The Washington Post)

By

**Sarah Kaplan** and  
**Emily Guskin**

September 17, 2019 at 12:00 a.m. GMT+12

In a coastal town in Washington, climate change has a high school junior worried about the floods that keep deluging his school. A 17-year-old from Texas says global warming scares him so much he can't even think about it. But across the country, teens are channeling their anxieties into activism. "Fear," says Maryland 16-year-old Madeline Graham, an organizer of a student protest planned for this week, "is a commodity we don't have time for if we're going to win the fight."

A solid majority of American teenagers are convinced that humans are changing the Earth's climate and believe that it will cause harm to them personally and to other members of their generation, according to a

new [Washington Post-Kaiser Family Foundation poll](#). Roughly 1 in 4 have participated in a walkout, attended a rally or written to a public official to express their views on global warming – remarkable levels of activism for a group that has not yet reached voting age.

## **POLL** Washington Post-Kaiser Family Foundation Poll

---

### **About 1 in 7 U.S. teens has participated in climate change school walk-out**

In the past three years, have you done any of the following to express your views on climate change or global warming, or not?

Participated in a school walk-out

**15%**

Participated in a protest, rally or other event

**13**

Written a letter, emailed or phoned a government official

**12**

**Have taken at least one of the actions above**

**24**

Note: "No" and "no opinion" not shown.

Source: July 9 - Aug. 5, 2019, Washington Post-Kaiser Family Foundation survey of 629 teenagers aged 13-17. Results have an error margin of +/- 5 percentage points.

ADRIAN BLANCO/THE WASHINGTON POST

The poll by The Post and Kaiser Family Foundation (KFF) is the first major survey of teenagers' views since the explosion of the youth climate movement last year. Inspired by 16-year-old Greta Thunberg, whose year-long "strike" in front of the Swedish Parliament and carbon-neutral sailboat

voyage across the Atlantic have made her an activist icon, growing numbers of teens have been skipping school on Fridays to protest on behalf of something they say is more important.

This week, in the run-up to a major United Nations summit, hundreds of thousands of school kids plan to abandon their classrooms to demand more aggressive measures to protect the planet.

“People feel very guilty when a child says, ‘You are stealing my future.’ That has impact,” Thunberg told The Post. “We have definitely made people open their eyes.”

More than 7 in 10 teenagers and young adults say climate change will cause a moderate or great deal of harm to people in their generation, a slightly higher percentage than among those 30 and older. By the time today’s high schoolers turn 30, scientists say the world must achieve a “rapid and far-reaching” transformation of society to avoid warming’s most dire consequences.

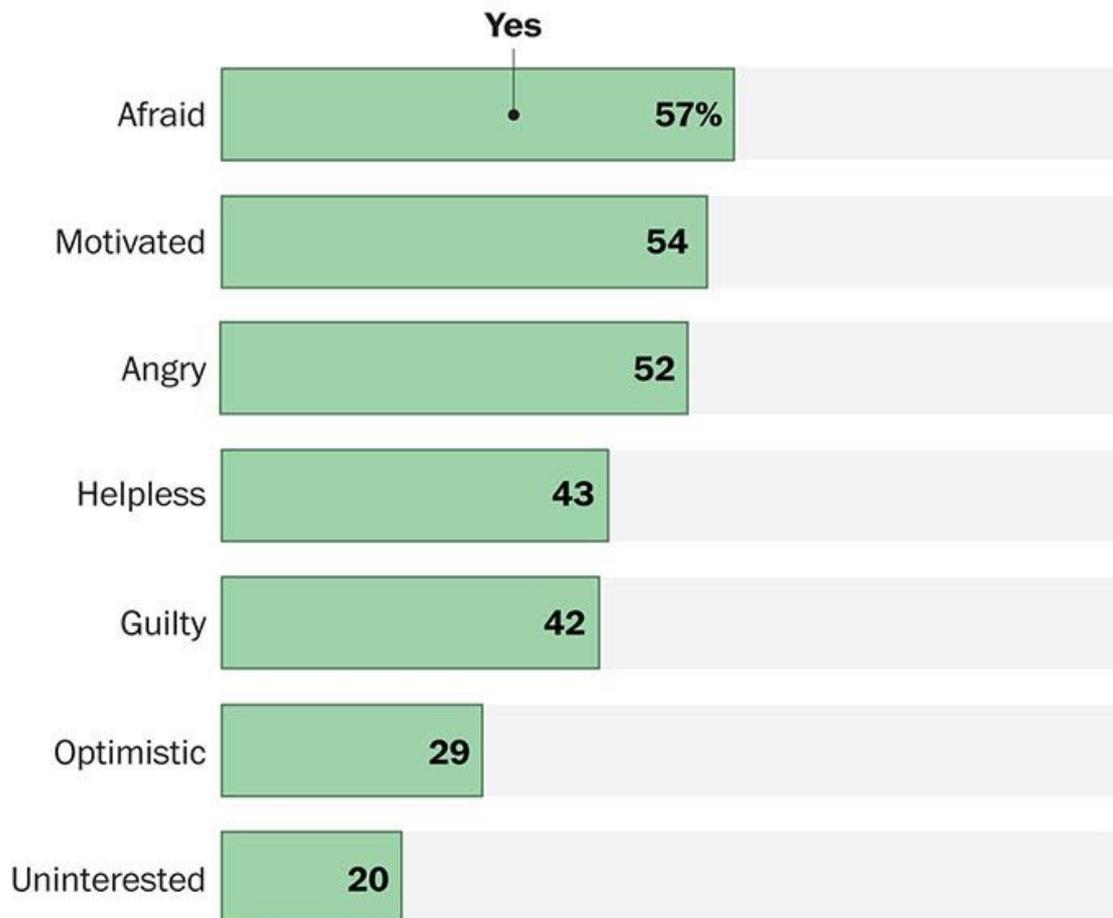
Several teenagers told The Post they are already feeling its effects.

Gabe Lopez, 16, of Everett, Wash., said warming waters have taken a financial toll on relatives who fish in the Pacific. Graham, who lives in Silver Spring, was inspired to take action after seeing hurricanes bombard Puerto Rico, North Carolina and the Bahamas — and watching floods repeatedly deluge her grandmother’s home in Ellicott City, Md.

“It’s like a dystopian novel,” she said. “To grow up seeing the world fall apart around you and knowing it’s going to be the fight of your lives to make people stop it.”

## Majority of teens feel afraid and angry about climate change, but also motivated

Does the issue of climate change make you feel each of the following, or not?



Source: July 9 - Aug. 5, 2019, Washington Post-Kaiser Family Foundation survey of 629 teenagers aged 13-17. Results have an error margin of +/- 5 percentage points.

ADRIAN BLANCO/THE WASHINGTON POST

Both Lopez and Graham said thinking about climate change makes them afraid, an emotion they share with 57 percent of teens nationwide. Fewer than a third of teens say they are optimistic.

“A lot of it is connected to being a kid,” Lopez said. “We can’t vote. We don’t have anyone to represent us.”

Adults, he said, don’t seem to take the issue as seriously, or as personally,

as people his age. Lopez recalled getting into an argument with his driving instructor after the older man was dismissive of students' anxieties about climate change.

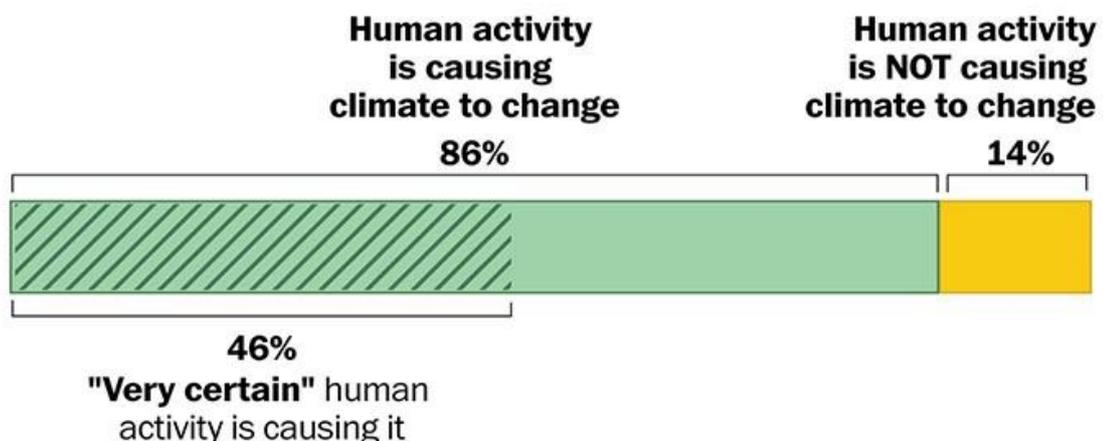
Adults “think: ‘Oh you’re so young, you don’t know what you’re talking about,’” he said. “But I know the facts, and I know what the most drastic consequences will be. I know that people aren’t doing what needs to be done.”

Teens are slightly more likely than adults to accept the scientific consensus that humans are causing global warming, 86 percent versus 79 percent. But in other ways, kids are much like the rest of America when it comes to climate change.

**POLL** Washington Post-Kaiser Family Foundation Poll

### A large majority of teens say humans are causing the climate to change

Do you think human activity is or is not causing changes to the world's climate, including an increase in average temperature?  
(IF YES) How certain are you that human activity is causing changes to the world's climate?



Note: No opinion not shown.

Source: July 9 - Aug. 5, 2019, Washington Post-Kaiser Family Foundation survey of 629 teenagers aged 13-17. Results have an error margin of +/- 5 percentage points.

ADRIAN BLANCO/THE WASHINGTON POST

Roughly a third of both teenagers and adults say the issue is “extremely

important” to them personally. Just under half believe the United States must drastically reduce its fossil fuel use in the next few years to avoid the worst effects of climate change. And roughly 4 in 10 say mitigating the effects of warming will require major sacrifices from ordinary Americans.

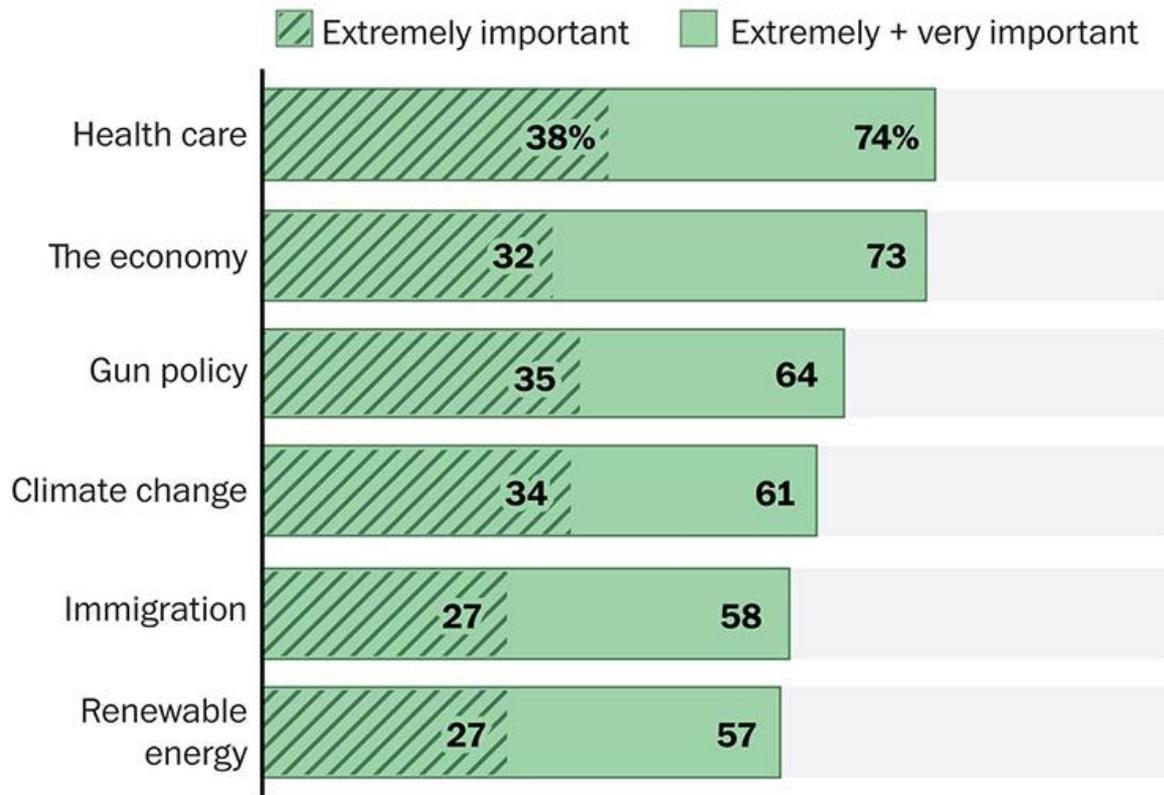
Teenagers also share adults’ questions and misconceptions about the ways the world is warming. In both age groups, no more than 2 in 10 say they know “a lot” about the causes of climate change and ways to reduce it. Sizable minorities of teens incorrectly believe that phenomena like volcanic eruptions and the sun getting hotter are major contributors.

Despite many teens’ strong feelings about the issue, fewer than half say they’ve taken action to reduce their own carbon footprints. Their most common approaches are recycling, limiting time in cars and reducing plastic use. And most say they rarely or never discuss the issue with family and friends.

Meanwhile, the number of teenagers who say they’re being taught in school how to mitigate climate change appears to be on the decline. Fourteen percent say they have learned “a lot” about the subject, down from 25 percent in 2010, when the Yale Project on Climate Change asked a similar question.

**Teens rank climate change as important as other major issues, while adults rank it lower**

How important are the following issues to you personally? (% saying "extremely" or "very" important)



Note: "Somewhat," "not so important" and "no opinion" not shown.

Source: July 9 - Aug. 5, 2019, Washington Post-Kaiser Family Foundation survey of 629 teenagers aged 13-17. Results have an error margin of +/- 5 percentage points. Full question wording available at <http://wapo.st/pollarchive>

ADRIAN BLANCO/THE WASHINGTON POST

“It’s terrible,” said Sam Riley, 17, of Boston. “It’s hardly ever brought up at my school.”

The high school junior said he learned nearly everything he knows about climate change from reading the news and searching the Internet. What he found scares and angers him.

“We’re killing the thing we live on,” he said. “By the time that I’m old, I

know I will see more impacts starting to happen.”

Riley, who is black, believes that minorities and people in low income communities will be most severely impacted by warming, because they are more likely to live in vulnerable areas and less likely to be able to insulate themselves.

“The wealthier you are, the more protection you have,” he said.

*Listen on Post Reports: Climate change fear spurs teenagers into action*

The Post-KFF poll finds black and Hispanic teens express a greater sense of urgency around climate change; 37 percent and 41 percent, respectively, say people need to act in the next year or two, compared with 24 percent of white teens.

Teens who do not think that human activities are affecting the planet are in the minority. Jane Palmer, 13, of Chubbuck, Idaho, said she doesn't see how people can influence the climate when Earth has been changing for millions of years. When her eighth-grade science teacher told her class that fossil fuel use is warming the globe, her mother dismissed those lessons as “fearmongering.”

Still, Palmer has noticed that summers in Idaho are getting hotter. She worries that many people “don't really care about the Earth,” and says she is still thinking the issue through.

“I'm kind of in-between,” she said. “It is a problem, but it's also not that big a deal. Teachers should talk about it and let us know what's happening in the world, but they shouldn't . . . make it seem like the world is going to end.”



Young climate activists participate in a climate strike demonstration outside the White House. (Jahi Chikwendiu/The Washington Post)

Many of her peers disagree: About 4 in 10 of those under 18 call climate change a “crisis.” But unlike adults, most teenagers say they don’t feel helpless. More than half — 54 percent — say they feel motivated.

“It’s the greatest threat to life as we know it and humanity as we know it,” Graham said. “When you’re facing something like that, and you’re 16 years old, and your mom’s yelling at you, and you have classes, and, on top of that, everybody’s gonna die . . . it’s easy to let fear overtake you.”

“But,” she said, “this generation — we’re fighters. And we’re going to win.”

The Post-KFF survey was conducted online and by telephone from July 9 to Aug. 5, among a national sample of 2,293 adults and 629 teenagers through Amerispeak, a survey panel recruited through random selection of U.S. households by NORC at the University of Chicago. Adult results have a margin of sampling error of plus or minus three percentage points and teen results have a margin of sampling error of plus or minus five percentage points.

# How should we talk about what's happening to our planet?



(Barry Falls for The Washington Post)

By

**Dan Zak**

August 27, 2019 at 11:00 p.m. GMT+12

In the middle of a winter's night in 2017, Frank Luntz's cellphone alerted him to a nearby wildfire. The longtime analyst of public opinion opened his bedroom curtains and saw, less than a mile away, flames chewing the dark sky over Los Angeles. Luntz — who specializes in how the public reacts to words — saw scary evidence of a threat that he once tried to neutralize with language. In 2001, he'd written a memo of environmental talking points for Republican politicians and instructed them to scrub their vocabulary of “global warming,” because it had “catastrophic connotations,” and rely on another term: “climate change,” which suggested “a more controllable and less emotional challenge.”



Protesters block the street as they gather for a demonstration organized by Extinction Rebellion outside the Brazilian embassy in London on Aug. 23. (Isabel Infantes/AFP/Getty Images)

Last month, with a revised script, Luntz appeared before the Senate Democrats' Special Committee on the Climate Crisis. "I'm here before you to say that I was wrong in 2001," Luntz said. Nearby was a colorful chart of vocabulary, developed since his polling in 2009 showed bipartisan support for climate legislation. He went on: "I've changed. And I will help you with messaging, if you wish to have it."

Don't talk about *threats*, he told the senators. Talk about *consequences*. Don't talk about new *jobs* created by green energy. Talk about new *careers*. And *sustainability*?

"Stop," Luntz said. "Sustainability is about the status quo."

Even the committee's name had a troublesome word in it: "crisis." It's flabby from overuse, Luntz thought. If everything is a crisis, then nothing is.

From a word standpoint, that's true. And sometimes it feels true in the real

world. The phone in your hand has become a police scanner of unfolding crises. The Kashmir crisis, the Hong Kong crisis, the border crisis, the trade crisis, the measles crisis. The crisis of mass shootings, of the national debt, of Puerto Rico, Brexit, the Amazon. And, yes, the climate crisis, formerly climate change — somehow the least tangible but most alarming of the crises, which makes it trickier to talk about.

Those who are talking about it have ratcheted up their rhetoric. In May, the Swedish activist Greta Thunberg ditched “climate change” for “climate breakdown” or “climate emergency.” The Guardian now uses “climate catastrophe” in its articles. A resistance movement born in Europe last year named itself Extinction Rebellion, partly to normalize the notion of aggressive action in a life-or-death situation.

Luntz wants defter language. “The strongest advocates for a particular issue are often the worst communicators,” he says later by phone, because “they forget that the people they need to convince are not themselves or their friends.”

The climate problem is not just scientific. It’s linguistic. If we can agree how to talk and write about an issue that affects us all, maybe we can understand and fix it together.

But words can be clumsy tools. They can be too dull to puncture ignorance, or so sharp that people flinch and turn away. Is “change” appropriately neutral, or unjustly neutered? Is an “emergency” still an “emergency” after months or years? Does “catastrophe” motivate people, or make them hide under the bed? How long before words such as “breakdown” and “extinction” lose their bite?

And if we keep returning to the dictionary for new words to replace them, will there eventually be any left?

**The second volume of the fourth National Climate Assessment is**

1,515 pages long. The word "likely" appears 867 times, sometimes after "very" or "extremely." Last spring, as they distilled data into text, the scientists who wrote the report spent long hours debating the usage of "likely."

Without significant action to curb climate change, they wrote in the final chapter, "it is very likely that some physical and ecological impacts will be irreversible for thousands of years, while others will be permanent."

When translated to conversational English, "very likely" becomes "this is something really bad and totally crazy and wild," says one author of the report, who spoke on the condition of anonymity to discuss internal deliberations.

"Why don't we use plain language and say, 'Yes, this is crazy and, yes, you should be freaking out'? Because that's not fair. That's not the role of the National Climate Assessment," the author says. "But then we sort of fail as a community in actually getting people to understand the severity of it."

The science community is supposed to interpret for the rest of us, but its dialect does not always pack rhetorical oomph. "I didn't realize that pointing to a climate graph I think is the Rosetta stone — people don't see it the way I see it," says Brenda Ekwurzel, director of climate science for the Union of Concerned Scientists. "We as humans don't experience an exponential curve viscerally, in our gut."

In the industrial age, environmentalist writers have tried to access the brain via the gut. "Thank God men cannot fly, and lay waste the sky as well as the earth," Henry David Thoreau wrote in the 19th century. In the 1960s, Rachel Carson envisioned an ecosystem silenced by chemicals: "Everywhere was a shadow of death." In the 1980s, as global warming was first debated widely, Bill McKibben pondered "the end of nature" itself.

But “there’s a point at which words like ‘climate change’ become part of your mental furniture,” McKibben says in an interview. “Like ‘urban violence’ — things that are horrible problems but you just repeat the thing so often that people’s minds kind of skip over them.”

Terms lose their power as they get used over many years, says Anthony Leiserowitz, director of the Yale Program on Climate Change Communication, and “come to accrete their own set of connotations.”

Such as: elitist, liberal, socialist. When thousands of pages of analysis become a two-word slogan, it passes from science to politics. Facts become less important than feelings. For some people, “climate change” is a wedge word synonymous with “hoax” and calls to mind former vice president Al Gore. For others, it summons the specter of ExxonMobil and is a rallying cry for restructuring the global economy.

“The facts do not speak for themselves,” says Richard Buttny, a professor in the department of communication and rhetorical studies at Syracuse University. “People make decisions based on values.”

And therein lies an opportunity, according to Kim Cobb, professor of earth and atmospheric sciences at Georgia Tech. Scientists observe and publish findings for the public, Cobb says, but then often fail to “recognize the emotional toll this takes on the recipient and the challenge to their core values.”

Cobb refrains from using words such as “crisis” and “emergency” on Twitter, where the character limit discourages context and nuance. Instead, she elevates language about solutions, and about the emotions triggered by the science, in the hopes of widening the circle of understanding.

“We’re way behind creating these communities for shared values and

shared goals,” Cobb says. “And from that comes shared language.”

**We are gradually building that language** to talk about where we are, where we're going and about the emotions that accompany that knowledge. The Germans have a word for feeling guilty about flying on airplanes: “flugscham,” or “flight shame.”

The biologist Edward O. Wilson has a word for a future epoch following a profound loss of species: “the Eremocene,” or “the Age of Loneliness.”

Karla Brollier, founder of the Climate Justice Initiative, is listening to her fellow indigenous Alaskans as their language evolves to include loss and adaptation, without relying on words such as “climate refugee” that connote victimhood.

Jennifer Atkinson’s students at the University of Washington at Bothell have used “blissonance” to describe the feeling of enjoying a record-hot day in winter — while recognizing that climate change might have something to do with it.

“Solastalgia,” coined by environmental philosopher Glenn Albrecht, means distress over change in one’s home environment. Atkinson phrases it as a homesickness without ever having left home.

Her students “describe how the sound of frogs has slowly disappeared over time — these changes that destabilize connections to personal memories,” says Atkinson, a senior lecturer at Bothell. “Unlike with personal bereavement, we don’t have a vocabulary for the grief people have for the loss of the natural world.”

Her course is called “Environmental Anxiety and Climate Grief.” One of the goals is to search for ways of communicating outside the bounds of science and its “value-neutral” vocabulary — all those likelys and somewhat likelys.

“We’re moving into an age of great earnestness, because we’re trying to figure out, ‘How do we show up for each other?’ ” says Sarah Myhre, a climate and ocean scientist who has studied social and ecological decision-making. “And the language that’s being used in my spaces is all about heart-centered work.”

Whereas Frank Luntz once tried to strip the climate problem of emotional resonance, Atkinson, Myhre and others are acknowledging and amplifying it. Whereas science has traditionally been guided by dispassionate, male-centric authority, women are rewording climate conversations to honor the collective, connective nature of the problem.

And how we talk about the environment affects how we think about it. In the colonial and industrial ages, Myhre says, our language reflected an idea of the natural world as an inventory of useful commodities — separate from, and subservient to, humanity.

Trees became timber.

Animals became livestock.

Oil and coal became fuels.

And thus a cultural problem has given birth to an environmental one, says Daniel Wildcat, a professor at Haskell Indian Nations University in Kansas. “Think of how our worldview changes if we shift from thinking that we live in a world full of resources,” he says, “to a world where we live among relatives.”

**In June, the White House slashed its red pen** through certain labels in written congressional testimony from a State Department analyst. When the analyst used “possibly catastrophic” to describe the future impacts of climate change, a member of the National Security Council typed a note in the margin: “not a science-based assessment but advocacy for the climate-

alarm establishment."

The analyst listed "tipping point processes" on a page that was entirely crossed out. A note in the margin: "Tipping points' is a propaganda slogan designed to frighten the scientifically illiterate."

Some activists believe fright is appropriate, and they're eager to use keener language than "tipping points" to do it.

"We've been told for years: 'Don't scare people, people don't want to know the bad news' — and all that's meant is nothing's changed," says Charlie Waterhouse, founder of the company behind Extinction Rebellion's branding. "We know that we have to up the ante, and we have to have a more extreme position because that opens that crack that lets other people follow."

The word "extinction" is a blunt instrument that whacks at complacency. The word "rebellion" invites enlistees and subverts established power structures.

But this "constant inflation" in terminology hampers rational discussion, says the Danish author Bjorn Lomborg, whose skeptical writings on the economics of climate action have riled scientists and activists. Words such as "catastrophe" and "extinction" imply that we should either cower and do nothing, or overreact and do everything, says Lomborg, who is president of the Copenhagen Consensus Center.

"The conversation we should have is: How do we make smart policies that cost less than the damage they reduce?" Lomborg writes in an email.

"Climate policy shouldn't be done with labels but with careful analysis."

We don't need labels as much as we used to, back when the effects of climate change were forecast instead of seen and felt.

“In a certain sense, words are no longer as necessary as they once were,” says McKibben, author of [“The End of Nature.”](#) “Twenty or 30 years ago we were describing things that hadn’t happened yet, so you couldn’t take a picture of them. Now every single day you can take 1,000 pictures around the world of the trauma of climate change.”

Nearly two decades after Frank Luntz recommended it, “climate change” may still be the closest thing to a shared language that Americans have for describing what’s happening to the planet. But we diverge from there. Scientists speak about consequences. Activists speak about crises and catastrophes. Politicians speak about doubt and propaganda. And if you’re paying attention, you’ll hear nature speaking loudly for itself.