



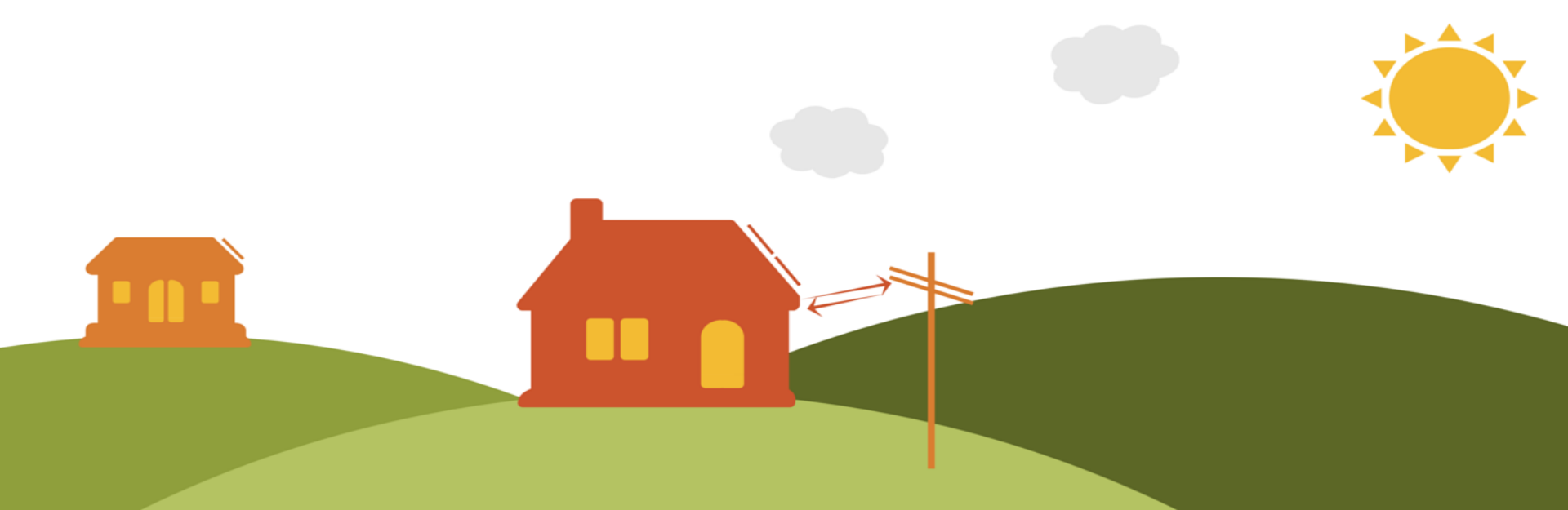
Clean Energy National Online Survey

Key findings from a national online survey of
1,000 actual voters, conducted December 16-22, 2020.



Project #201002





Methodology

Public Opinion Strategies is pleased to present the key findings from an online survey of 1,000 actual voters nationwide, conducted December 16-22, 2020, with a credibility interval of $\pm 3.53\%$.

Glen Bolger was the principal researcher. Gabe Imber was the project director, and Torie Bolger provided analytical support.

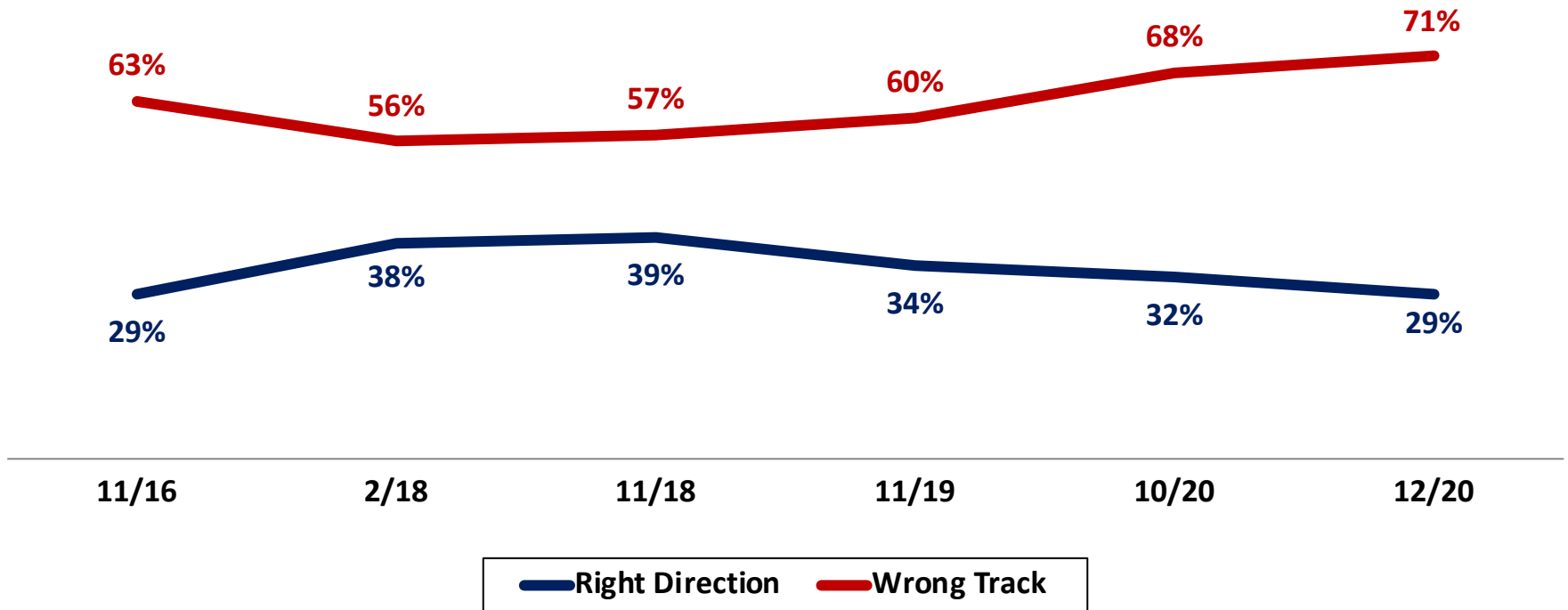


Political Environment

Voters continue to be extremely pessimistic about the direction of the country.

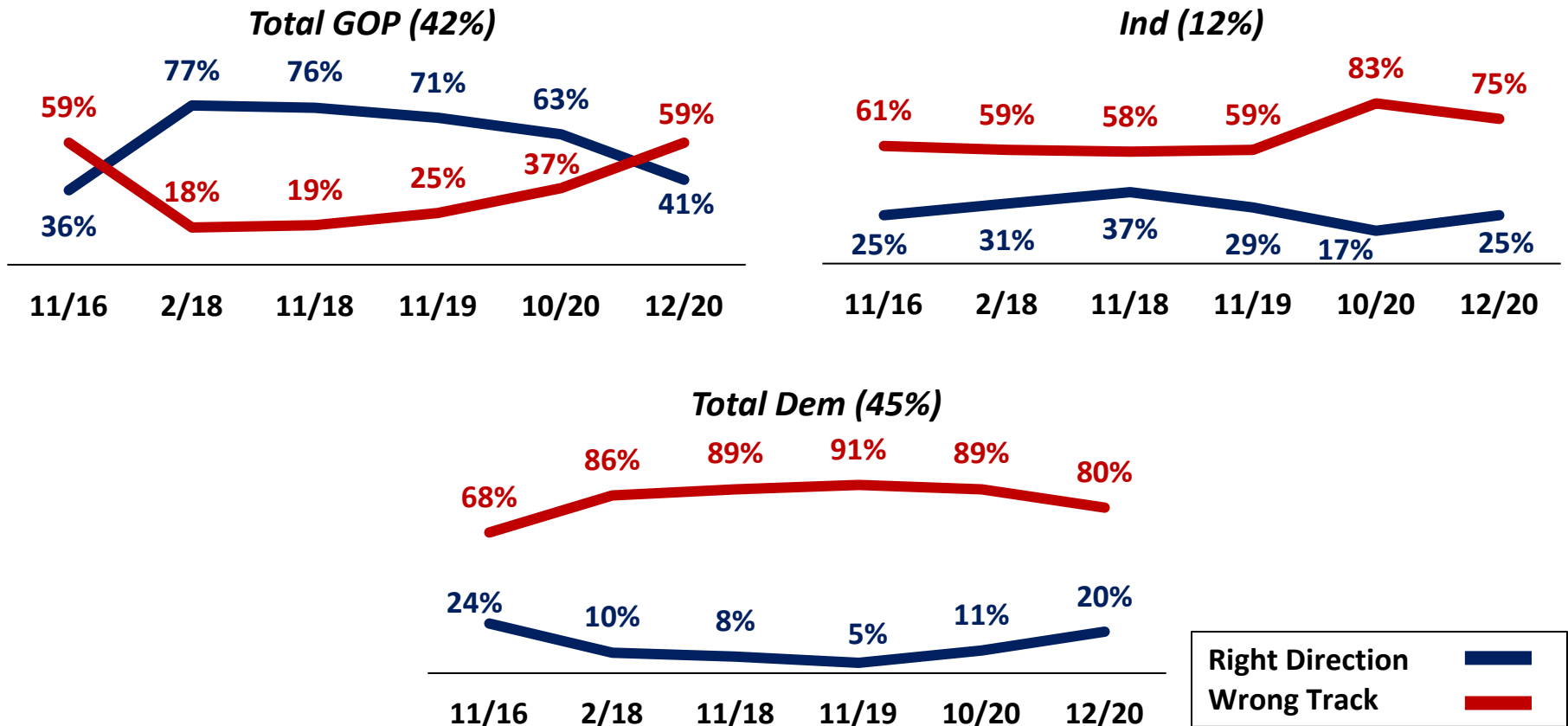
“Would you say that things in the country are going in the right direction, or have they pretty seriously gotten off on the wrong track?”

RCP National Average	
Right Direction	29%
Wrong Track	64%



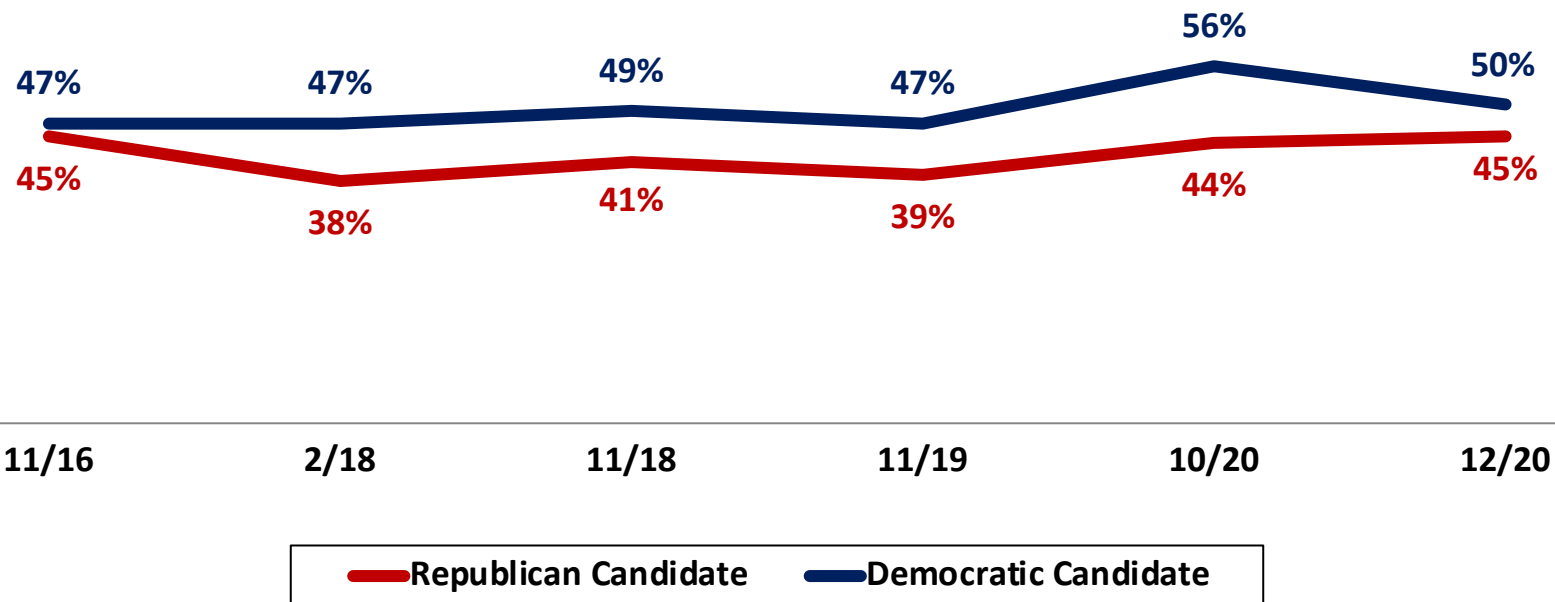
After Trump's loss, a majority of Republicans are now negative. Inds and Dems remain pessimistic.

National Mood Trend by Party



Half the voters voted for the Democratic candidate from their Congressional district.

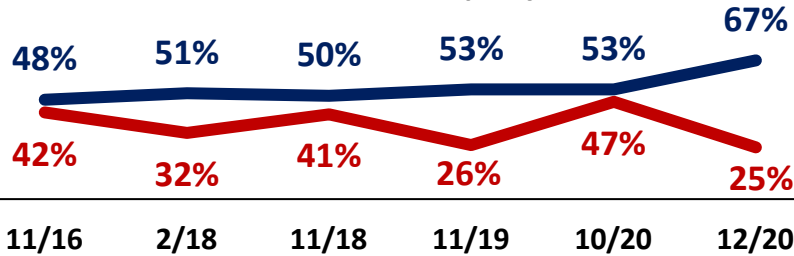
“Thinking about the recent elections... For whom did you vote in the election for U.S. Congress in your district... the Republican candidate ...or... the Democratic candidate?”



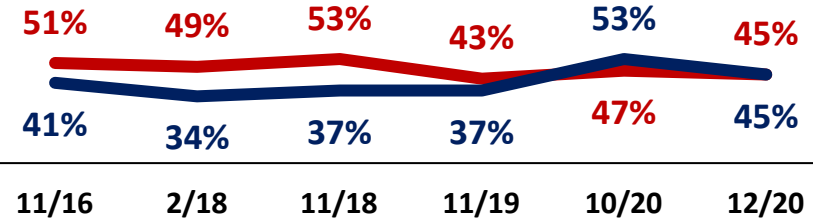
There is a slight generation gap. Older voters were more likely to vote Republican than Democrat.

Generic Ballot Trend by Gender/Age

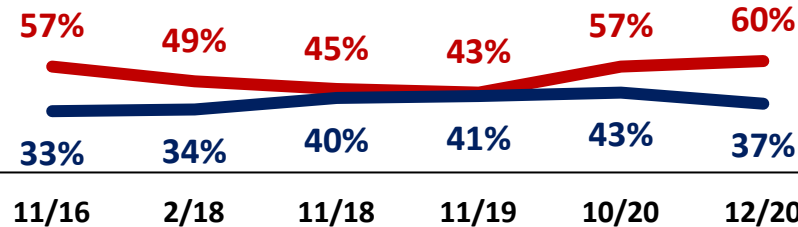
Men 18-34 (8%)



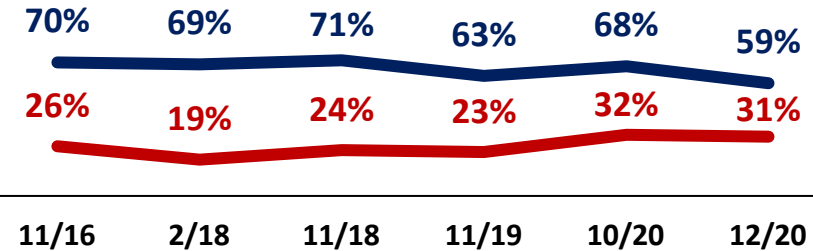
Men 35-54 (15%)



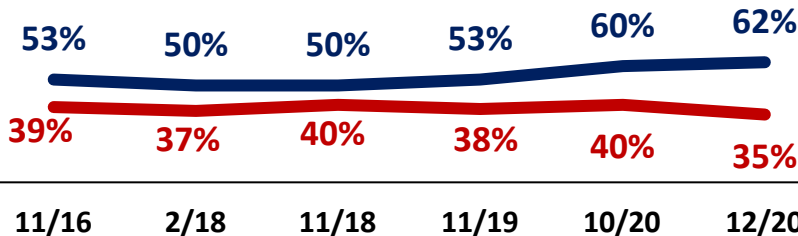
Men 55+ (26%)



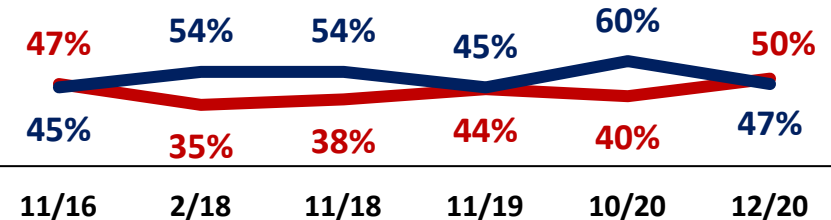
Women 18-34 (14%)



Women 35-54 (17%)



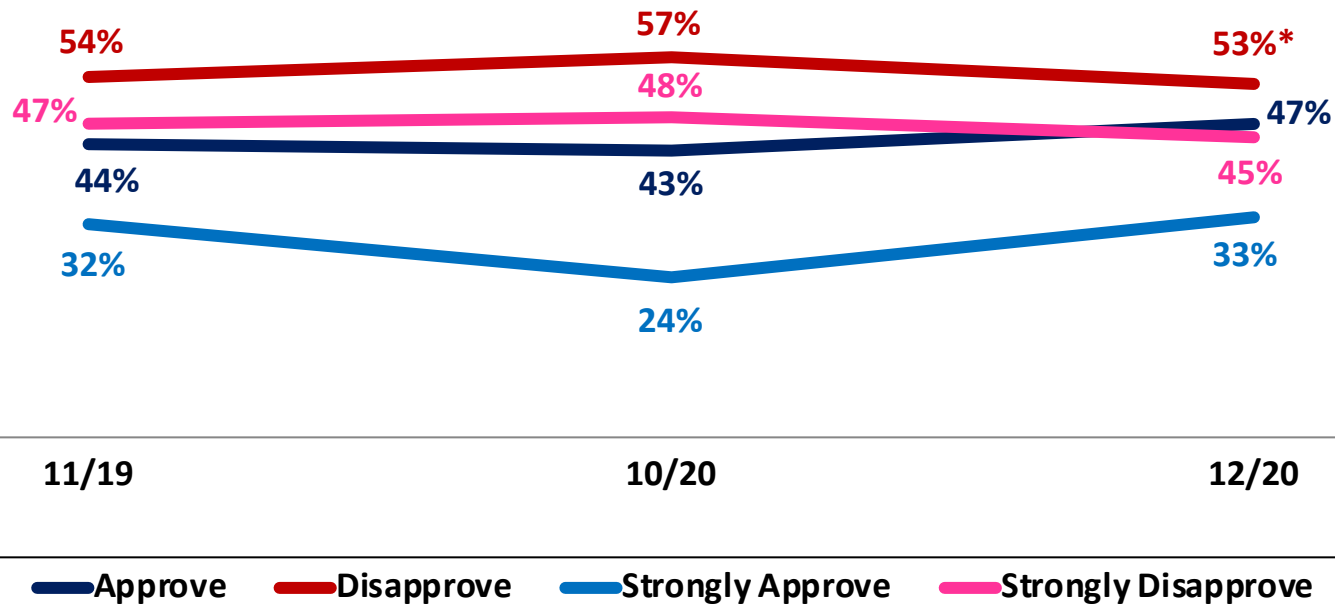
Women 55+ (20%)



Republican Candidate
Democratic Candidate

President Trump's approval rating continues to be underwater.

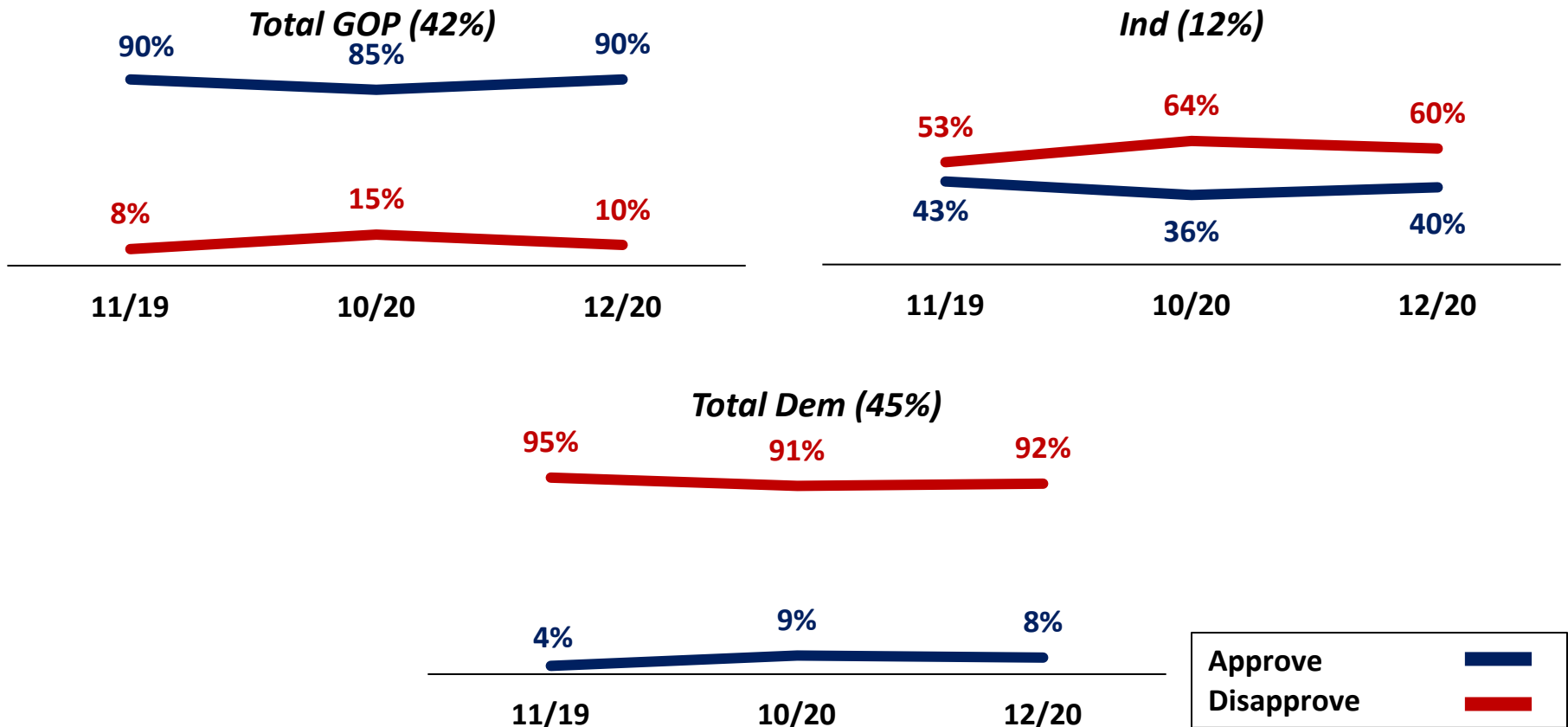
"Do you approve or disapprove of the job Donald Trump is doing as President?"



*Denotes Rounding.

Not surprisingly, GOPers approve of the President. Independents and Democrats remain negative.

Trump Approval Trend by Party



Presidential Ballot Test

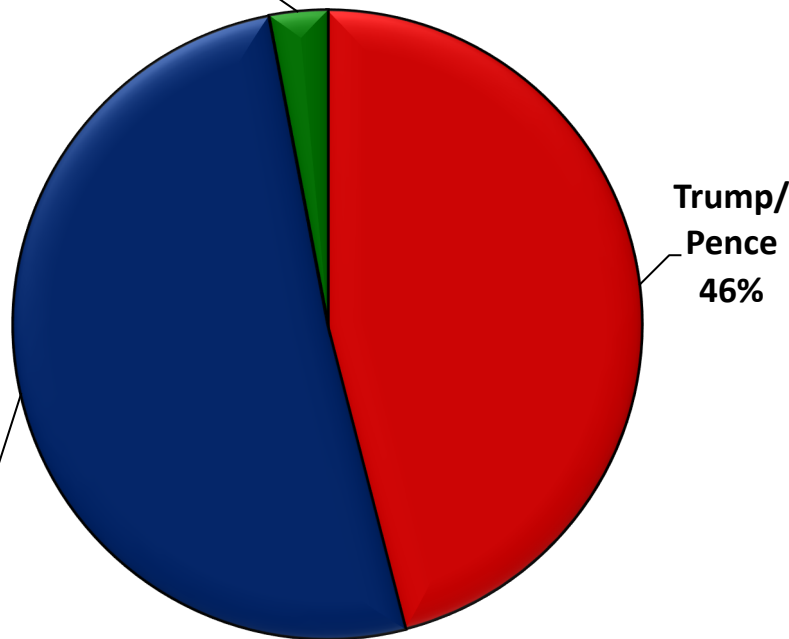
This mirrors the final result. Trump lost Independents by double digits.

“And, for whom did you vote in the November Presidential election... Donald Trump and Mike Pence, Republicans, Joe Biden and Kamala Harris, Democrats, ...or... a third party candidate?”

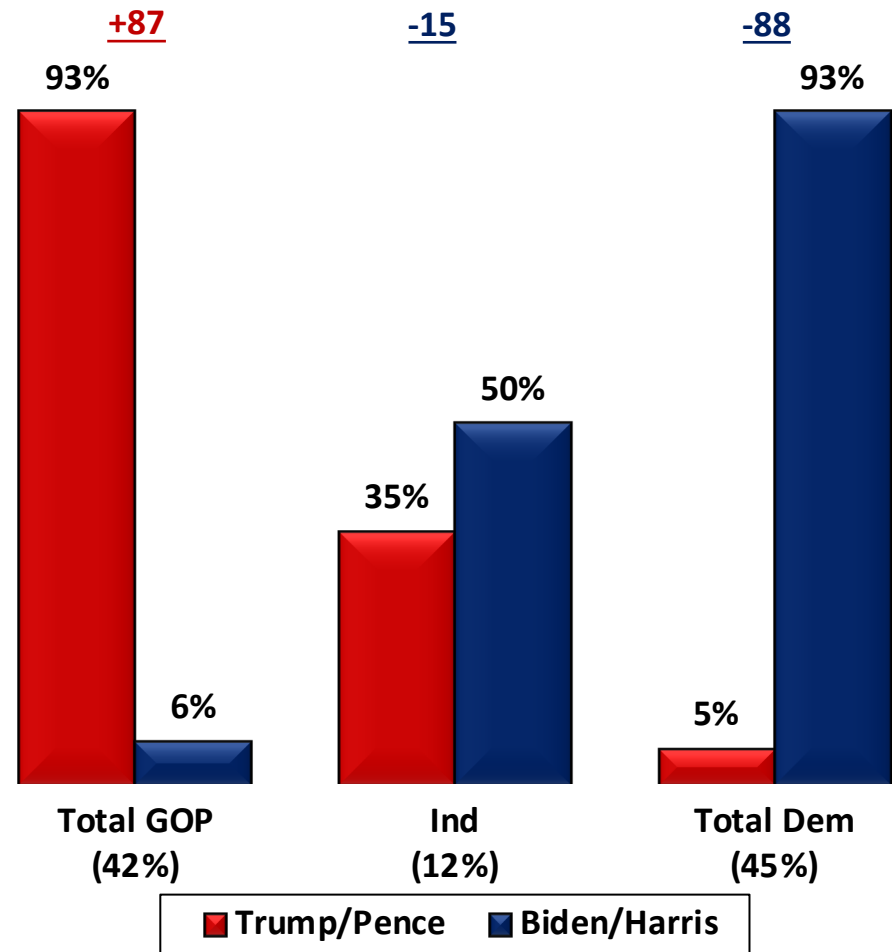
Overall

2020 Pres Elec	
Total Trump	46.9%
Total Biden	51.4%

Third Party
Candidate
3%



By Party

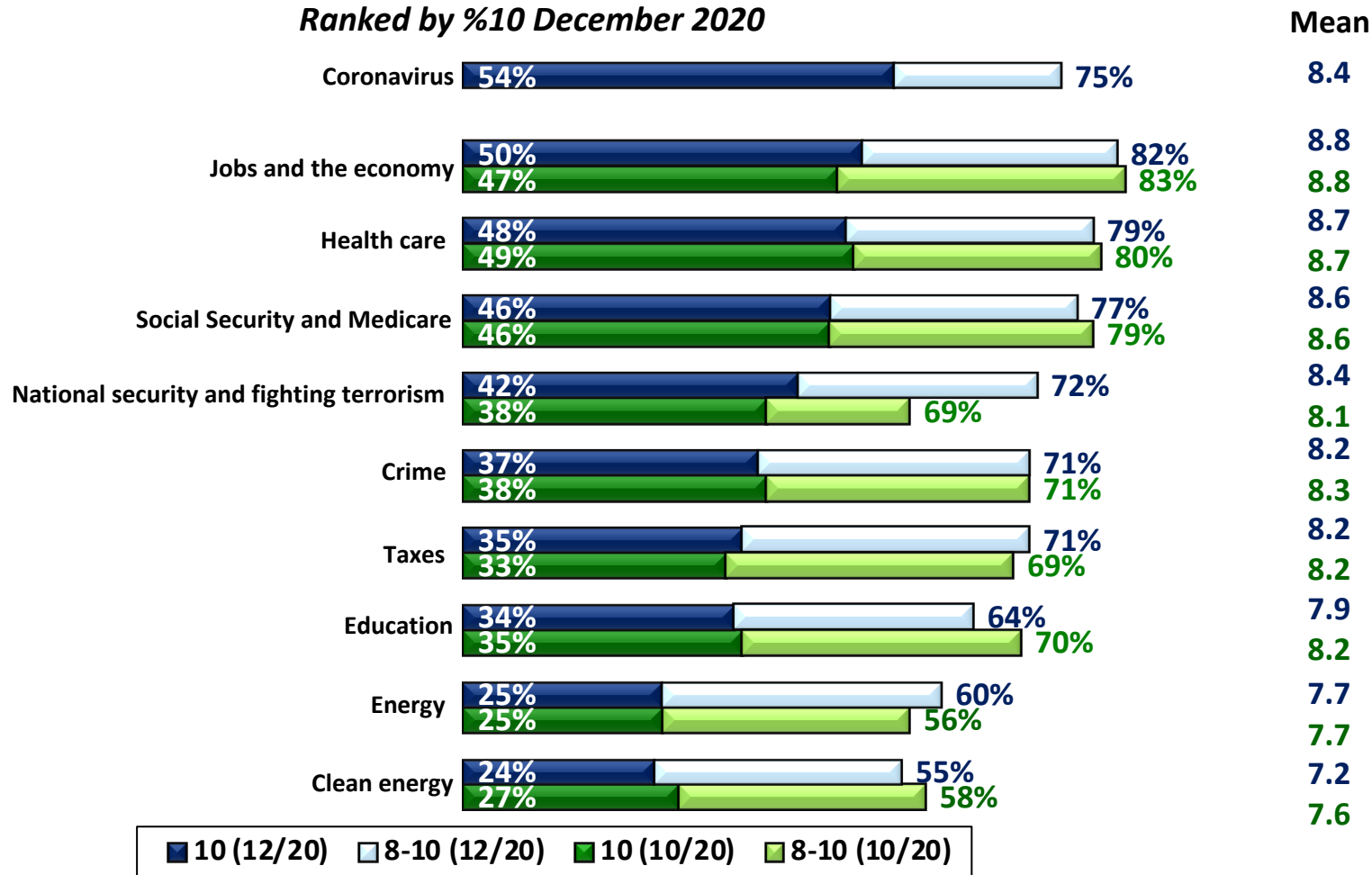


Issues

Energy and clean energy issues continue to rank at the bottom of the issue agenda.

“Thinking now about issues, please indicate how important each of the following issues is to you on a scale of one to ten, where one means that issue is not at all important to you and ten means that issue is extremely important to you. Of course, you can choose any number between one and ten.”

Ranked by %10 December 2020

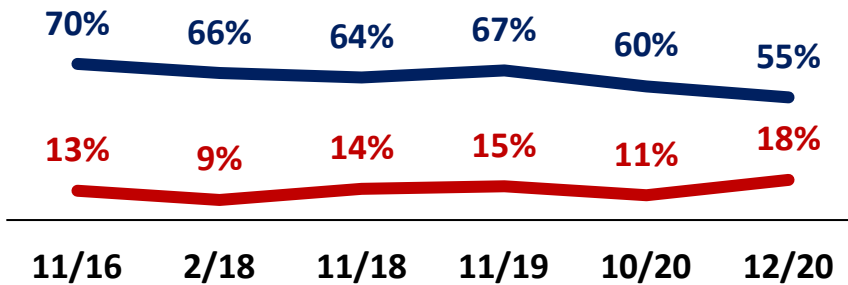


Domestic Energy Production

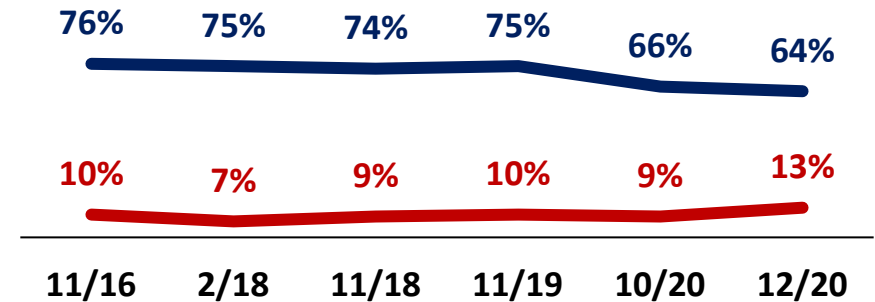
A majority of voters continue to believe the U.S. should put more emphasis on solar, wind, and hydropower energy sources.

"Still thinking about this...Do you think that, as a country, the United States should put more emphasis, less emphasis, or about the same emphasis as it does now on producing domestic energy from each of the following sources..."

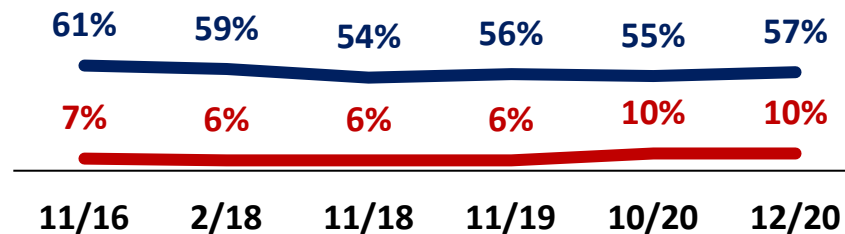
Wind



Solar Power



Hydropower

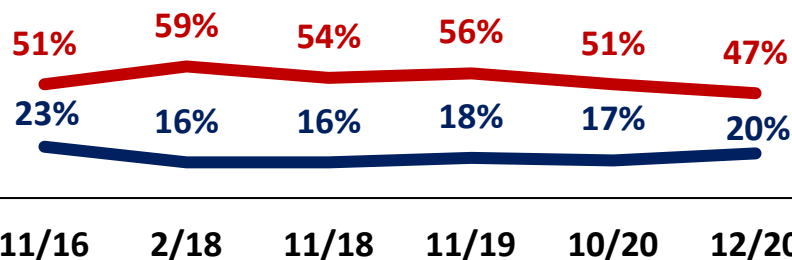


More Emphasis 
Less Emphasis 

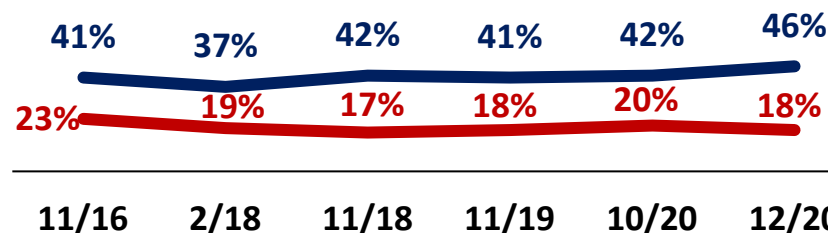
Voters remain divided on nuclear energy, but are not as against using coal as in the past.

“Still thinking about this...Do you think that, as a country, the United States should put more emphasis, less emphasis, or about the same emphasis as it does now on producing domestic energy from each of the following sources...”

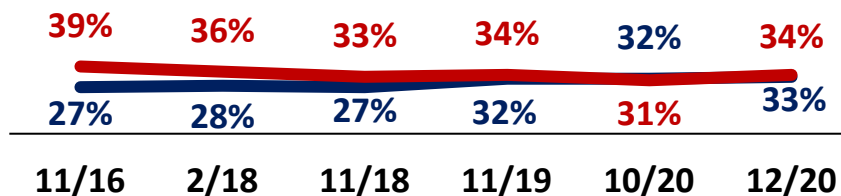
Coal



Natural Gas



Nuclear Power



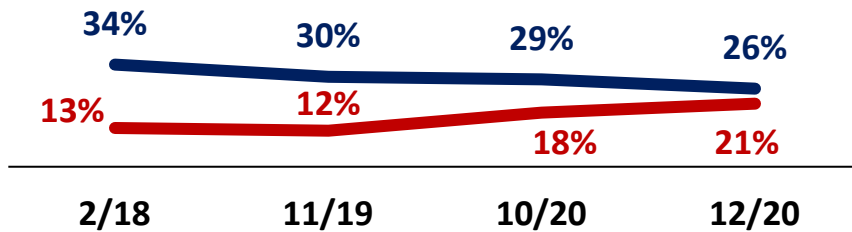
More Emphasis
Less Emphasis



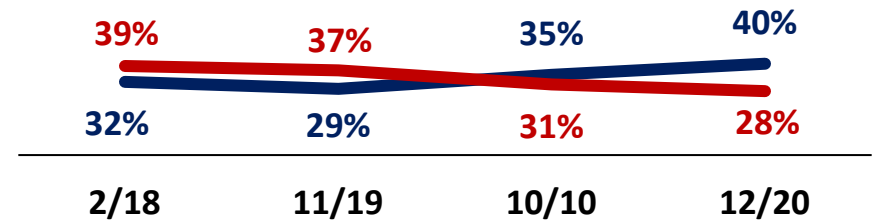
Support for biomass is slowly, steadily declining. Clean coal is rebounding in the eye of the public.

“Still thinking about this...Do you think that, as a country, the United States should put more emphasis, less emphasis, or about the same emphasis as it does now on producing domestic energy from each of the following sources...”

Biomass



Clean Coal



More Emphasis ■
Less Emphasis ■

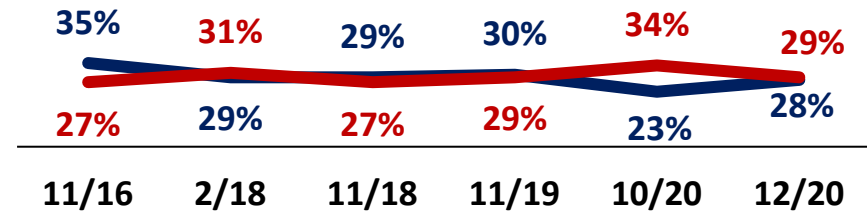
GOPers are not as high on wind and solar power energy. They remain split on their views of coal.

Energy Emphasis Trend by GOPers (42%)

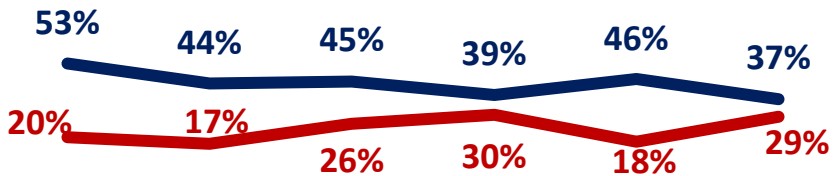
Coal

More Emphasis
Less Emphasis

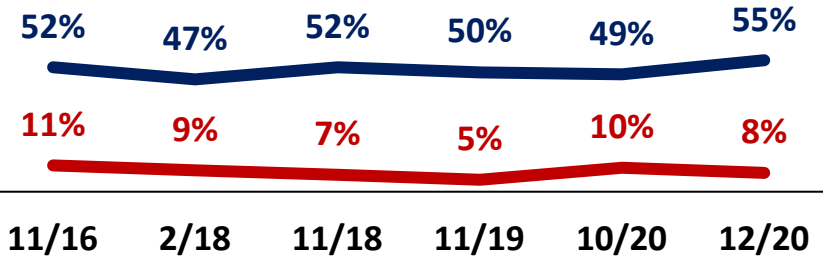
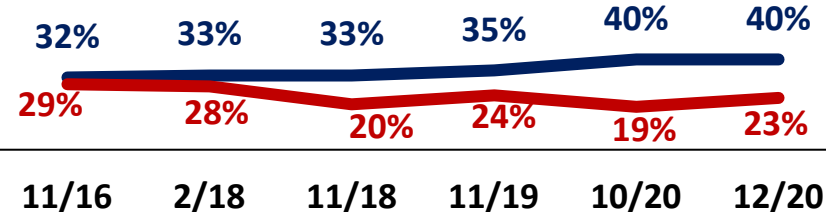
Natural Gas



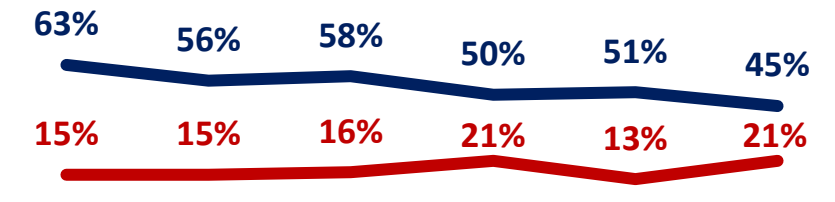
Wind



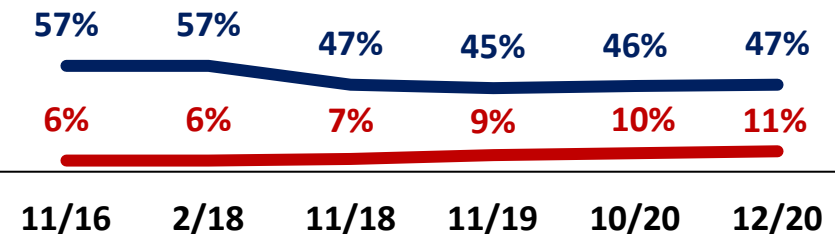
Nuclear Power



Solar Power



Hydropower



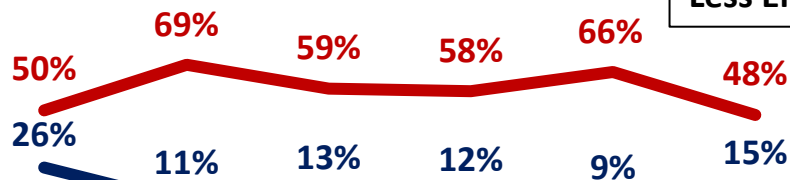
Emphasis on wind and solar power has also dropped among Independents.

Energy Emphasis Trend by Inds (12%)

Coal

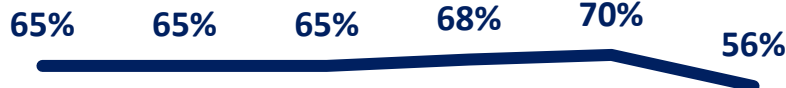
More Emphasis
Less Emphasis

Natural Gas



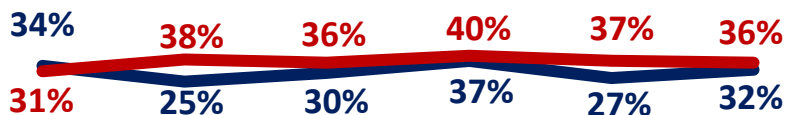
11/16 2/18 11/18 11/19 10/20 12/20

Wind

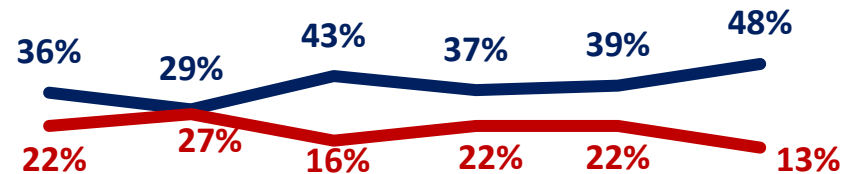


11/16 2/18 11/18 11/19 10/20 12/20

Nuclear Power

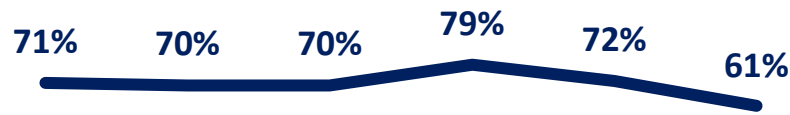


11/16 2/18 11/18 11/19 10/20 12/20



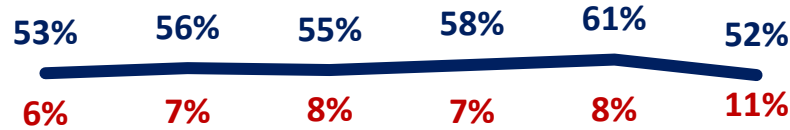
11/16 2/18 11/18 11/19 10/20 12/20

Solar Power



11/16 2/18 11/18 11/19 10/20 12/20

Hydropower

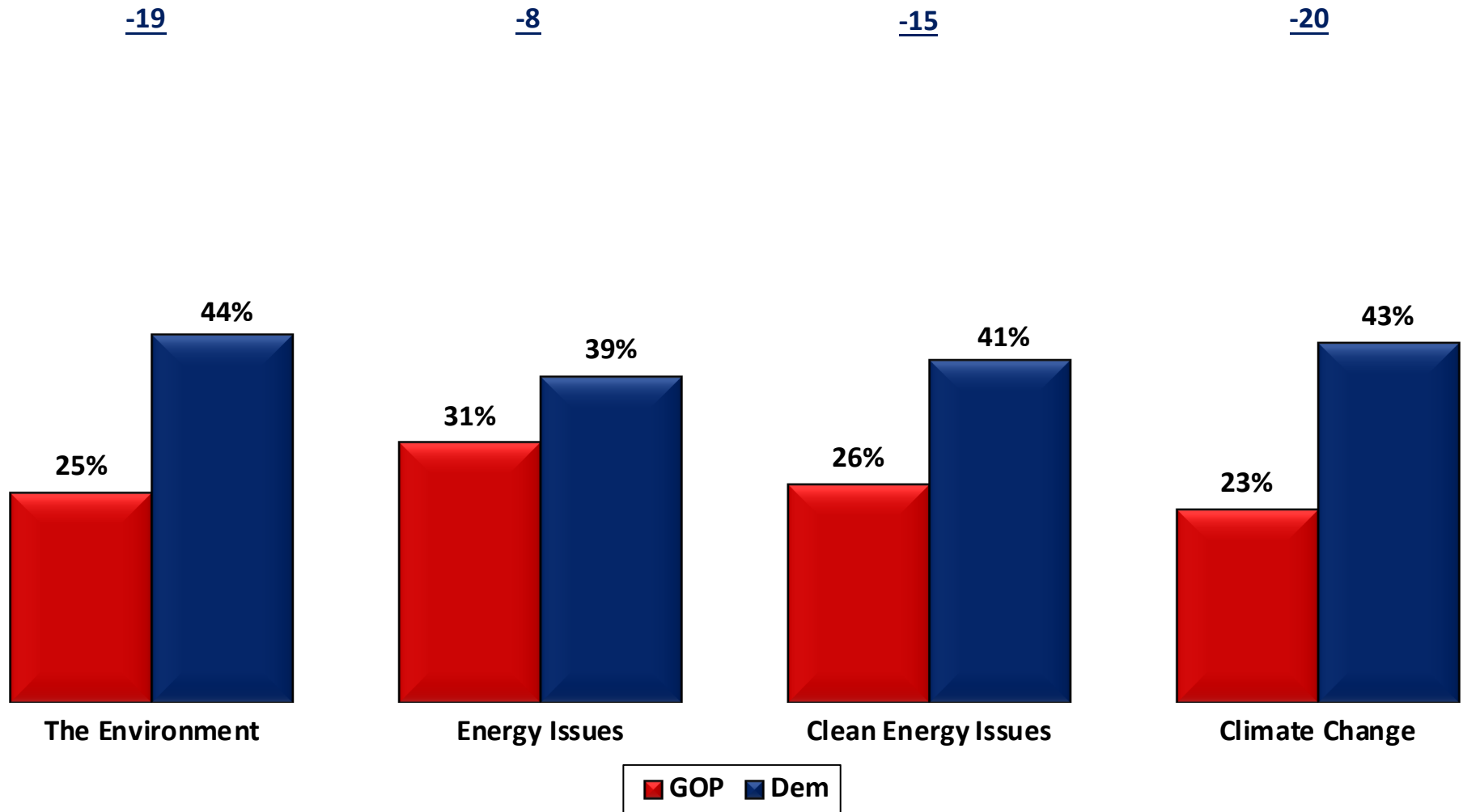


11/16 2/18 11/18 11/19 10/20 12/20

Party Issue Handling

Voters trust the Democratic Party with all these energy and environmental issues over the GOP.

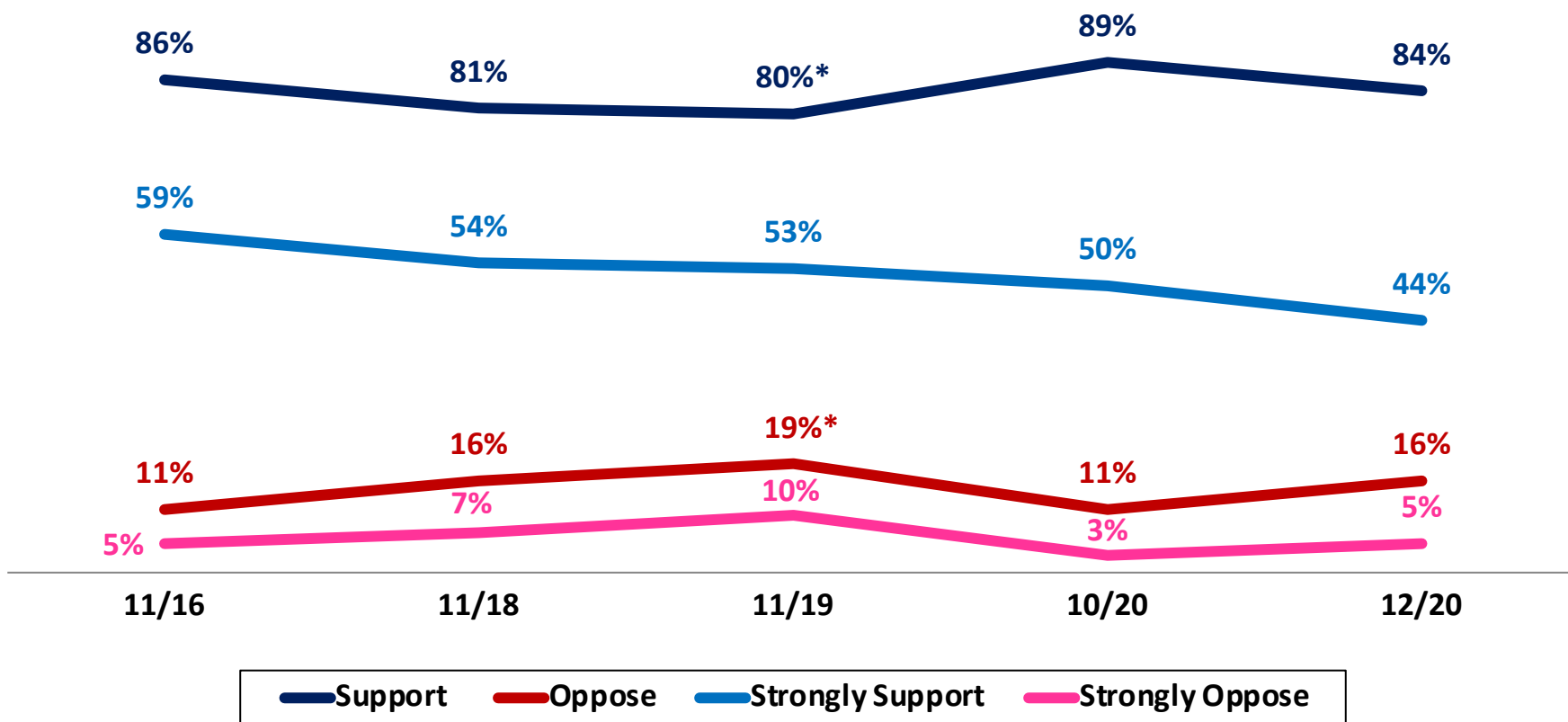
"Now please read the list of issues below and indicate which party you think would do a better job: the Democratic Party, the Republican Party, or both about the same? If you think that neither would do a good job, please indicate that below."



Clean Energy

Over 80% of voters continue to support the government taking action to develop and accelerate the use of clean energy.

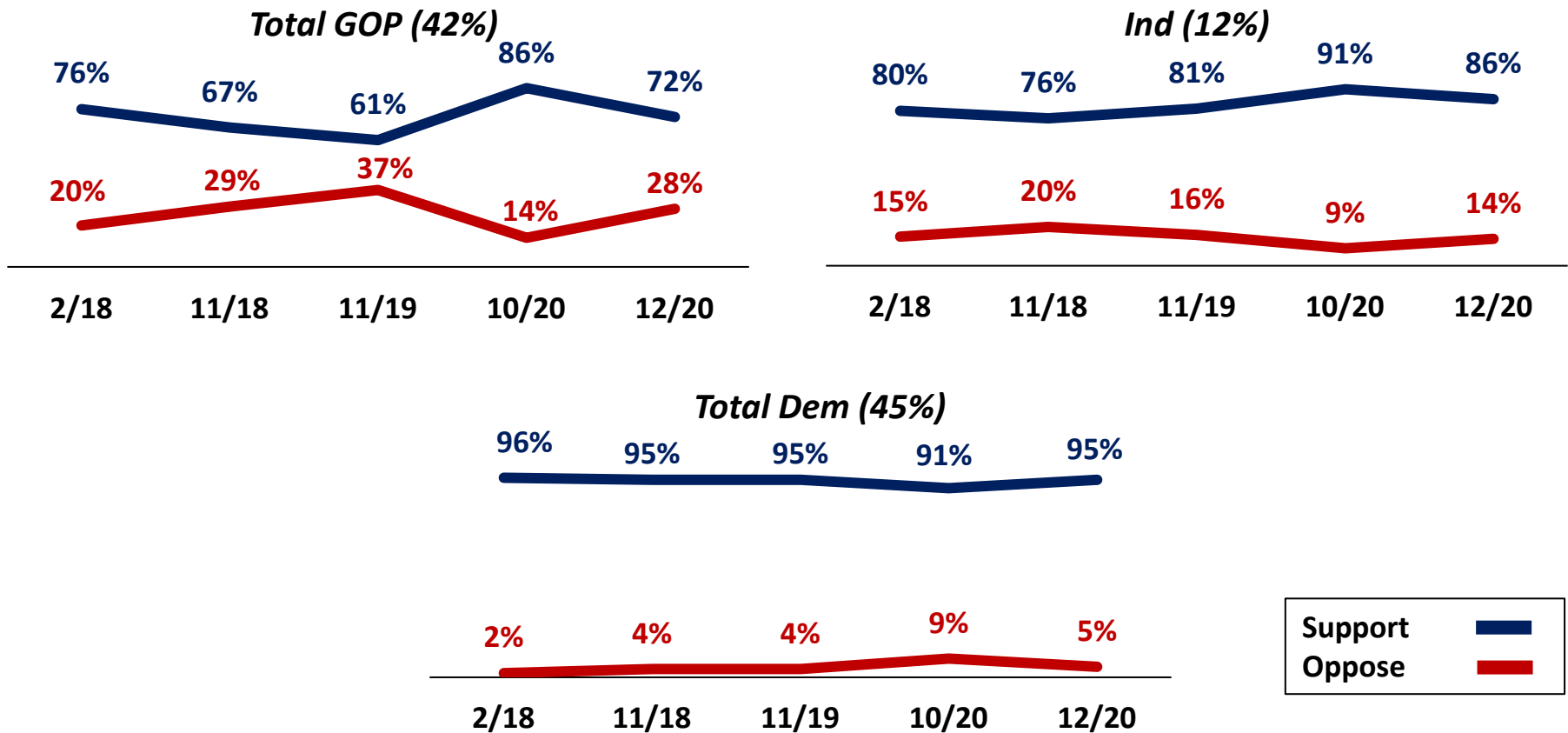
“And, would you say you support or oppose the government taking action to accelerate the development and use of clean energy in the United States?”



*Denotes Rounding.

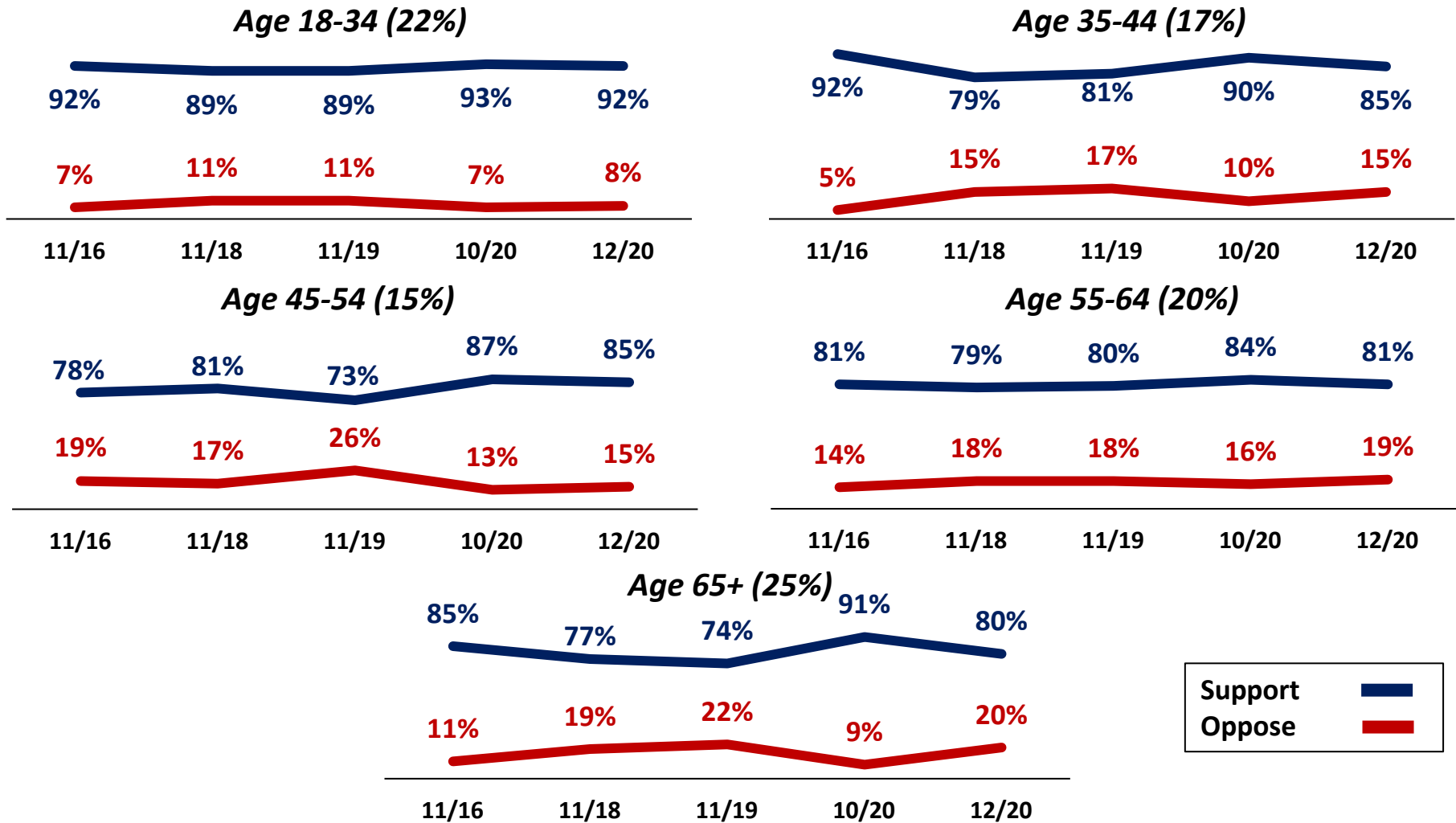
This sentiment is supported across party lines, with Democrats paving the way.

Government Action on Clean Energy Trend by Party



An overwhelming majority of voters, regardless of age, back government action on the use of clean energy.

Government Action on Clean Energy Trend by Age



Six-in-ten voters prefer a free-market approach to providing more clean energy production.

"To increase clean energy production, would you prefer..."

63%

Approaches like competition that allow markets and businesses to provide more clean energy production

20%

Government mandates, subsidies, and quotas

...Or...

17%

A price or tax put on carbon emissions

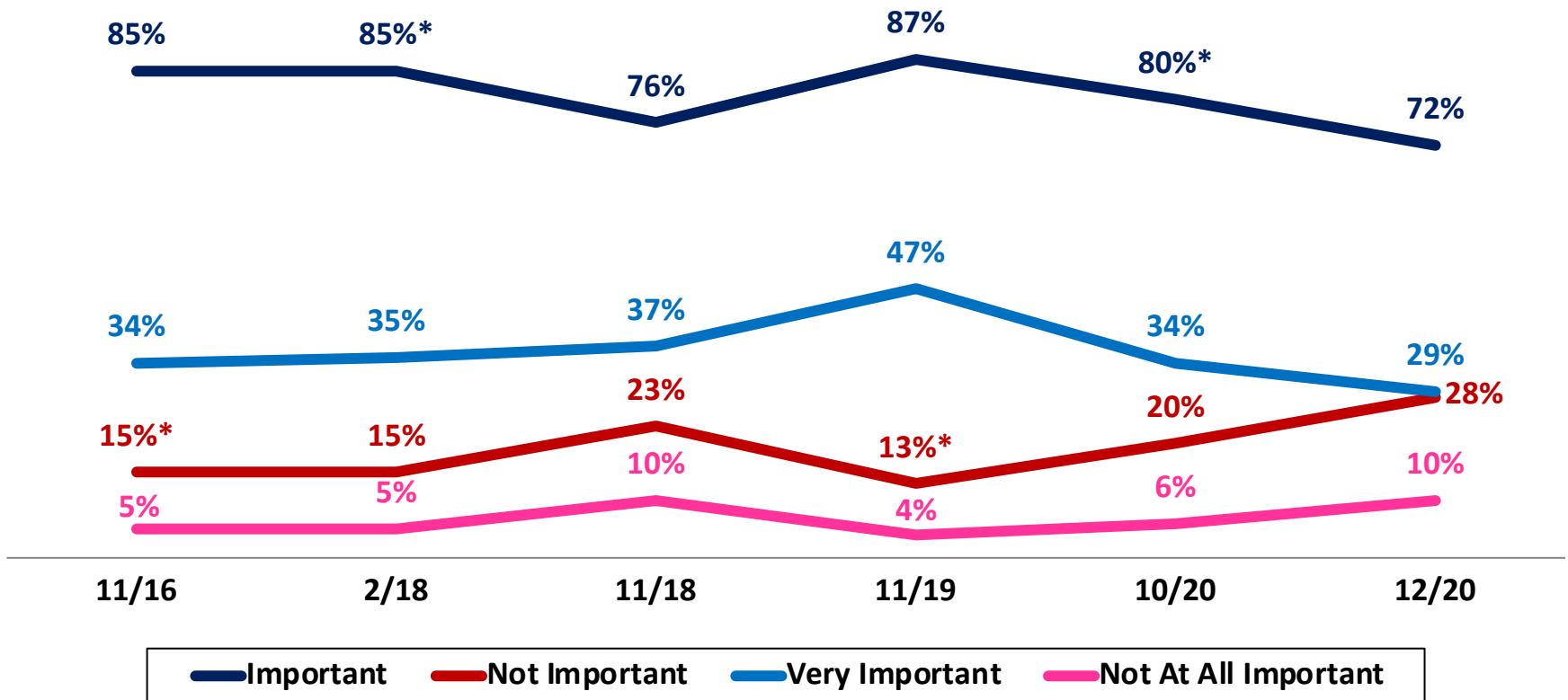
GOPers and Inds are in lockstep here, while Democrats are not as sold on competition incentives for clean energy production.

Increase Clean Energy Production by Party

	Overall	Total GOP (42%)	Ind (12%)	Total Dem (45%)
Competition	63%	79%	71%	45%
Government Mandates	20%	13%	13%	29%
Tax On Emissions	17%	8%	16%	25%

A clear majority of voters continue to say it is important that a candidate for political office shares their opinion on clean energy issues.

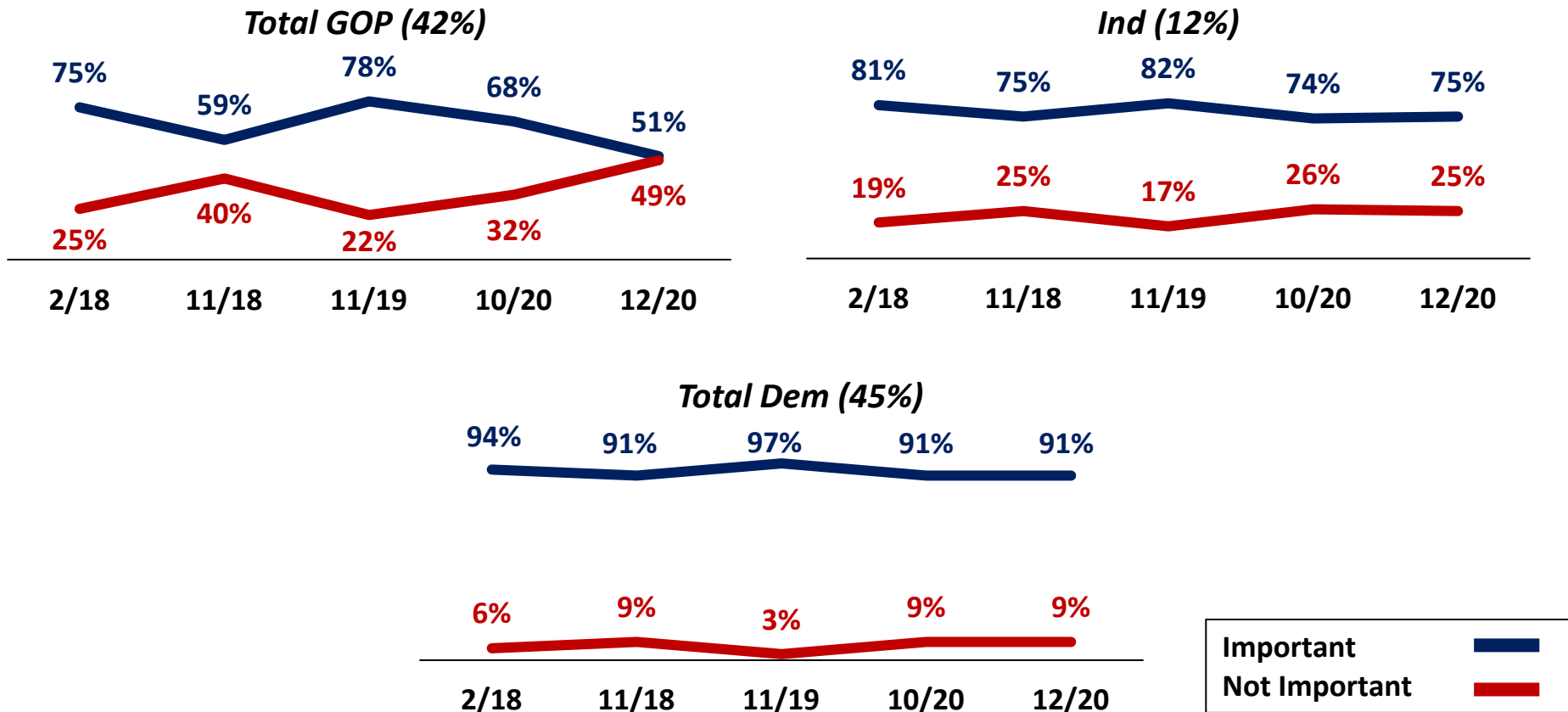
“And, how important is it to you that a candidate for political office share your opinion on clean energy issues? Is it...”



*Denotes Rounding.

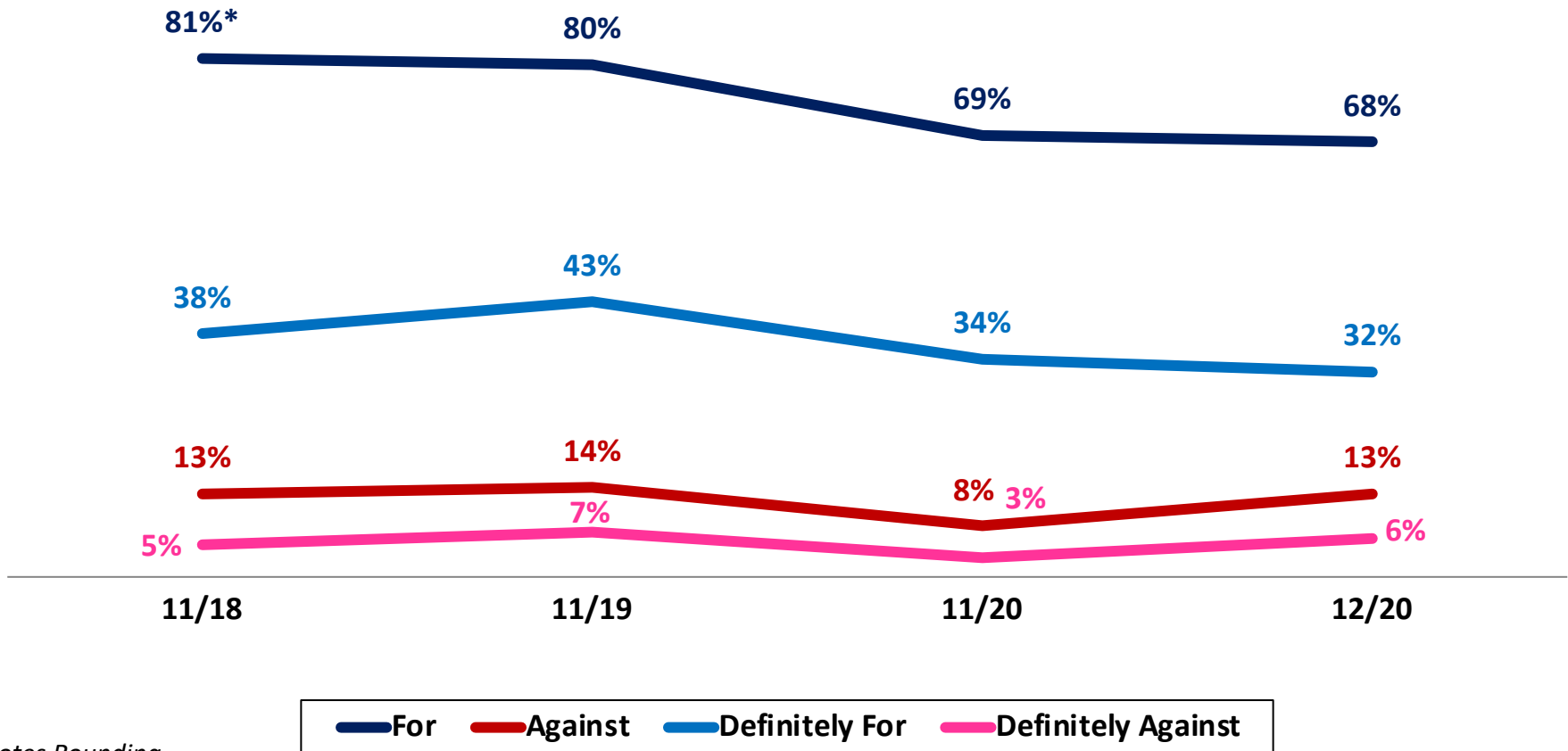
Republicans are now divided on whether it's important for them that a candidate shares their view on clean energy.

Clean Energy Importance Vote Trend by Party



There is steady support for a candidate who backs clean energy developments.

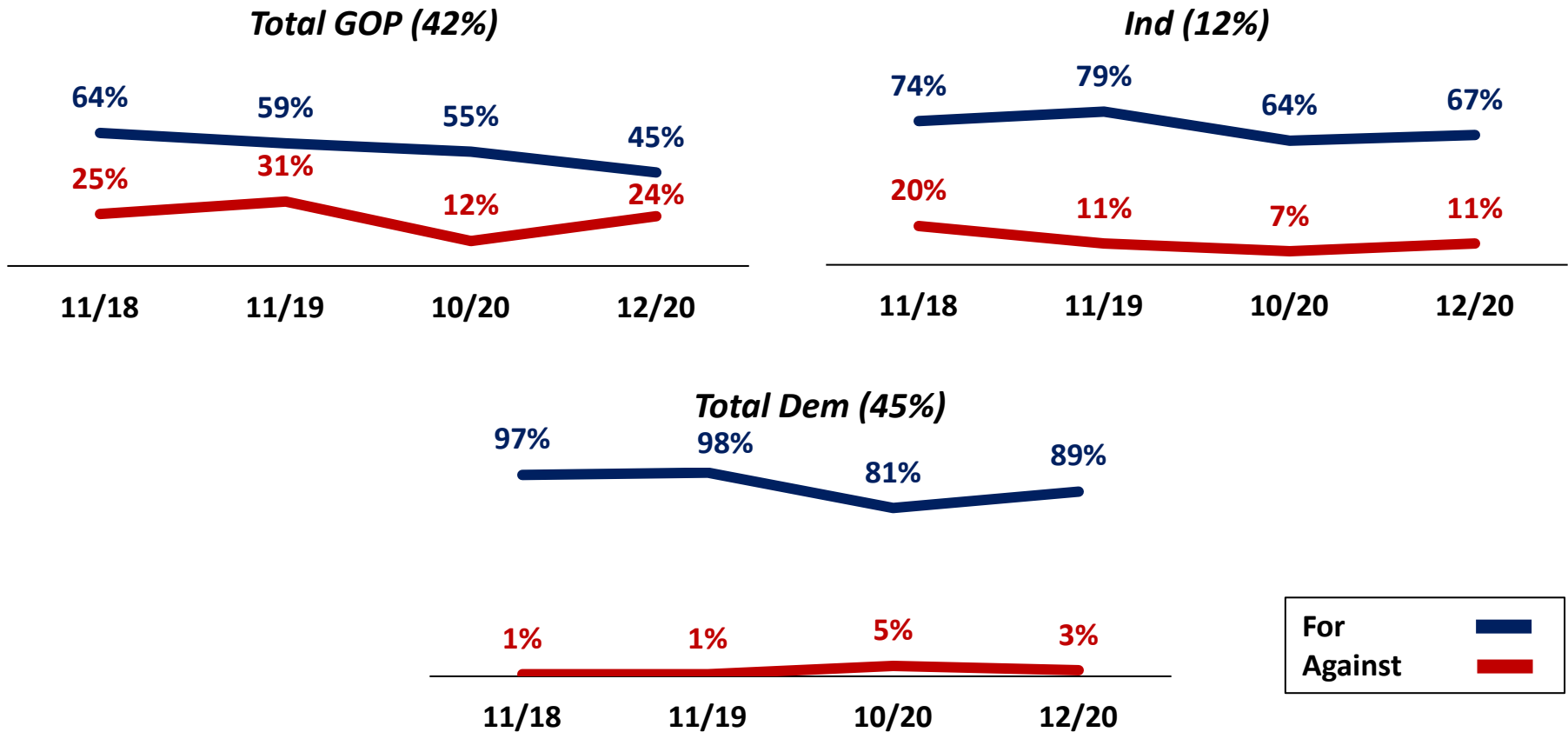
“Still thinking about clean energy... Thinking ahead to future elections... would you vote for or against elected officials or candidates who support clean energy development like solar and wind?”



*Denotes Rounding.

Support among Republicans continues to drop.

Would Vote for Candidates Who Support Clean Energy Trend by Party

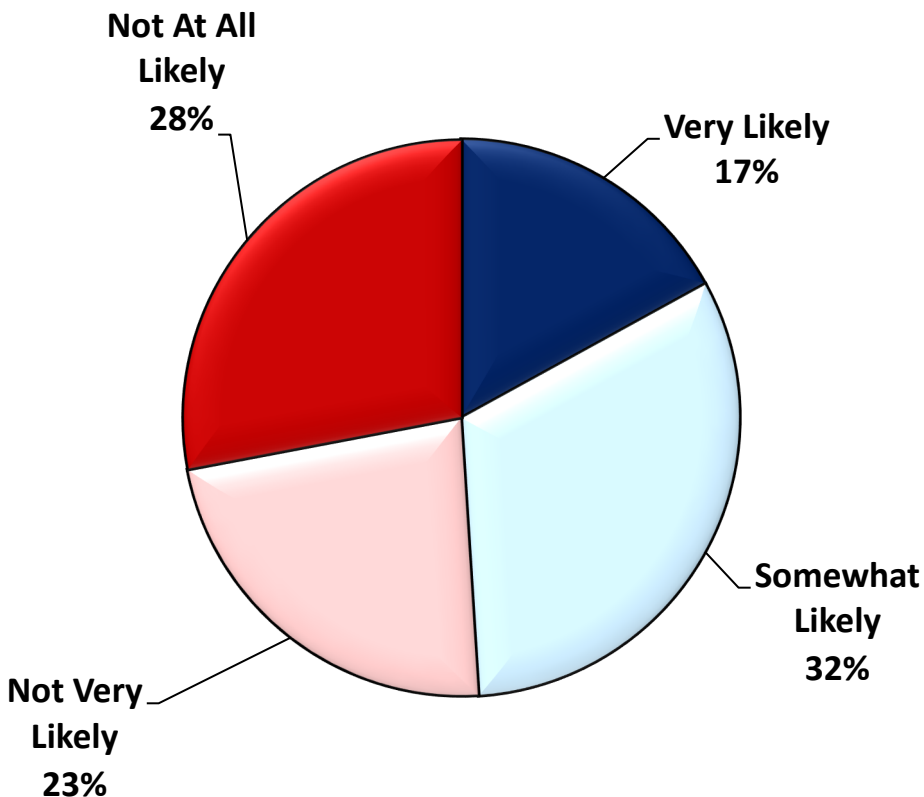


Voters are not likely to consider purchasing an electric vehicle.

"Thinking now about electric vehicles... When you make your next vehicle purchase, how likely are you to consider purchasing an electric vehicle..."

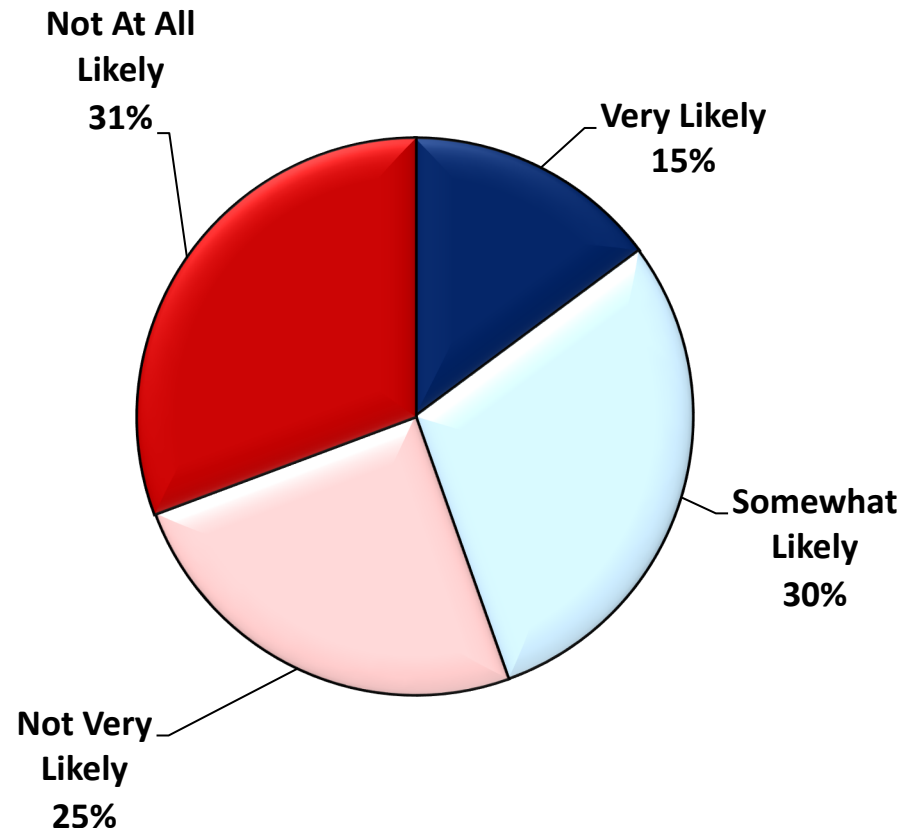
October 2020

Total Likely	48%*
Total Not Likely	52%*



December 2020

Total Likely	45%
Total Not Likely	55%*



**Denotes Rounding.*

Top Groups – Very Likely to Consider Purchasing Electric Vehicle

Top Groups – Very Likely (15%)

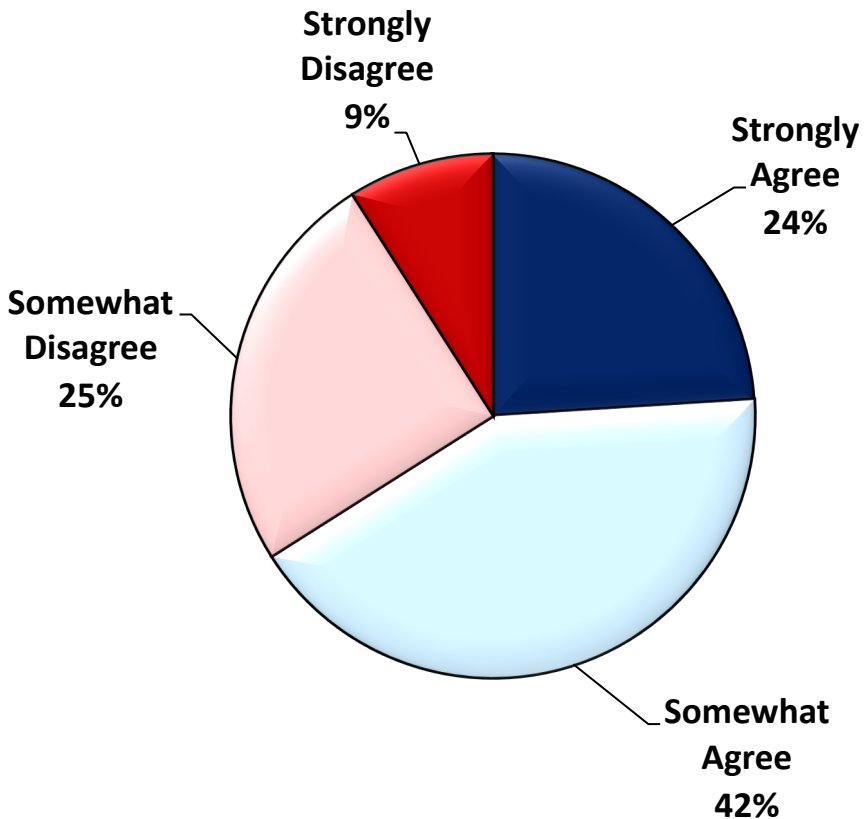
Men 18-34	32%
Liberal	27%
Dem Men	26%
Minority Men	24%
Age 18-34	24%
Dem 18-54	24%
Dem w/ Degree	24%
Base Dem	23%
White Dem	23%
Ind w/o Degree	22%
Conservative Dem	22%
Total Dem	21%
Hispanic	21%
Pacific Region	21%
West Region	20%
Total Non-White	20%
Age 35-44	20%
Women 18-34	20%
Men w/ Degree	20%
Men 35-54	19%
Mid-Atlantic Region	19%

As in October, two-thirds of voters agree nuclear energy should be prioritized as part of the clean energy mix.

"Thinking again about nuclear energy... Please read the following statement and indicate whether you agree or disagree with that statement: Nuclear energy should be included and prioritized as part of the country's clean energy mix."

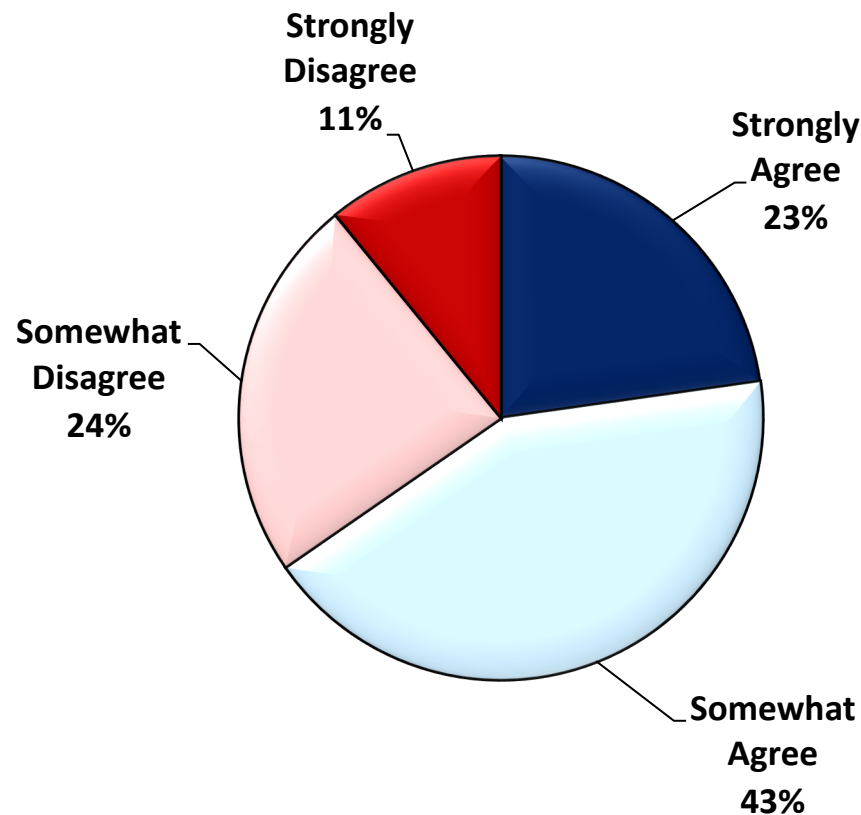
October 2020

Total Agree	67%*
Total Disagree	33%*



December 2020

Total Agree	66%
Total Disagree	34%*

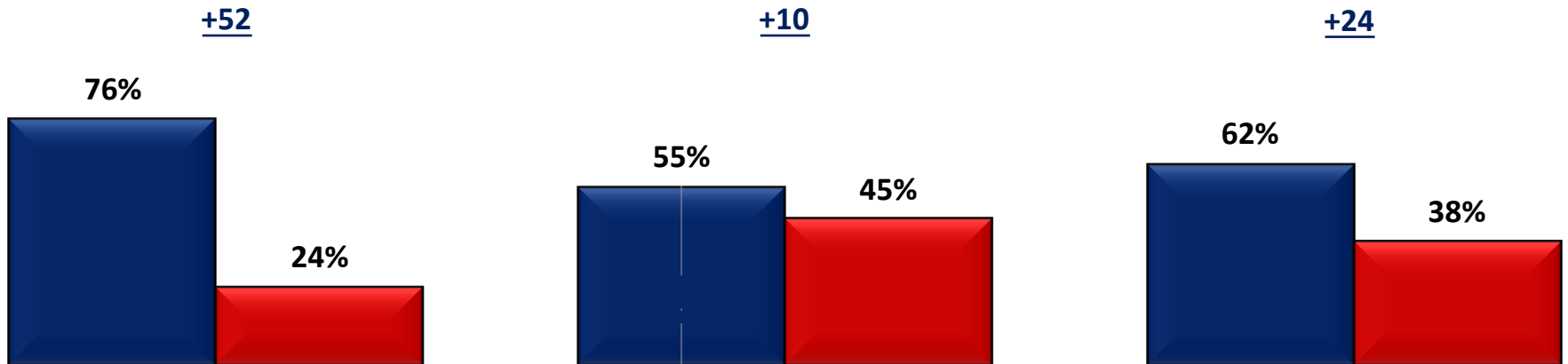


**Denotes Rounding.*

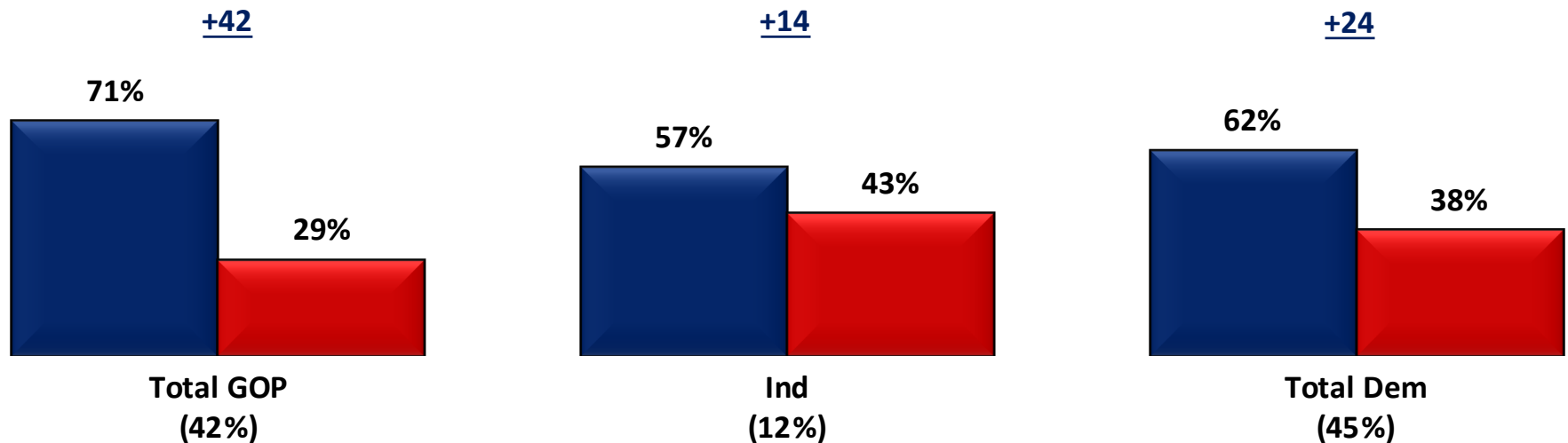
Independents are the most reluctant to embrace nuclear energy.

Nuclear Energy Prioritization Trend by Party

October 2020



December 2020



■ Agree ■ Disagree

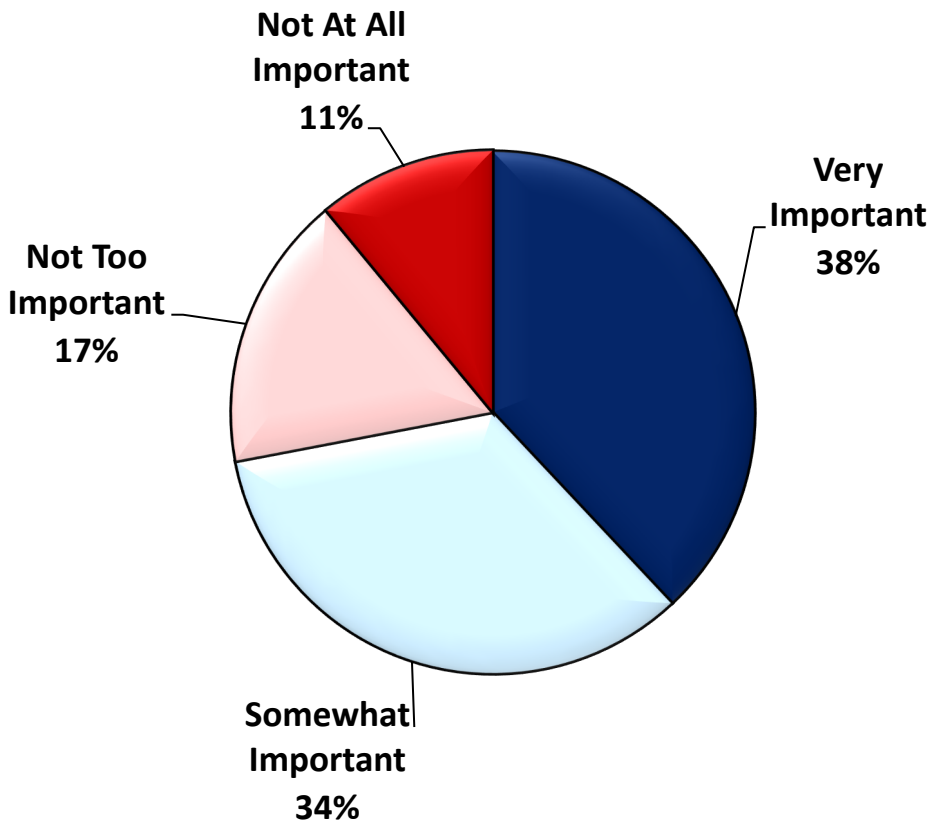
Climate Change

Only a slight majority of voters now say the issue of climate change was important to their 2020 vote.

“How important was the issue of climate change to your vote in the November 2020 election?”

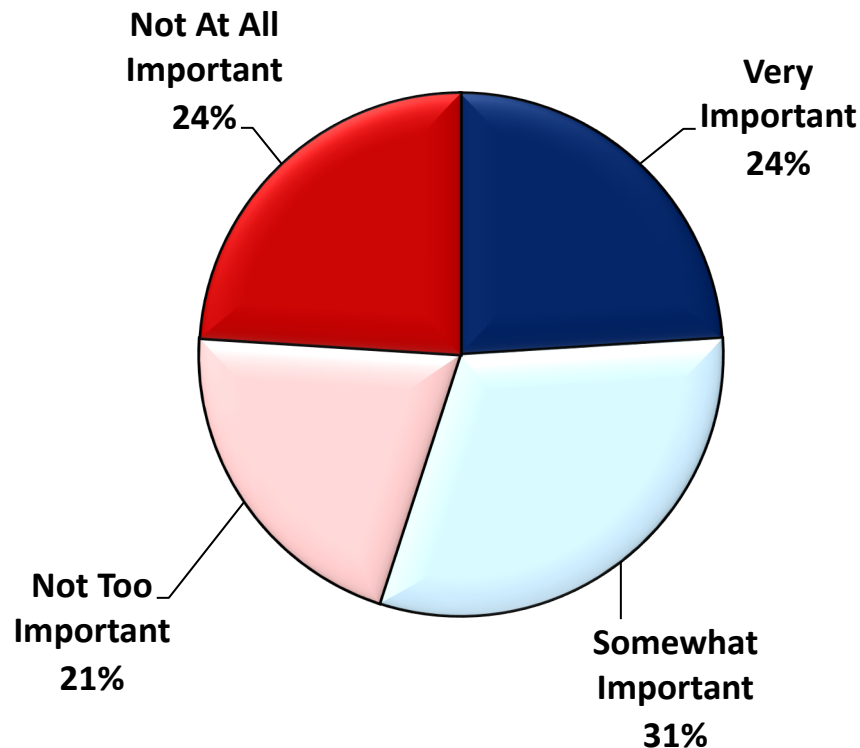
October 2020

Total Important	72%
Total Not Important	28%



December 2020

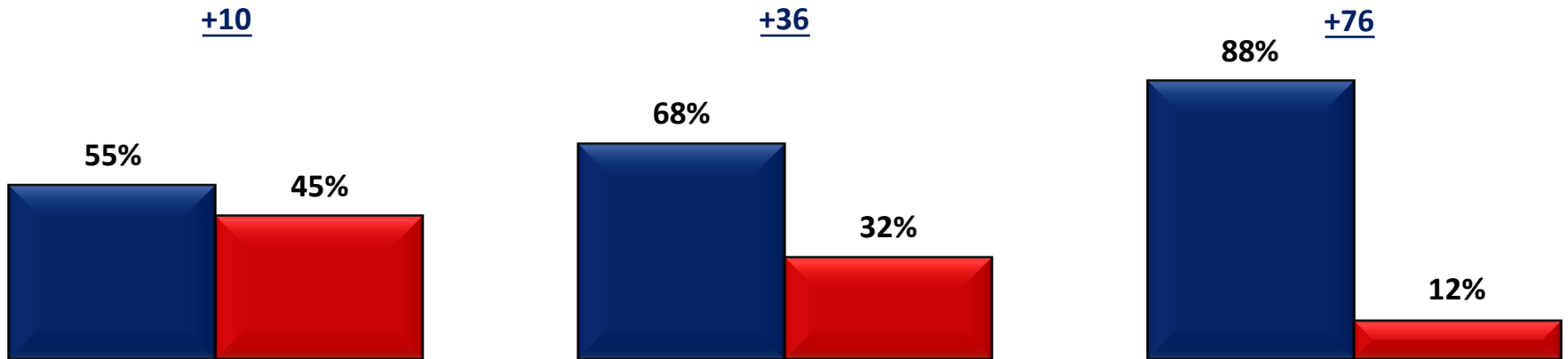
Total Important	55%
Total Not Important	45%



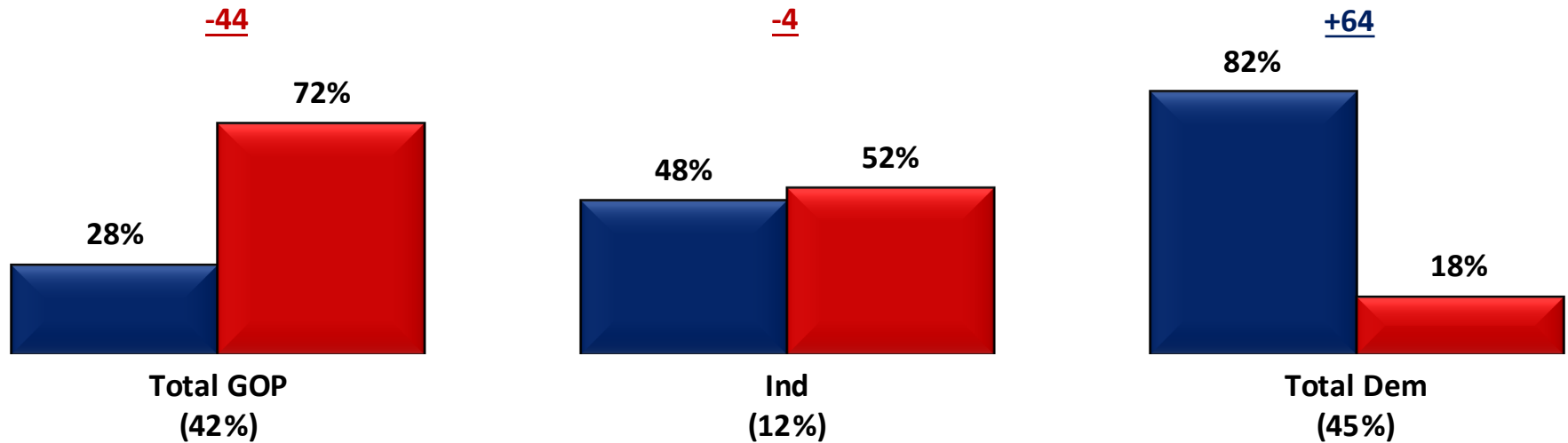
A majority of GOPers and Inds say climate change was not an important factor to their vote.

Climate Change Issue Importance to Vote Trend by Party

October 2020



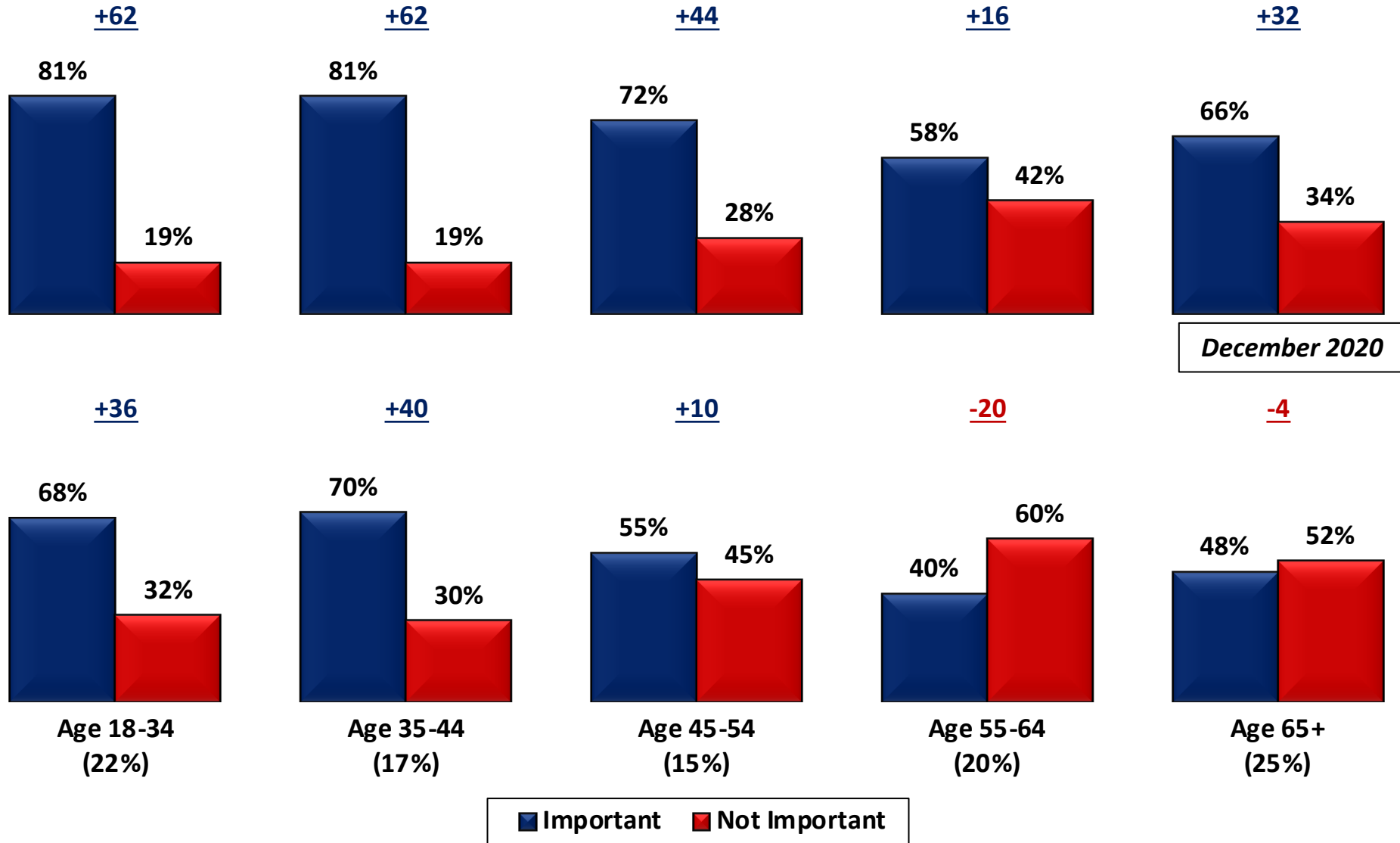
December 2020



■ Important ■ Not Important

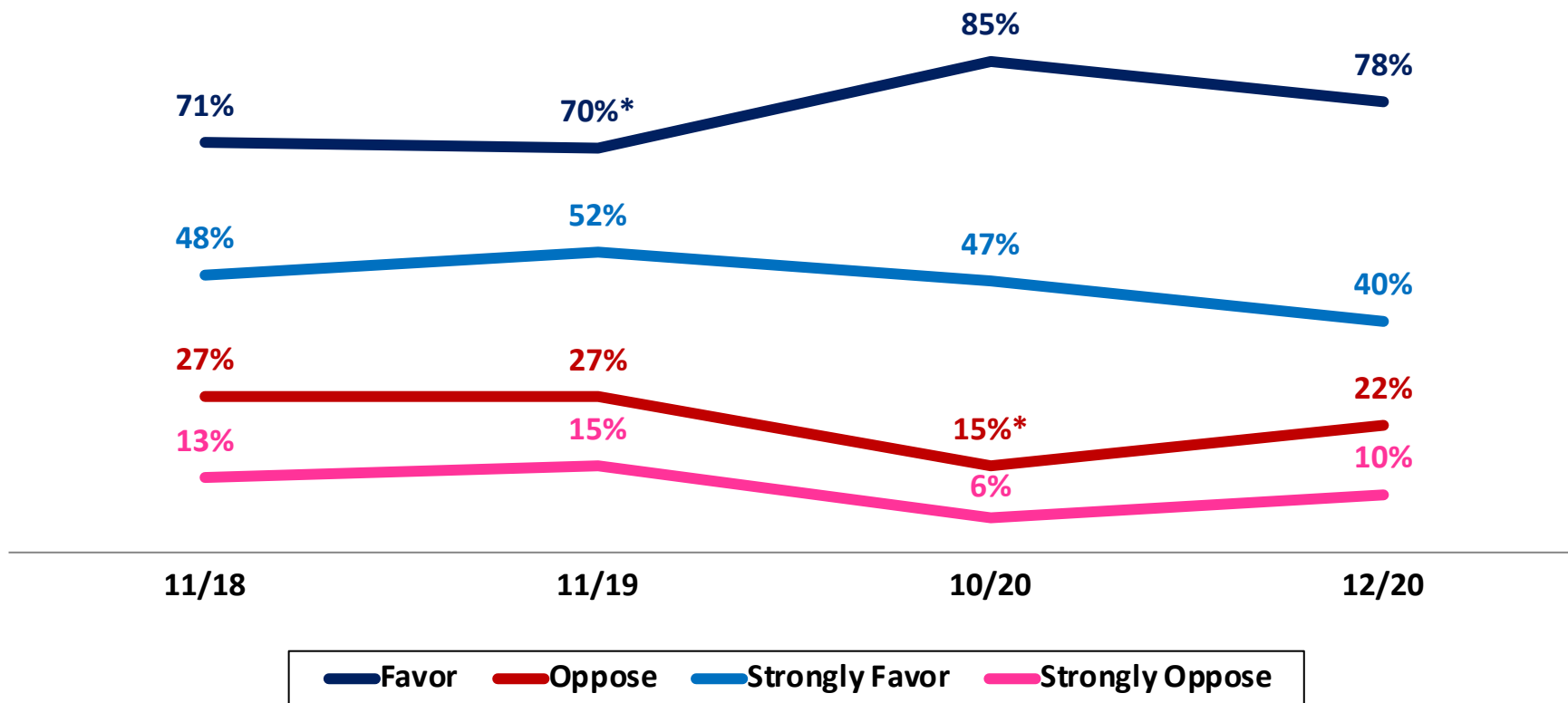
Older voters were less likely to prioritize climate change in their 2020 vote.

Climate Change Issue Importance to Vote Trend by Age



Over three-quarters of voters favor the government taking action to reduce emissions of gases that cause climate change.

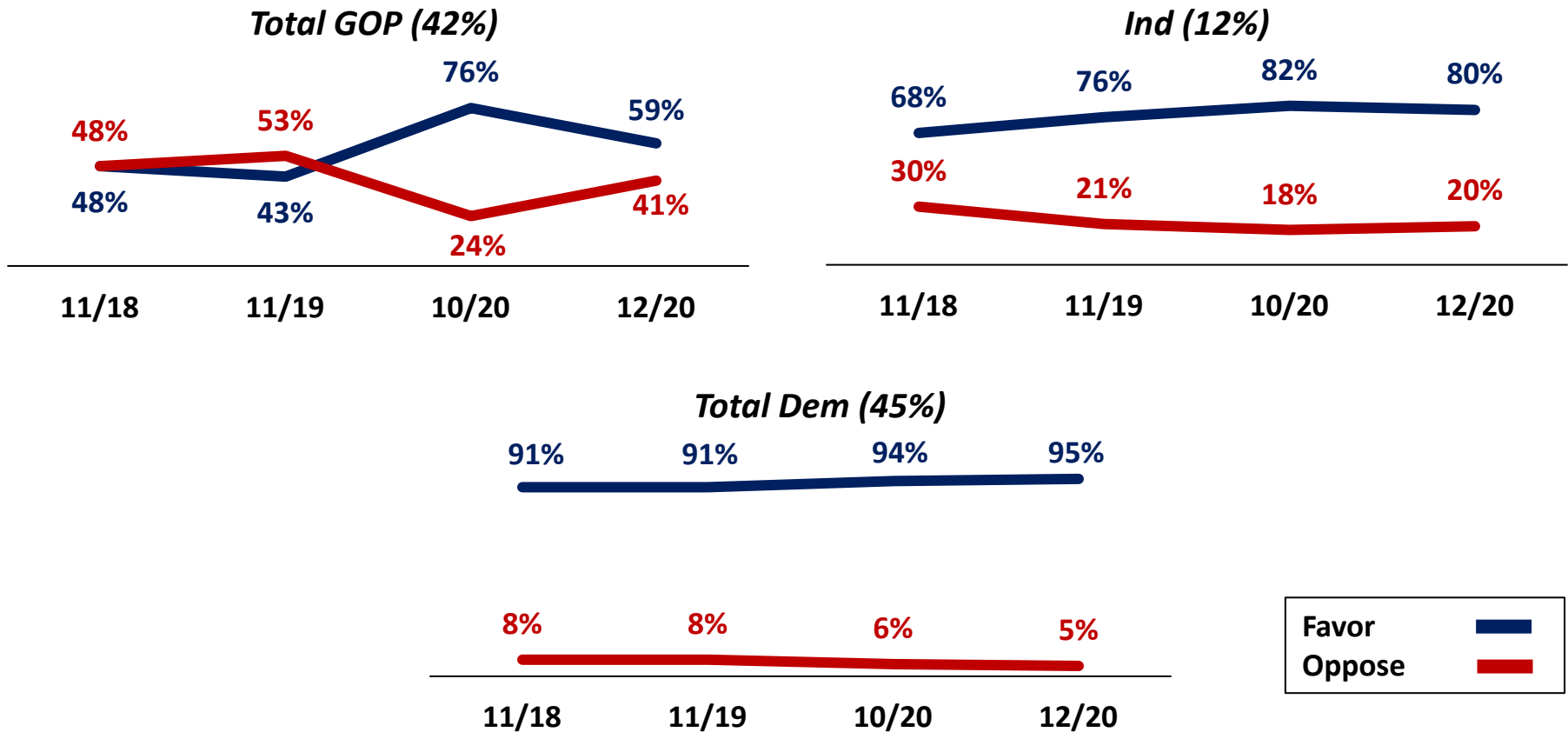
“And, do you favor or oppose the government taking steps to reduce emissions of gases like carbon dioxide and methane emissions that cause global climate change?”



*Denotes Rounding.

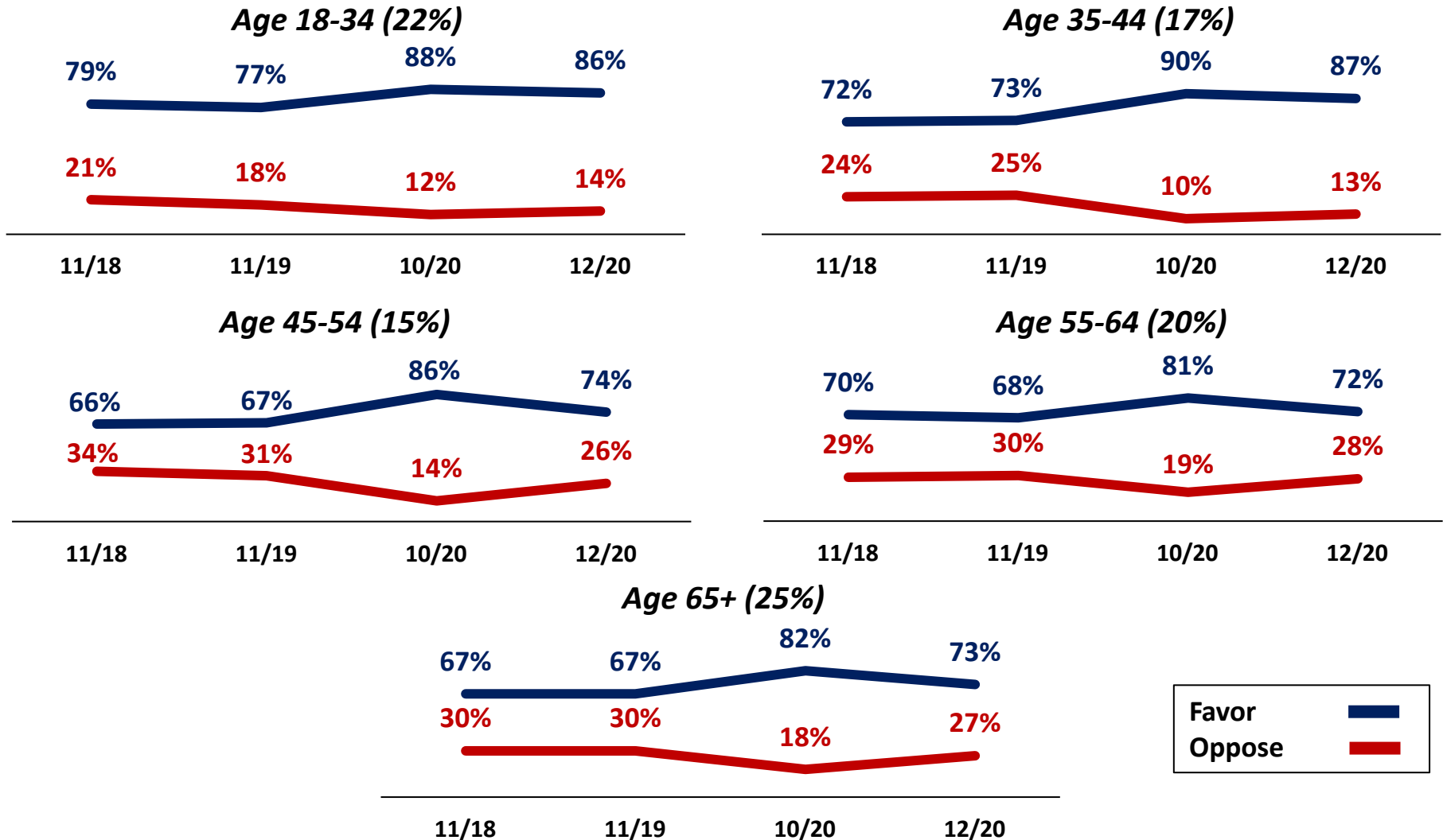
A lower majority of Republicans favor government action. Inds and Dems continue to decidedly support this.

Government Action on Reduced Emissions Trend by Party



Younger generations are most likely to favor government action, but older voters still support this.

Government Action on Reduced Emissions Trend by Age



Nearly 90% of voters say climate change is a threat.

“Continuing to think about climate change... Please read the following statements about the impact of climate change on society, and after you read each one, please indicate which statement is closest to your own opinion...”

October 2020

43%

34%

16%

8%

December 2020

39%

29%

21%

12%

Climate change is an extreme threat.

Climate change is a threat to be considered.

Climate change is a minor threat.

Climate change is not at all a threat.

Putting effort into research and improving market structures are the top two ways voters say to deal with climate change.

"Assuming climate change is caused by humans, which do you think is the best way to deal with the issue..."

23%

Putting more efforts in to Research, Development, and Innovation of clean energy sources

22%

Improving market structure and incentives to allow clean energy technologies to more fairly compete

11%

Increased regulations to force businesses to comply with carbon emission standards

10%

Phasing out the use of fossil fuels such as coal, oil, and gas

...or...

7%

Joining international agreements such as the Paris Climate Accord

7%

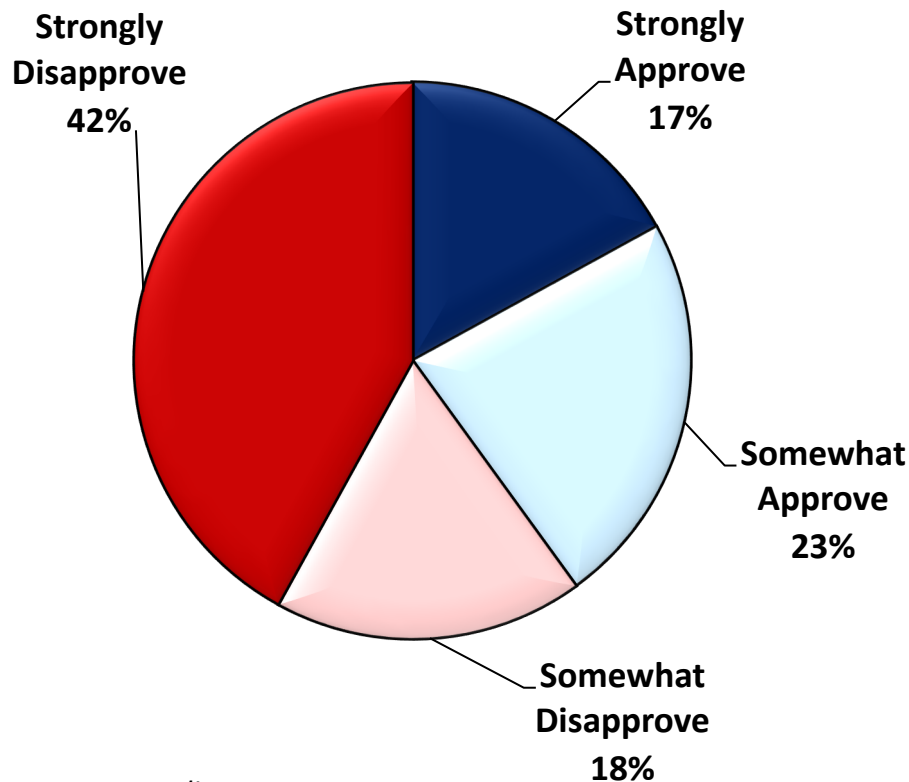
All of the above

A majority of voters continue to disapprove of the way the GOP is handling climate change.

"And do you approve or disapprove of the job the Republican Party is doing in addressing climate change?"

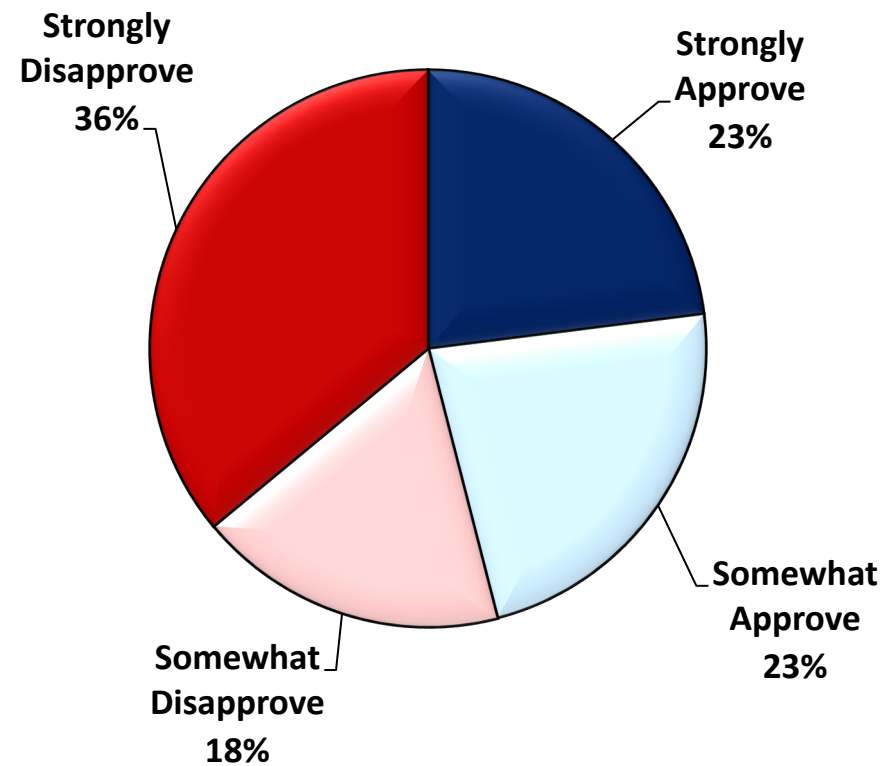
October 2020

Total Approve	41%*
Total Disapprove	59%*



December 2020

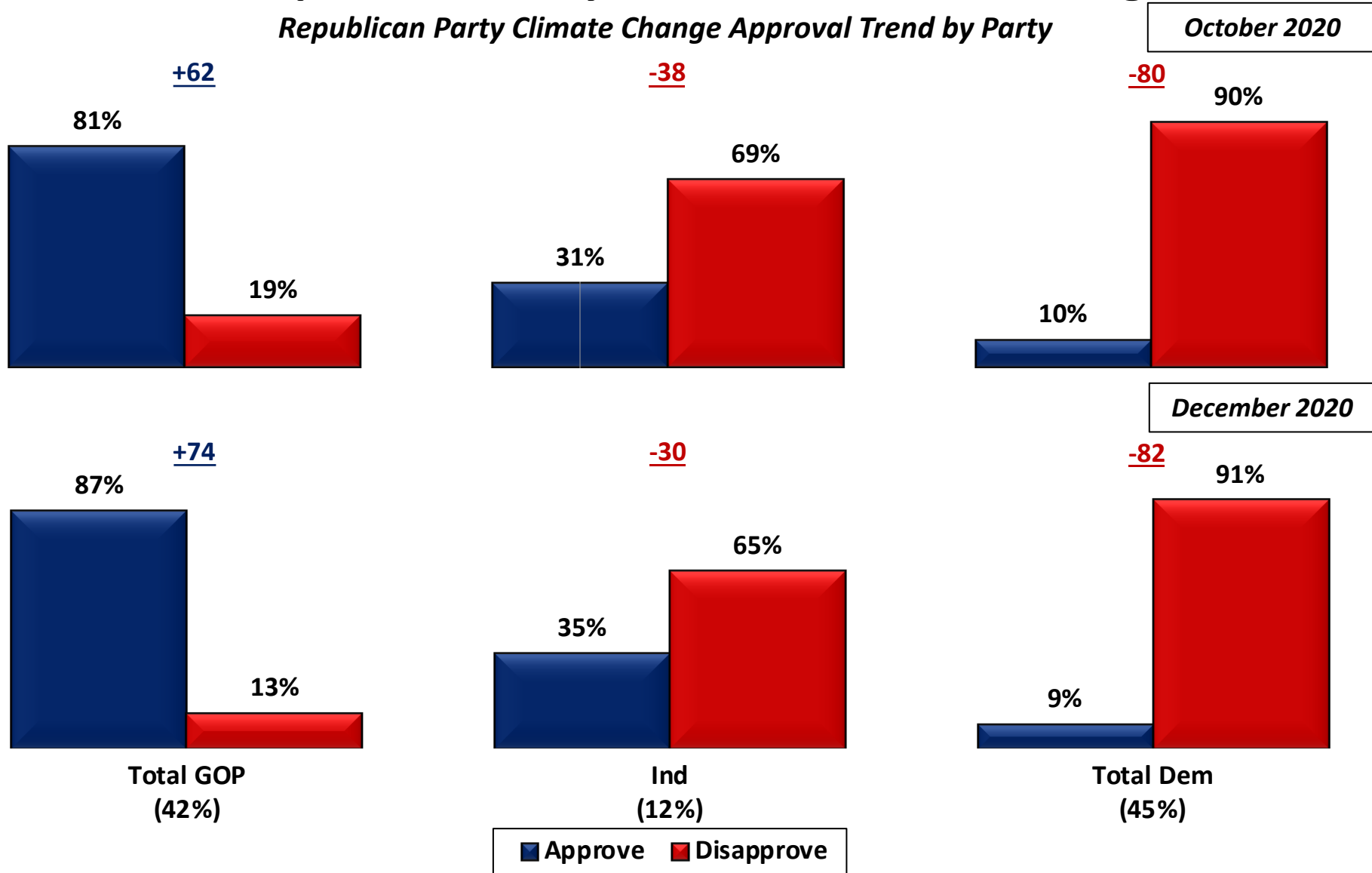
Total Approve	45%*
Total Disapprove	55%*



*Denotes Rounding.

Independents continue to disapprove of the way the Republican Party addresses climate change.

Republican Party Climate Change Approval Trend by Party

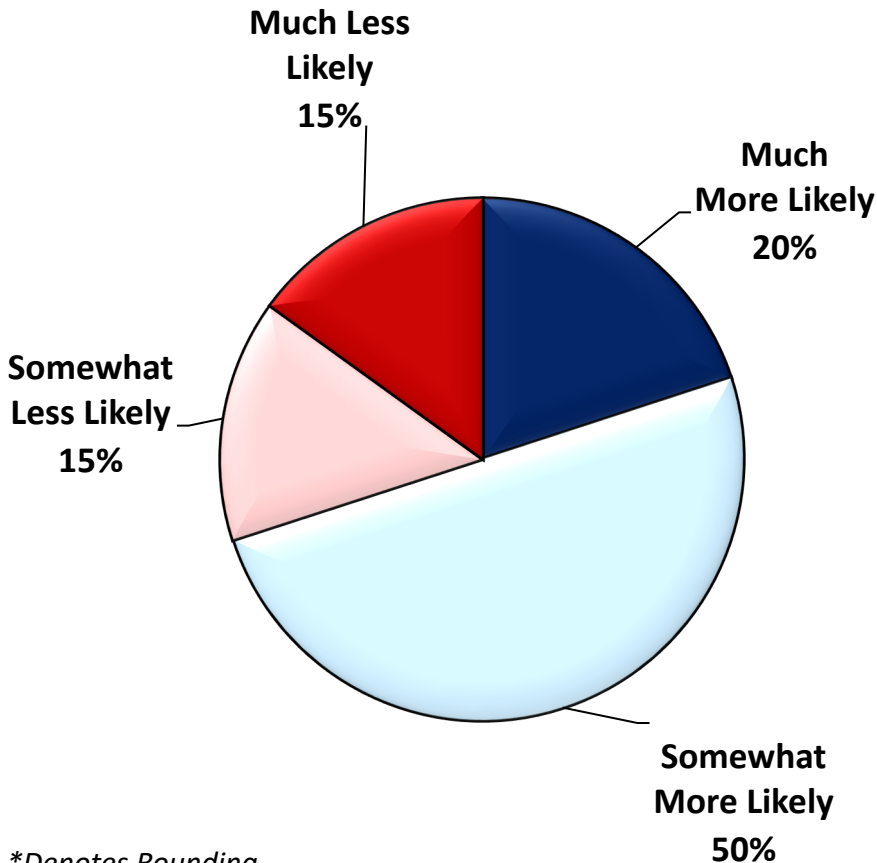


Most voters say they are more likely to support a Republican who embraces an innovative approach to addressing climate change.

“Would you be more likely or less likely to support a Republican candidate who embraces an innovation-based approach to addressing climate change?”

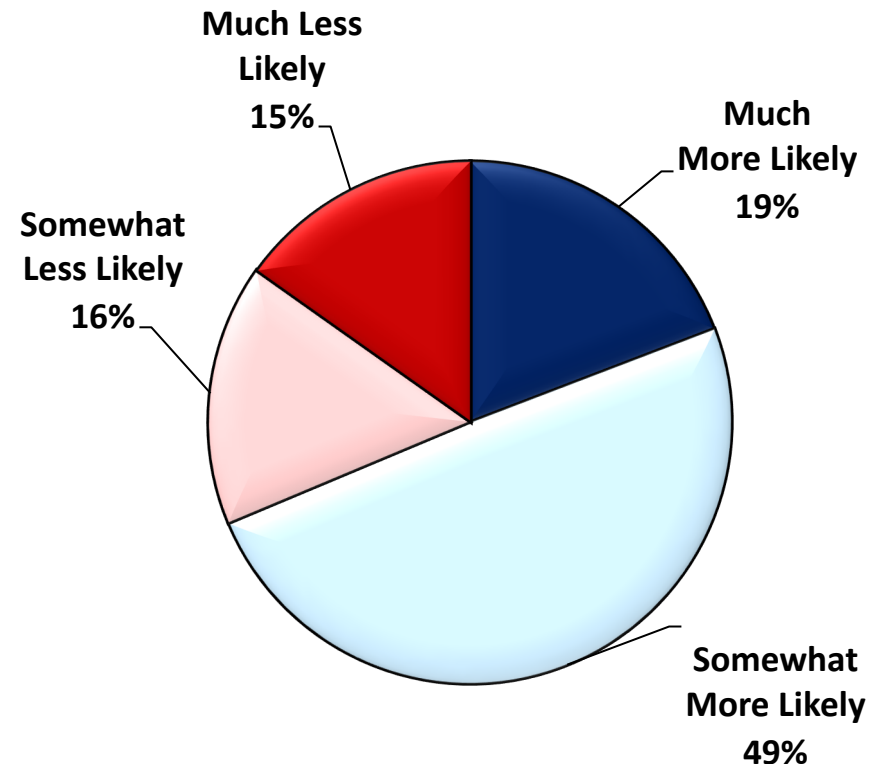
October 2020

Total More Likely	70%
Total Less Likely	30%



December 2020

Total More Likely	68%
Total Less Likely	32%*



*Denotes Rounding.

Top Groups – More Likely to Support GOP Candidate

Top Groups – More Likely (68%)

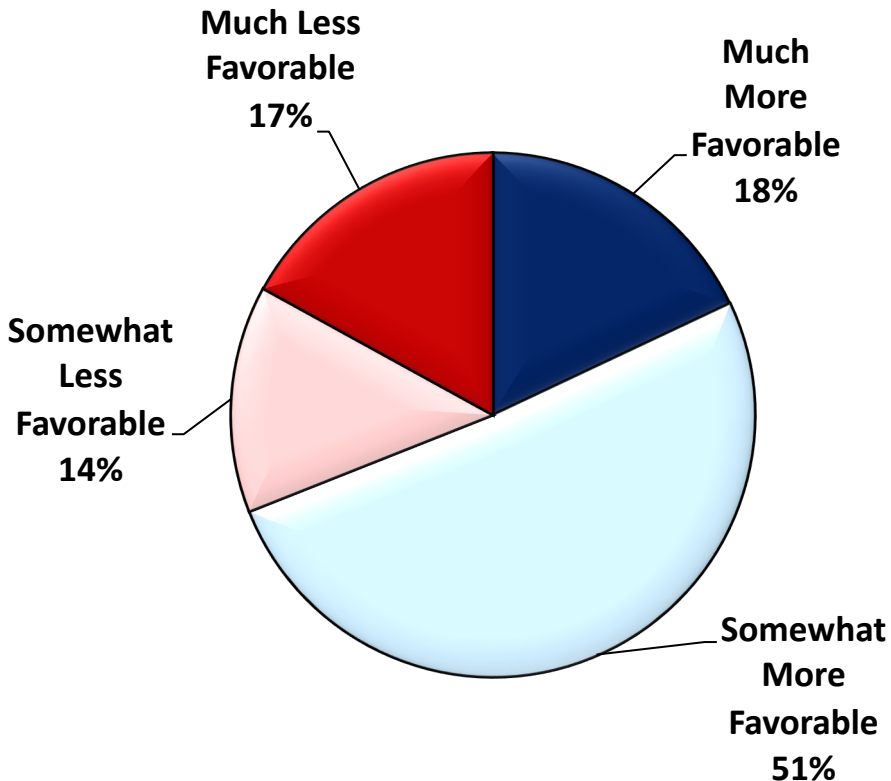
Mod/Lib GOP	84%
GOP 18-54	81%
Women 18-34	80%
GOP Women	80%
Ind 18-54	80%
Age 18-34	79%
White Moderate	79%
Soft/Lean GOP	78%
Mod GOP/Ind	78%
Men 18-34	77%
Ind w/o Degree	76%
White Women	75%
Age 35-44	75%
Women 35-54	75%
Mountain Region	75%
High School or Less	73%
GOP w/ Degree	73%
Total GOP	72%
West Region	72%
White	72%
White Dem	72%

Three-quarters of voters would be more favorable to Congressional Republicans if they embraced a conservative approach to clean energy.

“Would your view of Congressional Republicans be more favorable or less favorable if they embraced a conservative approach to addressing clean energy by prioritizing technology innovation and competition?”

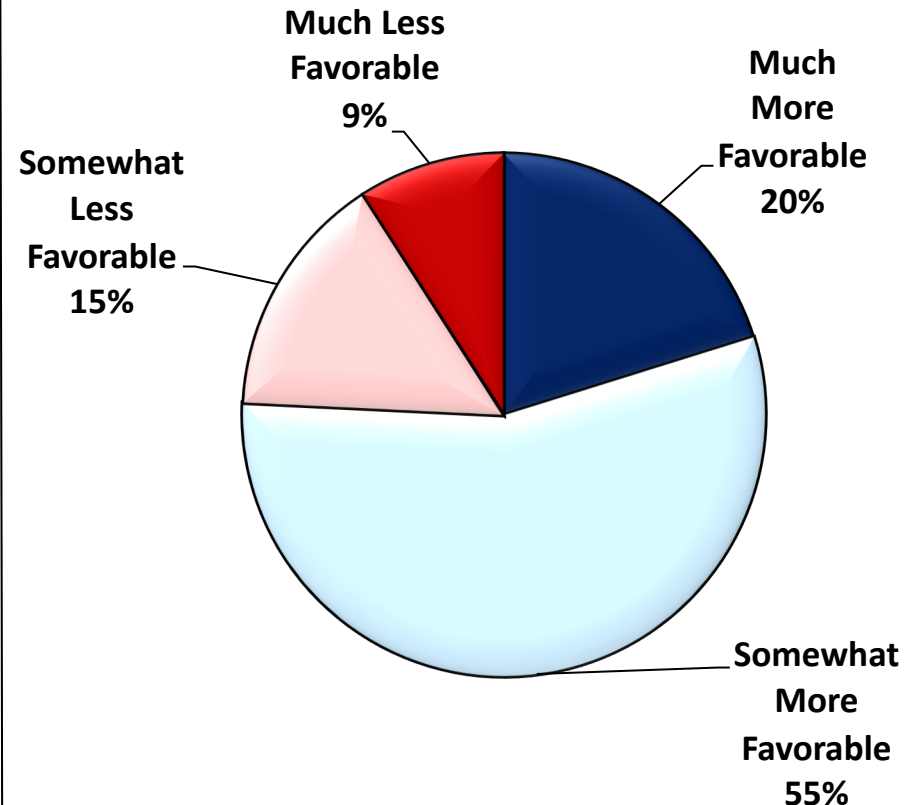
October 2020

Total More Favorable	69%
Total Less Favorable	31%



December 2020

Total More Favorable	75%
Total Less Favorable	25%*

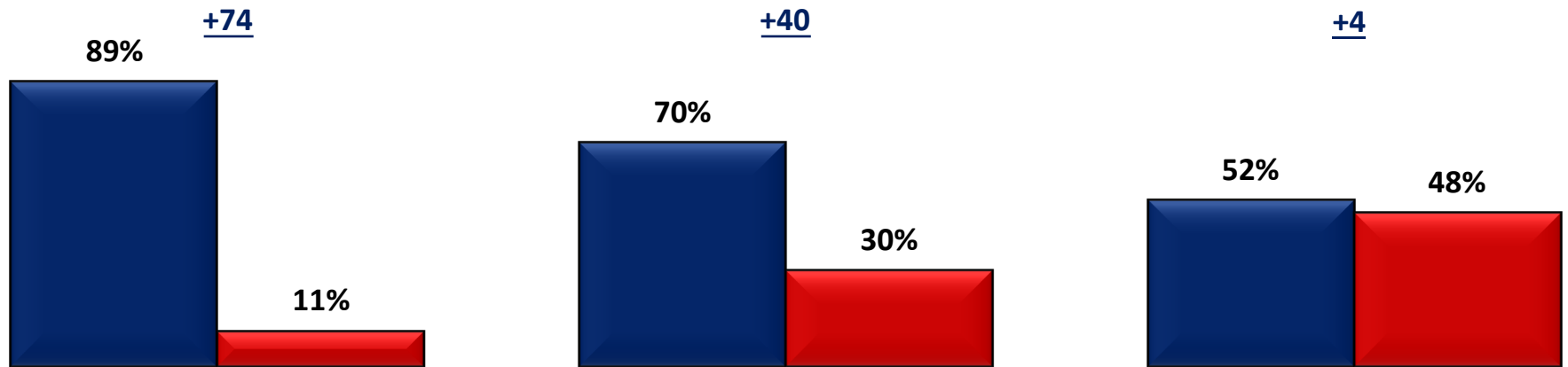


*Denotes Rounding.

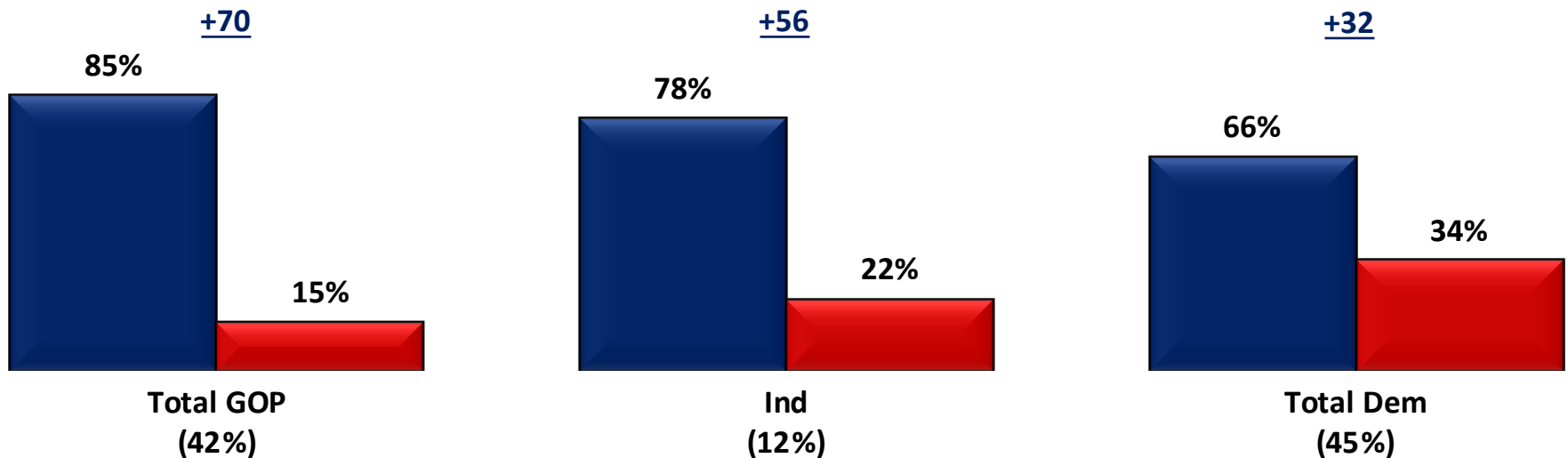
Even a solid majority of Democrats would support Congressional Republicans who do this.

Embrace Conservative Approach to Clean Energy/Climate Change Trend by Party

October 2020



December 2020

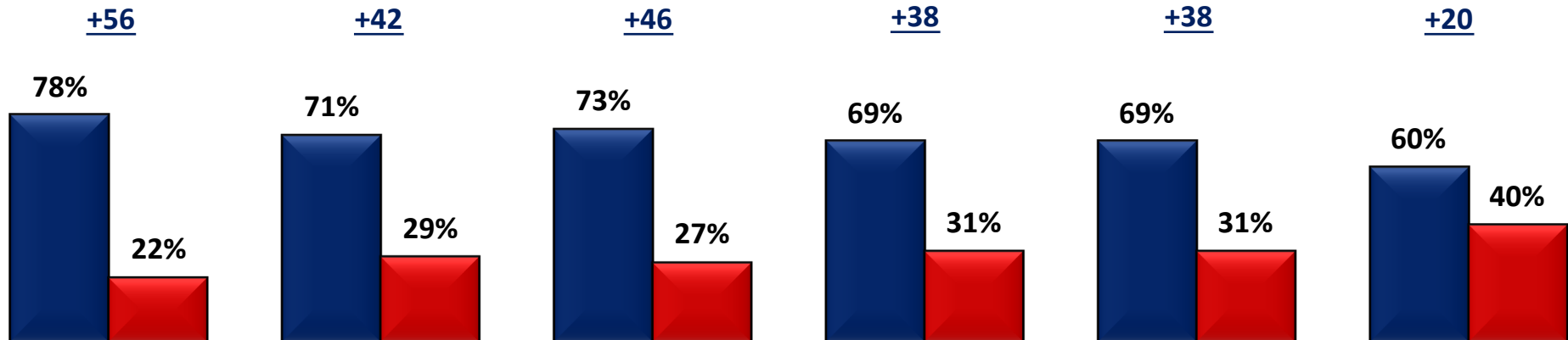


■ More Favorable ■ Less Favorable

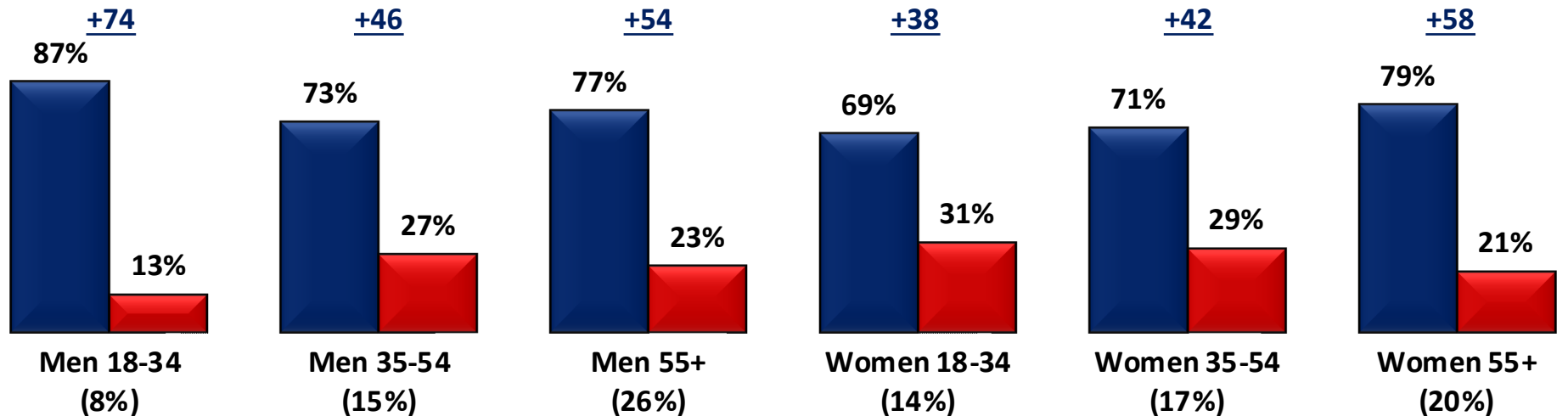
Voters, regardless of age or gender, would view Congressional GOPers more favorably this way.

Embrace Conservative Approach to Clean Energy/Climate Change Trend by Gender/Age

October 2020



December 2020



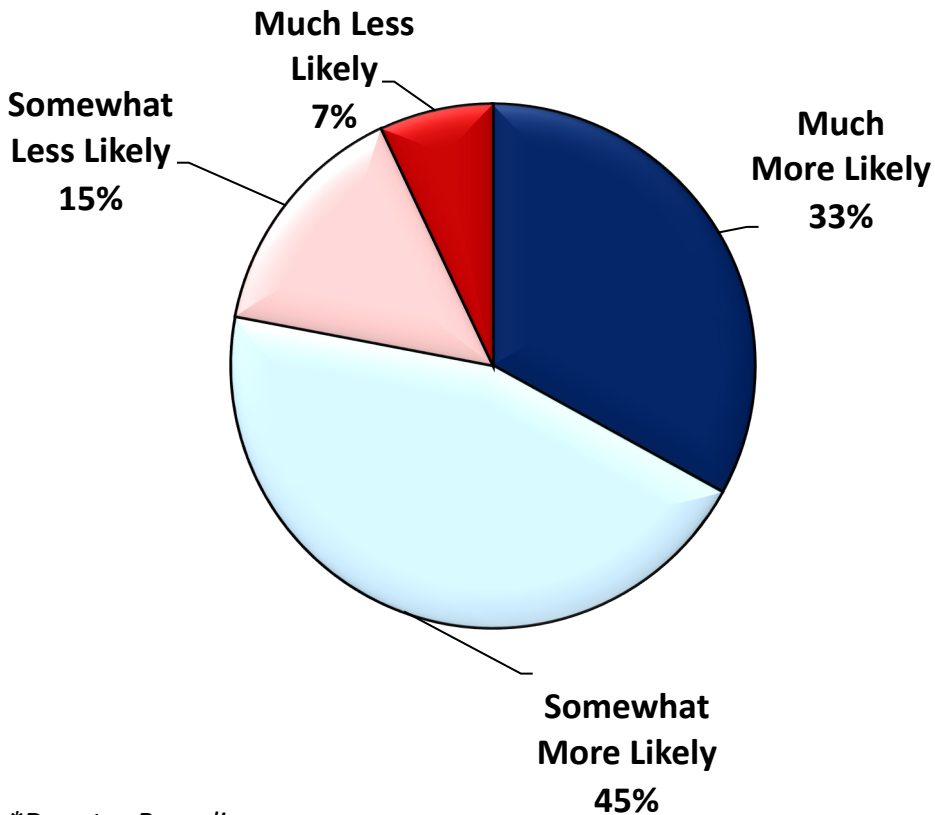
■ More Favorable ■ Less Favorable

Over 70% of voters continue to be more likely to support a candidate who believes in human caused climate change.

“Are you more likely or less likely to support a candidate for public office who believes human activity is contributing to climate change?”

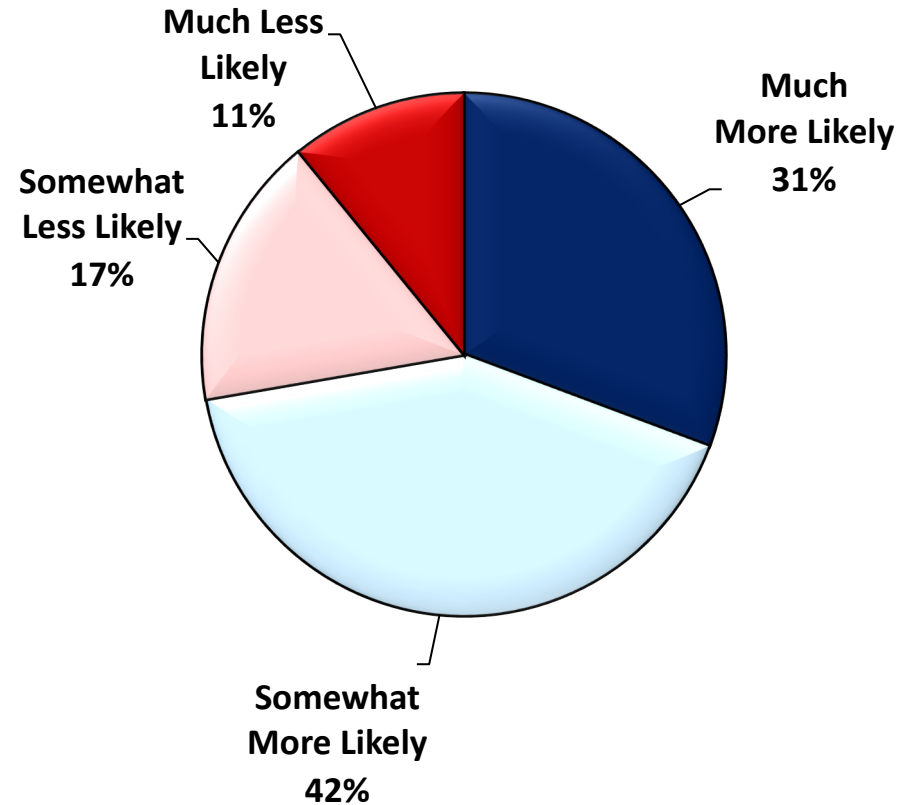
October 2020

Total More Likely	78%
Total Less Likely	22%



December 2020

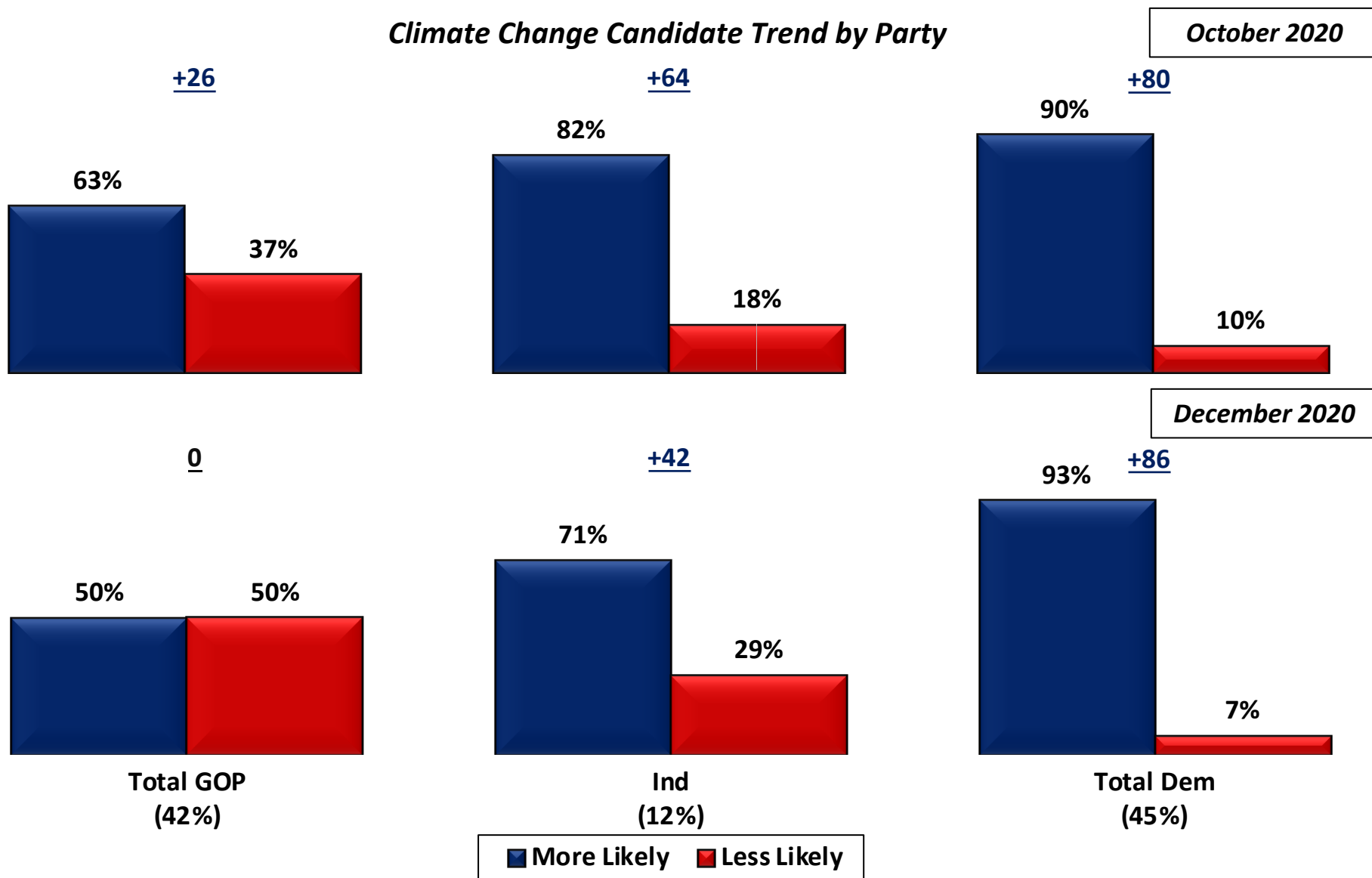
Total More Likely	72%*
Total Less Likely	28%



*Denotes Rounding.

Republicans are now divided on their support.

Climate Change Candidate Trend by Party



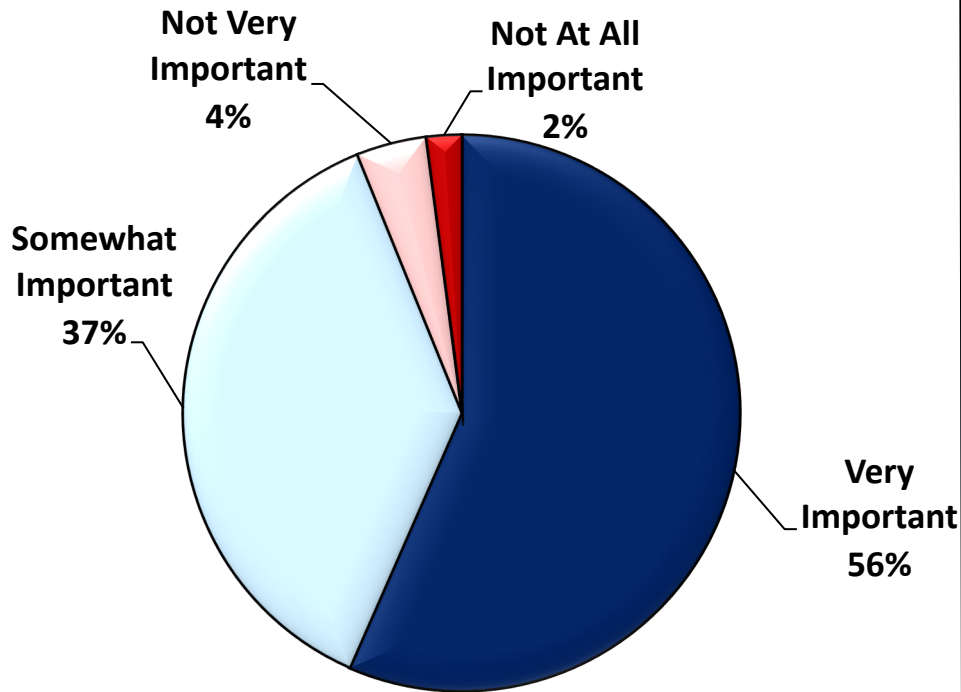
The Electric Grid

Nearly all voters agree it is important to take steps to protect the electricity grid from disasters.

"Now thinking about our electric grid... Given America's unpreparedness for the Coronavirus pandemic, how important it to you that we apply lessons learned and begin taking steps to protect our electricity grid from disaster, which experts say is just a matter of time?"

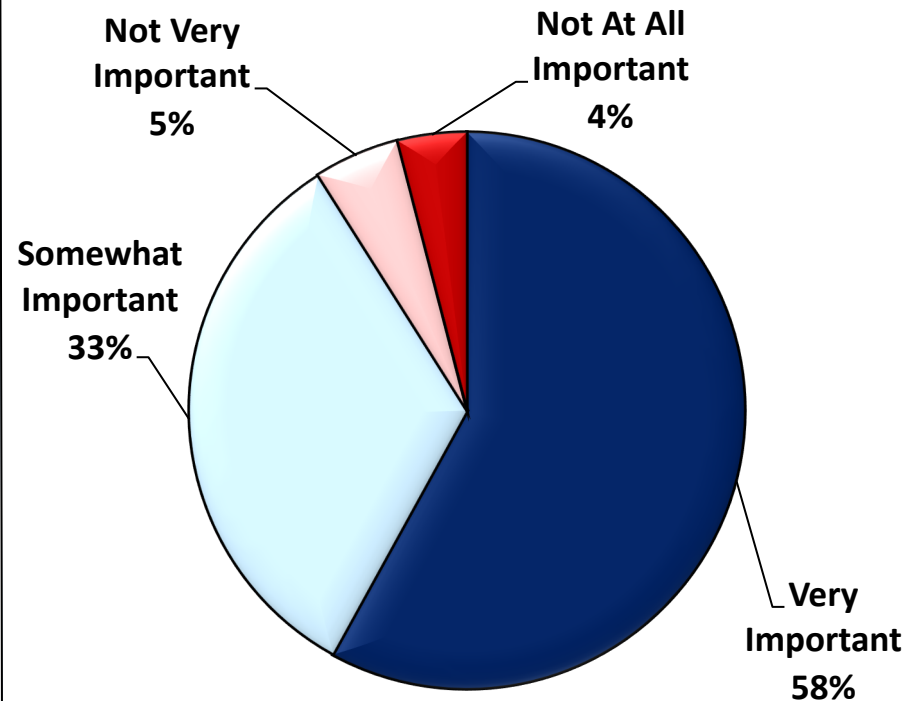
October 2020

Total Important	94%*
Total Not Important	6%



December 2020

Total Important	91%
Total Not Important	9%



*Denotes Rounding.

Top Groups – Very Important to Take Steps To Protect Electricity Grid

Top Groups – Very Important (58%)

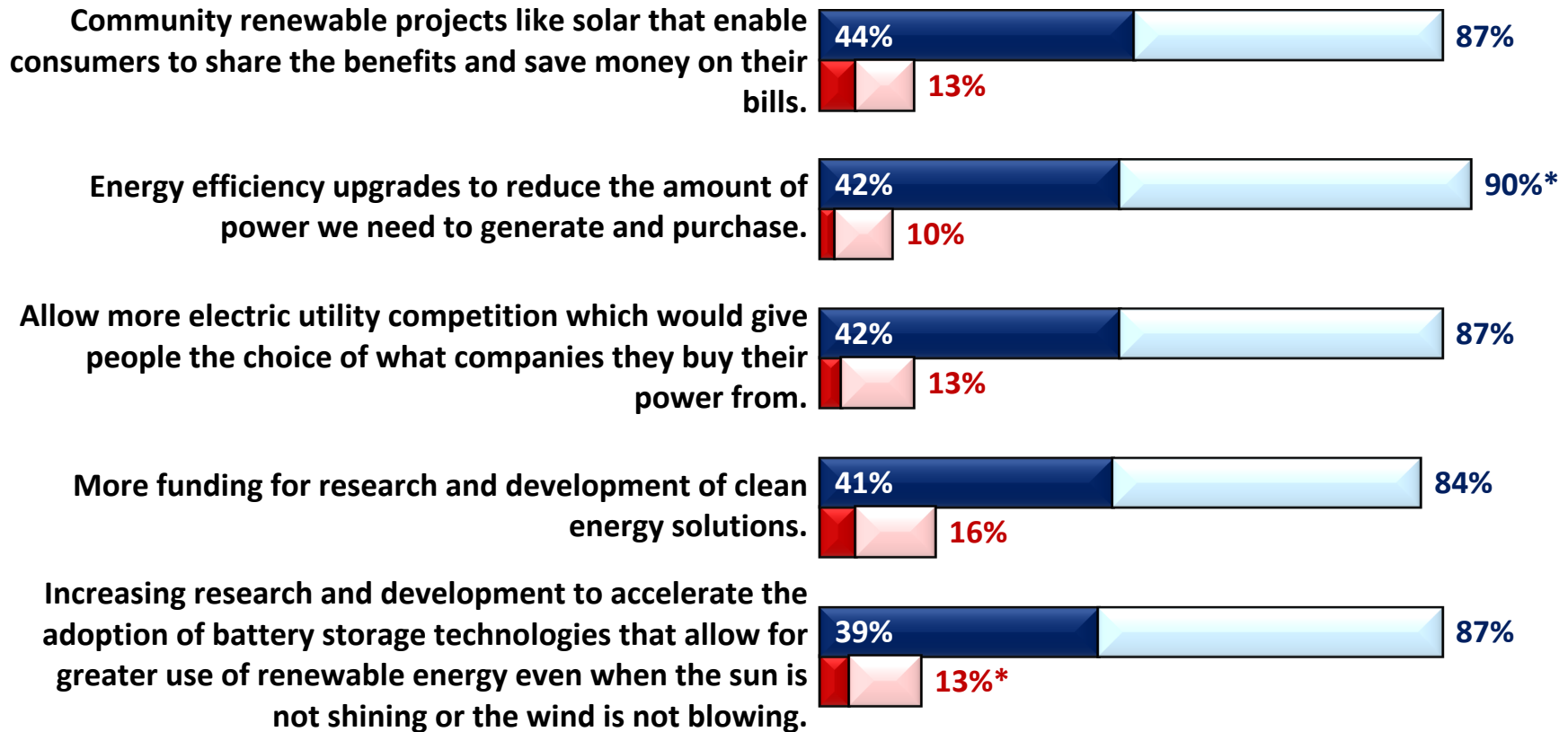
Dem 55+	79%
Base Dem	76%
White Dem	75%
Dem w/ Degree	75%
Conservative Dem	73%
Total Dem	72%
Women 65+	72%
Dem Women	72%
Liberal	72%
Dem Men	71%
New England Region	70%
Dem w/o Degree	69%
Moderate Dem	69%
Dem 18-54	67%
Age 65+	66%
Soft/Lean Dem	65%
Women 55+	65%
Pacific Region	65%
African American	64%
Total Non-White	63%
Minority Women	63%
Urban	63%
Northeast Region	62%
Minority Men	62%
Men 55+	62%
College Grad	62%
Men w/ Degree	62%
Ind w/o Degree	62%
Farm Belt Region	62%

Clean Energy Policy Proposals

Policies emphasizing renewable projects and energy efficiency upgrades are the most favorable to voters.

“Please read the following list of policies that supporters have proposed to help expand your state’s commitment to clean energy. After you read each one, please indicate whether you favor or oppose that policy.”

Ranked by % Strongly Favor



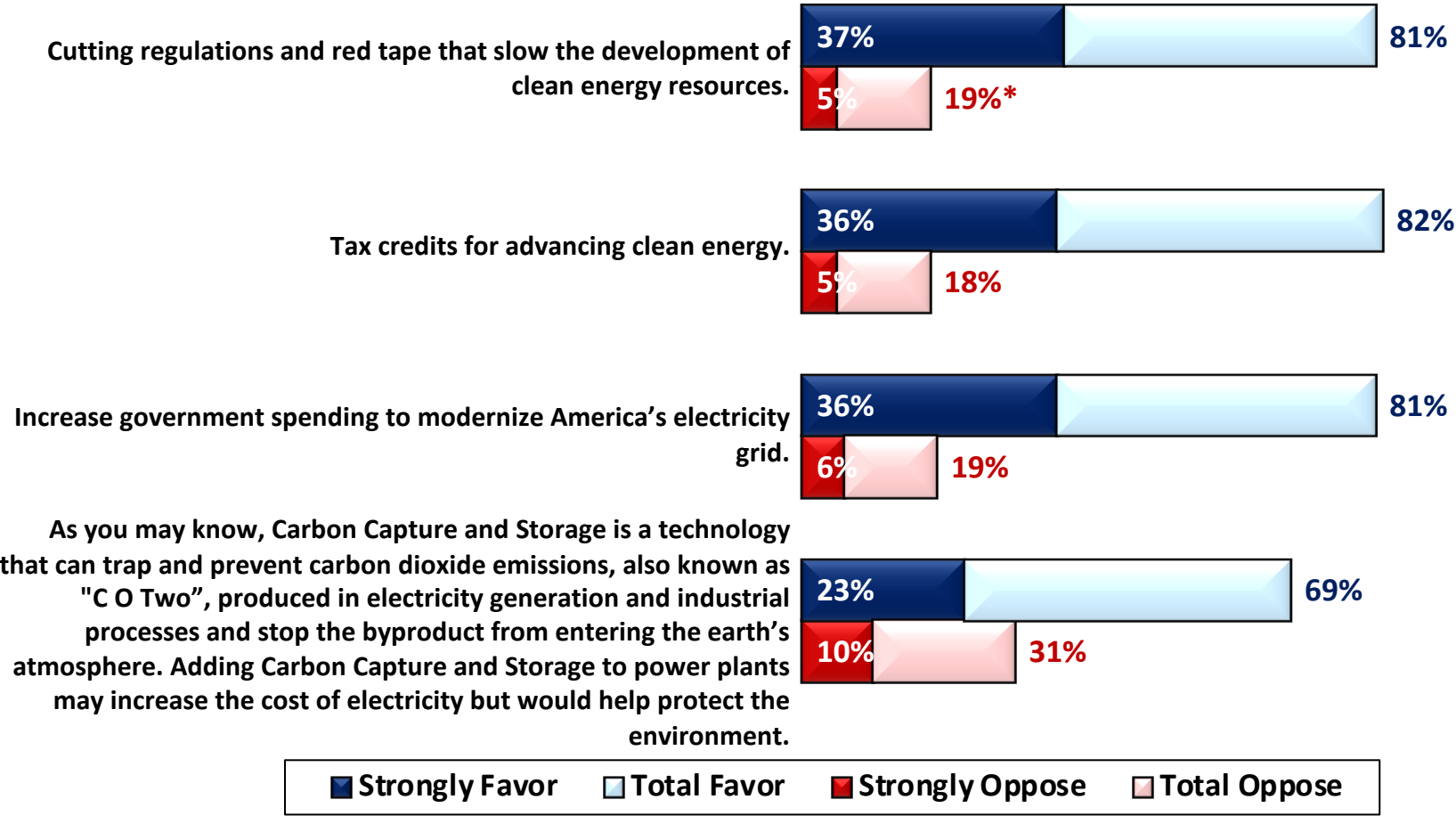
■ Strongly Favor ■ Total Favor ■ Strongly Oppose ■ Total Oppose

**Denotes Rounding.*

Cutting regulations, giving tax credits for clean energy, and increasing spending for the electricity grid are also popular policies.

“Please read the following list of policies that supporters have proposed to help expand your state’s commitment to clean energy. After you read each one, please indicate whether you favor or oppose that policy.”

Ranked by % Strongly Favor

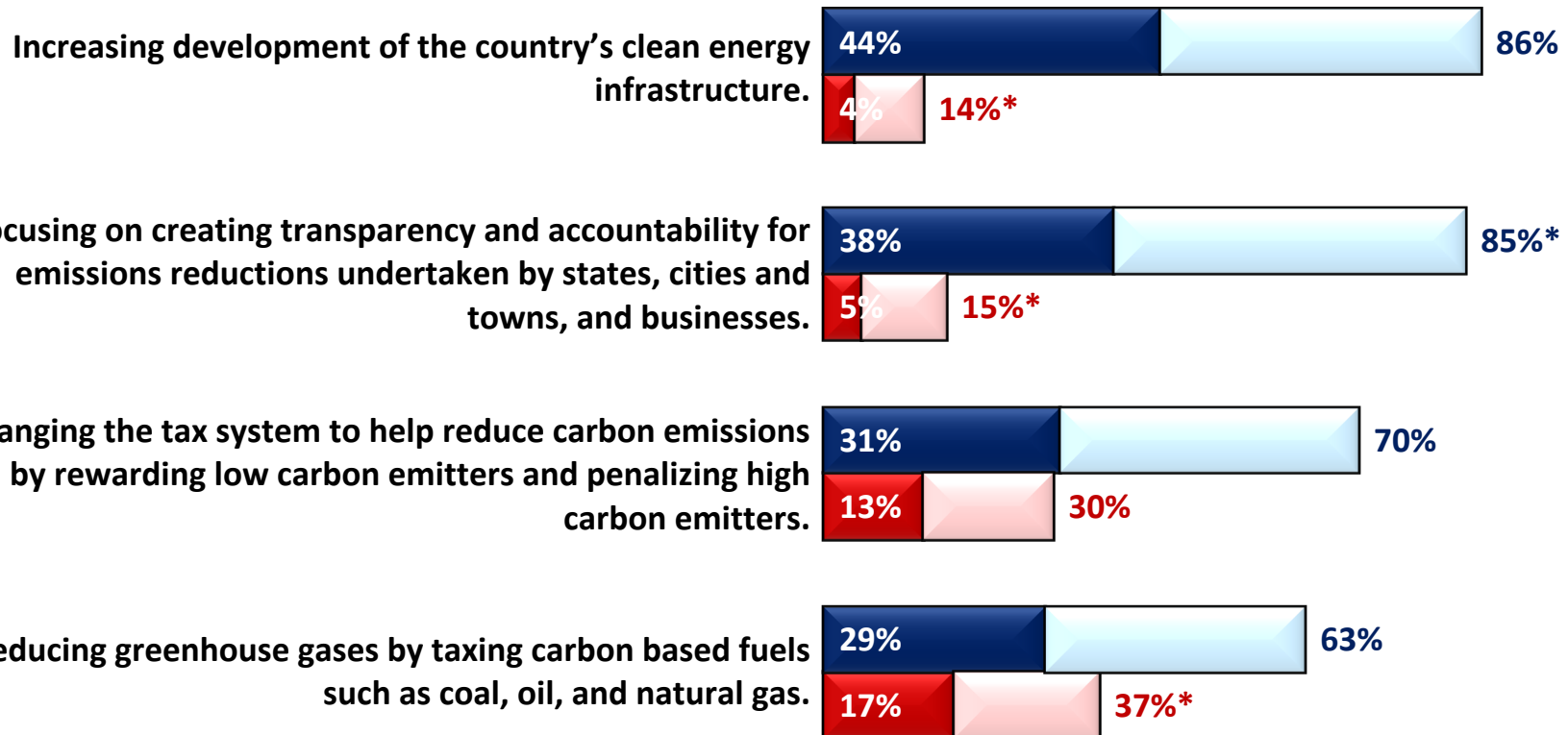


**Denotes Rounding.*

Voters support increasing clean energy infrastructure and boosting accountability for emissions reductions.

“Now, please read the following list of proposals that have been put forth to help expand clean energy in the United States. After you read each one, please indicate whether you support or oppose that proposal.”

Ranked by % Strongly Support



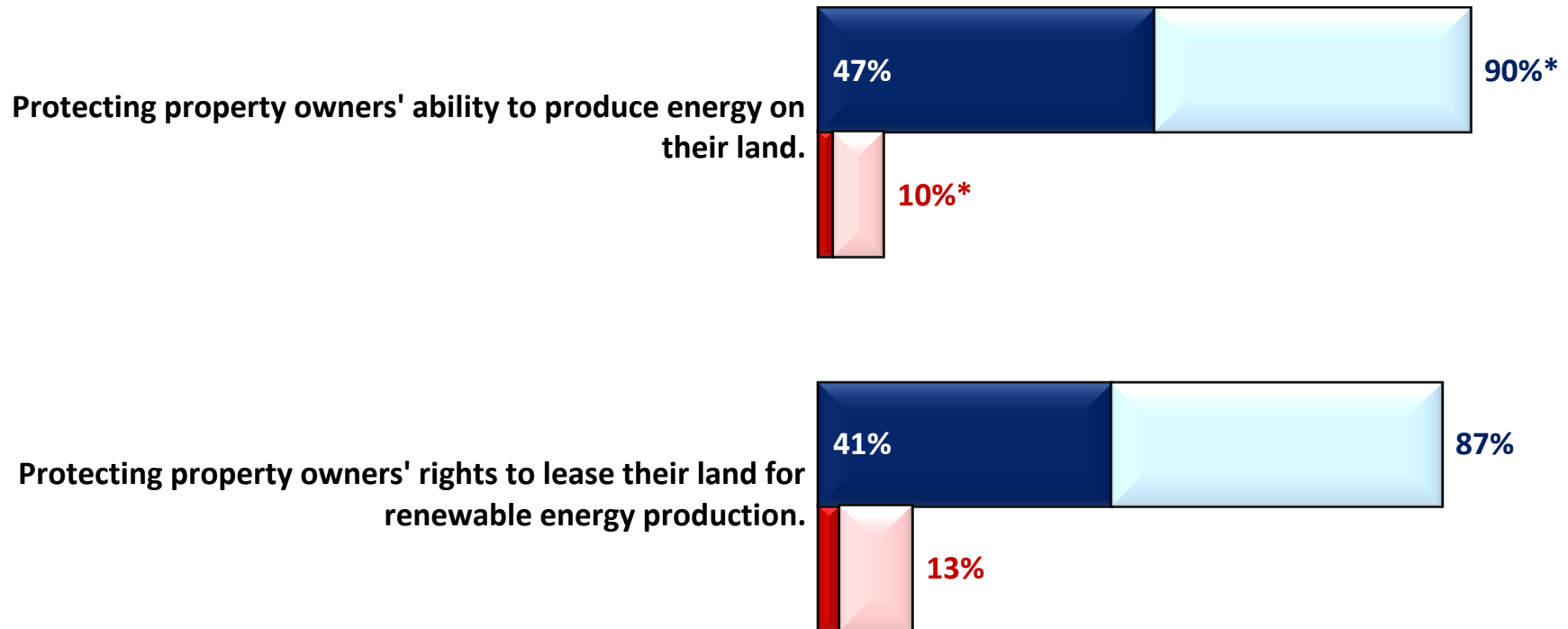
■ Strongly Support ■ Total Support ■ Strongly Oppose ■ Total Oppose

**Denotes Rounding.*

Protecting property owners' abilities to produce energy on their land is extremely important to voters.

"Now, please read the list below of policies that supporters have proposed to help expand our state's commitment to clean energy. After you read each one, please indicate whether you think that policy is... very important, somewhat important, not too important, or not at all important."

Ranked by % Very Important



■ Very Important

■ Total Important

■ Not At All Important

■ Total Not Important

**Denotes Rounding.*

Message Testing

Voters are divided on whether owners of electric vehicles should be subjected to special taxes or not.

“Thinking about infrastructure needs for electric vehicles, like charging stations and the roads and highways they travel on, electric vehicle charging stations are often paid for by state governments, which fund these stations with resources collected from the gas tax.

Thinking about infrastructure needs for electric vehicles, like charging stations and the roads and highways they travel on, electric vehicle charging stations are often paid for by state governments, which fund these stations with resources collected from the gas tax.”

50%

Some people say that many owners of electric vehicles are wealthy and they should not be exempt from paying gas taxes that subsidize the cost of charging stations for their cars or without having to pay into the maintenance for the roads and highways they also use. There should be a tax for electric vehicles so owners of these are paying their fair share to fund our roads, highways, and the charging stations for their automobiles.

...while...

50%

Other people say that owners of electric vehicles pay more for those automobiles because they are more costly to begin with, and they are also helping the environment by not using fossil fuels that create emissions, and therefore owners of electric vehicles should not be subject to special taxes but encouraged to drive them. People who buy electric vehicles are helping lead the nation's transition from gas-powered cars and are taking on risks by spending on this new technology. They should be credited, not punished.

While a majority of voters say net metering is fair.

“Changing topics slightly... As you may know, thirty-four states have a policy called net metering that allows homeowners, businesses, local school districts, and other organizations to get full retail credit for the extra energy their rooftop solar panels produce. This extra solar energy goes onto the electricity grid for the utility company to sell at the full retail rate to other customers. Please read the following two statements about this, and please indicate which one comes closer to your own point of view.”

55%

Some people say net metering is fair because it encourages the development of solar resources, and other customers benefit from the extra solar energy that goes onto the electricity grid.

...while...

45%

Other people say net metering is unfair because solar customers use the electricity grid, too, and need to pay a fair rate for their use. They say that otherwise, solar customers' use of the electricity grid becomes subsidized by non-solar customers.

Nearly three-quarters of voters support renewable wind and solar projects in rural areas.

“Renewable energy development is becoming increasingly common in rural landscapes across the country. Most of them are utility scale projects of wind and solar. Now, please read the following two statements and after you read each one, please indicate which statement comes closest to your own opinion...”

74%

Supporters of renewable wind and solar projects in rural areas say those projects are good because they boost the income of farmers, helping them to survive financially and maintain their family farm.

...while...

26%

Opponents of renewable wind and solar projects in rural areas say those projects are bad because they ruin beautiful views, kill birds, and take some good farmland out of production.

There is high support for creating a new electricity system to give consumers a choice and benefit the environment.

"Now, please read two additional options about purchasing electricity, and please indicate which one you prefer."[^]

"Now, please read two additional options about purchasing electricity, and please indicate which one you prefer."^{^^}

80%

A new system that allows people to have a choice of where they purchase electricity and what kind of electricity, such as clean energy.

...Or...

20%

The current system, in which nearly everyone purchases their electricity from one monopoly utility.

74%

America can create a new electricity system that benefits the environment, accelerates the availability of new technology, and creates more choices by opening up markets to competition, giving consumers more choices instead of just their monopoly utility.

...Or...

26%

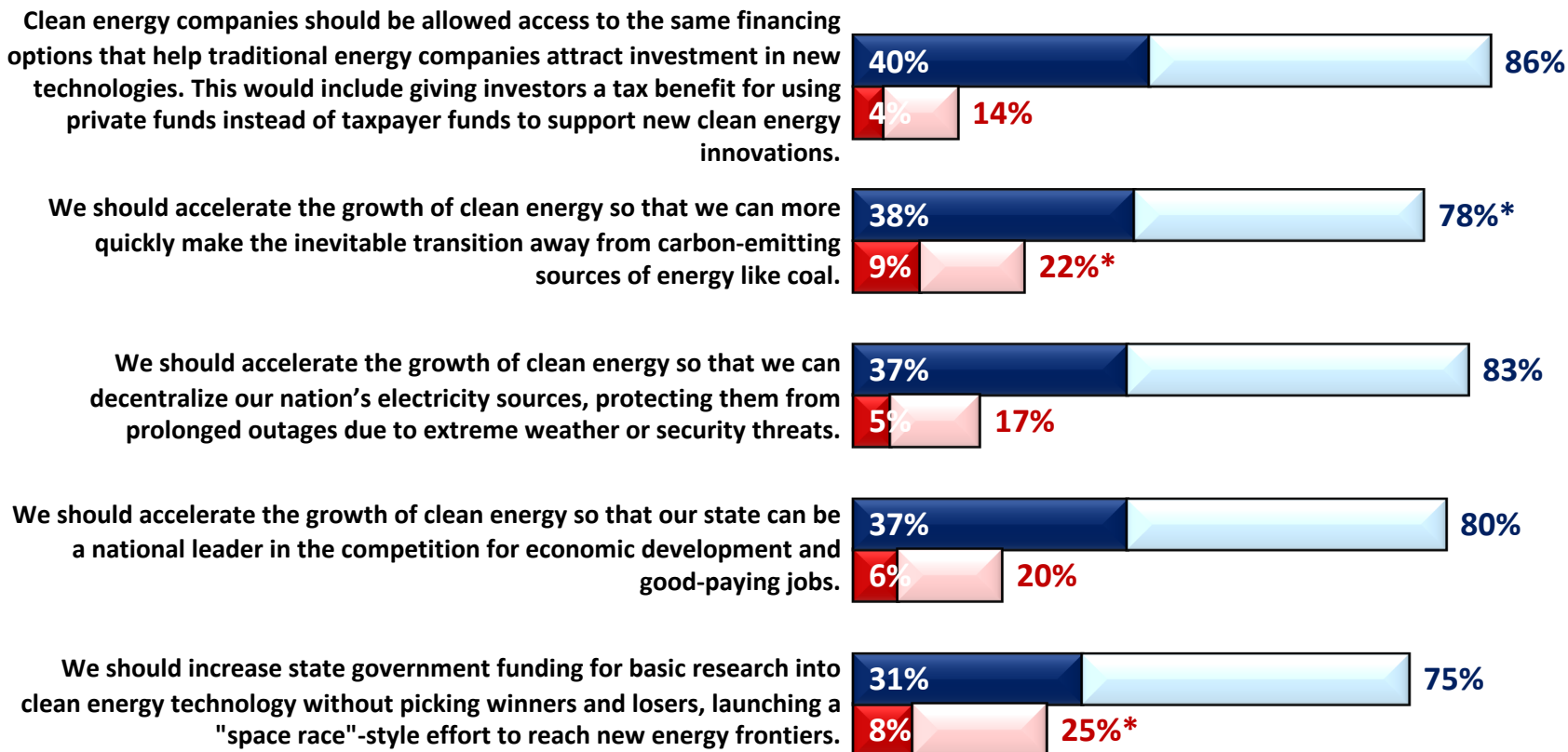
The current electricity monopoly system works fine as it is, and change will only end up creating confusion, reducing reliability, and resulting in higher costs for consumers.

[^]Split Sample A, N=484; ^{^^}Split Sample B, N=516.

These statements test well, especially ones focused on leveling the playing field for clean energy companies.

Thinking again about clean energy... Please read the following statements about why some people want to accelerate the growth of clean energy, by speeding up the development of sources of renewable energy like wind and solar power. After you read each statement, please indicate whether you agree or disagree with that statement."

Ranked by % Strongly Agree

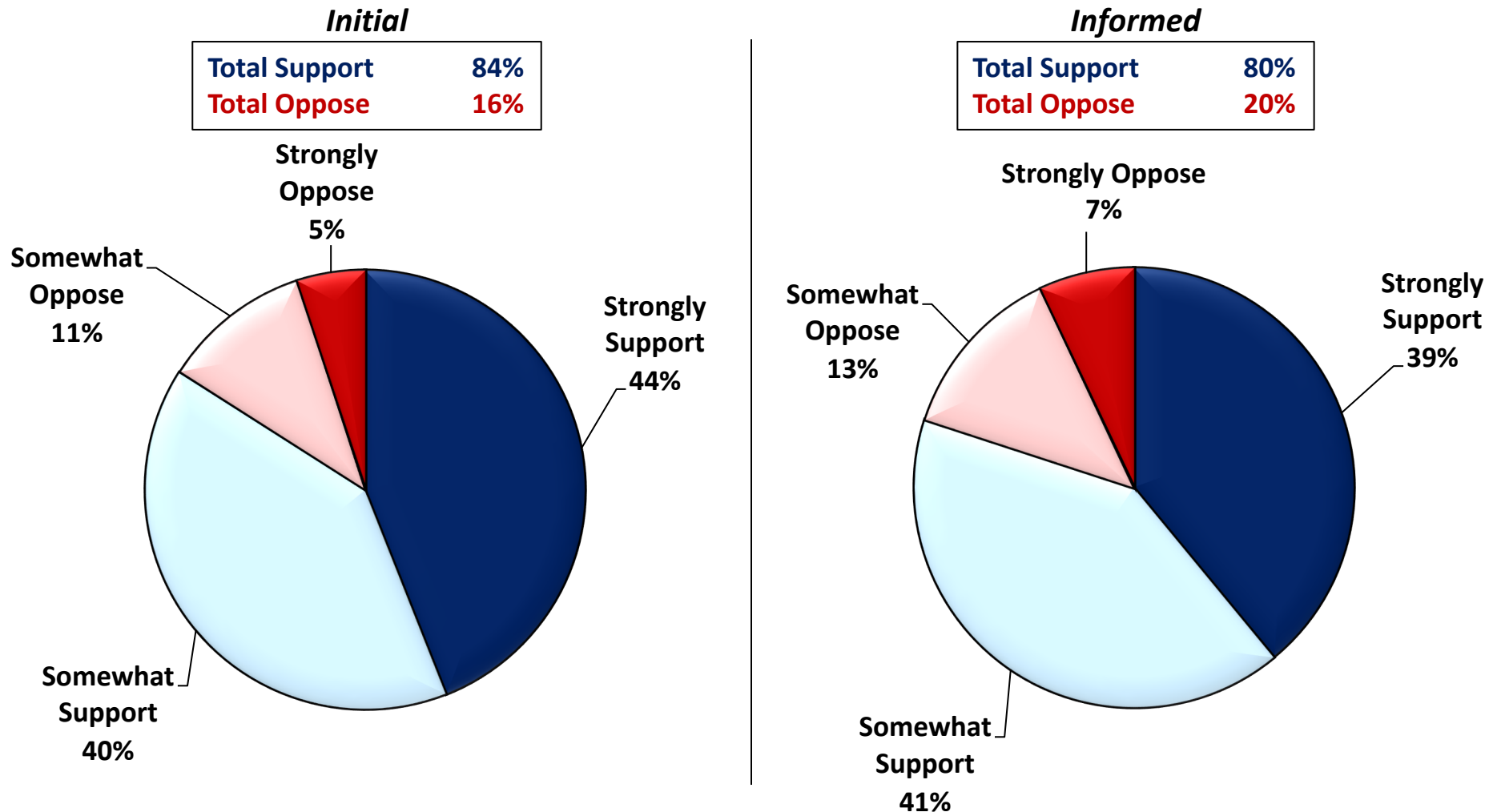


■ Strongly Agree ■ Total Agree ■ Strongly Disagree ■ Total Disagree

*Denotes Rounding.

Overall support for government intervention on the use of clean energy dipped slightly, but eight-in-ten voters still support it.

“And now that you have heard some more information, do you support or oppose the government taking action to accelerate the development and use of clean energy in the United States?”





Glen Bolger

Glen@pos.org

For more information about this presentation or
about Public Opinion Strategies, please give us a call.



214 N. Fayette St.
Alexandria, Virginia 22314
(703) 836-7655 - Phone
www.pos.org