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Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue

Majorities of Americans support array of measures to address climate change but stop short of full break with fossil fuels

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How we did this

Pew Research Center conducted this study to understand how Americans view climate, energy and environmental issues. We surveyed 13,749 U.S. adults from April 20 to 29, 2021.

The survey was conducted on Pew Research Center's American Trends Panel (ATP) and included an oversample of adults ages 18 to 24 from the Ipsos Knowledge Panel. A total of 912 Generation Z adults, born after 1996, were included in the sample.

Respondents on both panels are recruited through national, random sampling of residential addresses. This way nearly all U.S. adults have a chance of selection. The survey is weighted to be representative of the U.S. adult population by gender, race, ethnicity, partisan affiliation, education and other categories. Read more about the ATP's methodology.

Here are the [questions used](#) for this report, along with responses, and its [methodology](#).

Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue

Majorities of Americans support array of measures to address climate change but stop short of full break with fossil fuels

In the first year of Joe Biden's presidential term, climate, energy and environmental policy have been the subject of renewed federal attention. In recent months, the United States has rejoined the Paris Agreement on climate change, the Environmental Protection Agency has moved to sharply restrict greenhouse gas emissions, and Biden has outlined a range of policy goals, including getting the U.S. to "net-zero" by 2050.

Even as Americans identify a number of pressing [national problems](#), majorities see an array of actors, from government to business, as doing too little to reduce the effects of climate change and are broadly supportive of a range of policy approaches that would help address climate change, including moving toward renewable energy sources, developing infrastructure for electric vehicles, and increasing taxes

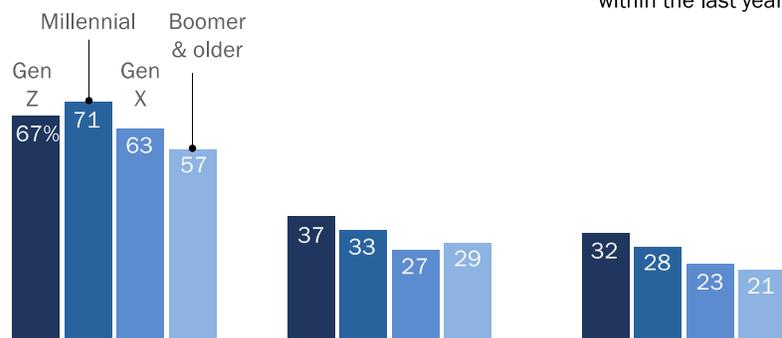
Gen Z, Millennials more active than older generations addressing climate change on- and offline

% of U.S. adults who say ...

Climate should be top priority to ensure sustainable planet for future generations

Addressing climate change is my top personal concern

Have personally taken action to help address climate change within the last year

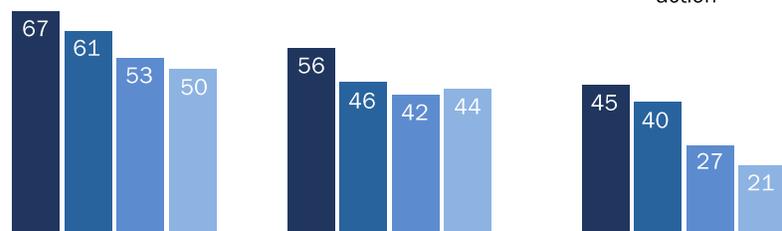


In the past few weeks ...

Talked about need for action on climate at least 1-2 times

Seen content on social media about need for climate action

Engaged on social media with content on need for climate action



Note: Respondents who gave other responses or did not give an answer are not shown. Seen content on social media and engaged with climate content based on social media users.

Source: Survey conducted April 20-29, 2021.

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and restrictions on carbon emissions.

Still, most Americans favor using a mix of energy sources to meet the country’s needs – including renewables as well as oil, coal and natural gas. There is limited support for phasing out the use of fossil fuels altogether. And the public is closely divided over the idea of phasing out the production of gas-powered vehicles by 2035.

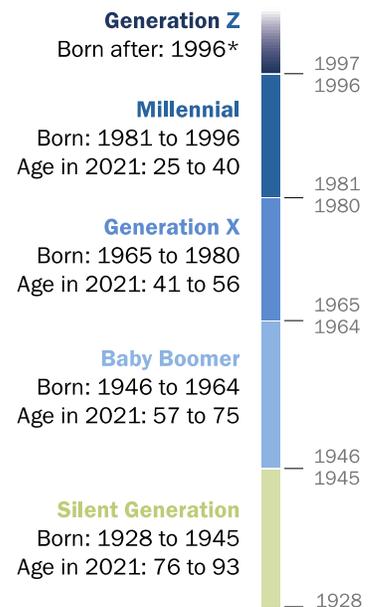
Partisan gaps in views of climate change remain vast – from the salience of the issue to the role for government addressing it. And divisions over renewable energy and stricter environmental regulations are wider today than they were under Donald Trump’s administration, due to increased opposition among Republicans.

But meaningful generational differences over the need for climate action, and engagement with the issue, stand alongside these partisan divisions. Younger activists are often at the forefront of the climate debate, with voices such as those of Greta Thunberg and the Sunrise Movement – a youth-led political organization urging increased attention to climate change – among the most visible in global conversations advocating climate action.

Younger Americans – Millennials and adults in Generation Z – stand out in a new Pew Research Center survey particularly for their high levels of engagement with the issue of climate change. Compared with older adults, Gen Zers and Millennials are *talking* more about the need for action on climate change; among social media users, they are *seeing* more climate change content online; and they are *doing* more to get involved with the issue through activities such as volunteering and attending rallies and protests.

While many forms of political engagement – [such as voting](#) – tend to be higher among older adults, 32% of Gen Zers and 28% of Millennials have taken at least one of four actions (donating money, contacting an elected official, volunteering or attending a rally) to help address climate change in the last year, compared with smaller shares of Gen X (23%) and Baby Boomer and older adults (21%).

The generations defined



*No chronological endpoint has been set for this group. In this analysis, Generation Z includes those ages 18 to 24 in 2021. “Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

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The survey finds that, when asked about engaging with climate change content online, those in Gen Z are particularly likely to express anxiety about the future. Among social media users, nearly seven-in-ten Gen Zers (69%) say they felt anxious about the future the most recent time they saw content about addressing climate change. A smaller majority (59%) of Millennial social media users report feeling this way the last time they saw climate change content; fewer than half of Gen X (46%) and Baby Boomer and older (41%) social media users say the same.

Anxiety about the future also is a predominant emotional reaction to climate change content among those who are most engaged with the issue on social platforms (those who follow a climate-focused account, interact with, post or share climate content themselves). Majorities of these *climate-engaged* social media users report feeling angry that not enough is being done when encountering climate change content online; but large shares also say they feel motivated to learn more and confident in the ability to reduce the effects of climate change.

As a group, larger shares of [younger adults](#) identify with, or lean toward, the Democratic Party than the GOP. But generational differences in climate change attitudes and behaviors are not simply a reflection of the Democratic orientation of younger adults. In fact, *among Republicans*, generational differences in views are often quite pronounced. For example, 49% of Gen Z and 48% of Millennial Republicans (including Republican leaners) say action to reduce the effects of climate change needs to be prioritized today, even if that means fewer resources to deal with other important problems; significantly fewer Gen X (37%) and Baby Boomer and older (26%) Republicans say the same.

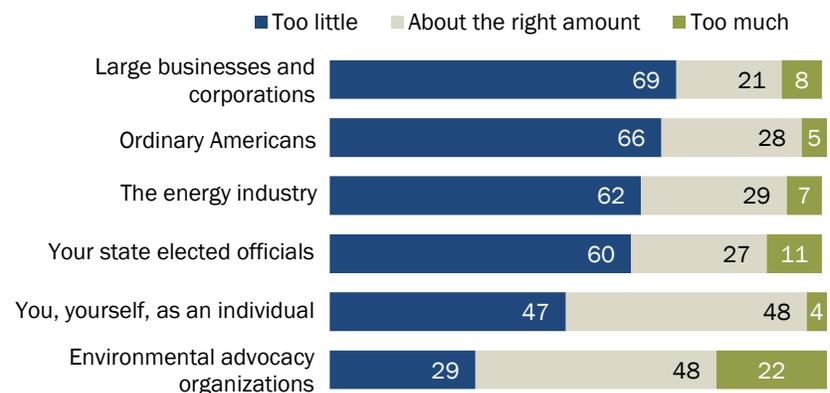
Attitudinal differences by generation among Democrats are less common, as large shares prioritize climate action and back policies to help reduce climate impacts. Still, younger Democrats are more likely than older Democrats to be talking about the need for action on climate change and to have been personally encouraged to become more involved. And on the policy front, Gen Z and Millennial Democrats express more openness to breaking with fossil fuels entirely than Gen X and Baby Boomer and older Democrats.

The new national survey by Pew Research Center, conducted April 20 to 29 among 13,749 U.S. adults, including 912 Gen Z adults, finds a majority of Americans (64%) say efforts to reduce the effects of climate change need to be prioritized today to ensure a sustainable planet for future generations, even if it means fewer resources for addressing other important problems; far fewer (34%) say climate change should be a lower priority, given other important problems facing Americans today.

In line with the public's view that climate change should be addressed today, majorities believe a range of public and private actors are not doing enough to help reduce climate impacts. More than six-in-ten Americans say large businesses and corporations (69%) and the energy industry (62%) are doing too little to address climate change. Such critiques extend beyond industry: Two-thirds say ordinary Americans are doing too little to help reduce the effects of climate change. Consistent with past Center surveys, majorities also say the federal government is doing too little across a range of environmental concerns – such as protecting air and water quality – and 59% see it as doing too little to reduce the effects of climate change.

Majorities say large businesses, energy industry and ordinary Americans are doing too little on climate

% of U.S. adults who say each of the following are doing ____ to help reduce the effects of global climate change



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Despite ongoing support for prioritizing alternative energy, nearly two-thirds of U.S. public opposes phasing out fossil fuels; closely divided over phasing out gas-powered cars

There are limits to how far the public is willing to go on climate and energy policy, especially when it comes to breaking with fossil fuels, a potential shift that gained increased attention during the global drop in carbon emissions in 2020 that accompanied the [COVID-19 pandemic](#).

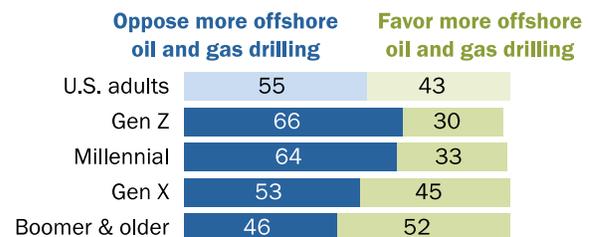
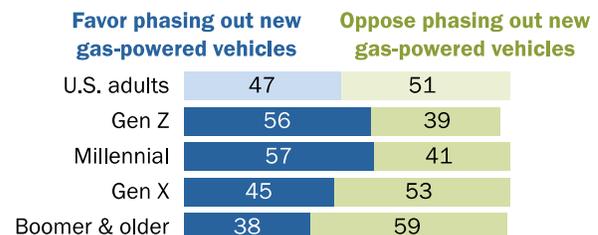
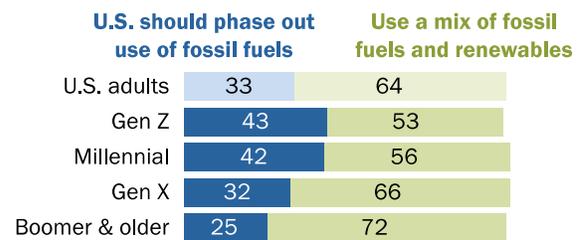
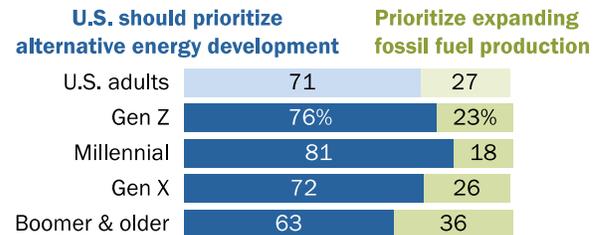
Most Americans (71%) continue to say the U.S. should prioritize development of alternative energy sources, such as wind and solar, over expanding production of oil, coal and natural gas. And there is strong policy support for tougher restrictions on power plant carbon emissions, as well as for higher fuel-efficiency standards for cars and trucks.

But the public is cool to the idea of phasing out fossil fuels from the country's energy supply altogether and closely divided over transitioning away from gas-powered cars.

Nearly two-thirds of Americans (64%) say the U.S. should use a mix of energy sources going forward – including oil, coal and natural gas, along with renewables; far fewer (33%) support phasing out fossil fuels entirely. By 51% to 47%, a slightly larger share of Americans oppose than favor phasing out the production of new gasoline cars and trucks by 2035 – a proposal that has been put forward by [governors in 12 states](#), including California and New York. Phasing out gas-powered vehicles is one of several measures the [International Energy](#)

Younger generations more willing than older to give up fossil fuels, phase out gas-powered cars

% of U.S. adults who say ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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[Association](#) says will be needed to reach net-zero emissions globally.

The views of Gen Zers and Millennials are distinct from those of older adults over the use of fossil fuels. Majorities of Gen Zers (56%) and Millennials (57%) favor phasing out new gasoline cars and trucks by the year 2035; by contrast, majorities of Gen X (53%) and Baby Boomer and older adults (59%) oppose this idea. And while adults across generations are inclined to use a mix of sources to meet the country’s energy needs, support for phasing out the use of oil, coal and natural gas is significantly higher among Gen Zers and Millennials (43% and 42%, respectively) than among Gen X (32%) and Baby Boomer and older adults (25%).

Broad support among U.S. adults for key elements in Biden’s infrastructure plan; half say it would help the U.S. economy

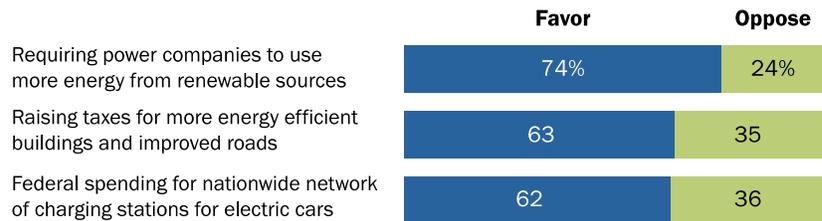
The Biden administration signaled a focus on [climate change](#) since taking office, calling it a profound crisis. The new Center survey finds majorities of Americans support a number of proposals to address climate change, including three specific elements in Biden’s [infrastructure plan](#).

More than seven-in-ten Americans (74%) support a proposal to require power companies to increase their reliance on renewable energy sources in order to reduce carbon emissions. A smaller majority (62%) backs federal spending to build a network of electric vehicle charging

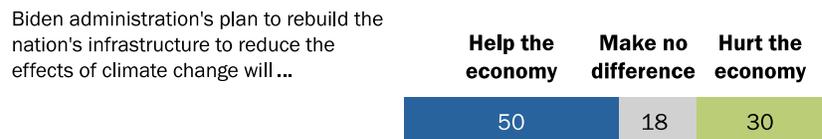
stations across the country in order to increase the use of electric cars and trucks. And a similar share (63%) supports raising corporate taxes to pay for more energy efficient buildings and improved roads, a key funding mechanism in Biden’s infrastructure proposal.

Majorities support three specific proposals in Biden’s infrastructure plan; half think plan will help economy

% of U.S. adults who say they favor each of the following proposals from the federal government



% of U.S. adults who say the following



Note: Respondents who gave other responses or did not give an answer are not shown.
 Source: Survey conducted April 20-29, 2021.
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On the question of the economic benefits – or costs – of Biden’s infrastructure plan, 50% of U.S. adults think the plan to rebuild the country’s infrastructure in ways that are aimed at reducing the effects of climate change will help the economy, while fewer (30%) think it will hurt the economy; 18% say it will make no difference.

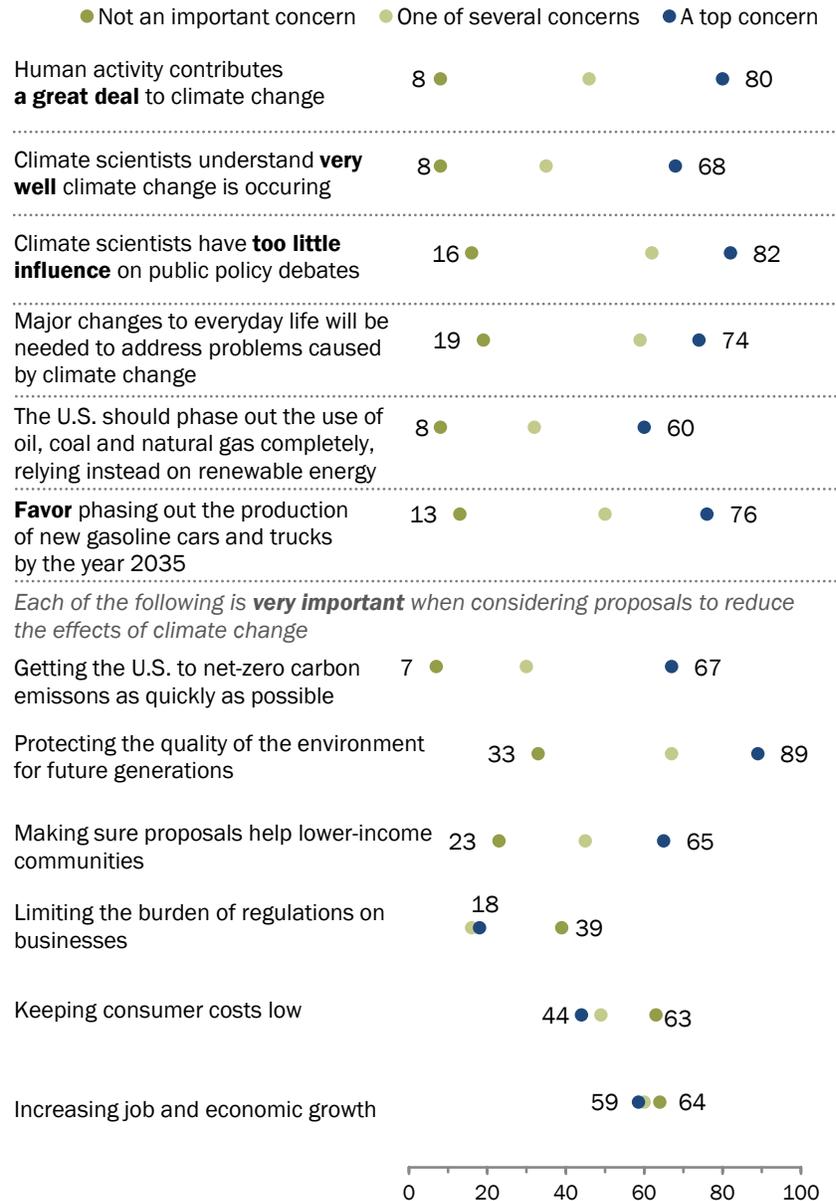
As expected, there are sharp partisan divisions over these proposals and their likely economic impact: 78% of Democrats think the Biden administration plan will help the U.S. economy, while a majority of Republicans (59%) say the opposite and expect it to hurt the economy.

The roughly three-in-ten Americans most concerned about climate change differ widely from other Americans in their beliefs, priorities for climate policy

The survey provides a detailed look at the 31% of Americans for whom climate change is a top personal concern. This group is distinct in their views on climate from the 30% of Americans who say that climate change is not

Those most concerned with climate change place high importance on protecting planet for future generations

% of U.S. adults who say the following, among those who say addressing global climate change is ___ to them personally



Note: Respondents who gave other responses or did not give an answer are not shown.
 Source: Survey conducted April 20-29, 2021.
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important to them personally, as well as from the 39% who call it one of several issues – but not a top issue – they care about.

For example, those with a strong personal concern about climate are much more likely than other groups to say human activity contributes “a great deal” to climate change, to believe climate scientists understand the phenomenon “very well” and to say climate scientists have too little influence on policy.

This group also stands out for their priorities in thinking about climate policy. Those most concerned about climate change are particularly likely to say protecting the quality of the environment for future generations (89%), getting the U.S. to net-zero carbon emissions as quickly as possible (67%) and making sure proposals help lower-income communities (65%) are very important considerations to them in climate policy proposals.

Other key findings from the survey include:

- *A narrow majority in U.S. say climate scientists have too little influence on climate policy debates.* Overall, 54% of Americans say that climate scientists have too little influence on related policy decisions, 22% say they have about the right amount and another 22% say they have too much influence. Democrats (77%) are far more likely than Republicans (27%) to say that climate scientists have too little influence on climate policy debates.
- *Majorities of Black (68%) and Hispanic (55%) adults prioritize help for lower-income communities when considering climate policy proposals.* A smaller share of White adults (38%) say helping lower-income areas is a very important consideration to them in climate proposals. Middle- and upper-income Black adults are about as likely as lower-income Black adults (70% and 66%, respectively) to say this is very important to them. Similarly, there are no differences on this question between middle/upper-income Hispanic adults and those with lower incomes (54% vs. 57%, respectively).
- *Half of Americans say they have experienced extreme weather over the past year.* Three-quarters of U.S. adults support a proposal to change building standards so that new construction will better withstand extreme weather; 23% say this is a bad idea because it could increase costs and cause delays in important projects. Those who say they have experienced extreme weather events are more likely than those who have not to consider it a good idea to change building codes, though majorities of both express this view.

- *Republicans' views on energy issues have shifted compared with a year ago, leading to wider political divides between the parties.* Republican support for expanding wind and solar power, while still a majority, has decreased 13 and 11 percentage points, respectively, compared with a year ago when Trump was in office. The shares of Republicans and Republican leaners who support expanding hydraulic fracturing for oil and natural gas (up 10 points), offshore oil and gas drilling (up 6 points) and coal mining (up 6 points) have risen over the same period. Even so, younger Republicans remain less likely than their older counterparts to support expanding fossil fuel sources, consistent with past Center surveys.

1. Climate engagement and activism

For many forms of political engagement – such as voting in elections – older adults are more likely to participate than younger adults. However, when it comes to climate activism, Gen Zers and Millennials are more likely than Gen X and Baby Boomer and older adults to have taken action to address climate change through participation in a range of activities. Younger adults are also more likely than older adults to talk about the need for action on climate change and to have been encouraged to get more involved. Among social media users, they're also more likely to engage with climate social media content and to have strong emotional reactions – such as anxiety about the future or anger about lack of action – to the content they see.

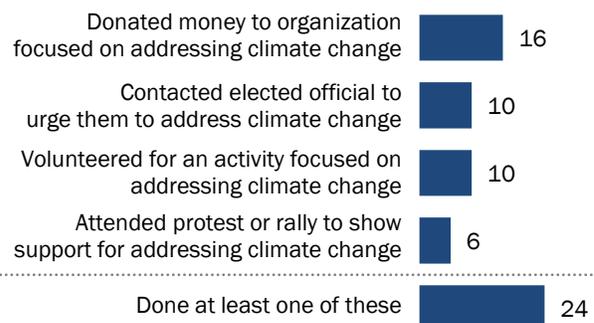
As with most attitudes and behaviors around climate change, partisan differences are also pronounced, with Democrats much more likely than Republicans to have taken steps themselves to help address climate change and engage with climate change content in personal conversations and online.

Overall, 16% of U.S. adults say they have donated money to an organization that is focused on addressing climate change in the past year. One-in-ten Americans have contacted an elected official to urge them to act on climate change, and the same share has volunteered for an activity that was focused on addressing climate change. Somewhat fewer – just 6% of adults – say they have attended a protest or rally to show support for addressing climate change in the past year.

Put together, 24% of Americans say they have done at least one of these four activities to address climate change in the past 12 months.

24% of U.S. adults have made efforts to support climate action in the past year

% of U.S. adults who say they have done each of the following in the past year



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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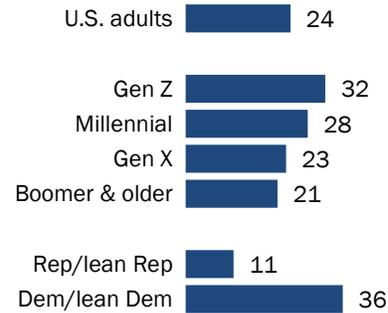
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A third of Gen Z adults (32%) and 28% of Millennials have participated in at least one of these activities aimed at addressing climate change in the last year. This compares with smaller shares of Gen X (23%) and Baby Boomer and older adults (21%).

Democrats are roughly three times as likely as Republicans to have taken at least one of these four actions to address climate change. Among Republicans, Gen Z adults (21%) are much more likely than Baby Boomer and older adults (7%) to have participated in at least one activity to help address climate change in the last year.

Younger generations, Democrats more active on climate change

% of U.S. adults who have done at least one of four activities to address climate change in past year



Note: "At least one of four activities" refers to one or more of donating money, contacting elected official, volunteering for an activity or attending protest or rally to address climate change. Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Addressing climate change among Democrats’ top personal concerns

Asked about the issues and activities that are important to them, 31% of Americans call addressing global climate change a top concern to them personally, while another 39% say this is one of several important concerns. Three-in-ten say addressing climate change is not an important concern to them personally.

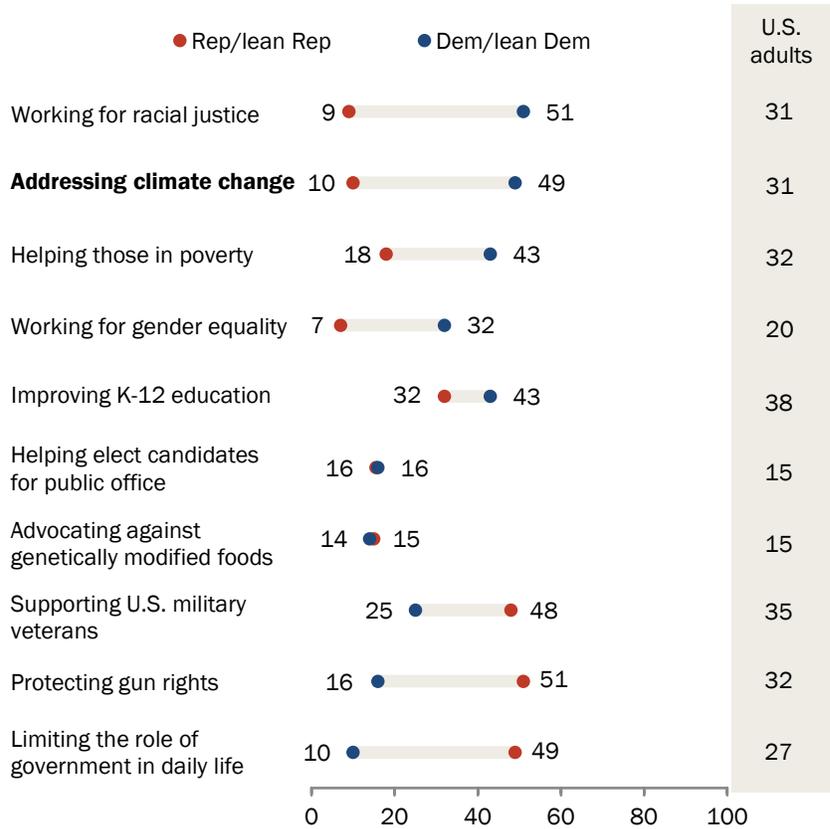
On a list with nine other issues, climate change ranks toward the middle, with larger shares naming improving K-12 education (38%) and supporting U.S. military veterans (35%) as top personal concerns.

About half of Democrats (49%) say addressing climate change is a top concern to them personally, and another 43% call this one of several important concerns. For Democrats, climate change ranks alongside addressing racial justice (51% top concern) as among the issues they express the most personal concern about.

By contrast, just 10% of Republicans say addressing climate change is a top personal concern (32% say it is one of several important concerns). A majority of Republicans (58%) say climate change is *not* an important concern to them – among the largest shares of Republicans who say this about any of the 10 items included in the survey.

Far more Democrats than Republicans call addressing climate change a top personal concern

*% of U.S. adults who say each of the following is a **top concern** to them personally*



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Across generations, 37% of Gen Zers and 33% of Millennials say addressing global climate change is a top concern to them personally, and large majorities of both groups say it is at least one of several important concerns to them (76% and 75%, respectively). Gen X and Baby Boomer and older adults are less likely to call addressing climate change a top personal concern (27% and 29%, respectively), and smaller majorities say it is at least one of several important concerns to them.

Among Republicans, 55% of Gen Zers and 52% of Millennials say climate change is at least one of several important concerns to them (though relatively few call it a top personal concern). By contrast, majorities of Gen X (60%) and Baby Boomer and older (65%) Republicans say climate change is not an important concern to them.

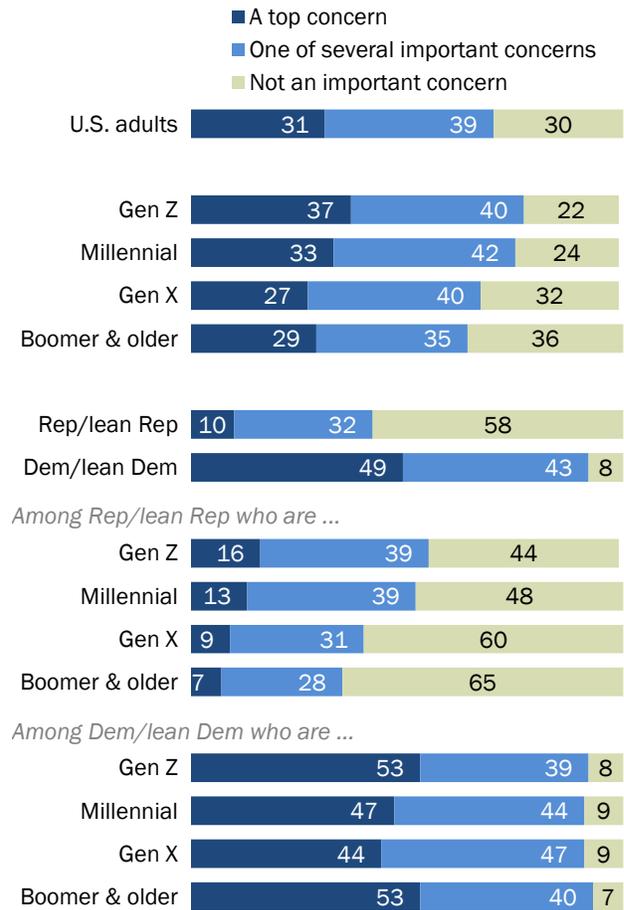
Among Democrats, generational patterns are less pronounced, and large majorities of all groups say climate change is at least one of several important concerns to them personally.

Hispanic adults (39%) are more likely than Black (32%) or White (28%) adults to say climate change is a top concern. Younger generations of Hispanic adults (41%) as well as older ones (37%) are about equally likely to say climate change is a top personal concern.

Roughly half of Hispanics who identify with or lean to the Democratic Party consider climate change a top personal concern (49%), compared with 21% of Republican and Republican-leaning Hispanics. See the [Appendix](#) for more on Hispanics' views.

More than one-third of Gen Z adults say climate change is a top concern

% of U.S. adults who say addressing global climate change is ___ to them personally



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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A majority of Americans have talked about the need for action on climate change recently; 26% say a friend or family member has encouraged them to get more involved

Overall, 56% of Americans say they are talking about climate change at least sometimes.

Over the past few weeks, 18% of U.S. adults say they've talked about the need for action on climate change at least a few times each week, and another 38% say they've discussed this once or twice in that time.

About four-in-ten (43%) say they never discussed this.

When it comes to taking action to address climate change, 26% of U.S. adults say a friend or family member has encouraged them to get more involved in efforts to reduce the effects of climate change. Relatively fewer report that a friend or family member has criticized them for not doing enough to help with climate change efforts (13%).

Asked to think about talking with someone they *disagree* with over the need for action

on climate change, 40% say they generally find this to be a difficult conversation, while a larger share (57%) say it is generally not a difficult conversation for them. Those who describe climate change as a top personal concern are much more likely to say talking with those they disagree with on the issue is a difficult conversation than those who place lower personal importance on climate change (52% to 34%).

A majority of U.S. adults have talked about the need for action on climate change in the past few weeks

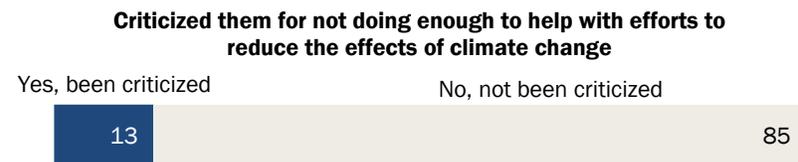
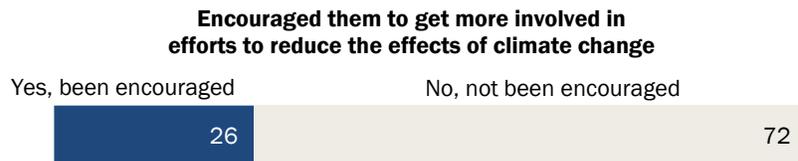
% of U.S. adults who say over the past few weeks they've talked about the need for action on climate change ...



*% of U.S. adults who say when they talk with someone they **disagree** with about the need for action on climate change, they generally find it to be ...*



% of U.S. adults who say a friend or family member has ever personally ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

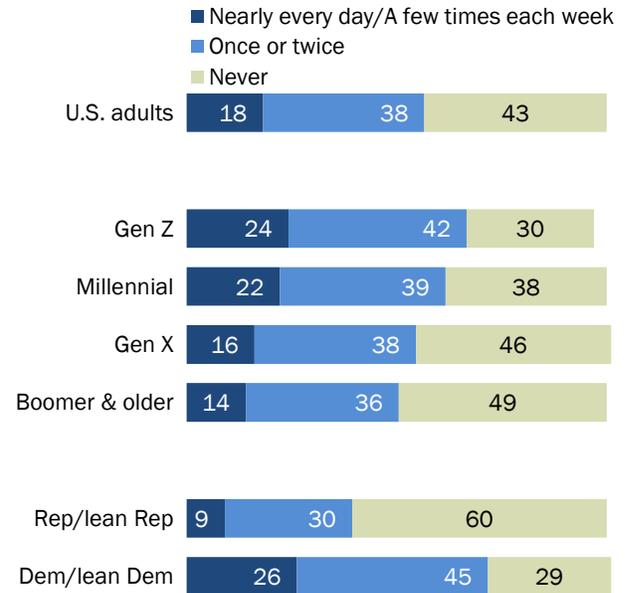
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Younger Americans and Democrats are more likely to have talked about the need for action on climate change recently. For instance, 24% of Gen Z adults say they have talked about the need for action on climate change at least a few times each week recently, compared with 14% of Baby Boomer and older adults.

About a quarter of Democrats (26%) have discussed this at least a few times each week, and another 45% have done so once or twice over the past few weeks. In comparison, a majority of Republicans (60%) say they never talked about the need for action on climate change in the past few weeks.

Gen Z, Millennials discuss need for action on climate change more often

% of U.S. adults who say over the past few weeks they've talked about the need for action on climate change ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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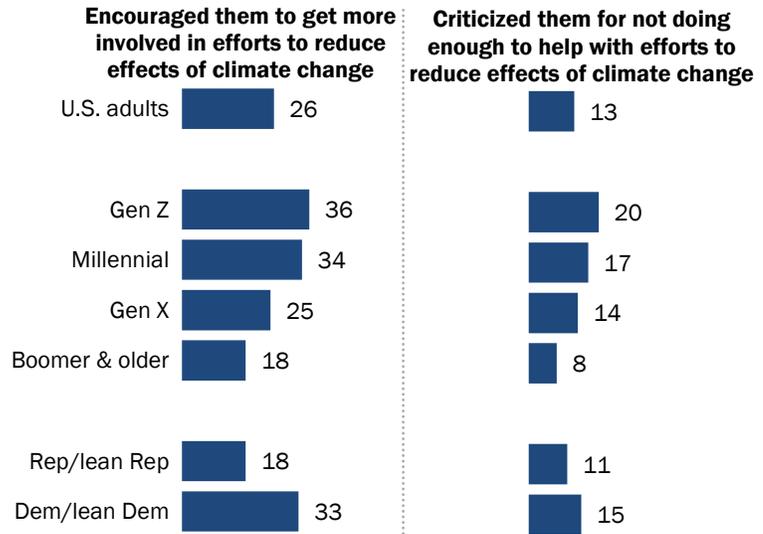
Overall, Gen Z (36%) and Millennial (34%) adults are more likely to say a friend or family member has encouraged them to get more involved in efforts to reduce the effects of climate change; 25% of Gen X and 18% of Baby Boomer and older adults say this has happened to them.

Younger adults also are more likely to say a friend or family member has criticized them for not doing enough on climate, though larger shares across generations report being encouraged to get involved than being criticized for not doing more.

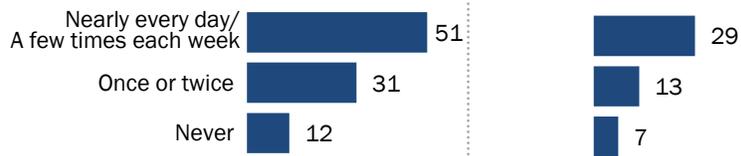
People who have talked about the need for climate action in the past few weeks are much more likely to say that they have received such encouragements or admonishments.

More younger adults say they have been encouraged by family or friends to do more on climate

% of U.S. adults who say a friend or family member has ever personally ...



Among those who discussed need for action on climate change ___ over past few weeks



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

“Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

Among social media users, younger generations stand out for engagement with content about the need to address global climate change

Gen Z adults, [born after 1996](#), have lived their whole lives in an internet and social media era. Younger adults have been among the first to adopt social media use and remain much more likely than older adults to say they [are online “almost constantly.”](#)

Gen Z adults report seeing climate-related content on social media platforms to a greater extent than older generations. Gen Z, as well as Millennials, are more likely than older adults to engage with climate posts, saying they have interacted with or shared a post about the need for action on climate change in the past few weeks or that they follow an account focused on this cause. Those social media users who engage with climate content – a group that skews younger than the general population – are particularly

likely to have emotional reactions to what they see, ranging from feeling motivated and confident about addressing climate change to feeling anxious for the future and angry that more isn’t being done now.

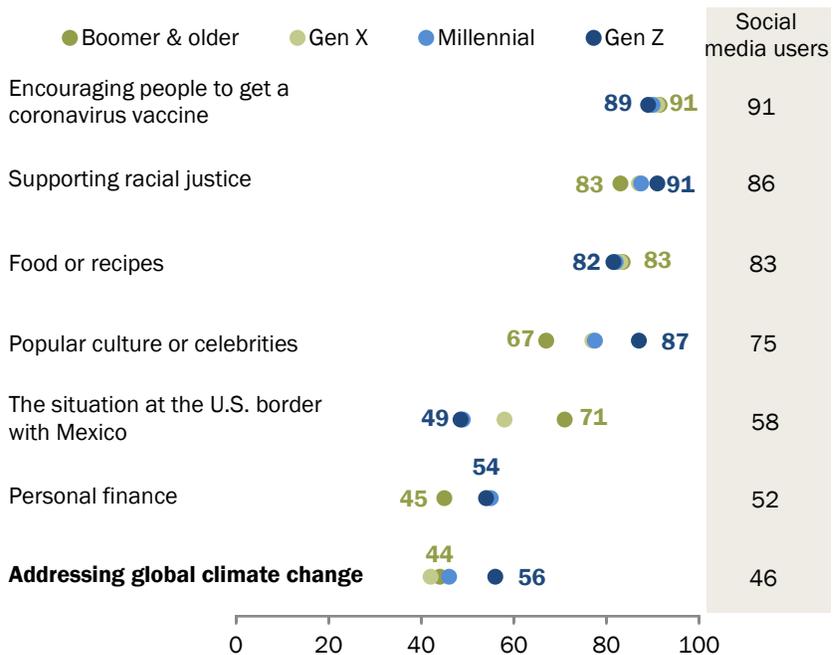
Gen Z adults on social media are most likely to see climate-related content in their feeds

Climate change is just one of many topics vying for attention in social media users’ feeds.

The Center survey asked social media users whether they had seen content focused on each of seven possible topics in the past few weeks across any platform.

56% of Gen Z social media users say they have seen content focused on addressing climate change

% of U.S. adult social media users who say they have seen any content on social media in the past few weeks that focused on ...



Note: Based on social media users. Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

“Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

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Of the seven topics, climate change content was the least frequently encountered: 46% of social media users had seen climate-related content in the past few weeks.

The most common, seen by 91% of social media users, was content encouraging people to get a coronavirus vaccine.

Gen Z social media users stand out from Millennials and older generations for the relatively high share – 56% – who say they have seen content geared toward addressing global climate change in the past few weeks. Fewer than half of Millennial (46%), Gen X (42%) or Baby Boomer and older social media users (44%) say the same.

Among social media users, Democrats and independents who lean to the Democratic Party are more likely than Republicans and Republican leaners to report seeing content about addressing climate change (53% vs. 38%). But strikingly, similar shares of Democratic and Republican Gen Z social media users say they have seen climate-related content over the past few weeks (58% and 55%).

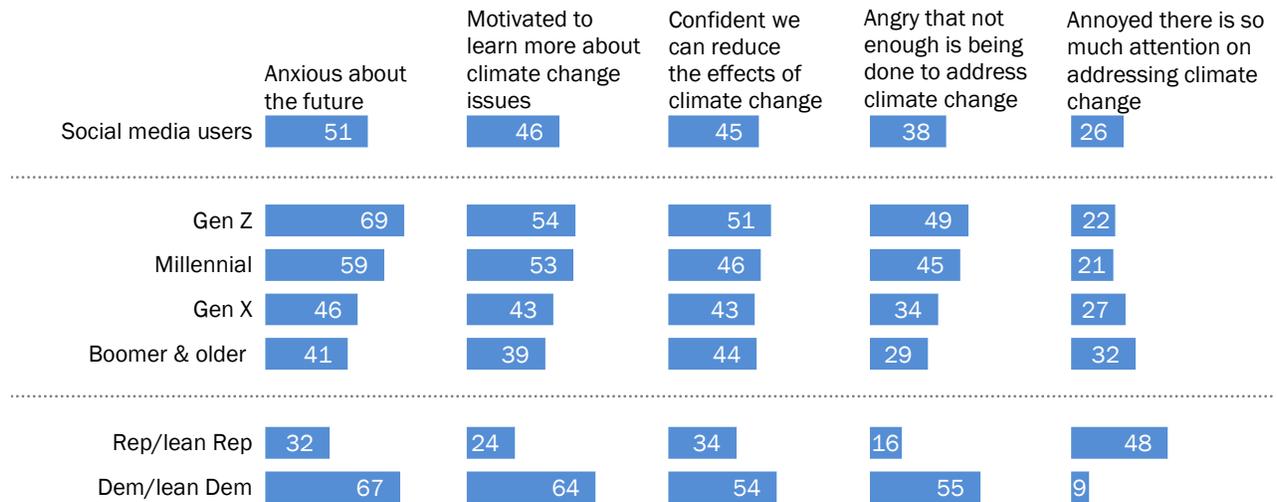
Climate-related posts evoke an array of intense emotional reactions for some social media users, especially among younger generations. Nearly seven-in-ten Gen Z social media users (69%) say that the most recent time they saw content on social media about addressing climate change it made them feel anxious about the future, compared with 41% of Baby Boomer and older social media users.

Nearly half of Gen Z (49%) and 45% of Millennial social media users report having felt angry that not enough is being done to address climate change the last time they saw climate content on social media; Gen X (34%) and Baby Boomer and older (29%) social media users are much less likely to say they felt this way. In addition, younger more so than older social media users say they felt motivated to learn more about climate change the last time they encountered climate content online.

Older social media users are more likely than younger ones to report feeling annoyed that there is so much attention given to the issue when encountering climate content on social media. However, this pattern is driven entirely by views within the GOP: 57% of Baby Boomer and older Republican social media users say they feel annoyed when seeing climate content because of the amount of attention the issue receives, compared with 43% of Gen Z and 37% of Millennial Republicans on social media.

Younger adults more likely than older adults to feel anxious, motivated and angry when they see social media content focused on addressing global climate change

% of U.S. adult social media users who say the most recent time they saw content on social media about addressing global climate change, it made them feel ...



Note: Based on social media users. Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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Social media users who are more engaged with climate content report a mix of emotional reactions to what they see, from motivation to anger and anxiety

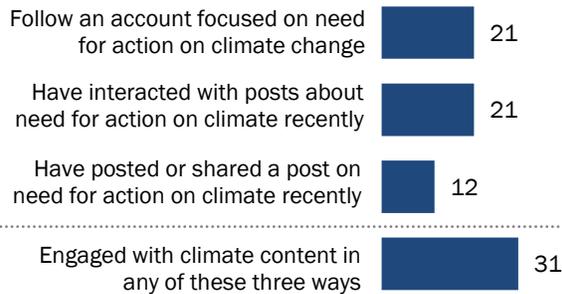
Aside from seeing content about climate change in their feeds, there are a number of ways social media users can actively engage with climate change content on social media.

The survey finds that 21% of social media users say they follow an account that focuses on the need for action on climate change. The same share of social media users (21%) say they have interacted with a post about the need for climate change (such as liking or commenting) in the past few weeks, and 12% say they have recently posted, or shared a post, about the need for action on climate change.

Taken together, 31% of social media users are *climate engaged* – that is, having taken at least one of three actions to interact with climate change content on social platforms.

31% of social media users actively engage with climate change content

% of U.S. adult social media users who ...



Note: Based on social media users. Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

“Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

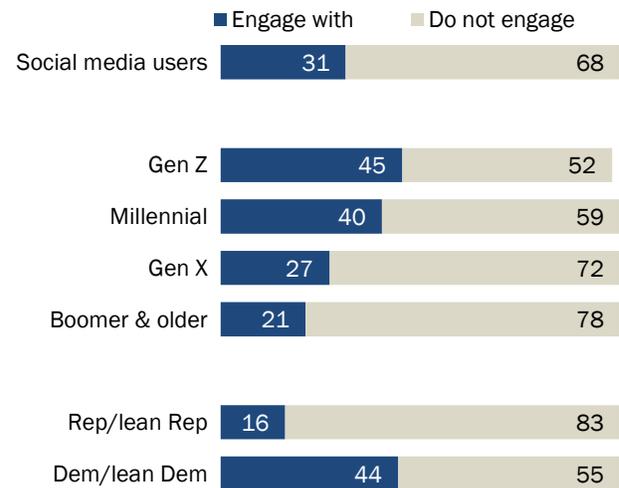
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Gen Z (45%) and Millennial (40%) social media users are much more likely to engage with content about the need for action on climate change than Gen X (27%) and Baby Boomer and older (21%) social media users.

This generational pattern occurs among both Democrats and Republicans. Democratic Gen Zers (54%) and Millennials (53%) on social media are more likely to engage with content about the need for action on climate change than Baby Boomer and older Democrats (37%). Among Republican social media users, 32% of Gen Z, 22% of Millennial, 17% of Gen X and 7% of Baby Boomer and older adults engage with climate content.

Gen Z and Millennial adults more likely to engage with climate change content on social media than older generations

% of U.S. adult social media users who ___ with content on the need for action on climate change



Note: Based on social media users. Respondents who did not give an answer are not shown. "Engage with climate content on social media" defined as those who follow an account, interact with posts, or post or share content on social media related to addressing global climate change.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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Climate-engaged social media users stand out from others on social platforms across a range of climate attitudes, including the priority they give to addressing the issue, the levels of support they offer for policies to deal with climate impacts and the emotional reactions they have when encountering climate content online.

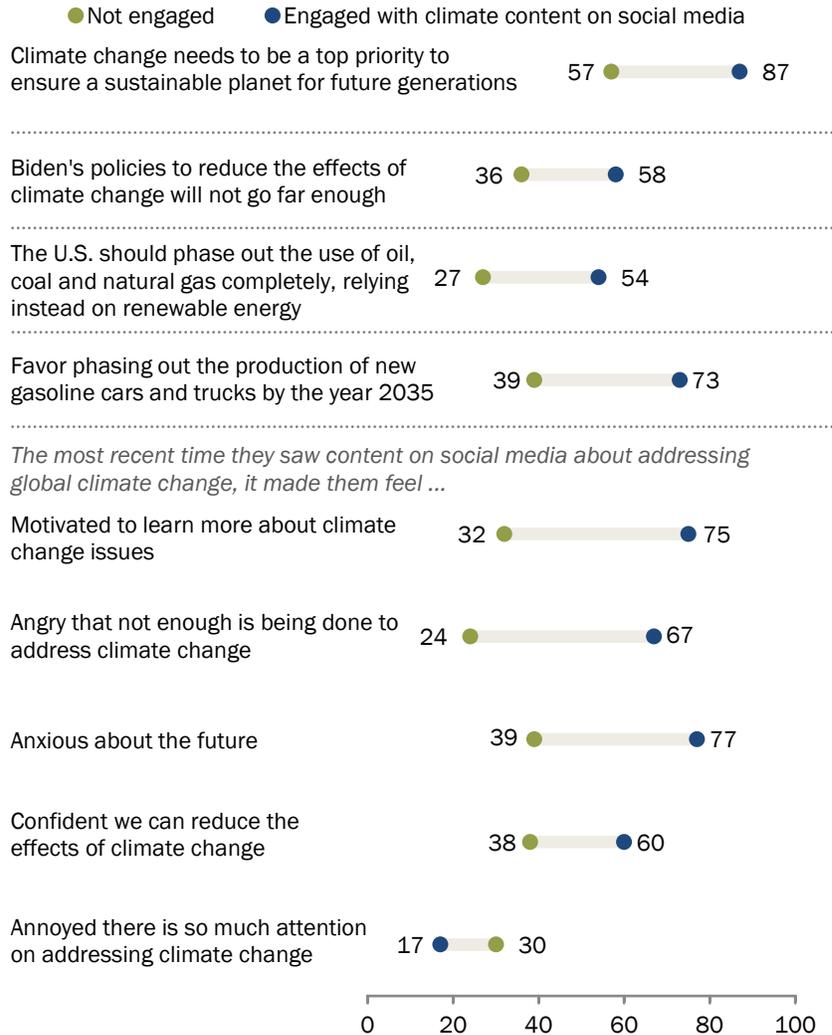
For example, 73% of climate-engaged social media users favor the idea of phasing out production of new gasoline vehicles by 2035, and 54% favor phasing out the use of all fossil fuels, relying instead solely on renewable energy sources. Much smaller shares of those who do not engage with climate content on social media express these views (39% and 27%, respectively).

In another sign of support for action among the climate-engaged on social media, a majority (58%) say they think Biden's policies will not go far enough to address climate change.

Notably, those engaged with climate content also report a range of intense emotions about what they see. Roughly three-quarters of this group (77%) report that their most recent encounter with climate-related content

Climate-engaged social media users express more urgency about action, offer broader policy support and have stronger emotional reactions to climate content

% of U.S. adult social media users who say ...



Note: Based on social media users. Respondents who gave other responses or did not give an answer are not shown. "Engage with climate content on social media" defined as those who follow an account, interact with posts, or post or share content on social media related to addressing global climate change.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

made them feel anxious about the future. And two-thirds of this group (67%) say it made them feel angry about insufficient action to address climate change.

At the same time, 75% of these climate-engaged social media users also say that climate-related content made them feel motivated to learn more about climate change. Six-in-ten say it made them feel confident in our ability to do something to reduce the effects of climate change.

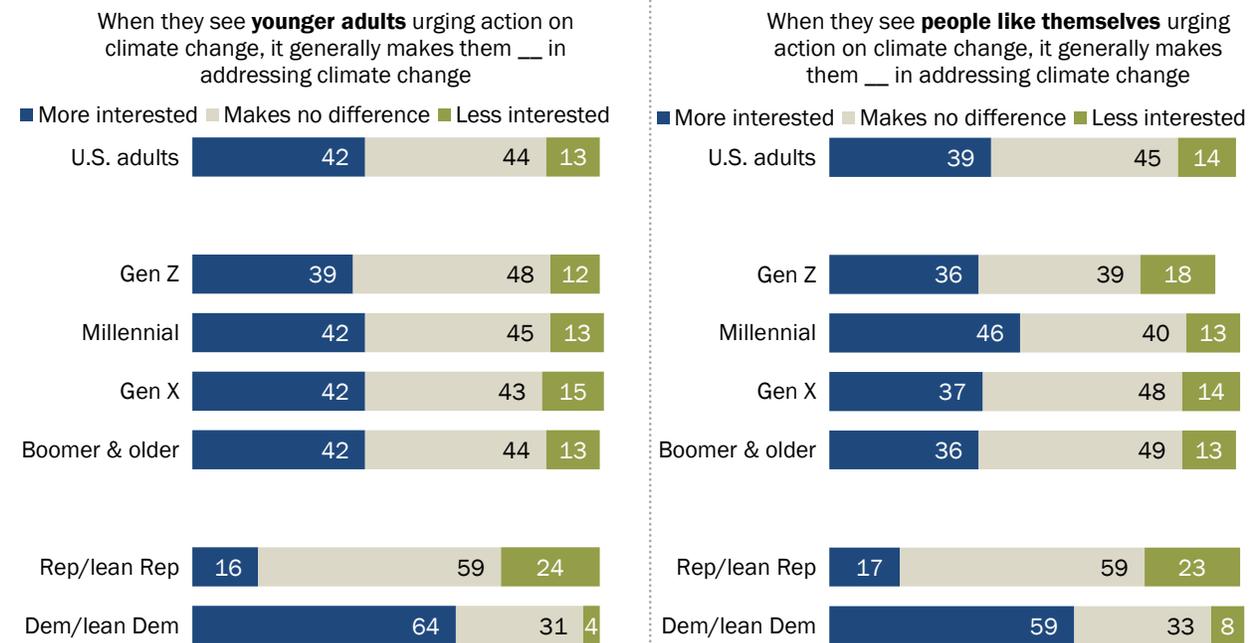
Seeing others urge action on climate change is motivating to roughly four-in-ten Americans

About four-in-ten Americans say seeing younger adults (42%) or people like them (39%) urging action on climate change makes them feel more interested in addressing the issue.

Majorities of Democrats say they feel more interested in addressing climate change when they see younger adults (64%) or people like themselves (59%) urging action; fewer Republicans (16% and 17%, respectively) say this makes them more motivated.

Majority of Democrats say they are more interested in addressing climate change when they see younger adults, people like them urging action

% of U.S. adults who say ...



Note: Respondents who did not give an answer are not shown.
 Source: Survey conducted April 20-29, 2021.
 “Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

2. Climate, energy and environmental policy

A majority of Americans consider climate change a priority today so that future generations can have a sustainable planet, and this view is held across generations.

Looking to the future, the public is closely divided on what it will take to address climate change: While about half say it's likely major lifestyle changes in the U.S. will be needed to deal with climate change impacts, almost as many say it's more likely new developments in technology will address most of the problems caused by climate change.

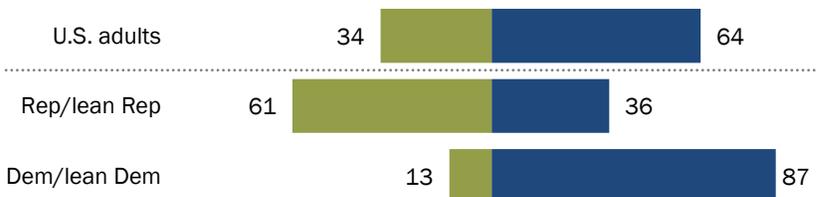
On policy, majorities prioritize the use of renewable energy and back the expanded use of specific sources like wind and solar. Americans offer more support than opposition to a range of policies aimed at reducing the effects of climate change, including key climate-related aspects of President Joe Biden's recent infrastructure proposal. Still, Americans do not back a complete break with carbon: A majority says oil and gas should still be part of the energy mix in the U.S., and about half oppose phasing out gas-powered vehicles by 2035.

Overall, 64% of U.S. adults say reducing the effects of climate change needs to be “a top priority to ensure a sustainable planet for future generations, even if that means fewer resources for addressing other important problems today.” By contrast, 34% say that reducing the effects of climate change needs to be “a lower priority, with so many other important problems facing Americans today, even if that means more climate problems for future generations.”

Majority of Americans prioritize reducing the effects of climate change to ensure a sustainable planet for future generations

% of U.S. adults who say reducing the effects of global climate change needs to be a ...

- Lower priority, with so many other important problems facing Americans today
- Top priority to ensure a sustainable planet for future generations



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

“Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

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There are stark partisan differences over this sentiment. Nearly nine-in-ten Democrats (87%) say efforts to reduce the effects of climate change need to be prioritized today to ensure a sustainable planet. By contrast, 61% of Republicans say that efforts to reduce the effects of climate change

need to be a lower priority, with so many other important problems facing Americans today. (Democrats and Republicans include those who lean to each party.)

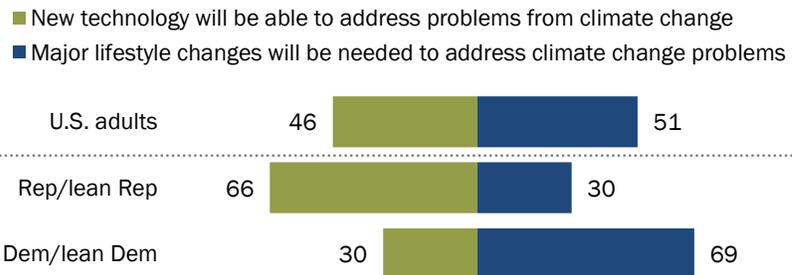
Asked to look to the future 50 years from now, 51% of Americans say it's more likely that major changes to everyday life in the U.S. will be needed to address the problems caused by global climate change. By contrast, 46% say it's more likely that new technology will be able to address most of the problems caused by global climate change.

Most Democrats (69%) expect that in 50 years major lifestyle changes in the U.S. will be needed to address the

problems caused by climate change. By contrast, among Republicans, two-thirds (66%) say it's likelier that new technology will be able to address most climate change problems in the U.S. Among Republicans, this view is widely held (81%) among the majority who do not see climate change as an important personal concern; Republicans who express greater personal concern about climate change are more likely to say major changes to everyday life in the future will be needed to address problems caused by climate change.

Looking ahead, Americans closely divided over whether lifestyle changes will be needed, or new technology can mitigate effects of climate change

% of U.S. adults who say that 50 years from now, it is more likely that ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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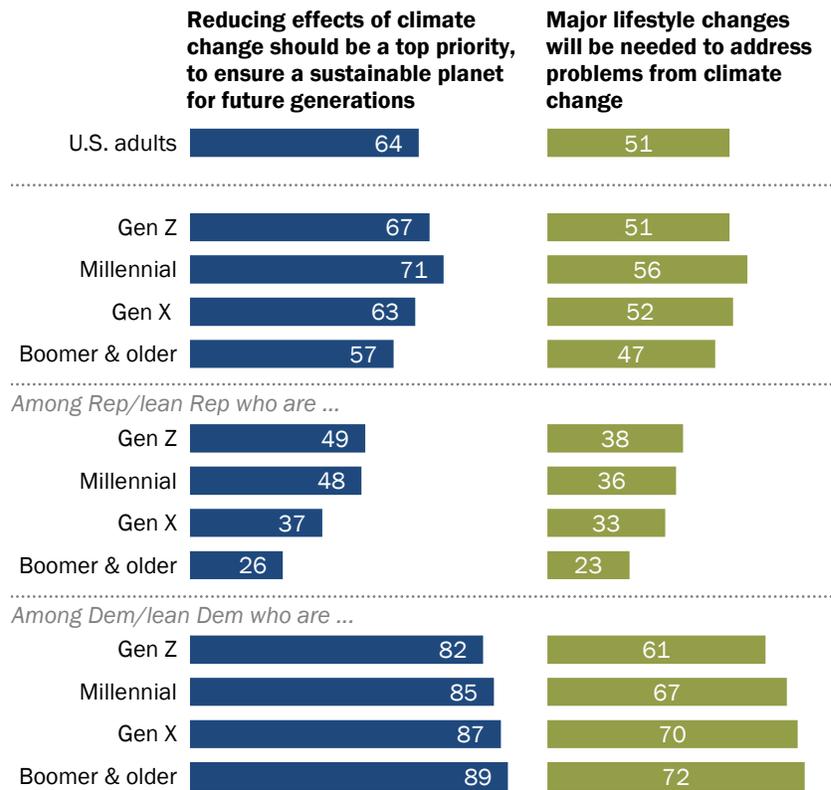
Overall, majorities across generations believe that climate change should be a top priority today to ensure a sustainable planet for future generations. Generational divisions are more prominent among Republicans than Democrats, however.

Among Republicans, about half of Gen Zers (49%) and Millennials (48%) give top priority to reducing the effect of climate change today, even if that means fewer resources to deal with other important problems. By contrast, majorities of Gen X (61%) and Baby Boomer and older Republicans (71%) say reducing the effects of climate change needs to a lower priority today, given the other problems Americans are facing.

Generational differences among Democrats on this question are modest, with clear majorities giving priority to dealing with climate change today.

Younger Republicans more likely than older to prioritize reducing effects of climate change now

% of U.S. adults who say ...



Note: Respondents who gave other responses or did not give an answer are not shown.
 Source: Survey conducted April 20-29, 2021.
 "Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

Majority of Americans prioritize developing alternative energy sources, but only a third would phase out all fossil fuels

Burning fossil fuels for electricity and in cars and trucks are among the primary sources of U.S. greenhouse gas emissions that contribute to climate change. Americans broadly favor increasing the use of renewable energy sources, but a majority reject the idea of phasing out fossil fuel energy sources completely. And Americans are about evenly divided on the idea of phasing out the production of new gasoline cars and trucks by 2035.

There are familiar partisan divisions over nearly every aspect of energy policy, particularly when it comes to fossil fuels. Political divides have widened over the past year as Republican support for alternative energy sources – including wind and solar power – has fallen while support for expanding offshore oil drilling, hydraulic fracturing and coal mining has ticked up.

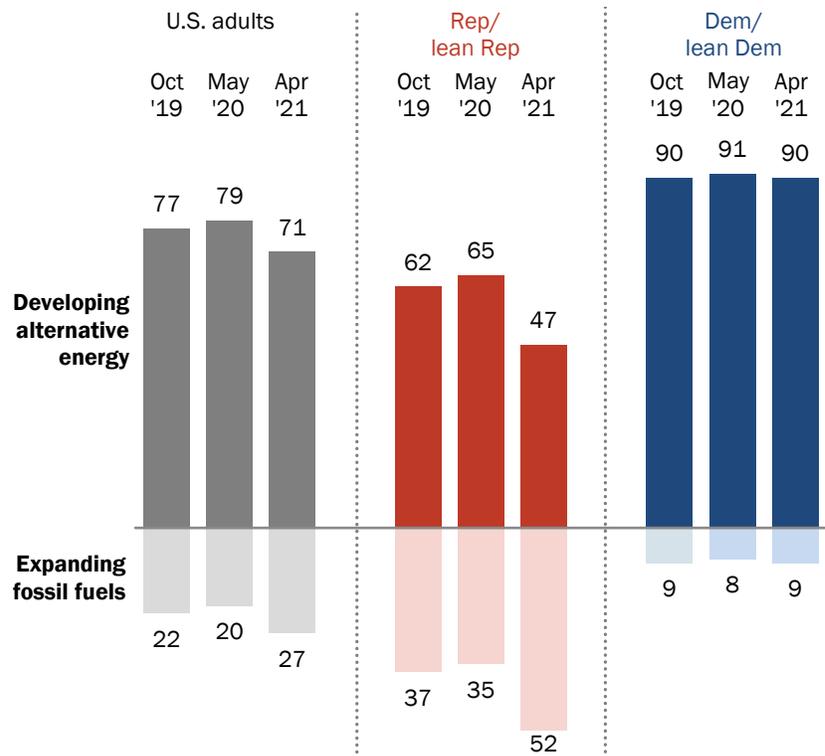
Within both parties, Gen Zers and Millennials are more supportive of proposals to move away from fossil fuels than their older counterparts.

A majority of Americans (71%) continue to say that the U.S. should prioritize developing alternative energy, while a much smaller share (27%) prioritizes expanding the production of oil, coal and natural gas.

The share of Republicans who prioritize developing alternative energy sources over expanding the production of fossil fuels has fallen 18

Most Democrats prioritize alternative energy development, Republicans are now divided

% of U.S. adults who say the more important priority for addressing America's energy supply should be ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

“Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

percentage points in the past year. As a result, Republicans are now closely divided between these two energy priorities. Democrats remain near consensus levels in their support for prioritizing development of alternative energy levels.

Among Republicans, there are significant generational differences in support for increasing the development of renewable energy sources. Majorities of Gen Z (63%) and Millennial (62%) Republicans prioritize increased development of renewable sources, such as wind and solar. Smaller shares of Gen X Republicans (50%) and just 33% of Baby Boomer and older Republicans prioritize this approach over the expanding of fossil fuel development. For more details, including longer-term trends over time, see the [Appendix](#).

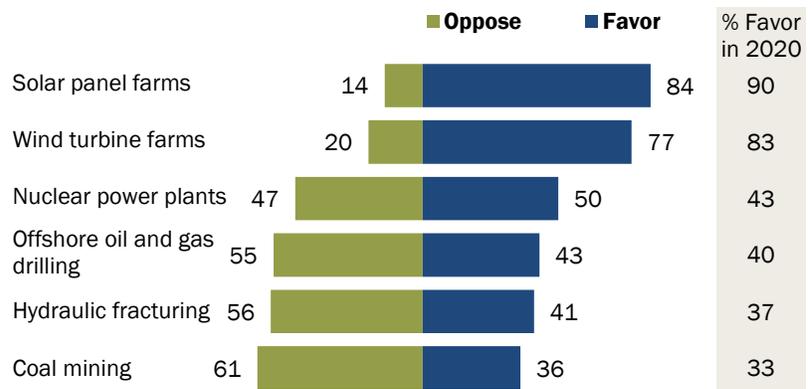
Republicans and Democrats also differ over the best way to encourage reliance on renewable energy sources. Most Democrats (81%) continue to see a need for government regulations to increase reliance on renewable energy. On the other hand, two-thirds of Republicans (67%) say the private marketplace alone will be enough. See the [Appendix](#) for details.

In keeping with support for prioritizing the development of renewable energy, most Americans favor expanding solar panel farms (84%) and wind turbine farms (77%). By contrast, majorities *oppose* more coal mining (61%), more hydraulic fracturing (56%) and more offshore oil and gas drilling (55%).

Americans are divided over expanding nuclear power: 50% favor more nuclear power plants, while 47% are opposed.

Most Americans support expanding use of solar and wind power

% of U.S. adults who say they ____ expanding each energy source



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Republican support for expanding solar power is down 11 points in the last year (from 84% to 73%), and support for wind power has fallen 13 points (from 75% to 62%). Democrats' widely held support for increasing both energy sources remains largely unchanged.

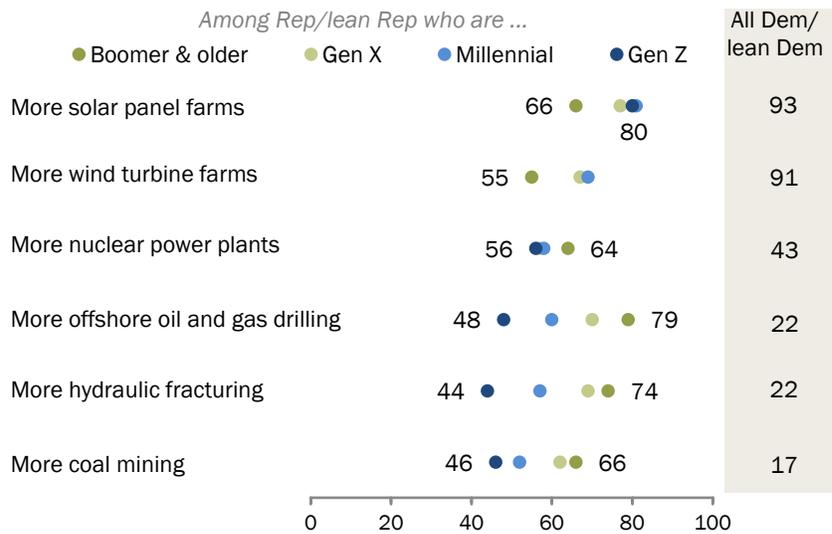
In addition, there has been an increase since 2020 in the shares of Republicans who support expanding hydraulic fracturing of natural gas (up 10 points), offshore oil and gas drilling (up 6 points) and coal mining (up 6 points). See the [Appendix](#) for details.

Even so, younger Republicans remain less likely than their older counterparts to support expanding fossil fuel sources, consistent with past Center surveys.

For instance, 79% of Baby Boomer and older Republicans support more offshore oil and gas drilling, while roughly half (48%) of Gen Z Republicans say the same (a difference of 31 points). There are similar divides over hydraulic fracturing, the primary extraction technique for natural gas (74% of Baby Boomer and older Republicans favor vs. 44% of Gen Z Republicans).

Among Republicans, support for expanding use of fossil fuel sources is lower among Gen Z, Millennials

% who favor expanding the use of each energy source



Note: There is insufficient sample size to report Gen Z Republicans' views of wind turbine farms because the question was asked of half the sample. Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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Nearly two-thirds of Americans support using a mix of fossil fuel and renewable energy sources, younger adults more inclined to phase out fossil fuels completely

While a large share of U.S. adults would prioritize alternative energy development over expanding the use of fossil fuels, most adults are not inclined to give up reliance on fossil fuels altogether.

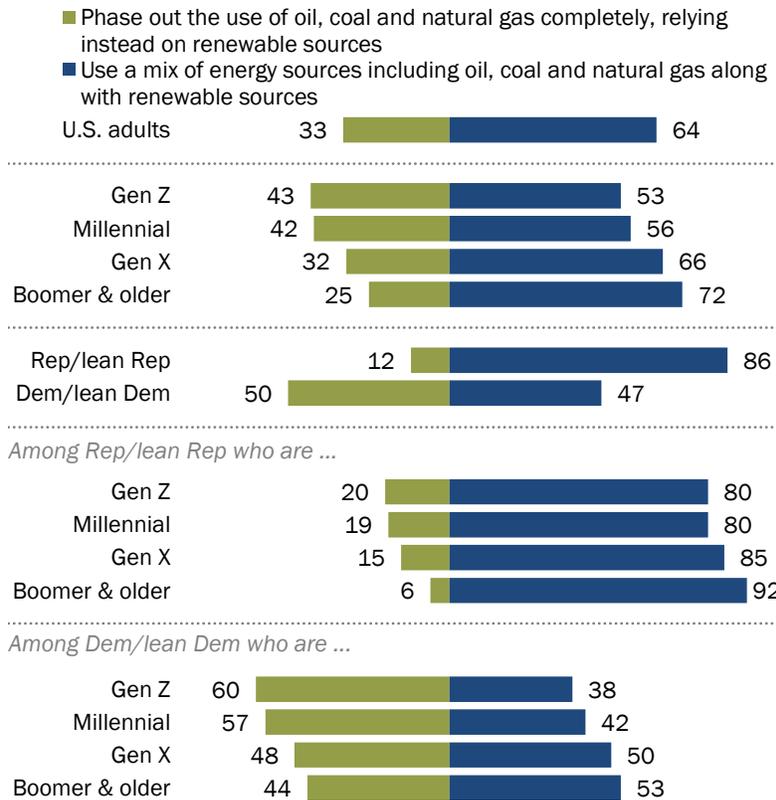
The survey finds 64% of Americans say they support ongoing use of oil, coal and natural gas as well as renewable energy sources, while a third (33%) say the country should phase out the use of fossil fuels completely.

There are sharp differences of opinion about this issue by party. Most Republicans (86%) say that the U.S. should rely on a mix of fossil fuel and renewable energy sources. Democrats are about evenly divided, with 47% in favor of using a mix of sources and 50% calling for a phase out of fossil fuels. About two-thirds of liberal Democrats (65%) support phasing out fossil fuels, but fewer moderate and conservative Democrats say the same (39%).

There are also generational divisions on this issue, with younger generations more likely to support giving up fossil fuel use over time. In fact, majorities of Democratic Gen Zers (60%) and Millennials (57%) support phasing out fossil fuel use completely.

Majority of Americans favor using a mix of fossil fuels and renewable sources

% of U.S. adults who say that the U.S. should ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

“Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

Americans are closely divided over phasing out gas-powered vehicles; Democrats, younger adults are more receptive to the idea

Climate advocates point to electric vehicles as a way to cut down on carbon emissions and reduce climate change. Americans are about equally divided on the idea of phasing out production of gasoline cars and trucks by 2035. A little under half (47%) say they would favor such a proposal, while 51% are opposed.

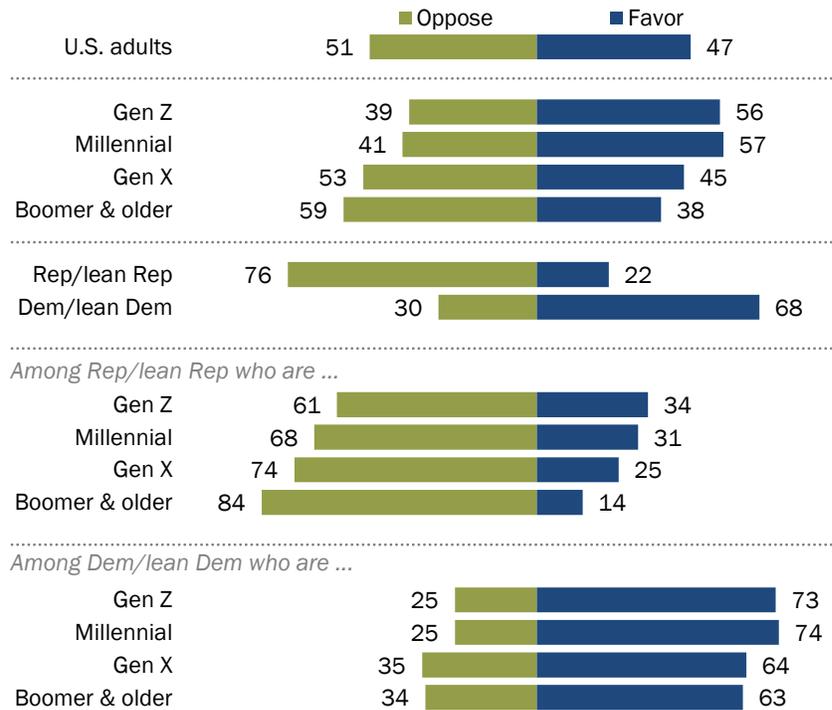
As with other proposals on climate and energy issues, partisans express opposing viewpoints. About two-thirds of Democrats (68%) support phasing out gasoline cars by 2035, while 76% of Republicans oppose this.

But there are also generational dynamics in views about gasoline-powered vehicles, with younger adults more supportive than older adults of phasing out gas cars and trucks. Narrow majorities of Gen Zers (56%) and Millennials (57%) support such a proposal,

compared with 38% of Baby Boomer and older Americans. This pattern holds within both parties, though sizable partisan divides remain across all generations. See the [Appendix](#) for a look at how these generational and partisan divides compare across measures.

Americans are closely divided over whether to phase out gas-powered cars

% of U.S. adults who say they ___ phasing out the production of new gasoline cars and trucks by 2035



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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The public is broadly familiar with electric vehicles: About nine-in-ten have heard either a lot (30%) or a little (62%) about them. When it comes to first-hand experience, 7% of adults say they currently have an electric or hybrid vehicle; 93% say they do not.

People who say they have heard a lot about electric vehicles are closely divided over the idea of phasing out gas-powered cars and trucks by a margin of 52% in favor to 48% opposed. Not surprisingly, those who currently own an electric or hybrid vehicle are largely in favor of this idea (68% vs. 31% opposed).

Most U.S. adults oppose oil drilling in ANWR but are more divided over Keystone XL decision

The issue of whether or not to allow oil and gas drilling in the Arctic National Wildlife Refuge has long been a controversy in energy policy. Overall, most Americans (70%) oppose the idea, while 27% are in favor.

Nearly all Democrats (89%) say they oppose allowing oil and gas drilling in the ANWR. Republicans are about evenly divided, with half in favor of allowing this and 48% opposed.

One of Biden's [first actions as president](#) was revoking the permit for the Keystone XL pipeline. The pipeline would have carried oil from Canada into the U.S.

About half of Americans (49%) say canceling the pipeline was the right decision, while 45% say it was the wrong decision.

Most Democrats (78%) say it was the right decision, while most Republicans (80%) say otherwise. See details in the [Appendix](#).

Broad public support for a number of policies to address climate change, including some proposed in Biden infrastructure plan

In late March, the Biden administration announced [a \\$2 trillion infrastructure plan](#) with several elements they argue would help reduce the effects of climate change. The new Center survey finds majorities of Americans support a number of proposals to address global climate change, including three specific elements in Biden's infrastructure plan.

There are sharp partisan divisions over many of these proposals, as expected. In addition, there are concerns, particularly among Democrats, that Biden's policy proposals will not go far enough in efforts to reduce the effects of climate change.

Majorities of U.S. adults support a range of approaches to address climate change

The new Center survey finds majorities back three specific elements of Biden's infrastructure plan. More than seven-in-ten Americans (74%) favor a proposed requirement for power companies to use more energy from

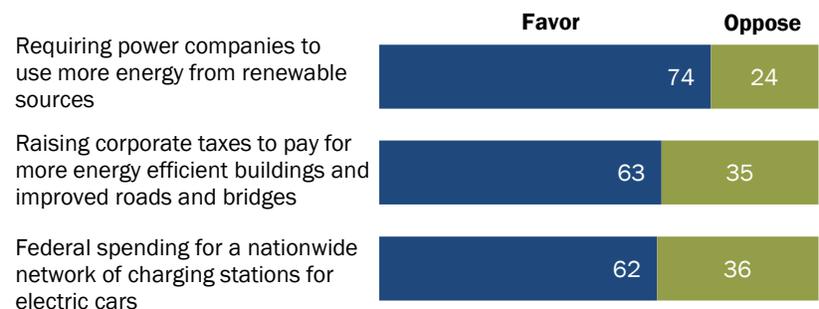
renewable sources, such as solar and wind, to reduce carbon emissions. A smaller majority – 62% – favors federal spending to build a network of electric vehicle charging stations across the country in order to increase the use of electric cars and trucks.

And 63% of Americans support the idea of raising corporate taxes to pay for more energy efficient buildings and improved roads and bridges, a key funding mechanism in Biden's infrastructure proposal.

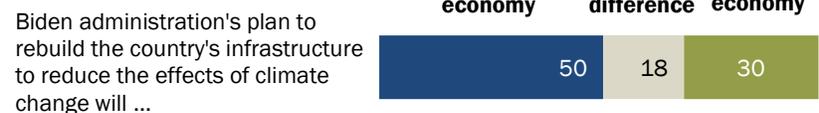
Biden has [closely tied](#) his climate-focused infrastructure

Majorities support three specific proposals in Biden's infrastructure plan; half think plan will help economy

% of U.S. adults who say they ___ each of the following federal government proposals



% of U.S. adults who say ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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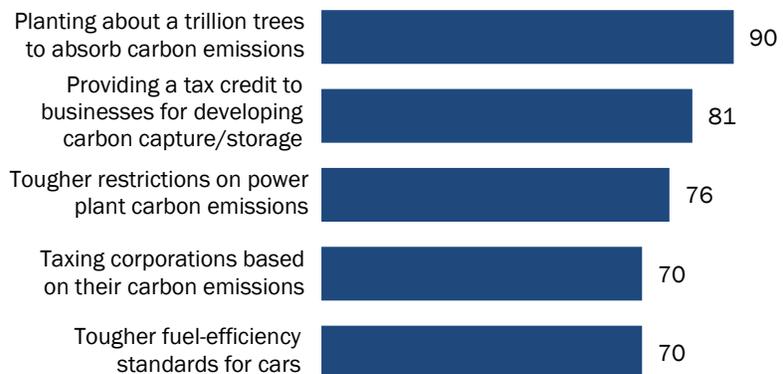
proposals with economic and job growth. Half of U.S. adults think that the Biden administration's plan to rebuild the nation's infrastructure in ways that are aimed at reducing the effects of climate change will help the economy. Three-in-ten think this will hurt the economy, and 18% say it will make no difference.

Americans continue to broadly support a number of longer-standing proposals to reduce the effects of climate change. Nine-in-ten Americans favor planting additional trees to absorb carbon dioxide emissions. About eight-in-ten (81%) favor providing a tax credit for businesses that develop technology that can capture and store carbon emissions before they enter the atmosphere. Both of these ideas were part of a set of policies supported by congressional Republicans [last year](#).

Large majorities of Americans also favor tougher restrictions on power plant carbon emissions (76%), taxing corporations based on the amount of carbon emissions they produce (70%) and tougher fuel-efficiency standards for automobiles and trucks (70%).

Majorities of Americans support proposals aimed at reducing the effects of climate change

% of U.S. adults who say they favor the following proposals to reduce the effects of climate change



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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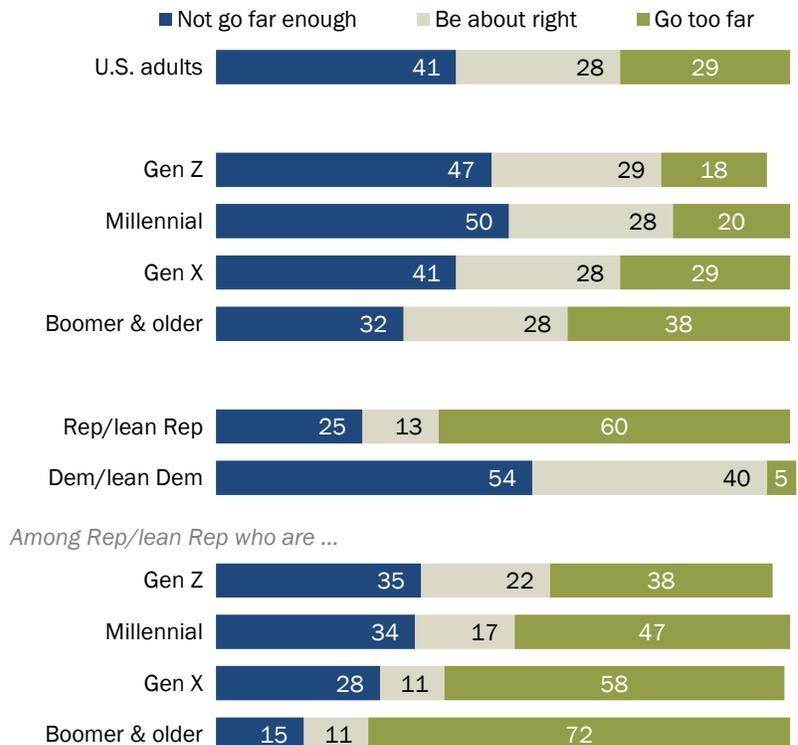
54% of Democrats think Biden administration's climate policies will not go far enough

Three months into the Biden administration, there is no clear consensus over the administration's approach on climate change. About four-in-ten Americans (41%) think the Biden administration's policies to reduce the effects of climate change will not go far enough. Roughly three-in-ten (29%) think the Biden administration will go too far, and a similar share (28%) say the administration's approach will be about right.

Republicans and Democrats have far different expectations for the Biden's administration policies on climate change. A narrow majority of Democrats and those who lean to the Democratic Party (54%) – including 63% of liberal Democrats – think the administration's policies will not go far enough to reduce the effects of climate change.

A narrow majority of Democrats say Biden will not go far enough on climate

% of U.S. adults who say the Biden administration's policies to reduce the effects of climate change will ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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In contrast, six-in-ten Republicans and Republican-leaning independents say the Biden administration's policies will go too far, including 74% of conservative Republicans.

There are some generational differences in views on this issue among Republicans, in line with differences over the importance of addressing climate change. About as many Gen Z Republicans say Biden's climate policies will not go far enough (35%) as say the policies will go too

far (38%). By comparison, a 72% majority of Republicans in the Baby Boomer or older generations think the Biden administration will go too far on climate change.

When it comes to views about proposals aimed at reducing climate change, however, there are few differences of opinion across generations among either party. Yet large differences remain between Republicans and Democrats overall.

Democrats' views about five proposals aimed at reducing the effects of climate change are uniformly positive. Roughly 85% to 95% of Democrats support each.

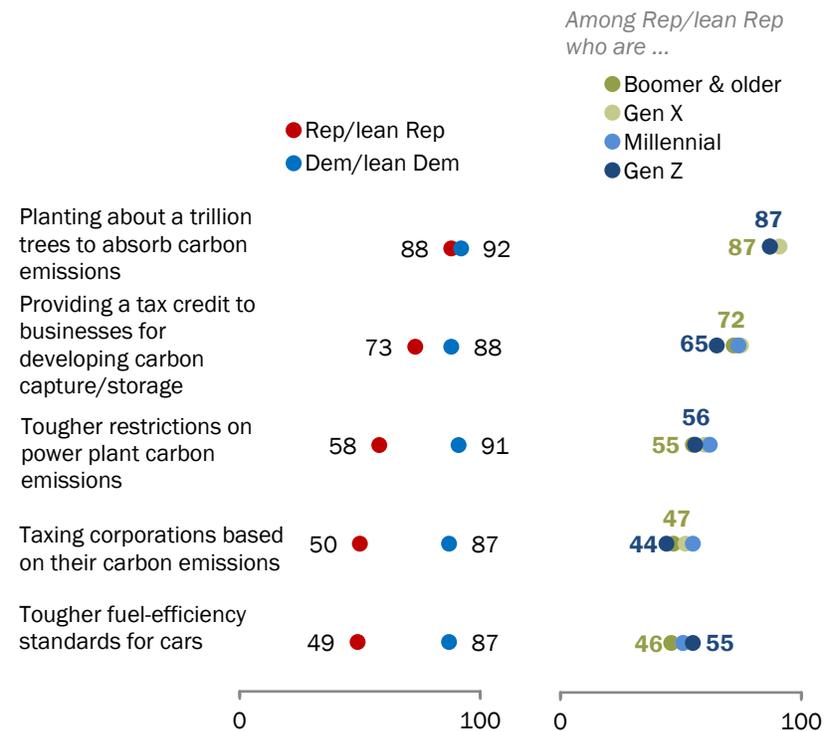
Republicans and Republican leaners are most supportive of proposals to absorb carbon emissions by planting large numbers of trees (88%), followed by a proposal to provide a corporate tax credit for carbon-capture technology (73%). A majority of the GOP (58%) favor tougher restrictions on carbon

emissions from power plants. About half of Republicans favor taxing corporate carbon emissions (50%) or tougher fuel-efficiency standards for cars and trucks (49%).

There are no divisions within the GOP by generation across these issues, though ideological divides are often sharp. For example, 65% of moderate and liberal Republicans favor tougher fuel-efficiency standards for cars and trucks, compared with 40% of conservative Republicans.

Large majorities of Democrats and smaller shares of Republicans back range of climate proposals

% of U.S. adults who favor each of the following proposals to reduce the effects of climate change



Note: Respondents who gave other responses or did not give an answer are not shown. Source: Survey conducted April 20-29, 2021. "Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

Republicans and Democrats are also deeply divided over climate-focused proposals in the Biden administration’s infrastructure plan.

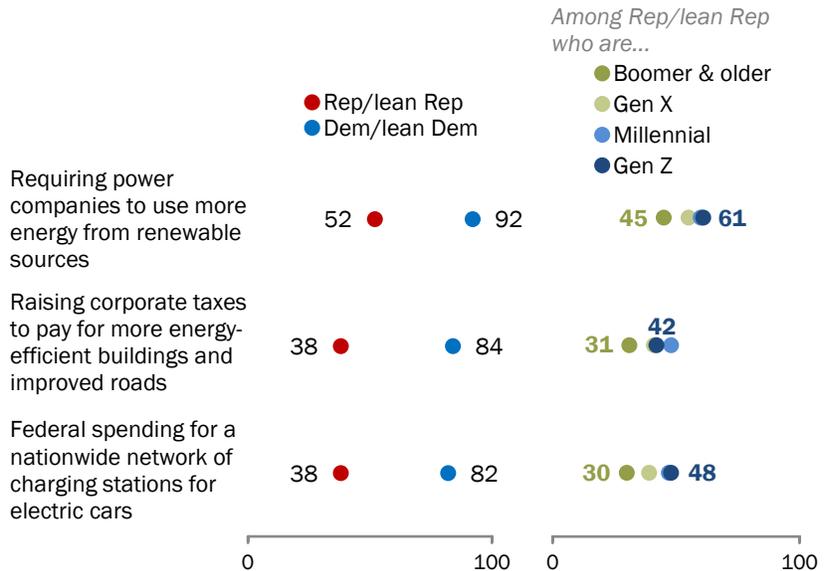
Large majorities of Democrats favor requiring power companies to use more energy from renewable sources (92%), raising corporate taxes to pay for energy efficient buildings and improved roads (84%) and building a network of electric vehicle charging stations across the country (82%).

About half of Republicans (52%) support requiring power companies to use more energy from renewable sources. There is less support for federal spending to build a nationwide network of electric vehicle charging stations (38%). An equal share of Republicans (38%) support the idea of raising taxes on corporations to pay for more energy efficient buildings and better roads, although more moderates and liberals in the GOP (59%) than conservatives (27%) support this idea.

There is comparatively more support for these proposals among younger Republicans, particularly for federal spending to build electric vehicle charging stations and requirements for power plants to use more renewable sources.

Wide partisan divides over Biden’s infrastructure plans, and modest generational differences within GOP

% of U.S. adults who favor each of the following federal government proposals



Note: Respondents who gave other responses or did not give an answer are not shown.
 Source: Survey conducted April 20-29, 2021.
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Republicans and Democrats at odds over economic impact of Biden's infrastructure plan

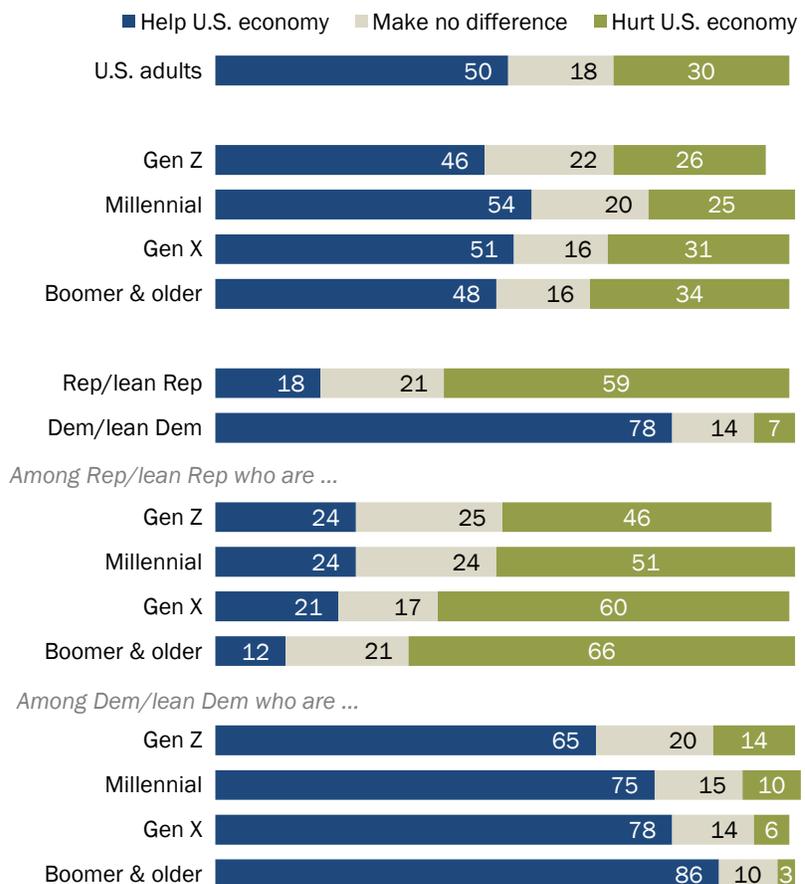
Democrats are largely optimistic that the Biden administration's plan to rebuild the nation's infrastructure in ways aimed at reducing the effects of climate change will help the economy. About eight-in-ten Democrats (78%) say this.

Among Republicans, a majority (59%) thinks this proposed plan will hurt the economy, while only about two-in-ten (18%) say it will help. Conservative Republicans (71%) are especially inclined to say the climate-focused infrastructure proposal will hurt the economy.

Generational differences are largely modest but occur in both parties. Baby Boomer Republicans are the most pessimistic about the plan's economic impact, while Boomer Democrats are the most optimistic that the plan will help the economy.

Half of Americans think the Biden administration's infrastructure plan will help the nation's economy

% of U.S. adults who say the Biden administration's proposed plan to rebuild the nation's infrastructure in ways that are aimed at reducing the effects of climate change will ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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What are important considerations to Americans in climate proposals?

When it comes to proposals to reduce the effects of global climate change, protecting the environment for future generations and increasing jobs and economic growth are the top considerations Americans would like to see in policy proposals.

Asked to think about what is important to them in proposals to reduce the effects of climate change, 64% of the public says protecting the quality of the environment for future generations is a very important consideration to them personally; 28% say it's somewhat important to them and just 6% say it's not too or not at all important to them.

A majority (60%) also says that increasing job and economic growth is a very important consideration to them personally when it comes to proposals to reduce the effects of climate change.

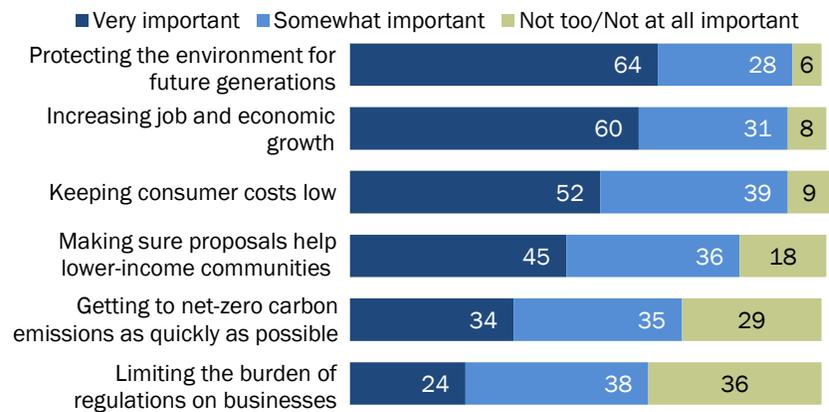
About half (52%) say keeping consumer costs low is a very important consideration to them personally in climate proposals. Making sure proposals help lower-income communities is seen as a very important consideration by 45% of the public.

About a third (34%) say getting to net-zero carbon emissions as quickly as possible is a very important consideration to them personally. Joe Biden has set a goal for the U.S. to reach net-zero emissions by 2050.

Limiting the burden of regulations on businesses is seen as a very important climate policy consideration by 24% of the public – the lowest share who say this across the six items asked in

Most Americans place importance on protecting the environment for future generations

% of U.S. adults who say each of the following is ___ to them personally when thinking about proposals to reduce the effects of climate change



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

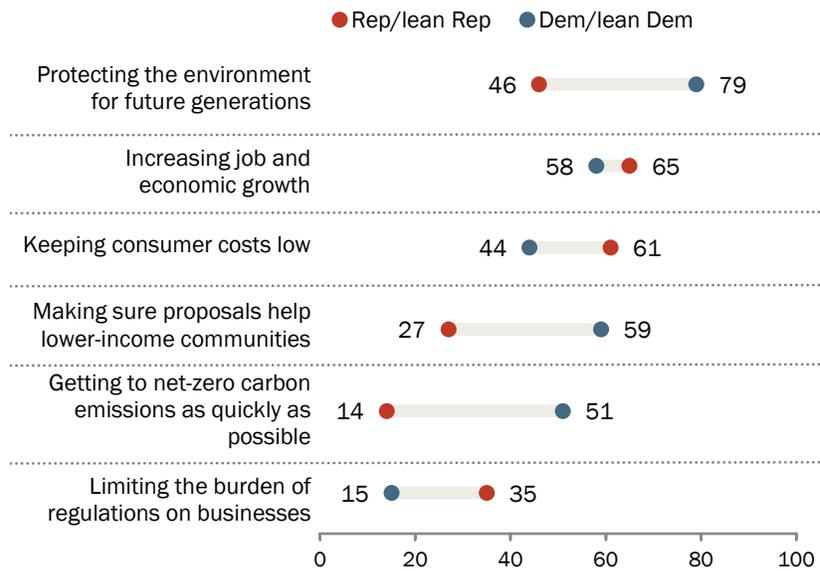
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the survey. However, majorities view all six factors, including limiting the regulatory burden on businesses, as at least *somewhat* important considerations in climate proposals.

Partisans have differing priorities when it comes to climate change proposals. Among Republicans, increasing job and economic growth (65% very important) and keeping consumer costs low (61% are their top considerations). Among Democrats, protecting the quality of the environment for future generations is their clear top consideration (79% very important), followed by making sure proposals help lower-income communities (59%) and increasing job and economic growth (58%). About half of Democrats (51%) say getting to net-zero carbon emissions as quickly as possible is very important to them.

Republicans' priorities in evaluating climate policy are on job growth, low consumer costs

*% of U.S. adults who say each of the following is **very important** to them personally when thinking about proposals to reduce the effects of climate change*



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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Public sees actions from businesses, ordinary Americans as insufficient on climate change

Americans see a range of actors as falling short in efforts to help reduce the effects of global climate change. The public is broadly critical of the lack of action from large businesses and the energy industry – but also views elected officials, as well as ordinary Americans, as failing to do their part.

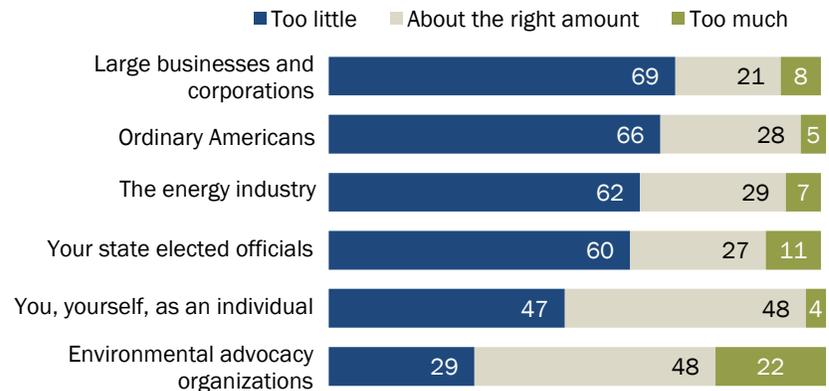
Nearly seven-in-ten adults (69%) say large businesses and corporations are doing too little to help reduce the effects of global climate change, while just 21% say they are doing about the right amount and very few (8%) say they are doing too much to address climate change. Similarly, a majority of the public (62%) says the energy industry is doing too little to help reduce the effects of global climate change.

The public also extends criticism on climate inaction to Americans themselves and the officials they vote into elected office. Overall, 66% say ordinary Americans are doing too little to help reduce the effects of climate change, and 60% say this about their state’s elected officials. A separate question that asks about the actions of the federal government across a range of environmental areas finds that 59% say the federal government is doing too little on climate change.

Americans are less critical of their own individual actions in helping to address climate change: Roughly half (48%) believe they, themselves, are doing about the right amount to help reduce the effects of climate change. Still, almost as many (47%) say they are doing too little to help.

Majorities say large businesses, energy industry and ordinary Americans are doing too little on climate

% of U.S. adults who say each of the following are doing ____ to help reduce the effects of climate change



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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When it comes to the role of environmental advocacy organizations, 48% say they are doing about the right amount to help reduce the effects of climate change, compared with 29% who say they are doing too little and 22% who say they are doing too much.

There are stark partisan differences in views of the role groups and individuals are playing to help reduce the effects of climate change. Large majorities of Democrats and Democratic-leaning independents say large businesses (85%), ordinary Americans (82%), the energy industry (80%) and their state elected officials (79%) are doing too little to help reduce climate change impacts. By contrast, about half of Republicans and Republican leaners or fewer say these actors are doing too little to address climate change. Republicans are much more likely to say most of these groups are doing about the right amount than to say they are doing too much to address climate change.

Younger Republicans more likely than older Republicans to say a range of groups are doing too little on climate change

% of U.S. adults who say ____ are doing **too little** to help reduce the effects of climate change

| | Large businesses and corporations | Ordinary Americans | The energy industry | Your state elected officials | You, yourself, as an individual | Environmental advocacy organizations |
|---------------------------------------|-----------------------------------|--------------------|---------------------|------------------------------|---------------------------------|--------------------------------------|
| U.S. adults | 69 | 66 | 62 | 60 | 47 | 29 |
| Gen Z | 70 | 62 | 60 | 63 | 50 | 28 |
| Millennial | 74 | 71 | 68 | 67 | 54 | 31 |
| Gen X | 69 | 65 | 61 | 60 | 49 | 29 |
| Boomer & older | 65 | 63 | 58 | 54 | 38 | 28 |
| Rep/lean Rep | 50 | 46 | 39 | 37 | 30 | 19 |
| Dem/lean Dem | 85 | 82 | 80 | 79 | 60 | 37 |
| <i>Among Rep/lean Rep who are ...</i> | | | | | | |
| Gen Z | 57 | 50 | 47 | 47 | 40 | 23 |
| Millennial | 59 | 56 | 49 | 45 | 42 | 21 |
| Gen X | 50 | 46 | 39 | 40 | 32 | 22 |
| Boomer & older | 43 | 40 | 32 | 29 | 20 | 16 |

Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Generational differences in views are most pronounced on this question within the GOP. In general, Gen Z and Millennial Republicans are more likely than older Republicans to say groups

and individuals are doing too little to help reduce the effects of climate change. For instance, 57% of Gen Z and 59% of Millennial Republicans say large businesses are doing too little to help address climate change, compared with 50% of Gen X Republicans and 43% of Baby Boomer and older Republicans.

A 54% majority of U.S. adults see climate scientists’ role on policy as too limited, though some have doubts about scientists’ understanding

As the Biden administration, Congress and state and local governments debate how best to address climate change, 54% of Americans think climate scientists have too little influence on policy debates about climate change. Smaller shares say climate scientists have about the right amount (22%) or too much (22%) influence on climate policy.

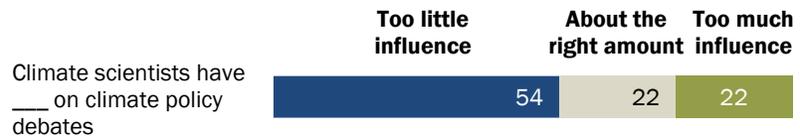
At the same time, Americans appear to have reservations about climate scientists’ expertise and understanding. Only about two-in-ten Americans (18%) say climate scientists understand “very well” the best ways to address climate change. Another 42% say climate scientists understand ways to address climate change “fairly well”; 38% say they understand this not too or not at all well.

Public views of climate scientists’ understanding are more positive, if still generally skeptical, on the fundamentals of whether climate change is occurring (37% say scientists understand this very well) and what causes climate change (28%).

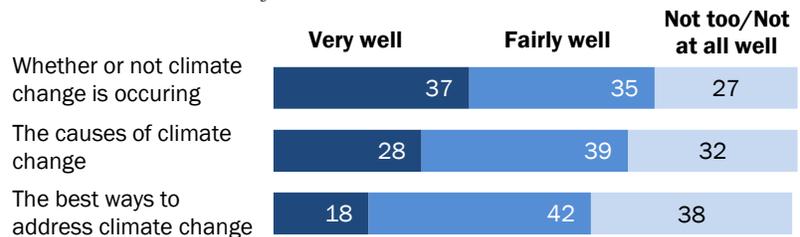
Americans’ overall views about climate scientists’ expertise and understanding of what is happening to the Earth’s climate are [similar to 2016](#), the last time Pew Research Center asked these questions.

A narrow majority of Americans say climate scientists have too little influence on climate policy debates

% of U.S. adults who say ...



% of U.S. adults who say climate scientists understand ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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In keeping with the wide political divisions over climate policy issues, Democrats are far more likely than Republicans to rate climate scientists’ understanding highly. And these partisan divides have widened since 2016. For example, Democrats are 43 percentage points more likely than Republicans to say climate scientists understand very well whether or not climate change is occurring. This gap was 25 points in 2016. See the [Appendix](#) for details.

Similarly, far larger shares of Democrats than Republicans believe climate scientists have too little say in climate debates (77% vs. 27%).

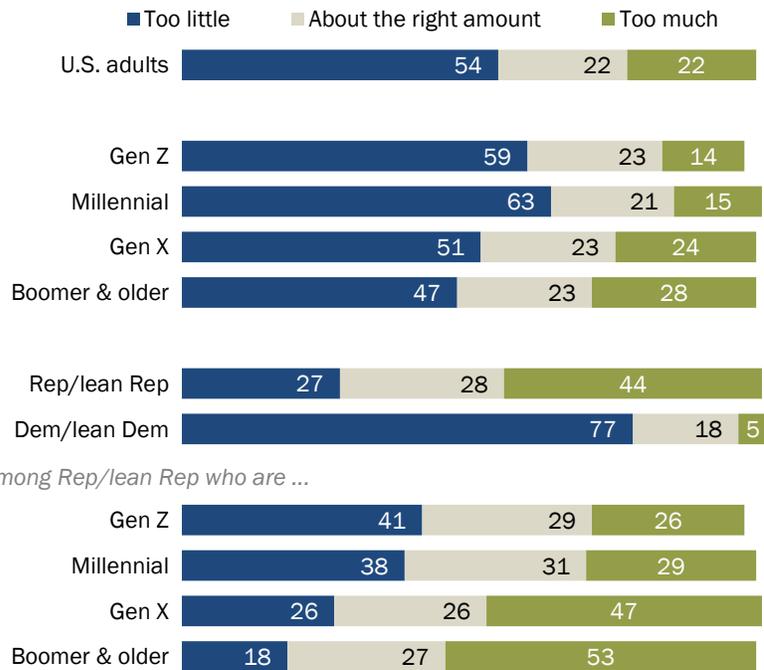
Younger generations are especially likely to think climate scientists have too little say on climate policy debates. However, these generational dynamics occur only within the GOP.

Millennial (38%) and Gen Z (41%) Republicans are more likely than Baby Boomers and older generations of Republicans (18%) to think climate scientists have too little influence on related policy debates. About half of older Republicans (53%) say climate scientists have *too much* influence in these debates.

Roughly three-quarters to eight-in-ten Democrats across younger and older generations think climate scientists have too little say in climate policy debates.

Among Republicans, younger generations more likely to say climate scientists have too little policy influence

% of U.S. adults who say climate scientists have ___ influence on public policy debates about addressing climate change



Note: Respondents who did not give an answer are not shown.
 Source: Survey conducted April 20-29, 2021.
 “Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

Majority of Americans continue to say federal government is doing too little to protect key aspects of the environment

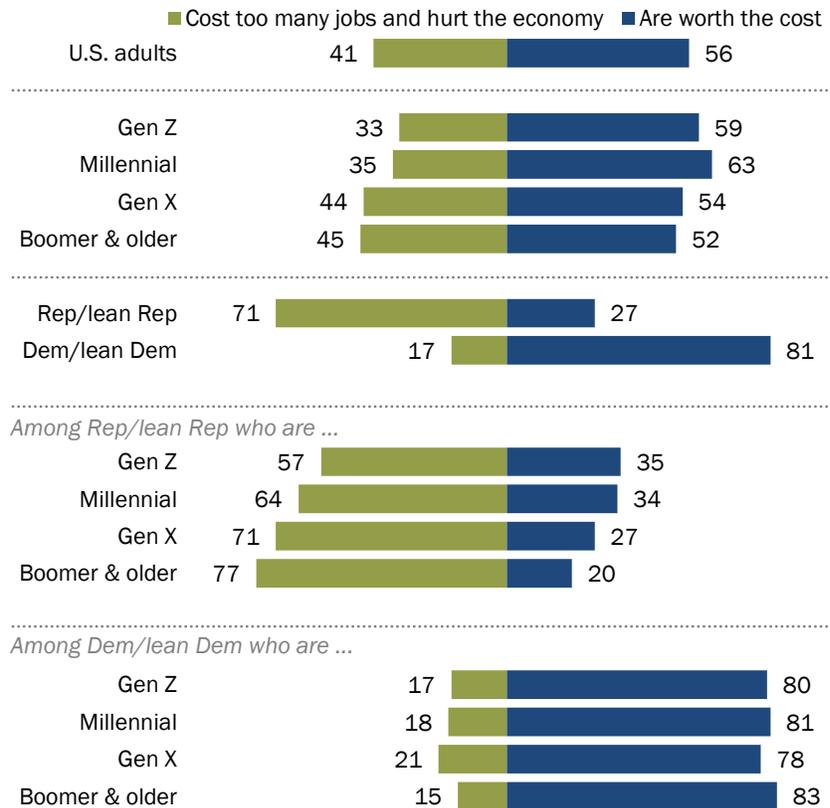
When it comes to environmental protection, a majority of Americans continue to see a role for stricter environmental regulations and majorities view the federal government as doing too little across most areas of environmental concern asked about in the survey, such as protecting air quality.

Gen Z and Millennials offer the broadest support for environmental regulations and for more government action to protect specific aspects of the environment.

Partisan gaps over government action to protect the environment remain very large and differences over the value of stricter environmental regulations have widened since last asked in September 2019 during the administration of Donald Trump.

Majority of Americans view stricter environmental laws as worth the cost

% of U.S. adults who say stricter environmental laws and regulations ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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There are generational and partisan differences over value of environmental regulations

Overall, 56% of Americans say that stricter environmental laws are worth the cost, compared with a smaller share (41%) who say they cost too many jobs and hurt the economy.

On balance Gen Z and Millennials are both much more likely to view stricter environmental laws as worth the cost than to say they cost too many jobs and hurt the economy (by 59% to 33% and 63%

to 35%, respectively). Gen X and Boomer and older adults also see stricter environmental laws as worth the cost, though by narrower margins.

A large majority of Democrats (81%) believe that stricter environmental laws are worth the cost. By contrast, 71% of Republicans say they cost too many jobs and hurt the economy. Republicans have become much more likely to take a critical view of stricter environmental regulations since September 2019, when 55% said they hurt the economy and cost too many jobs. (For more details on this change over time, see the [Appendix](#)).

Generational differences in views occur primarily within the GOP and not among Democrats. Among Republicans, Gen Zers (35%) and Millennials (34%) are more likely than Baby Boomer and older adults (20%) to say stricter environmental laws are worth the cost, though larger shares across cohorts say these regulations cost too many jobs and hurt the economy. Roughly eight-in-ten Democrats across generations say that stricter environmental laws are worth the cost.

Far more Americans say government is doing too little, rather than too much, on key areas of environmental protection

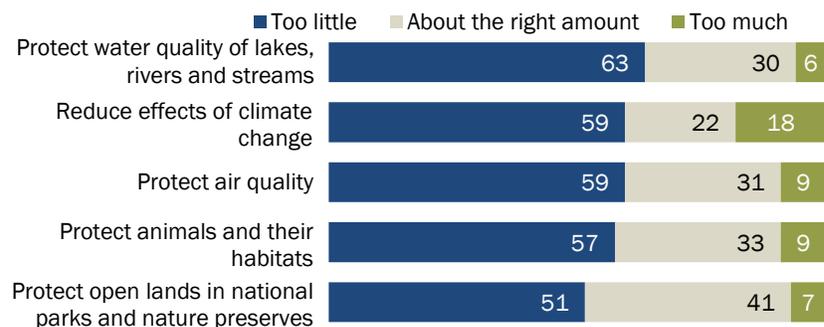
Consistent with Center surveys over the past few years, majorities of U.S. adults support more government action to address a range of environmental concerns, including air and water quality as well as climate change.

Overall, 63% say the federal government is doing too little to protect the water quality of lakes, rivers and streams. Majorities also say the government is doing too little to reduce the effects of climate change (59%), protect air

quality (59%) and protect animals and their habitats (57%). About half (51%) say the federal government is doing too little to protect open lands in national parks and nature preserves. Across

Majorities view federal government as doing too little in most areas of environmental protection

% of U.S. adults who say the federal government is doing ___ in each area



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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all five items, small shares of the public believe the government is doing too much to address any one of these environmental issues.

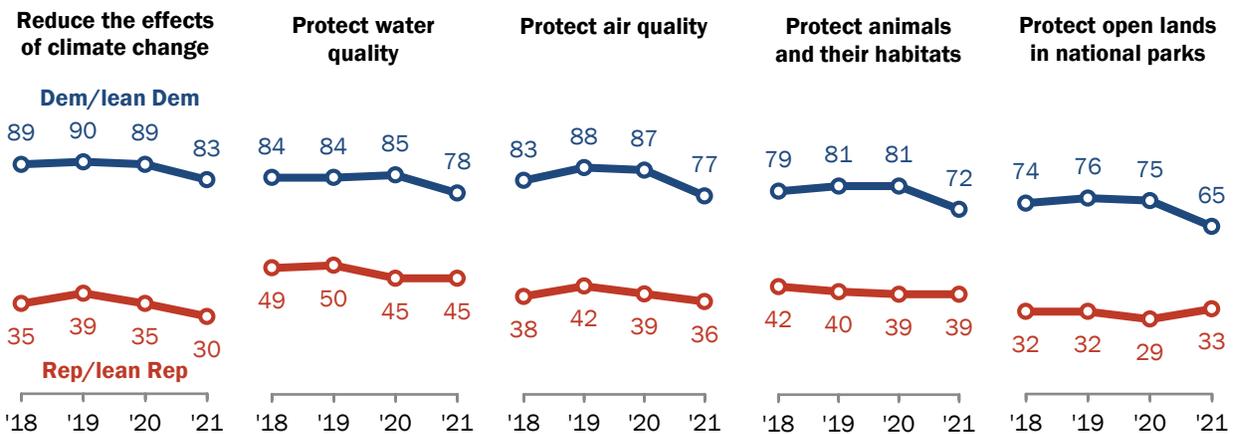
There are wide differences in views on these issues by political party, with Democrats much more likely than Republicans to think that government efforts in these areas are insufficient.

While still the predominant viewpoint, the shares of Democrats who say the government is doing too little across these five areas are 6 to 10 percentage points lower than they were in May of 2020, before Joe Biden took office. Republicans' views on these questions have been largely steady, although the share of Republicans who believe the federal government is doing too little to address climate change is down 5 percentage points, from 35% in May 2020 to 30% today.

Partisan groups remain far apart when it comes to assessment of government action on climate change: 83% of Democrats and Democratic leaners think the government's efforts are insufficient, vs. 30% of Republicans and GOP leaners, a difference of 53 percentage points. Conservative Republicans stand out on this from their fellow partisans with a moderate or liberal ideology: 19% say the federal government is doing too little to address climate change compared with 49% of moderate or liberal Republicans.

Republicans and Democrats remain far apart over the need for more government action to protect key aspects of the environment

% of U.S. adults who say the federal government is doing *too little* to ...



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

Gen Zers and Millennials are more likely than older Americans to say the government is doing too little to address specific areas of environmental concern, though these divides are driven primarily by differences by generation within the GOP.

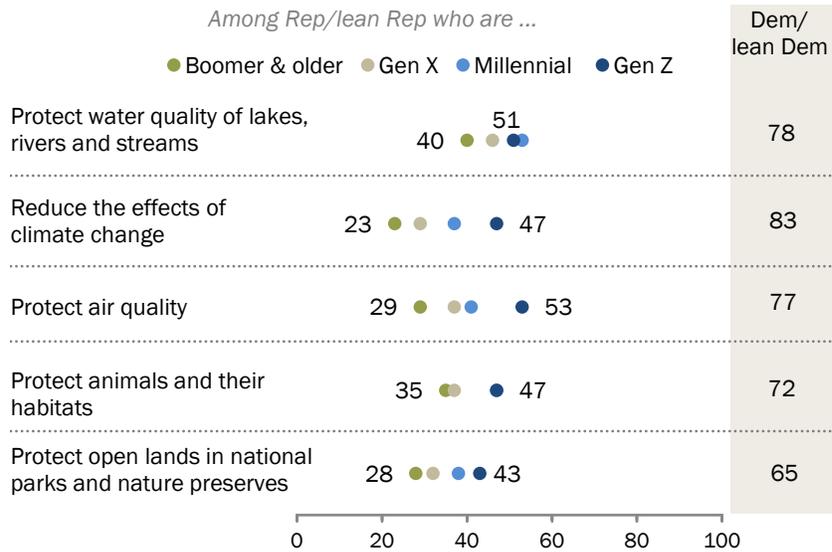
About two-thirds of Gen Zers (66%) and Millennials (65%) say the federal government is doing too little to protect air quality, compared with 58% of Gen X and 52% of Baby Boomer and older adults.

Similarly, 68% of Gen Zers and 66% of Millennials say the federal government is doing too little to reduce the effects of climate change versus 57% of Gen X and 52% of Baby Boomer and older adults.

Among Republicans, Gen Zers and Millennials are more likely than Baby Boomer and older adults to say the federal government is doing too little to address all five of these areas of environmental concern. Majorities of Democrats across generations say the government is doing too little to address these environmental issues.

Among Republicans, generational differences over government action in areas of environmental concern

% of U.S. adults who say the federal government is doing too little to ...



Note: Respondents who gave other responses or did not give an answer are not shown.
 Source: Survey conducted April 20-29, 2021.
 "Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

3. Local impact of climate change, environmental problems

A majority of Americans say climate change is having at least some impact on their local community, and half say their area has experienced extreme weather over the past year, particularly those living in South Central states such as Texas and Alabama. On a related policy question, a large majority of Americans favor the idea of revising building standards so new construction can better withstand extreme weather events.

At the local level, experience with environmental problems – such as air and water pollution – varies across groups. Black and Hispanic adults are particularly likely to say they experience environmental problems in their local community, as are those with lower family incomes.

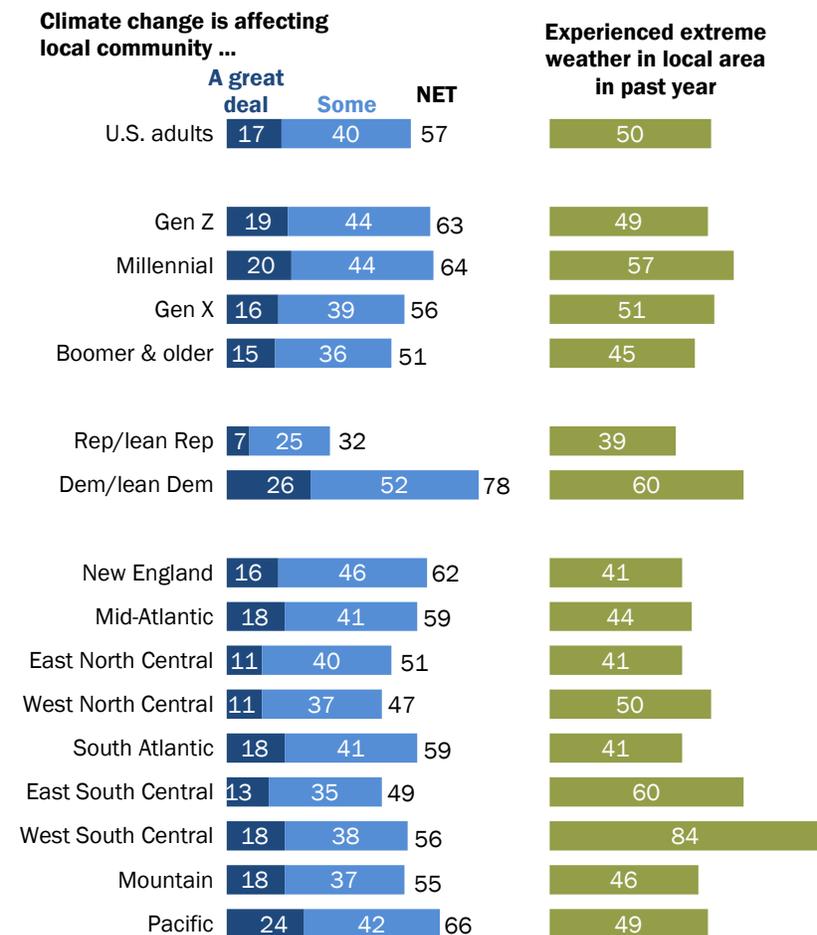
And when it comes to climate policy considerations, large majorities of Black and Hispanic adults – across income levels – say it’s very important to ensure that lower-income communities benefit from proposals aimed at reducing the effects of climate change.

More than half of U.S. adults say they have seen at least some local effects of climate change

Overall, 57% of U.S. adults say climate change is affecting their own community either a

A majority of Americans say climate change is affecting their local community

% of U.S. adults who say the following



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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great deal (17%) or some (40%). Smaller shares say climate change is affecting their community not too much (27%) or not at all (15%).

The overall share of Americans who say their area is affected a great deal by climate change is down 7 percentage points, from 24% a year ago to 17% today.

Americans' beliefs about local impact of climate change are more closely linked to their partisanship than to where they live. Perceptions of local climate impact vary modestly across census regions. The regions that are relatively likely to say climate change is impacting their communities, such as New England and the Pacific, tend to be places that lean Democratic in their political affiliation. There are also modest differences by generation in beliefs about its local impact.

A separate question in the survey finds that half of Americans say their local area experienced an extreme weather event in the past 12 months.

A large majority (84%) in the West South Central region say they have experienced extreme weather in the last 12 months. The region was impacted by a severe winter storm in February that led to a power crisis in Texas. In contrast to the overall partisan differences seen on this question, comparable majorities of Republicans and Democrats in the West South Central region report their communities have experienced extreme weather in the past year.

Most Americans, including a majority of Republicans, say human activity plays at least some role in climate change

Most Americans (77%) say human activity contributes either a great deal (44%) or some (33%) to global climate change. Far fewer (22%) say human activities such as the burning of fossil fuels contribute not too much or not at all to climate change.

Republicans continue to be less likely to believe that human activity plays at least some part in global climate change. Still, 59% of this group says human activity contributes at least some, while 40% say human activity has not too much of a role or no role in climate change.

Democrats across generations are in broad agreement that human activity has at least some effect on climate change. Among Republicans, Gen Zers and Millennials are more likely than Gen X and Baby Boomer and older adults to see human activity as playing a role in global climate change. See [the Appendix](#) for details.

Wide public support for revised building standards to protect against extreme weather

Climate change is thought to be a [key factor](#) in the occurrence of more frequent and intense or extreme weather events. When asked about a federal government proposal to change building standards so that new construction will better withstand extreme weather events, 75% of U.S. adults responded in favor of this proposal, while 23% said it is a bad idea because it could increase costs and cause delays in important projects.

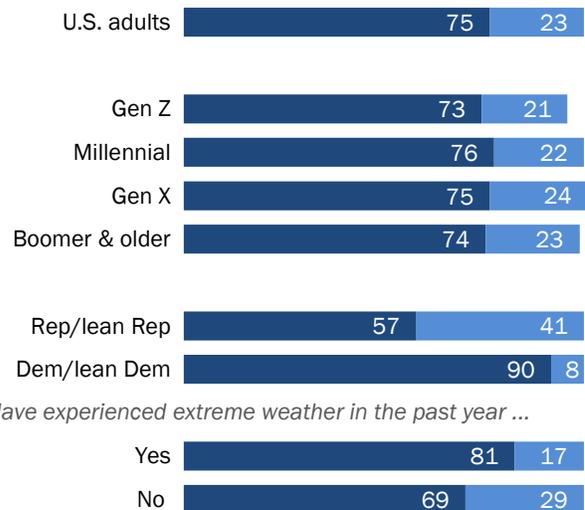
There is near consensus among Democrats and Democratic-leaning independents (90%) that revising building standards so construction better withstands extreme weather is a good idea. A 57% majority of Republicans and GOP leaners agree, although support is considerably higher among moderate and liberal Republicans (71%) than conservative Republicans (50%).

People who report direct experience with extreme weather in the past year are particularly likely to consider this a good idea (81% vs. 69% of those who do not report recent experience with extreme weather).

Most Democrats, a majority of GOP support new building standards aimed at withstanding extreme weather

% of U.S. adults who say a federal government proposal to change building standards so that new construction will better withstand extreme weather events is ...

- A good idea because U.S. building standards need to be upgraded to better deal with effects of extreme weather
- A bad idea because it could increase costs and cause delays in important projects



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Black, Hispanic and lower-income adults more likely to report living in areas with big problems when it comes to air pollution, other environmental concerns

Overall, about six-in-ten Americans say they see at least moderate problems where they live when it comes to an excess of garbage (62%) and water pollution in lakes, rivers and streams (60%). About half (52%) say the same about local air pollution, and about four-in-ten say safe drinking water (41%) or a lack of greenspace (39%) are at least moderate problems.

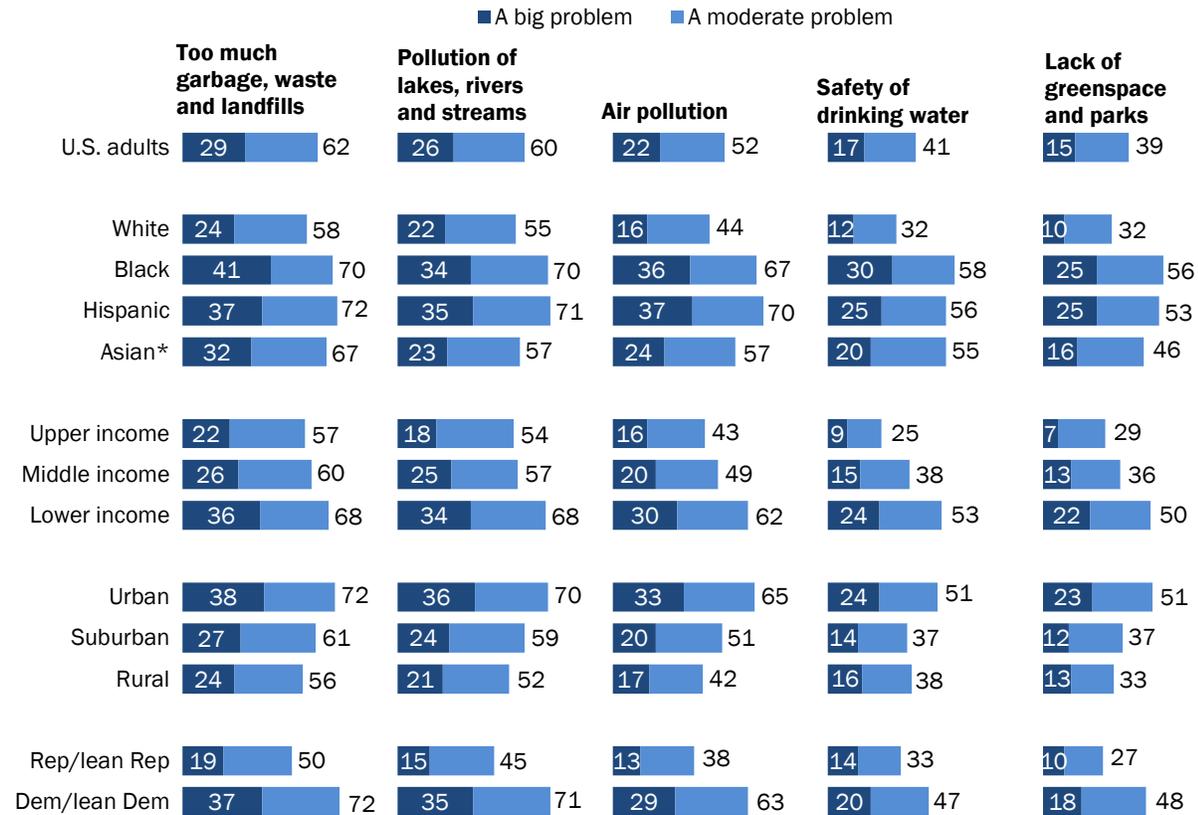
Past research has found that Black, Hispanic and Asian American communities are more likely to be [exposed to air pollution](#) and other environmental hazards in their local area.

The Center survey finds Black and Hispanic adults particularly likely to say their local communities are having problems across this set of five environmental issues, and they stand out for the large share who consider these to be “big problems” where they live. About four-in-ten Black (41%) and Hispanic (37%) adults say the amount of garbage, waste and landfills in their community is a big problem. Black and Hispanic adults are also more likely than White adults to report that their community has big problems with air and water pollution, drinking water safety and a lack of greenspace and parks. A majority of Black (57%) and about half of Hispanic adults (53%) consider at least one of these five issues a big problem in their local area.

Lower-income Americans are also more likely to report that their area has big problems with these environmental issues. For example, about three-in-ten lower-income adults say their local community has a big problem with air pollution. About half as many upper-income adults (16%) say the same about their community. Half of those with lower family incomes say their local communities are having a big problem with at least one of these five environmental issues.

Lower-income Americans more likely to report a range of environmental problems in their communities

% of U.S. adults who say the following are big or moderate problems in their local communities



*Asian adults were interviewed in English only.

Note: Respondents who gave other responses or did not give an answer are not shown. White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2019 earnings.

Source: Survey conducted April 20-29, 2021.

“Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

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The Biden administration has brought a new focus to environmental justice concerns underlying climate and energy policy. Biden has called for \$1.4 billion in his [recent budget proposal](#) for initiatives aimed at helping communities address racial, ethnic and income inequalities in pollution and other environmental hazards.

As Americans think about proposals to address climate change, Black (68%) and Hispanic adults (55%) stand out for the high shares who say it is very important to them that such proposals help lower-income communities.

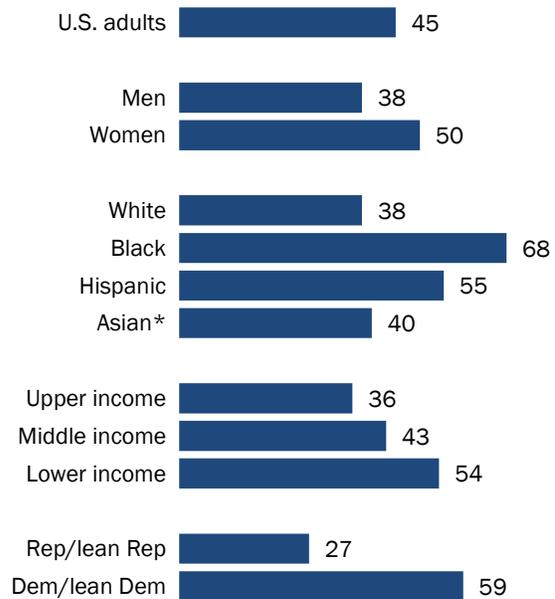
More than half of lower-income Americans (54%) say this is very important to them, compared with 36% of upper-income adults.

Middle- and upper-income Black adults (70%) are about as likely as lower-income Black adults (66%) to say this is very important to them, however. Similarly, there are no differences on this question between middle/upper income Hispanic adults and those with lower incomes (54% vs. 57%, respectively).

A majority of Democrats and independents who lean toward the Democratic Party (59%) say it is very important to them that climate change proposals help lower-income communities; far fewer Republicans and Republican leaners (27%) say this.

Black adults put higher priority on help for lower-income areas in climate policy

% of U.S. adults who say it is **very important** that proposals to reduce the effects of climate change help lower-income communities



*Asian adults were interviewed in English only.

Note: Respondents who gave other responses or did not give an answer are not shown. White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2019 earnings.

Source: Survey conducted April 20-29, 2021.

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Older Americans are more likely to say they regularly try to live in ways that help the environment

A large majority of Americans (86%) say they try to live in ways that help protect the environment all the time (22%) or some of the time (64%). Just 14% say they never or rarely make such an effort. These findings are largely unchanged since the question was last asked [in October 2019](#).

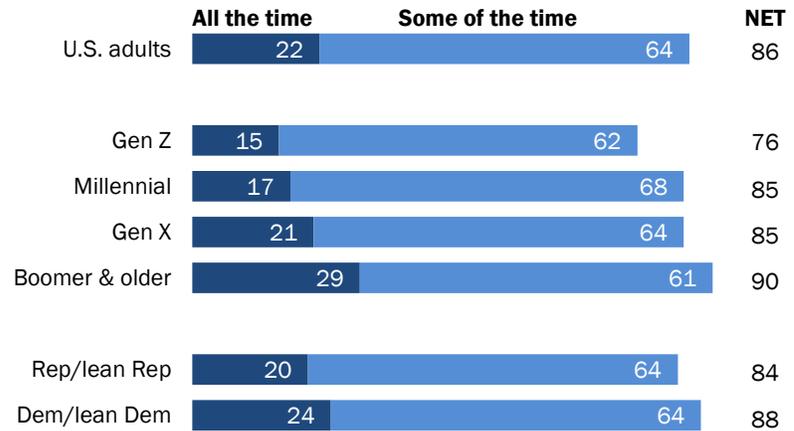
In contrast to views and behaviors related to climate change, Baby Boomer and older adults are more likely than those in younger generations to say they try to live in environmentally conscious ways all the time (29%, vs. 21% in Gen X, 16% of Millennials and 15% in Gen Z).

And, unlike views on many policy issues related to the environment, similar shares of Democrats (88%) and Republicans (84%) say they make an effort to do this at least some of the time.

Majorities of U.S. adults say they take some everyday actions in order to help protect the environment, including reducing their food waste

Majorities in both major parties try to live in ways that help protect the environment at least some of the time

% of U.S. adults who say they make an effort to live in ways that help protect the environment ...

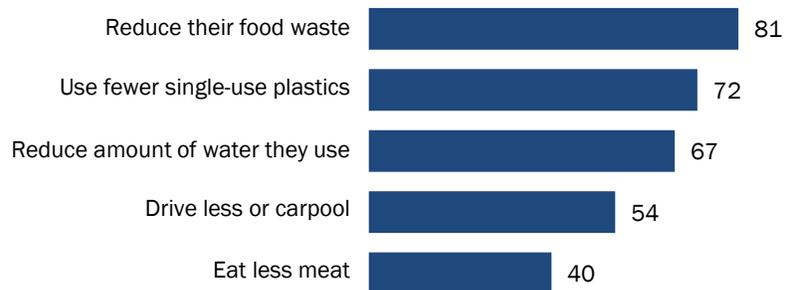


Note: Respondents who gave other responses or did not give an answer not shown.
 Source: Survey conducted April 20-29, 2021.
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Majorities of Americans say they try to limit food and water waste, use fewer plastics to help environment

% of U.S. adults who say they do each of the following to help protect the environment



Note: Respondents who gave other responses or did not give an answer are not shown.
 Source: Survey conducted April 20-29, 2021.
 “Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue”

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(81%), using fewer plastics that cannot be reused such as plastic bags, straws or cups (72%) or reducing the amount of water they use (67%). More than half of Americans (54%) say they drive less or carpool to help the environment, and 40% say they eat less meat.

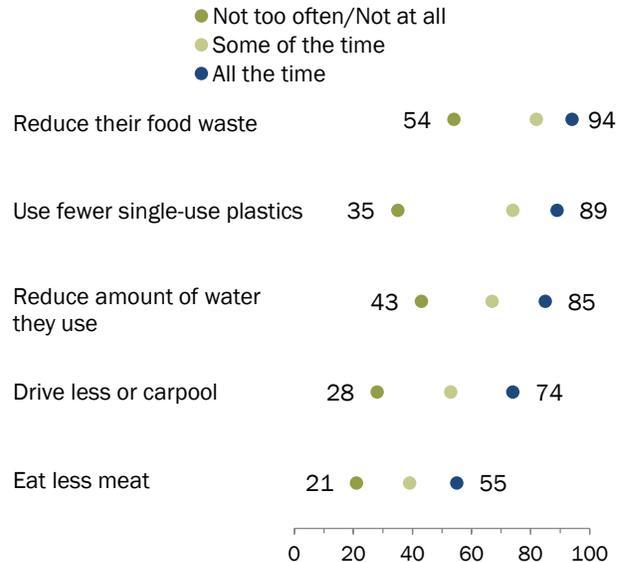
About one-in-five adults (18%) say they do all five of these activities to help the environment, a similar share to when these questions were last asked in October 2019. On average, Americans do 3.3 of these activities.

People who say they try to be environmentally conscious all the time are much more likely to say they are doing specific things to protect the environment. For instance, a large majority (89%) of people who make an effort to live in ways that help protect the environment all the time say they use fewer single-use plastics such as bags and straws in order to protect the environment. This compares with 35% of those who say they do not or don't often make an effort to protect the environment.

Actions to protect the environment more common among those who try to live in environmentally friendly ways

% of U.S. adults who say they do each of the following to help protect the environment

Among those who say they make an effort to live in ways that help protect the environment ...



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Acknowledgments

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pewresearch.org/science.

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Methodology

The American Trends Panel survey methodology

Overview

The American Trends Panel (ATP), created by Pew Research Center, is a nationally representative panel of randomly selected U.S. adults. Panelists participate via self-administered web surveys. Panelists who do not have internet access at home are provided with a tablet and wireless internet connection. Interviews are conducted in both English and Spanish. The panel is being managed by Ipsos.

Data in this report is drawn from the panel wave conducted April 20 to April 29, 2021, and includes an oversample from Ipsos' KnowledgePanel (KP) members ages 18 to 24. A total of 13,749 panelists responded out of 16,924 who were sampled, for a response rate of 81%. This includes 13,031 from the ATP and 718 respondents from the KnowledgePanel. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 4%. The break-off rate among panelists who logged on to the survey and completed at least one item is 2%. The margin of sampling error for the full sample of 13,749 respondents is plus or minus 1.4 percentage points.

Panel recruitment

The ATP was created in 2014, with the first cohort of panelists invited to join the panel at the end of a large, national, landline and cellphone random-digit-dial survey that was conducted in both English and Spanish. Two additional recruitments were conducted using the same method in 2015 and 2017, respectively. Across these three surveys, a total of 19,718 adults were invited to join the ATP, of whom 9,942 (50%) agreed to participate.

In August 2018, the ATP switched from telephone to address-based recruitment. Invitations were sent to a random, address-based sample of households selected

American Trends Panel recruitment surveys

| Recruitment dates | Mode | Invited | Joined | Active panelists remaining |
|---|-----------------------|---------------|---------------|----------------------------|
| Jan. 23 to March 16, 2014 | Landline/ cell RDD | 9,809 | 5,338 | 2,183 |
| Aug. 27 to Oct. 4, 2015 | Landline/ cell RDD | 6,004 | 2,976 | 1,243 |
| April 25 to June 4, 2017 | Landline/ cell RDD | 3,905 | 1,628 | 620 |
| Aug. 8 to Oct. 31, 2018 | ABS | 9,396 | 8,778 | 5,893 |
| Aug. 19 to Nov. 30, 2019 | ABS | 5,900 | 4,720 | 2,324 |
| June 1 to July 19, 2020; Feb. 10 to March 31, 2021 | ABS | 3,197 | 2,812 | 2,442 |
| | Total | 38,211 | 26,252 | 14,705 |

Note: Approximately once per year, panelists who have not participated in multiple consecutive waves or who did not complete an annual profiling survey are removed from the panel. Panelists also become inactive if they ask to be removed from the panel.

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from the U.S. Postal Service's Delivery Sequence File. Two additional recruitments were conducted using the same method in 2019 and 2020, respectively. Across these three address-based recruitments, a total of 18,493 adults were invited to join the ATP, of whom 16,310 (88%) agreed to join the panel and completed an initial profile survey. In each household, the adult with the next birthday was asked to go online to complete a survey, at the end of which they were invited to join the panel. Of the 26,252 individuals who have ever joined the ATP, 14,705 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

The U.S. Postal Service's Delivery Sequence File has been estimated to cover as much as 98% of the population, although some studies suggest that the coverage could be in the low 90% range.¹ The American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

About the Ipsos KnowledgePanel

The Ipsos KnowledgePanel is an online probability-based panel representative of the U.S. adult population. Households without internet connection are provided with a web-enabled device and free internet service. KnowledgePanel's recruitment process was originally based on a national RDD sampling methodology. In 2009, the panel switched to using an ABS methodology. Additional information about the recruitment, sampling and weighting procedures for the Ipsos KnowledgePanel are available [here](#).

Sample design

The overall target population for this survey was non-institutionalized persons ages 18 and older, living in the U.S., including Alaska and Hawaii. The ATP sample consisted of all current panel members. The KnowledgePanel sample included an oversample of KnowledgePanel members ages 18 to 24.

Questionnaire development and testing

The questionnaire was developed by Pew Research Center in consultation with Ipsos. The web program was rigorously tested on both PC and mobile devices by the Ipsos project management team and Pew Research Center researchers. The Ipsos project management team also populated test data which was analyzed in SPSS to ensure the logic and randomizations were working as intended before launching the survey.

¹ AAPOR Task Force on Address-based Sampling. 2016. "[AAPOR Report: Address-based Sampling](#)."

Incentives

All respondents were offered a post-paid incentive for their participation. Respondents could choose to receive the post-paid incentive in the form of a check or a gift code to Amazon.com or could choose to decline the incentive. Incentive amounts ranged from \$5 to \$20 depending on whether the respondent belongs to a part of the population that is harder or easier to reach. Differential incentive amounts were designed to increase panel survey participation among groups that traditionally have low survey response propensities.

Ipsos operates an ongoing modest incentive program for KnowledgePanel to encourage participation and create member loyalty. The incentive program includes special raffles and sweepstakes with both cash rewards and other prizes to be won. Typically, panel members are assigned no more than one survey per week. On average, panel members complete two to three surveys per month with durations of 10 to 15 minutes per survey. An additional incentive is usually provided for longer surveys. For this survey, KnowledgePanel members were offered 10,000 points (equivalent to \$10) in addition to the regular incentive program on April 26, 2021, at 8:30pm Eastern to those who hadn't responded yet in an attempt to boost the number of responses from KnowledgePanel members.

Data collection protocol

The data collection field period for this survey was April 20 to April 29, 2021. Postcard notifications were mailed to all ATP panelists with a known residential address on April 20, 2021.

Invitations were sent out in two separate launches: Soft Launch and Full Launch. Sixty ATP panelists and 490 KP panelists were included in the soft launch, which began with an initial invitation sent on April 20, 2021. The ATP panelists chosen for the initial soft launch were known responders who had completed previous ATP surveys within one day of receiving their invitation. All remaining English- and Spanish-speaking panelists were included in the full launch and were sent an invitation on April 21, 2021.

All panelists with an email address received an email invitation and up to three email reminders if they did not respond to the survey. All ATP panelists that consented to SMS messages received an SMS invitation and up to three SMS reminders.

Invitation and reminder dates

| | Soft Launch | Full Launch |
|--------------------|----------------|----------------|
| Initial invitation | April 20, 2021 | April 21, 2021 |
| First reminder | April 23, 2021 | April 23, 2021 |
| Second reminder | April 26, 2021 | April 26, 2021 |
| Final reminder | April 28, 2021 | April 28, 2021 |

Data quality checks

To ensure high-quality data, the Center’s researchers performed data quality checks to identify any respondents showing clear patterns of satisficing. This includes checking for very high rates of leaving questions blank, as well as always selecting the first or last answer presented. As a result of this checking, nine ATP respondents were removed from the survey dataset prior to weighting and analysis.

Weighting

The ATP data was weighted in a multistep process that accounts for multiple stages of sampling and nonresponse that occur at different points in the survey process. First, each panelist begins with a base weight that reflects their probability of selection for their initial recruitment survey (and the probability of being invited to participate in the panel in cases where only a subsample of respondents were invited). The base weights for panelists recruited in different years are scaled to be proportionate to the effective sample size for all active panelists in their cohort. To correct for nonresponse to the initial recruitment surveys and gradual panel attrition, the base weights for all active panelists are calibrated to align with the population benchmarks identified in the accompanying table to create a full-panel weight.

For ATP waves in which only a subsample of panelists are invited to participate, a wave-specific base weight is created by adjusting the full-panel weights for subsampled panelists to account for any differential probabilities of selection for the particular panel wave. For waves in which all active panelists are invited to participate, the wave-specific base weight is identical to the full-panel weight.

In the final weighting step, the wave-specific base weights for panelists who completed the survey are again calibrated to match the population benchmarks specified above. These weights are

trimmed (typically at about the 1st and 99th percentiles) to reduce the loss in precision stemming from variance in the weights. Sampling errors and test of statistical significance take into account the effect of weighting.

The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey.

Weighting dimensions

| Variable | Benchmark source |
|--|---|
| Age x Gender | 2019 American Community Survey |
| Education x Gender | |
| Education x Age | |
| Race/Ethnicity x Education | |
| Born inside vs. outside the U.S. among Hispanics and Asian Americans | |
| Years lived in the U.S. | |
| Race/Ethnicity among age 18-24 | |
| Education among age 18-24 | |
| Census region x Metro/Non-metro | 2019 CPS March Supplement |
| Volunteerism | 2017 CPS Volunteering & Civic Life Supplement |
| Voter registration | 2016 CPS Voting and Registration Supplement |
| Party affiliation | 2020 National Public Opinion Reference Survey |
| Frequency of internet use | |
| Religious affiliation | |

Note: Estimates from the ACS are based on non-institutionalized adults. The 2016 CPS was used for voter registration targets for this wave in order to obtain voter registration numbers from a presidential election year. Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total U.S. adult population. The 2020 National Public Opinion Reference Survey featured 1,862 online completions and 2,246 mail survey completions.

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Sample sizes and sampling errors for other subgroups are available upon request. In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

Margins of error

| | Unweighted sample size | Margin of error in percentage points |
|---------------------------|-----------------------------------|---|
| U.S. adults | 13,749 | +/- 1.4 |
| Form 1 | 6,860 | +/- 1.9 |
| Form 2 | 6,889 | +/- 1.9 |
| Gen Z | 912 | +/- 5.2 |
| Millennial | 3,160 | +/- 2.8 |
| Gen X | 3,518 | +/- 2.6 |
| Boomer & older | 6,074 | +/- 2.0 |
| Rep/lean Rep | 5,447 | +/- 2.0 |
| Dem/lean Dem | 7,962 | +/- 1.8 |
| <i>Among Rep/lean Rep</i> | | |
| Gen Z | 272 | +/- 8.8 |
| Millennial | 1,019 | +/- 4.5 |
| Gen X | 1,425 | +/- 4.0 |
| Boomer & older | 2,698 | +/- 2.8 |
| <i>Among Dem/lean Dem</i> | | |
| Gen Z | 607 | +/- 6.4 |
| Millennial | 2,060 | +/- 3.6 |
| Gen X | 1,997 | +/- 3.5 |
| Boomer & older | 3,255 | +/- 2.8 |

Note: The margins of error are reported at the 95% level of confidence and are calculated by taking into account the average design effect for each subgroup. Republicans and Democrats include independents and others who lean to each of the parties.

Source: Survey conducted Apr 20-29, 2021.

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Dispositions and response rates

| Final dispositions | AAPOR code | ATP | KP | Total |
|--|------------|---------------|--------------|---------------|
| Completed interview | 1.1 | 13,031 | 718 | 13,749 |
| Logged onto survey; broke-off | 2.12 | 163 | 50 | 213 |
| Logged onto survey; did not complete any items | 2.1121 | 74 | 41 | 115 |
| Never logged on (implicit refusal) | 2.11 | 1,430 | 1,404 | 2,834 |
| Survey completed after close of the field period | 2.27 | 1 | 3 | 4 |
| Completed interview but removed for data quality | 2.3 | 6 | 3 | 9 |
| Screened out | 4.7 | 0 | 0 | 0 |
| Total panelists in the Wave 89 survey | | 14,705 | 2,219 | 16,924 |
| Completed interviews | I | 13,031 | 718 | 13,749 |
| Partial interviews | P | 0 | 0 | 0 |
| Refusals | R | 1,673 | 1,498 | 3,171 |
| Non-contact | NC | 1 | 3 | 4 |
| Other | O | 0 | 0 | 0 |
| Unknown household | UH | 0 | 0 | 0 |
| Unknown other | UO | 0 | 0 | 0 |
| Not eligible | NE | 0 | 0 | 0 |
| Screen out | SO | 0 | 0 | 0 |
| Total | | 14,705 | 2,219 | 16,924 |
| AAPOR RR1 = I / (I+P+R+NC+O+UH+UO) | | 89% | 32% | 81% |

| Cumulative response rate | ATP | KP | Total |
|---|-----------|-----------|-----------|
| Weighted response rate to recruitment surveys | 12% | 10% | 12% |
| % of recruitment survey respondents who agreed to join the panel, among those invited | 74% | 59% | 72% |
| % of those agreeing to join who were active panelists at start of Wave 89 | 60% | 51% | 59% |
| Response rate to Wave 89 survey | 89% | 32% | 81% |
| Cumulative response rate | 5% | 1% | 4% |

Adjusting income and defining income tiers

To create upper-, middle- and lower-income tiers, respondents' 2019 family incomes were adjusted for differences in purchasing power by geographic region and for household size. "Middle-income" adults live in families with annual incomes that are two-thirds to double the median family income in the panel (after incomes have been adjusted for the local cost of living and for household size). The middle-income range for the American Trends Panel is about

\$38,900 to \$116,800 annually for an average family of three. Lower-income families have incomes less than roughly \$38,900, and upper-income families have incomes greater than roughly \$116,800 (all figures expressed in 2019 dollars).

Based on these adjustments, 30% are lower income, 46% are middle income and 19% fall into the upper-income tier. An additional 5% either didn't offer a response to the income question or to the household size question.

For more information about how the income tiers were determined, please see [here](#).

A note about the Asian sample

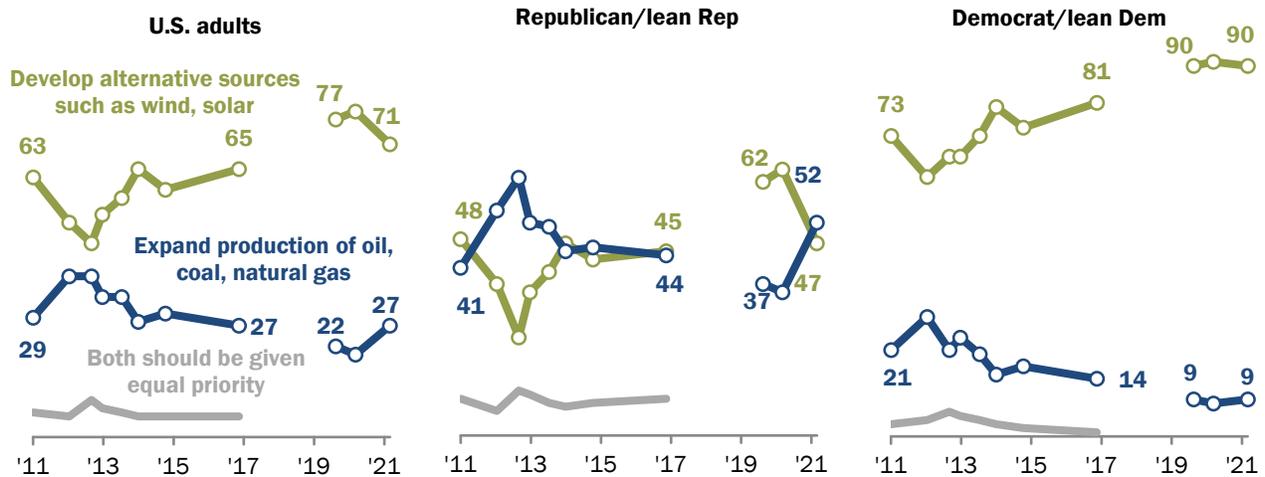
This survey includes a total sample size of 415 Asian Americans. The sample includes English-speaking Asian Americans only and, therefore, may not be representative of the overall Asian American population (75% of our weighted Asian American sample was born in another country, compared with 77% of the Asian American adult population overall). Despite this limitation, it is important to report the views of Asian Americans on the topics in this study. As always, Asian Americans' responses are incorporated into the general population figures throughout this report. Because of the relatively small sample size and a reduction in precision due to weighting, we are not able to analyze Asian American respondents by demographic categories, such as gender, age or education. For more, see "[Polling methods are changing, but reporting the views of Asian Americans remains a challenge.](#)"

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Appendix: Detailed charts and tables

An increased share of Republicans would prioritize fossil fuel expansion over development of alternative energy sources

% of U.S. adults who say the more important priority for addressing America's energy supply should be to ...



Note: Surveys conducted from 2011 to 2017 were conducted by phone using somewhat different question wording than the online surveys that begin in 2019. "Both should be given equal priority" was a volunteered response in telephone surveys. Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

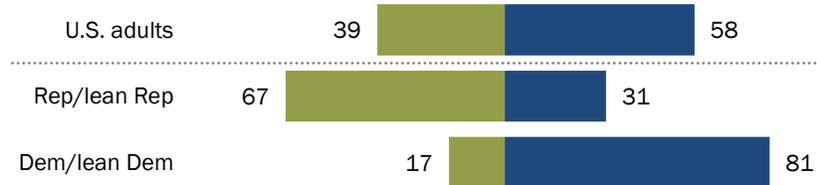
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Partisans far apart over the need for government regulations to spur renewable energy use

% of U.S. adults who say ...

- The private marketplace will ensure that businesses and consumers rely more on renewable energy sources, even without government regulations
- Government regulations are necessary to encourage businesses and consumers to rely more on renewable energy sources



Note: Respondents who did not give an answer are not shown.

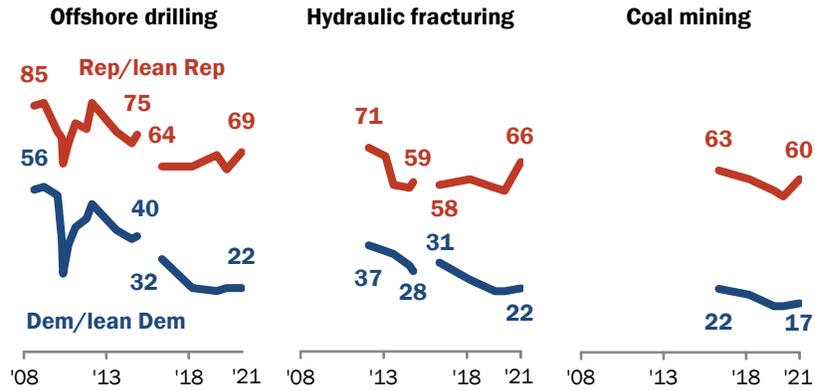
Source: Survey conducted April 20-29, 2021.

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Republicans have increased support for fossil fuels over the past year

% of U.S. adults who favor more ...



Note: Respondents who gave other responses or did not give an answer are not shown.

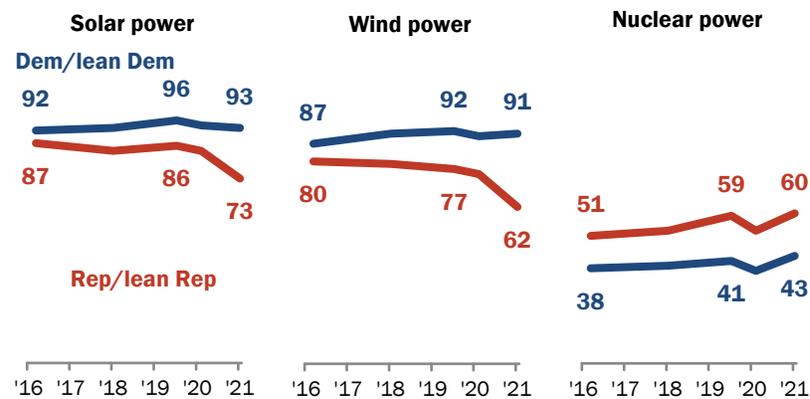
Source: Survey conducted April 20-29, 2021.

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Decrease in Republican support for wind and solar power over the past year

% of U.S. adults who favor more ...



Note: Respondents who gave other responses or did not give an answer are not shown.

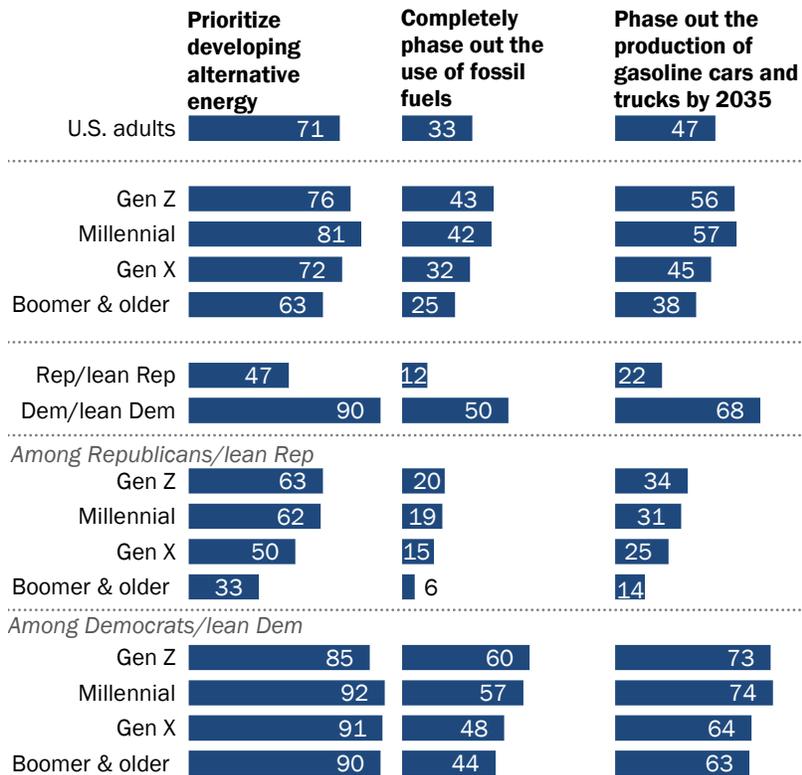
Source: Survey conducted April 20-29, 2021.

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Younger adults, Democrats are more inclined to phase out gas-powered cars, all fossil fuel use

% of U.S. adults who say the U.S. should ...



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Most Americans oppose Arctic drilling; about half say canceling Keystone XL pipeline was the right decision

% of U.S. adults who say the following ...

Oppose allowing oil and gas drilling in the Arctic National Wildlife Refuge



It was the **right decision** to cancel the Keystone XL pipeline



Note: Respondents who gave other responses or did not give an answer are not shown.

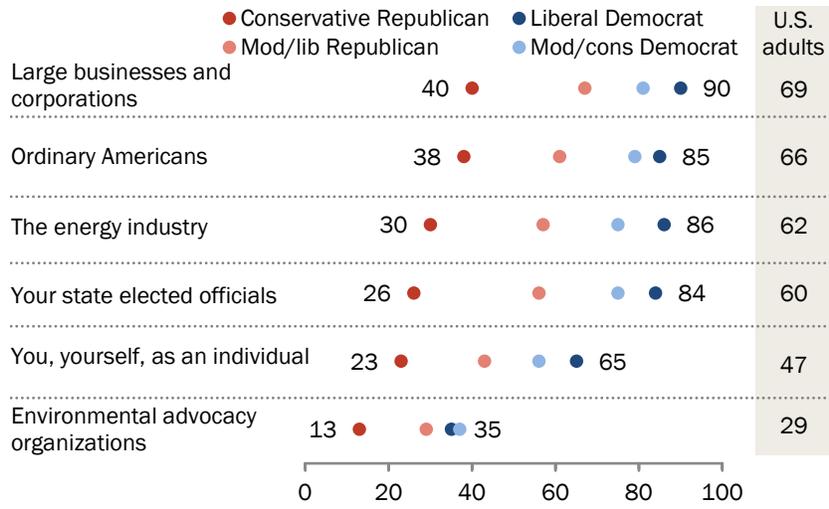
Source: Survey conducted April 20-29, 2021.

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Wide differences by party and ideology in views of actions taken to reduce the effects of climate change

% of U.S. adults who say each of the following are doing **too little** to help reduce the effects of global climate change



Note: Republicans and Democrats include independents and others who lean to each of the parties. Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

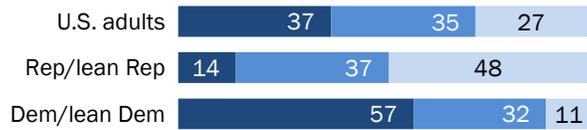
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Wide partisan differences in views of climate scientists' understanding

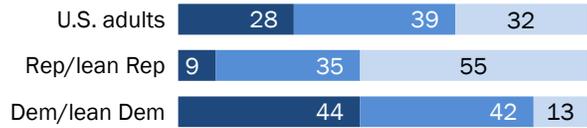
% of U.S. adults who say climate scientists understand ...

■ Very well ■ Fairly well ■ Not too/Not at all well

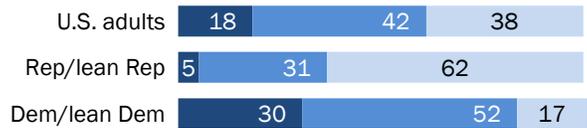
Whether or not climate change is occurring



The causes of climate change



The best ways to address climate change



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

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Widening partisan differences in views of climate scientists' understanding

% of U.S. adults who say climate scientists understand ...

| | Very well | Fairly well | Not too/Not at all well |
|---|-----------|-------------|-------------------------|
| Whether or not climate change is occurring | | | |
| <i>U.S. adults</i> | | | |
| 2021 | 37 | 35 | 27 |
| 2016 | 33 | 39 | 27 |
| <i>Rep/lean Rep</i> | | | |
| 2021 | 14 | 37 | 48 |
| 2016 | 20 | 38 | 42 |
| <i>Dem/lean Dem</i> | | | |
| 2021 | 57 | 32 | 11 |
| 2016 | 45 | 42 | 12 |
| The causes of climate change | | | |
| <i>U.S. adults</i> | | | |
| 2021 | 28 | 39 | 32 |
| 2016 | 28 | 40 | 32 |
| <i>Rep/lean Rep</i> | | | |
| 2021 | 9 | 35 | 55 |
| 2016 | 14 | 35 | 51 |
| <i>Dem/lean Dem</i> | | | |
| 2021 | 44 | 42 | 13 |
| 2016 | 38 | 46 | 15 |
| The best ways to address climate change | | | |
| <i>U.S. adults</i> | | | |
| 2021 | 18 | 42 | 38 |
| 2016 | 19 | 45 | 35 |
| <i>Rep/lean Rep</i> | | | |
| 2021 | 5 | 31 | 62 |
| 2016 | 9 | 37 | 53 |
| <i>Dem/lean Dem</i> | | | |
| 2021 | 30 | 52 | 17 |
| 2016 | 27 | 53 | 18 |

Note: Respondents who did not give an answer are not shown.

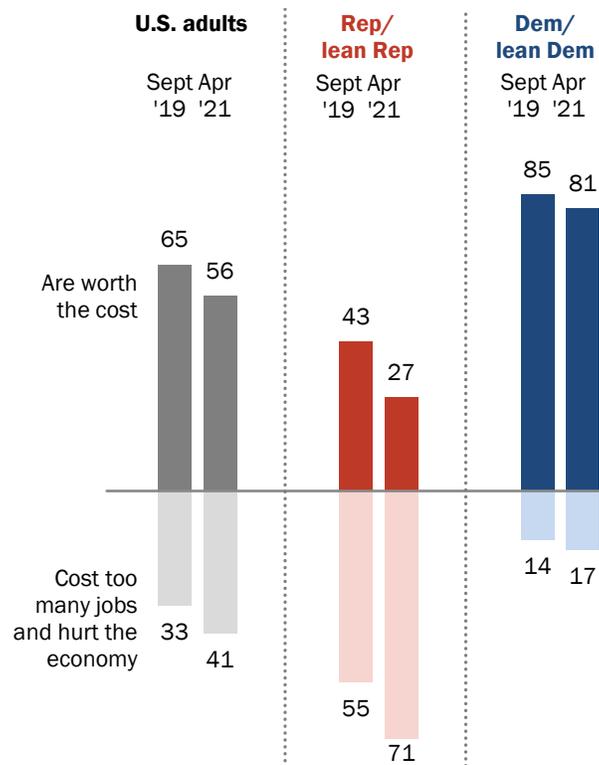
Source: Survey conducted Apr. 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

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Republican support for stricter environmental regulations has dropped

% of U.S. adults who say stricter environmental laws and regulations ...



Note: Respondents who did not give an answer are not shown.

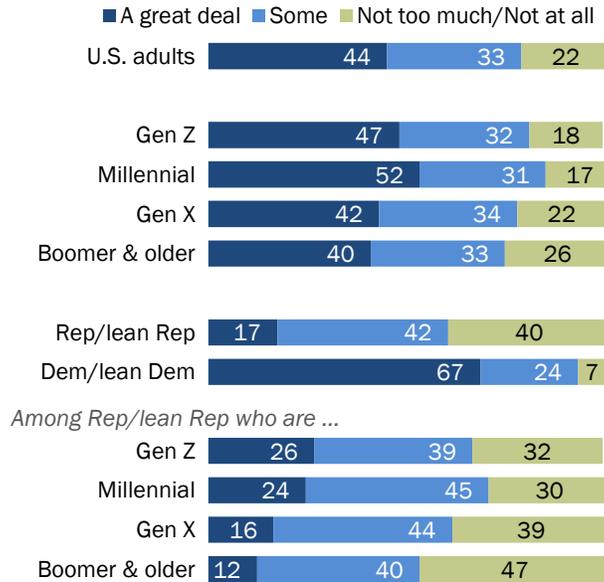
Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

PEW RESEARCH CENTER

Wide partisan divide over impact of human activity on climate change

% of U.S. adults who say human activity contributes to climate change ...



Note: Respondents who gave other responses or did not give an answer are not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

PEW RESEARCH CENTER

About seven-in-ten Hispanics say climate change affects their local community at least some

% of Hispanic adults who say ...

| | Hispanic | Among Hispanic adults who are ... | | | |
|---|----------|-----------------------------------|--------------------|-----------------|-----------------|
| | | Gen Z/ Millennial | Gen X and older | Rep/lean Rep | Dem/lean Dem |
| Climate change | | | | | |
| Climate change is a top personal concern | 39 | 41 | 37 | 21 | 49 |
| Done something to support climate action in past year | 31 | 30 | 22 | 20 | 30 |
| Climate change needs to be a top priority to ensure a sustainable planet for future generations | 75 | 76 | 73 | 54 | 85 |
| Human activity contributes to climate change a great deal or some | 84 | 87 | 81 | 71 | 91 |
| Climate change affects my local community a great deal or some | 71 | 78 | 64 | 52 | 81 |
| Climate and energy policy | | | | | |
| Major changes to our way of life are needed | 59 | 59 | 59 | 39 | 68 |
| Prioritize developing alternative energy sources | 77 | 82 | 72 | 59 | 86 |
| Favor using a mix of fossil fuels and renewables | 54 | 52 | 56 | 72 | 48 |
| Government regulations are necessary to encourage businesses to rely on renewables | 65 | 65 | 65 | 49 | 75 |
| Favor phasing out gas-powered vehicles | 56 | 66 | 45 | 38 | 64 |
| Biden administration's climate policies won't go far enough | 47 | 53 | 39 | 39 | 50 |
| Biden administration's infrastructure plan will help U.S. economy | 61 | 61 | 60 | 37 | 74 |
| Environmental regulations | | | | | |
| Stricter environmental laws are worth the cost | 62 | 67 | 57 | 39 | 72 |

Note: Based on Hispanic U.S. adults. Hispanics are of any race. Respondents who gave other responses or who did not give an answer not shown.

Source: Survey conducted April 20-29, 2021.

"Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement With Issue"

PEW RESEARCH CENTER

Survey question wording and topline

2021 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL
WAVE 89 April 2021
April 20-29, 2021
TOTAL N=13,749

ASK ALL:

ECON1 Thinking about the nation's economy...

How would you rate economic conditions in this country today?²

| | <u>Excellent</u> | <u>Good</u> | <u>Only fair</u> | <u>Poor</u> | <u>No answer</u> |
|---------------------|------------------|-------------|------------------|-------------|------------------|
| Apr 20-29, 2021 | 2 | 35 | 49 | 14 | <1 |
| Mar 1-7, 2021 | 2 | 21 | 53 | 24 | <1 |
| Nov 12-17, 2020 | 5 | 31 | 44 | 20 | <1 |
| Sep 30-Oct 5, 2020 | 4 | 29 | 42 | 25 | <1 |
| June 16-22, 2020 | 4 | 22 | 44 | 30 | 1 |
| Apr 7-12, 2020 | 4 | 19 | 38 | 38 | 1 |
| Jan 6-19, 2020 | 16 | 42 | 33 | 9 | <1 |
| Sep 16-29, 2019 | 10 | 46 | 35 | 8 | <1 |
| July 22-Aug 4, 2019 | 14 | 43 | 32 | 11 | <1 |
| Nov 7-16, 2018 | 13 | 46 | 31 | 9 | 1 |
| Sep 24-Oct 7, 2018 | 12 | 45 | 32 | 11 | <1 |
| Feb 28-Mar 12, 2017 | 2 | 37 | 43 | 17 | 0 |
| Oct 25-Nov 8, 2016 | 2 | 30 | 47 | 21 | <1 |
| Apr 29-May 27, 2014 | 1 | 18 | 50 | 30 | 1 |

ASK ALL:

ECON1B A year from now, do you expect that economic conditions in the country as a whole will be...

| | <u>Better</u> | <u>Worse</u> | <u>About the same as now</u> | <u>No answer</u> |
|---------------------|---------------|--------------|------------------------------|------------------|
| Apr 20-29, 2021 | 45 | 28 | 27 | 1 |
| Mar 1-7, 2021 | 44 | 31 | 24 | <1 |
| Nov 12-17, 2020 | 42 | 32 | 24 | 2 |
| Sep 30-Oct 5, 2020 | 52 | 17 | 30 | 1 |
| June 16-22, 2020 | 50 | 22 | 27 | 1 |
| Apr 7-12, 2020 | 55 | 22 | 22 | 1 |
| Jan 6-19, 2020 | 29 | 26 | 45 | 1 |
| Sep 16-29, 2019 | 20 | 32 | 48 | <1 |
| July 22-Aug 4, 2019 | 28 | 28 | 44 | <1 |

² Note: Previous surveys placed ECON1 and ECON1B in the middle of the survey.

ASK ALL:

SOCACTIV Thinking about issues and activities that some people care deeply about and others do not...

Compared with other issues, would you say each of these is... **[RANDOMIZE WITHIN EACH SET (a-e, and f-j); SHOW ON TWO SCREENS]**

| | | A top concern to me <u>personally</u> | One of several important concerns to <u>me</u> | Not an important concern to <u>me</u> | <u>No answer</u> |
|----|--|--|---|--|------------------|
| a. | Helping elect candidates for public office Apr 20-29, 2021 | 15 | 42 | 42 | 1 |
| b. | Addressing global climate change Apr 20-29, 2021 | 31 | 39 | 30 | <1 |
| c. | Improving K-12 education Apr 20-29, 2021 | 38 | 49 | 13 | <1 |
| d. | Working for racial justice Apr 20-29, 2021 | 31 | 42 | 26 | 1 |
| e. | Protecting gun rights Apr 20-29, 2021 | 32 | 29 | 39 | 1 |
| f. | Supporting U.S. military veterans Apr 20-29, 2021 | 35 | 49 | 15 | 1 |
| g. | Helping those in poverty Apr 20-29, 2021 | 32 | 58 | 10 | 1 |
| h. | Advocating against genetically modified foods Apr 20-29, 2021 | 15 | 33 | 51 | 1 |
| i. | Working for gender equality Apr 20-29, 2021 | 20 | 43 | 36 | 1 |
| j. | Limiting the role of government in daily life Apr 20-29, 2021 | 27 | 38 | 34 | 1 |

ASK ALL:

ENV2 Do you favor or oppose EXPANDING each of the following sources of energy in our country? **[RANDOMIZE ITEMS]**

(see following page)

| | <u>Favor</u> | <u>Oppose</u> | <u>No answer</u> |
|--|--------------|---------------|------------------|
| a. More offshore oil and gas drilling in U.S. waters | | | |
| Apr 20-29, 2021 | 43 | 55 | 3 |
| Apr 29-May 5, 2020 | 40 | 58 | 2 |
| Oct 1-13, 2019 | 42 | 56 | 1 |
| Mar 27-Apr 9, 2018 | 39 | 60 | 1 |
| May 10-Jun 6, 2016 | 45 | 52 | 3 |
| b. More nuclear power plants to generate electricity | | | |
| Apr 20-29, 2021 | 50 | 47 | 3 |
| Apr 29-May 5, 2020 | 43 | 55 | 2 |
| Oct 1-13, 2019 | 49 | 49 | 2 |
| Mar 27-Apr 9, 2018 | 44 | 54 | 2 |
| May 10-Jun 6, 2016 | 43 | 54 | 3 |
| c. More coal mining | | | |
| Apr 20-29, 2021 | 36 | 61 | 3 |
| April 29-May 5, 2020 | 33 | 65 | 2 |
| Oct 1-13, 2019 | 35 | 63 | 2 |
| Mar 27-Apr 9, 2018 | 37 | 61 | 2 |
| May 10-Jun 6, 2016 | 41 | 57 | 3 |
| d. More solar panel "farms" | | | |
| Apr 20-29, 2021 | 84 | 14 | 2 |
| April 29-May 5, 2020 | 90 | 9 | 1 |
| Oct 1-13, 2019 | 92 | 8 | 1 |
| Mar 27-Apr 9, 2018 | 89 | 10 | 1 |
| May 10-Jun 6, 2016 | 89 | 9 | 2 |
| e. More hydraulic fracturing, sometimes called "fracking," for oil and natural gas | | | |
| Apr 20-29, 2021 | 41 | 56 | 3 |
| April 29-May 5, 2020 | 37 | 60 | 3 |
| Oct 1-13, 2019 | 38 | 60 | 2 |
| Mar 27-Apr 9, 2018 | 39 | 58 | 2 |
| May 10-Jun 6, 2016 | 42 | 53 | 5 |
| ASK FORM 1 ONLY [N=6,860]: | | | |
| f. More wind turbine "farms" | | | |
| Apr 20-29, 2021 | 77 | 20 | 2 |
| April 29-May 5, 2020 | 83 | 16 | 2 |
| Oct 1-13, 2019 | 85 | 14 | 1 |
| Mar 27-Apr 9, 2018 | 85 | 13 | 2 |
| May 10-Jun 6, 2016 | 83 | 14 | 3 |
| ASK FORM 2 ONLY [N=6,889]: | | | |
| g. More offshore wind turbine "farms" | | | |
| Apr 20-29, 2021 | 75 | 23 | 3 |

ASK ALL:

EN1

Right now, which ONE of the following do you think should be the more important priority for addressing America's energy supply? **[RANDOMIZE RESPONSE OPTIONS]**

| | Developing alternative sources, such as wind, solar and <u>hydrogen technology</u> | Expanding exploration and production of oil, <u>coal and natural gas</u> | No answer |
|--------------------|--|--|-----------|
| Apr 20-29, 2021 | 71 | 27 | 1 |
| Apr 29-May 5, 2020 | 79 | 20 | 1 |
| Oct 1-13, 2019 | 77 | 22 | 1 |

TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: Right now, which ONE of the following do you think should be the more important priority for addressing America's energy supply **[READ AND RANDOMIZE]**?

| | <i>Developing alternative sources such as, wind, solar and hydrogen <u>technology</u></i> | <i>Expanding exploration and production of oil, <u>gas</u></i> | (VOL.) <i>Both should be given equal <u>priority</u></i> | (VOL.) <i>DK/Ref</i> |
|--------------------|---|--|--|--------------------------------|
| Jan 4-9, 2017 | 65 | 27 | 5 | 3 |
| Dec 3-7, 2014 | 60 | 30 | 5 | 4 |
| Feb 12-26, 2014 | 65 | 28 | 5 | 2 |
| Sep 4-8, 2013 | 58 | 34 | 6 | 3 |
| Feb 13-18, 2013 | 54 | 34 | 7 | 4 |
| Oct 24-28, 2012 | 47 | 39 | 9 | 5 |
| Mar 7-11, 2012 | 52 | 39 | 5 | 4 |
| Feb 22-Mar 1, 2011 | 63 | 29 | 6 | 2 |

ASK ALL:

EN2

Thinking about the country's energy supply, do you think the U.S. should... **[RANDOMIZE ORDER OF RESPONSE 1 AND 2]**

Apr 20-29,
2021

| | |
|----|--|
| 33 | Phase out the use of oil, coal and natural gas completely, relying instead on renewable energy sources such as wind and solar power only |
| 64 | Use a mix of energy sources including oil, coal and natural gas along with renewable energy sources |
| 2 | No answer |

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE

ASK FORM 1 [N=6,860]:

ARCTIC Do you favor or oppose allowing oil and gas drilling in the Arctic National Wildlife Refuge in Alaska?

Apr 20-29,

2021

| | |
|----|-----------|
| 27 | Favor |
| 70 | Oppose |
| 3 | No answer |

TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: Would you favor or oppose allowing oil and gas drilling in the Arctic National Wildlife Refuge in Alaska?

| | <u>Favor</u> | <u>Oppose</u> | <u>(VOL.)</u> <u>DK/Ref</u> |
|-----------------------------|--------------|---------------|--------------------------------|
| Sep 9-14, 2008 | 55 | 39 | 6 |
| Jun 18-29, 2008 | 50 | 43 | 7 |
| Feb 20-24, 2008 | 42 | 50 | 8 |
| May 2-14, 2006 | 46 | 44 | 10 |
| Jan 4-8, 2006 | 44 | 47 | 9 |
| Sep 8-11, 2005 ³ | 50 | 42 | 8 |
| Mar 17-27, 2005 | 46 | 49 | 5 |
| Mar 17-21, 2005 | 42 | 46 | 12 |

ASK FORM 2 [N=6,889]:

KSTONE As you may know, construction on the Keystone XL oil pipeline has been canceled. Do you think it was the right decision or the wrong decision to cancel construction on the Keystone XL pipeline?

Apr 20-29,

2021

| | |
|----|----------------|
| 49 | Right decision |
| 45 | Wrong decision |
| 6 | No answer |

³ In September 2005 and earlier the question was worded "...drilling in the Alaskan Arctic National Wildlife Refuge."

TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: Do you favor or oppose building the Keystone XL pipeline that would transport oil from Canada's oil sands region through the Midwest to refineries in Texas? **[READ AND RANDOMIZE]**?

| | <u>Favor</u> | <u>Oppose</u> | <u>(VOL.) DK/Ref</u> |
|----------------------------|--------------|---------------|--------------------------|
| Feb 7-12, 2017 | 42 | 48 | 10 |
| Nov 6-9, 2014 ⁴ | 59 | 31 | 10 |
| Feb 27-Mar 16, 2014 | 61 | 27 | 12 |
| Sep 4-8, 2013 | 65 | 30 | 5 |
| Mar 13-17, 2013 | 66 | 23 | 11 |

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE**ASK ALL:**

EVCAR3 Do you favor or oppose phasing out the production of new gasoline cars and trucks by the year 2035?

Apr 20-29,
2021

| | |
|----|-----------|
| 47 | Favor |
| 51 | Oppose |
| 3 | No answer |

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE**ASK ALL:**

EVCAR1 Do you currently have an electric or hybrid vehicle, or not?

Apr 20-29,
2021

| | |
|----|-----------|
| 7 | Yes |
| 93 | No |
| <1 | No answer |

ASK ALL:

ENV17 How often, if ever, do you make an effort to live in ways that help protect the environment?

| | <u>All the time</u> | <u>Some of the time</u> | <u>Not too often</u> | <u>Not at all</u> | <u>No answer</u> |
|--------------------|---------------------|-----------------------------|----------------------|-------------------|------------------|
| Apr 20-29, 2021 | 22 | 64 | 12 | 2 | <1 |
| Oct 1-13, 2019 | 25 | 63 | 9 | 2 | <1 |
| May 10-Jun 6, 2016 | 20 | 63 | 13 | 4 | <1 |

⁴ In November 2014, September 2013 and March 2013, question was asked as part of a list; March 2014 was a standalone item.

ASK ALL:

EN6F1

Do you do each of the following in your everyday life in order TO HELP PROTECT THE ENVIRONMENT, or don't you? **[RANDOMIZE ITEMS]**

| | Yes, I do <u>this</u> | No, I do <u>not do this</u> | No <u>answer</u> |
|---|--------------------------|--------------------------------|---------------------|
| a. Eat less meat | | | |
| Apr 20-29, 2021 | 40 | 60 | <1 |
| Oct 1-13, 2019 | 41 | 59 | <1 |
| b. Drive less or carpool | | | |
| Apr 20-29, 2021 | 54 | 45 | 1 |
| Oct 1-13, 2019 | 51 | 49 | <1 |
| c. Reduce your food waste | | | |
| Apr 20-29, 2021 | 81 | 19 | 1 |
| Oct 1-13, 2019 | 80 | 20 | <1 |
| d. Use fewer plastics that cannot be reused (e.g., plastic bags, straws, cups) | | | |
| Apr 20-29, 2021 | 72 | 27 | 1 |
| Oct 1-13, 2019 | 72 | 28 | 1 |
| e. Reduce the amount of water you use | | | |
| Apr 20-29, 2021 | 67 | 32 | <1 |
| Oct 1-13, 2019 | 68 | 32 | <1 |

RANDOMIZE ORDER OF LAWCOST AND ENVIR6**ASK ALL:**

LAWCOST

Which of these statements comes closer to your view, even if neither is exactly right?
[RANDOMIZE ORDER OF RESPONSE 1 AND 2]

| Apr 20-29, <u>2021</u> | | Sep 3-15, <u>2019</u> |
|---------------------------|---|--------------------------|
| 41 | Stricter environmental laws and regulations cost too many jobs and hurt the economy | 33 |
| 56 | Stricter environmental laws and regulations are worth the cost | 65 |
| 3 | No answer | 2 |

TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: Which statement comes closer to your views, even if neither is exactly right? **[READ AND RANDOMIZE]**?

| | Stricter environmental laws and regulations cost too many jobs and hurt the <u>economy</u> | Stricter environmental laws and regulations are <u>worth the cost</u> | (VOL.) <u>Both/Neither/DK</u> <u>/Ref</u> |
|---------------------|--|---|---|
| Sep 5-16, 2019 | 35 | 61 | 5 |
| Jan 9-14, 2019 | 30 | 63 | 6 |
| Jun 8-Jul 9, 2017 | 37 | 59 | 5 |
| Nov 30-Dec 5, 2016 | 34 | 59 | 7 |
| Aug 23-Sep 2, 2016 | 39 | 54 | 7 |
| Aug 27-Oct 4, 2015 | 36 | 59 | 4 |
| Jan 23-Mar 16, 2014 | 39 | 56 | 5 |
| Feb 22-Mar 14, 2011 | 39 | 53 | 7 |
| November, 2007 | 27 | 63 | 10 |
| July, 2006 | 31 | 57 | 12 |
| March, 2006 | 29 | 65 | 6 |
| December, 2005 | 37 | 56 | 7 |
| December, 2004 | 31 | 60 | 9 |
| September, 2000 | 31 | 61 | 8 |
| August, 1999 | 28 | 65 | 7 |
| October, 1996 | 30 | 63 | 7 |
| October, 1995 | 35 | 61 | 4 |
| April, 1995 | 39 | 57 | 4 |
| October, 1994 | 32 | 62 | 6 |
| July, 1994 | 33 | 62 | 5 |

ASK ALL:

ENVIR6

Which of these statements comes closest to your own view about the MOST EFFECTIVE WAY to increase reliance on renewable energy sources, even if neither is exactly right?
[RANDOMIZE OPTIONS]

| | Government regulations are necessary to encourage businesses and consumers to rely more on <u>renewable energy sources</u> | The private marketplace will ensure that businesses and consumers rely more on renewable energy sources, even <u>without government regulations</u> | No <u>answer</u> |
|--------------------|--|---|---------------------|
| Apr 20-29, 2021 | 58 | 39 | 3 |
| Apr 29-May 5, 2020 | 58 | 39 | 2 |
| Mar 27-Apr 9, 2018 | 56 | 42 | 1 |

TREND FOR COMPARISON

Pew Research Center survey conducted by telephone: Which of these statements come closest to your own view about the MOST EFFECTIVE WAY to increase reliance on renewable energy sources, even if neither is exactly right? **[READ AND RANDOMIZE RESPONSE OPTIONS 1 AND 2]**

May 3-7
2017

| | |
|----|--|
| 54 | Government regulations are necessary to encourage businesses and consumers to rely more on renewable energy sources |
| 38 | The private marketplace will ensure that businesses and consumers rely more on renewable energy sources, even without government regulations |
| 8 | No answer |

ASK ALL:

ENVIR8 How much do you think the federal government is doing to... **[RANDOMIZE ITEMS; show on same screen]**

| | <u>Too much</u> | <u>Too little</u> | <u>About the right amount</u> | <u>No answer</u> |
|--|-----------------|-------------------|-------------------------------|------------------|
| a. Protect air quality | | | | |
| April 20-29, 2021 | 9 | 59 | 31 | 1 |
| April 29-May 5, 2020 | 4 | 65 | 30 | 1 |
| Oct 1-13, 2019 | 4 | 67 | 28 | 1 |
| Mar 27-Apr 9, 2018 | 8 | 64 | 27 | 1 |
| b. Protect water quality of lakes, rivers and streams | | | | |
| April 20-29, 2021 | 6 | 63 | 30 | 1 |
| April 29-May 5, 2020 | 3 | 67 | 29 | 1 |
| Oct 1-13, 2019 | 4 | 68 | 27 | 1 |
| Mar 27-Apr 9, 2018 | 6 | 69 | 24 | 1 |
| c. Protect animals and their habitats | | | | |
| April 20-29, 2021 | 9 | 57 | 33 | 1 |
| April 29-May 5, 2020 | 6 | 62 | 32 | 1 |
| Oct 1-13, 2019 | 7 | 62 | 31 | 1 |
| Mar 27-Apr 9, 2018 | 9 | 63 | 27 | 1 |
| d. Protect open lands in national parks and nature preserves | | | | |
| April 20-29, 2021 | 7 | 51 | 41 | 1 |
| April 29-May 5, 2020 | 5 | 54 | 40 | 1 |
| Oct 1-13, 2019 | 5 | 55 | 39 | 1 |
| Mar 27-Apr 9, 2018 | 8 | 57 | 34 | 1 |
| e. Reduce the effects of global climate change | | | | |
| April 20-29, 2021 | 18 | 59 | 22 | 1 |
| April 29-May 5, 2020 | 9 | 65 | 25 | 1 |
| Oct 1-13, 2019 | 10 | 67 | 23 | 1 |
| Mar 27-Apr 9, 2018 | 13 | 67 | 19 | 1 |

ASK ALL:

LOCENV

How much of a problem, if at all, do you think each of the following is in your local community? **[RANDOMIZE ITEMS; OBSERVE FORM SPLITS]**

| | A big <u>problem</u> | A moderate <u>problem</u> | A small <u>problem</u> | Not a <u>problem</u> | No <u>answer</u> |
|---------------------------------------|-------------------------|------------------------------|---------------------------|-------------------------|---------------------|
| a. Air pollution April 20-29, 2021 | 22 | 30 | 27 | 20 | 1 |

ASK FORM 1 ONLY[N=6,860]:

b. Pollution of lakes, rivers and streams
April 20-29, 2021

| | | | | |
|----|----|----|----|----|
| 26 | 33 | 26 | 13 | <1 |
|----|----|----|----|----|

ASK FORM 2 ONLY[N=6,889]:

c. Safety of drinking water
April 20-29, 2021

| | | | | |
|----|----|----|----|---|
| 17 | 24 | 24 | 35 | 1 |
|----|----|----|----|---|

d. Too much garbage, waste and landfills
April 20-29, 2021

| | | | | |
|----|----|----|----|---|
| 29 | 34 | 22 | 15 | 1 |
|----|----|----|----|---|

e. Lack of greenspace and parks
April 20-29, 2021

| | | | | |
|----|----|----|----|---|
| 15 | 25 | 26 | 34 | 1 |
|----|----|----|----|---|

ASK ALL:

CLIM9

How much, if at all, do you think global climate change is currently affecting your local community?

| | A great <u>deal</u> | <u>Some</u> | Not too <u>much</u> | <u>Not at all</u> | No <u>answer</u> |
|---------------------------------|------------------------|-------------|------------------------|-------------------|---------------------|
| Apr 20-29, 2021 | 17 | 40 | 27 | 15 | 1 |
| Apr 29-May 5, 2020 | 24 | 39 | 25 | 12 | <1 |
| Oct 1-13, 2019 ⁵ | 22 | 39 | 24 | 13 | 1 |
| Mar 27-Apr 9, 2018 ⁶ | 22 | 37 | 25 | 15 | <1 |

ASK ALL:

EWLOCAL

Has the area where you live experienced any extreme weather events over the past 12 months?

Apr 20-29,
2021

| | |
|----|-----------|
| 50 | Yes |
| 49 | No |
| 1 | No answer |

⁵ October 2019 survey combines those asked in a series and those asked as the question is shown here.

⁶ Spring 2018 survey asked about climate change affecting your local community as part of a series

ASK ALL:

CCGEN

Which of the following statements comes closer to your own view, even if neither is exactly right? **[RANDOMIZE ORDER OF RESPONSE 1 AND 2]**

Reducing the effects of global climate change needs to be a...

Apr 20-29,
2021

| | |
|----|--|
| 34 | Lower priority with so many other important problems facing Americans today, even if that means more climate problems for future generations |
| 64 | Top priority to ensure a sustainable planet for future generations, even if that means fewer resources for addressing other important problems today |
| 2 | No answer |

ASK ALL:

CCFUTR

Looking to the future 50 years from now, which of the following do you think is more likely to happen in the U.S.? **[RANDOMIZE ORDER OF RESPONSE 1 AND 2]**

Apr 20-29,
2021

| | |
|----|---|
| 46 | New technology will be able to address most of the problems caused by global climate change |
| 51 | Major changes to everyday life will be needed to address the problems caused by global climate change |
| 3 | No answer |

ASK ALL:

EN7

How much do you think human activity, such as the burning of fossil fuels, contributes to global climate change?

| | <u>A great deal</u> | <u>Some</u> | <u>Not too much</u> | <u>Not at all</u> | <u>No answer</u> |
|--------------------|---------------------|-------------|---------------------|-------------------|------------------|
| Apr 20-29, 2021 | 44 | 33 | 15 | 6 | 1 |
| Apr 29-May 5, 2020 | 49 | 32 | 13 | 6 | 1 |
| Oct 1-13, 2019 | 49 | 30 | 14 | 5 | 2 |

ASK ALL:

ENV26 Thinking about what you have heard or read, how well do climate scientists understand...
[RANDOMIZE ITEMS]

a. Whether or not global climate change is occurring

| Apr 20-29 | | May 10-June 6 |
|-------------|-----------------|---------------|
| <u>2021</u> | | <u>2016</u> |
| 37 | Very well | 33 |
| 35 | Fairly well | 39 |
| 20 | Not too well | 18 |
| 8 | Not at all well | 9 |
| 1 | No answer | 1 |

b. The causes of global climate change

| Apr 20-29 | | May 10-June 6 |
|-------------|-----------------|---------------|
| <u>2021</u> | | <u>2016</u> |
| 28 | Very well | 28 |
| 39 | Fairly well | 40 |
| 23 | Not too well | 22 |
| 9 | Not at all well | 9 |
| 1 | No answer | 1 |

c. The best ways to address global climate change

| Apr 20-29 | | May 10-June 6 |
|-------------|-----------------|---------------|
| <u>2021</u> | | <u>2016</u> |
| 18 | Very well | 19 |
| 42 | Fairly well | 45 |
| 28 | Not too well | 26 |
| 9 | Not at all well | 9 |
| 1 | No answer | 1 |

ASK ALL:

CCINFLU Thinking about public policy debates about addressing global climate change, do you think climate scientists have...

| Apr 20-29, | |
|-------------|------------------------|
| <u>2021</u> | |
| 22 | Too much influence |
| 54 | Too little influence |
| 22 | About the right amount |
| 2 | No answer |

ASK ALL:

CLIMENO

How much do you think each of the following is doing to help reduce the effects of global climate change? **[RANDOMIZE ITEMS]**

| | <u>Too much</u> | <u>Too little</u> | <u>About the right amount</u> | <u>No answer</u> |
|--|-----------------|-------------------|-------------------------------|------------------|
| a. Large businesses and corporations Apr 20-29, 2021 | 8 | 69 | 21 | 2 |
| b. The energy industry Apr 20-29, 2021 | 7 | 62 | 29 | 2 |
| c. Ordinary Americans Apr 20-29, 2021 | 5 | 66 | 28 | 2 |
| d. Environmental advocacy organizations Apr 20-29, 2021 | 22 | 29 | 48 | 2 |
| e. You, yourself, as an individual Apr 20-29, 2021 | 4 | 47 | 48 | 2 |
| f. Your state elected officials Apr 20-29, 2021 | 11 | 60 | 27 | 2 |

ASK ALL:

CCPOLICY

Do you favor or oppose the following proposals to reduce the effects of global climate change? **[RANDOMIZE ITEMS; show on same screen]**

| | <u>Favor</u> | <u>Oppose</u> | <u>No answer</u> |
|---|--------------|---------------|------------------|
| a. Planting about a trillion trees around the world to absorb carbon emissions in the atmosphere Apr 20-29, 2021 | 90 | 9 | 2 |
| Apr 29-May 5, 2020 | 90 | 9 | 1 |
| b. Taxing corporations based on the amount of carbon emissions they produce Apr 20-29, 2021 | 70 | 28 | 2 |
| Apr 29-May 5, 2020 | 73 | 25 | 1 |
| c. Providing a tax credit to encourage businesses to develop technology which captures and stores carbon emissions so they do not enter the atmosphere Apr 20-29, 2021 | 81 | 17 | 2 |
| Apr 29-May 5, 2020 | 84 | 15 | 1 |
| d. Tougher restrictions on power plant carbon emissions Apr 20-29, 2021 | 76 | 22 | 2 |
| Apr 29-May 5, 2020 | 80 | 19 | 1 |
| e. Tougher fuel-efficiency standards for automobiles and trucks Apr 20-29, 2021 | 70 | 28 | 2 |
| Apr 29-May 5, 2020 | 71 | 28 | 1 |

ASK ALL:

BIDENC1 Overall, do you think the Biden administration's policies to reduce the effects of global climate change will...

Apr 20-29,

2021

| | |
|----|-------------------|
| 29 | Go too far |
| 41 | Not go far enough |
| 28 | Be about right |
| 2 | No answer |

ASK ALL:

CCPROP Thinking about proposals to reduce the effects of global climate change, how important is each of the following considerations to you personally? **[RANDOMIZE ITEMS]**

| | | <u>Very important</u> | <u>Somewhat important</u> | <u>Not too important</u> | <u>Not at all important</u> | <u>No answer</u> |
|----|---|---------------------------|-------------------------------|------------------------------|---------------------------------|------------------|
| a. | Getting the U.S. to net-zero carbon emissions as quickly as possible Apr 20-29, 2021 | 34 | 35 | 18 | 11 | 2 |
| b. | Making sure proposals help lower-income communities Apr 20-29, 2021 | 45 | 36 | 12 | 6 | 1 |
| c. | Limiting the burden of regulations on businesses Apr 20-29, 2021 | 24 | 38 | 25 | 11 | 2 |
| d. | Increasing job and economic growth Apr 20-29, 2021 | 60 | 31 | 6 | 2 | 1 |
| e. | Keeping consumer costs low Apr 20-29, 2021 | 52 | 39 | 7 | 2 | 1 |
| f. | Protecting the quality of the environment for future generations Apr 20-29, 2021 | 64 | 28 | 4 | 2 | 1 |

ASK ALL:

BIDENC2

Do you favor or oppose each of the following proposals for the federal government?

[RANDOMIZE ITEMS]

| | <u>Favor</u> | <u>Oppose</u> | <u>No answer</u> |
|--|--------------|---------------|------------------|
| a. Requiring power companies to use more energy from renewable sources, such as wind or solar, to reduce carbon emissions Apr 20-29, 2021 | 74 | 24 | 2 |
| b. Federal spending to build a network of electric vehicle charging stations across the country to increase use of electric cars and trucks Apr 20-29, 2021 | 62 | 36 | 2 |
| c. Raising taxes on corporations to pay for more energy efficient buildings and improved roads and bridges Apr 20-29, 2021 | 63 | 35 | 2 |

ASK ALL:

BIDENC3

As you may know, the Biden administration has proposed a plan to rebuild the country's infrastructure in ways that are aimed at reducing the effects of global climate change.

Overall, do you think the policies in this proposal will...

Apr 20-29,
2021

| | |
|----|---|
| 50 | Help the U.S. economy |
| 30 | Hurt the U.S. economy |
| 18 | Make no difference for the U.S. economy |
| 2 | No answer |

ASK ALL:

GRNINFRA

Which of the following statements comes closer to your view, even if neither is exactly right?

A federal government proposal to change building standards so that new construction will better withstand extreme weather events is... **[RANDOMIZE ORDER OF RESPONSE 1 AND 2]**Apr 20-29,
2021

| | |
|----|--|
| 75 | A good idea because the country's building standards need to be upgraded to better deal with the effects of extreme weather events |
| 23 | A bad idea because it could increase costs and cause delays in important building projects |
| 3 | No answer |

ASK ALL:

TALKCC

Thinking about the people you talked with over the past few weeks, whether in person, over the phone, or online...

How often, if ever, have you discussed the need for action on global climate change?

Apr 20-29,
2021

| | |
|----|-----------------------|
| 3 | Nearly every day |
| 15 | A few times each week |
| 38 | Once or twice |
| 43 | Never |
| 1 | No answer |

ASK ALL:

CCCNFLCT

When you talk with someone you DISAGREE with about the need for action on global climate change, do you generally find it to be...

Apr 20-29,
2021

| | |
|----|------------------------------|
| 40 | A difficult conversation |
| 57 | Not a difficult conversation |
| 4 | No answer |

ASK ALL:

CCACT

Has a friend or family member ever personally encouraged you to become more involved in efforts to reduce the effects of global climate change?

Apr 20-29,
2021

| | |
|----|--------------------------------|
| 26 | Yes, I have been encouraged |
| 72 | No, I have not been encouraged |
| 2 | No answer |

ASK ALL:

CCCRTQ

Has a friend or family member ever personally criticized you for not doing enough to help with efforts to reduce the effects of global climate change?

Apr 20-29,
2021

| | |
|----|--------------------------------|
| 13 | Yes, I have been criticized |
| 85 | No, I have not been criticized |
| 2 | No answer |

ASK ALL:

ENGACTION

Thinking about global climate change, here's a list of activities some people do and others do not. Please indicate if you have done each of the following activities in the past year. **[RANDOMIZE ITEMS]**

| | Yes, have done this in the past <u>year</u> | No, have not done this in the <u>past year</u> | <u>No answer</u> |
|---|---|--|------------------|
| a. Attended a protest or rally to show support for addressing climate change Apr 20-29, 2021 | 6 | 93 | 1 |
| b. Volunteered for an activity focused on addressing climate change Apr 20-29, 2021 | 10 | 89 | 1 |
| c. Donated money to an organization focused on addressing climate change Apr 20-29, 2021 | 16 | 83 | 1 |
| d. Contacted an elected official to urge them to address climate change Apr 20-29, 2021 | 10 | 89 | 1 |

ENGACTION SUMMARY TABLE**BASED ON TOTAL:**

Apr 20-29,
2021

| | |
|----|--|
| 24 | NET I have done at least one of these four activities (Attended a protest or rally, volunteered for an activity, donated money, or contacted an elected official, to address climate change) |
| 74 | I have done none of these four activities |
| 1 | No answer to any of ENGACTIONa-d |

ASK FORM 1 [N=6,860]:

ACTYGA

When you see younger adults urging action on global climate change, does it generally make you...

Apr 20-29,
2021

| | |
|----|--|
| 42 | More interested in addressing climate change |
| 13 | Less interested in addressing climate change |
| 44 | Makes no difference to me |
| 1 | No answer |

ASK FORM 2 [N=6,889]:

ACTLY When you see people like you urging action on global climate change, does it generally make you...

Apr 20-29,
2021

| | |
|----|--|
| 39 | More interested in addressing climate change |
| 14 | Less interested in addressing climate change |
| 45 | Makes no difference to me |
| 2 | No answer |

ASK IF USE SOCIAL MEDIA (XSNSUSEW88=1 OR SNSUSE_W89=1) [N=9,946]:

CONTYPE Have you seen any content on social media in the past few weeks that focused on the following? **[RANDOMIZE ITEMS]**

| | Yes, I have seen this on <u>social media</u> | No, I have not seen this on <u>social media</u> | No <u>answer</u> |
|--|--|---|---------------------|
| a. Personal finance Apr 20-29, 2021 | 52 | 47 | 1 |
| b. Popular culture or celebrities Apr 20-29, 2021 | 75 | 24 | 1 |
| c. Food or recipes Apr 20-29, 2021 | 83 | 17 | <1 |
| d. Encouraging people to get a coronavirus vaccine Apr 20-29, 2021 | 91 | 9 | <1 |
| e. The situation at the U.S. border with Mexico Apr 20-29, 2021 | 58 | 41 | <1 |
| f. Addressing global climate change Apr 20-29, 2021 | 46 | 54 | 1 |
| g. Supporting racial justice Apr 20-29, 2021 | 86 | 13 | 1 |

ASK IF USE SOCIAL MEDIA (XSNSUSEW88=1 OR SNSUSE_W89=1) [N=9,946]:

CLIMFEEL Thinking about the most recent time you saw content on social media about addressing global climate change, did it make you feel... **[RANDOMIZE ITEMS]**

| | <u>Yes</u> | <u>No</u> | <u>No answer</u> |
|---|------------|-----------|------------------|
| a. Anxious about the future Apr 20-29, 2021 | 51 | 48 | 1 |
| b. Angry that not enough is being done to address climate change Apr 20-29, 2021 | 38 | 61 | 2 |
| c. Confident we can reduce the effects of climate change Apr 20-29, 2021 | 45 | 53 | 2 |
| d. Annoyed there is so much attention on addressing climate change Apr 20-29, 2021 | 26 | 73 | 2 |
| e. Motivated to learn more about climate change issues Apr 20-29, 2021 | 46 | 52 | 2 |

ASK IF USE SOCIAL MEDIA (XSNSUSEW88=1 OR SNSUSE_W89=1) [N=9,946]:

CLIMSEEK Which statement best describes how you see content on social media that is focused on global climate change? **[RANDOMIZE ORDER OF RESPONSE 1 AND 2]**

When I see content on social media about global climate change...

Apr 20-29,
2021

| | |
|----|--|
| 11 | I mostly see it because I'm looking for it |
| 87 | I mostly see it because I happen to come across it |
| 1 | No answer |

ASK IF USE SOCIAL MEDIA (XSNSUSEW88=1 OR SNSUSE_W89=1) [N=9,946]:

FOLCLIM On social media, do you follow an account, page, organization or person who focuses on the need for action on global climate change?

Apr 20-29,
2021

| | |
|----|-------------------|
| 21 | Yes, at least one |
| 78 | No, none |
| 1 | No answer |

ASK IF USE SOCIAL MEDIA (XSNSUSEW88=1 OR SNSUSE_W89=1) [N=9,946]:

CCSOACT On social media, have you done the following in the past few weeks? **[RANDOMIZE ITEMS]**

| | <u>Yes, I have done this</u> | <u>No, I have not done this</u> | <u>No answer</u> |
|---|--------------------------------------|---|------------------|
| a. Interacted with posts about the need for action on global climate change (such as liking or commenting) Apr 20-29, 2021 | 21 | 78 | 1 |
| b. Posted or shared a post about the need for action on global climate change Apr 20-29, 2021 | 12 | 87 | 1 |

CCSOACT SUMMARY TABLE**BASED ON SOCIAL MEDIA USERS:**

Apr 20-29,
2021

| | |
|----|--|
| 31 | NET I do at least one of: following an account, page, organization or person who focuses on need for climate action; in the past few weeks, I have interacted with posts or posted/shared a post about the need for action on climate change |
| 68 | I do none of these |
| 1 | No answer to any of FOLCLIM, CCSOACTa-b |

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE