

A 2016 NATIONAL SURVEY OF BROADCAST METEOROLOGISTS

Initial Findings



GEORGE MASON UNIVERSITY
CENTER for CLIMATE CHANGE
COMMUNICATION

A 2016 National Survey of Broadcast Meteorologists: Initial Findings

March 2016

Edward Maibach¹, David Perkins¹, Zephi Francis¹, Teresa Myers¹, Keith Seitter², Bernadette Woods Placky³, Sean Sublette³, Joe Witte⁴, Ned Gardiner⁵, Bud Ward⁶, Allison Engblom¹, Batel Yona¹

1. George Mason University, Center for Climate Change Communication, Fairfax, VA
2. American Meteorological Society, Boston, MA
3. Climate Central, Princeton, NJ
4. NASA/GSFC, Greenbelt, MD
5. NOAA Climate Program Office, Silver Spring, MD
6. Yale Project on Climate Change Communication, New Haven, CT

Cite as: Maibach, E., Perkins, D., Francis, Z., Myers, T., Seitter, K., et al. (2016) A 2016 National Survey of Broadcast Meteorologists: Initial Findings. George Mason University, Fairfax, VA: Center for Climate Change Communication.

Table of Contents

INTRODUCTION	1
SUMMARY OF FINDINGS.....	2
DETAILED FINDINGS: THE PRACTICE OF BROADCAST METEOROLOGY	6
Opinions on climate change.....	13
Local impacts of climate change.....	25
Reporting on climate change	30
Climate Matters users section	48
General information about the weathercaster	55
SURVEY METHODOLOGY	63

Introduction

This report provides initial findings from the fourth nationally representative survey of broadcast meteorologists conducted by George Mason University and partner organizations (American Meteorological Society, Climate Central, NASA, NOAA, National Weather Association and Yale University) with National Science Foundation funding. The aim of these surveys – the first three of which were conducted in 2010, 2011, and 2015 – is to explore broadcast meteorologists’ views about climate change, and their views and activities related to reporting on climate change.

The current survey differed slightly from the previous three in that, for the first time, we began the survey with a broader focus to better understand broadcast meteorologist’ day-to-day activities and engagement with their viewership. These topics included: the relative priority of forecasting and reporting versus other educational activities; use of different communication channels, including social media outreach; the use of outdoor activity forecasts; and the influence of news consultants on the weather segment.

The first two surveys (2010, 2011) were limited to broadcasters who were current members of the American Meteorological Society and/or the National Weather Association. In 2015, and again this year, we attempted to survey all broadcast meteorology professionals currently working in the United States – 2,033 professionals in 2016.

Our survey was administered via email between January 6 and January 31, 2016. After making an initial request to participate, we sent up to five additional requests/reminders to participate to those people who had not yet completed a survey. A total of 646 broadcasters participated, with participants coming from 49 U.S. states. Participation rate in the survey was 32%, which compared favorably to the 22% participation rate in 2015.

We wish to sincerely thank all of the 646 broadcast meteorologists who took time out of their busy schedules to participate in this research. We hope the following report is useful to them.

Funding for this research was provided by NSF Award # DRL-1422431.

Summary of Findings

The practice of broadcast meteorology:

- Not surprisingly, weathercasters' top work priority by far is preparing and delivering the weather forecast, including warning co-anchors and viewers about potential high-impact weather events. Educational outreach of all types is a much lower priority.
- Nearly all weathercasters (90% or more) regularly appear on TV, and use their station's website, their station's social media sites, and their own social media sites in their work; a majority (68%) also regularly appear on radio. Only a minority regularly writes a blog or a newspaper column, or regularly makes school or community visits.
- Facebook and Twitter are by far weathercasters' most commonly used social media platforms; over 94% use both platforms.
- Nearly all weathercasters (89%) have used at least one outdoor activity forecast to engage viewers in the past year.

The role of news consultants:

- Nearly two-thirds of weathercasters (63%) work at a station where a news consultant has made suggestions about the weather segment in the past year.
- These weathercasters reported that their station's consultant rarely commented on the inclusion of climate change information in the weathercast: 2% supported the idea; 6% opposed the idea; and 92% were indifferent or did not comment.

Perceived trust by viewers:

- Nearly all weathercasters felt their viewers trust them – strongly (68%) or moderately (30%) – as a source of information about the weather.
- Conversely, many fewer weathercasters felt their viewers trust them – strongly (14%) or moderately (32%) – as a source of information about climate change. Only 3%, however, felt they are distrusted as a source of climate change information.

Views of climate change:

- Nearly all weathercasters (over 99%) think climate change – as defined by the American Meteorological Society – is happening.
- Nearly half of weathercasters (46%) are convinced that the climate change over the past 50 years has been primarily or entirely due to human activity, and nearly one quarter (22%) think it is more or less equally caused by human activity and natural events. About one quarter (24%) think the change has been primarily or entirely due to natural events.
- Weathercasters have diverse views on the extent to which additional climate change can be averted over the next 50 years, if mitigation measures are taken worldwide: only 13% think a large amount or all additional climate change can be averted; many more think a moderate (39%) or a small (34%) amount of additional climate change can be averted; and 13% think almost no additional climate change can be averted.
- Weathercasters also hold diverse views about the extent to which harm – to people’s health, agriculture, fresh water supplies, transportation systems, and homes and other buildings – can be prevented over the next 50 years: a quarter (23% to 26%) think a large amount or almost all of the harm to these things can be prevented; one quarter to one third (26% to 36%) think a moderate amount of harm can be prevented; and another quarter (24% to 28%) think only a small amount or none of the harm can be prevented.
- Slightly over half (54%) of weathercasters think the local climate in their area has changed in the past 50 years as a result of climate change, while one quarter (24%) think it hasn’t, and a nearly one quarter say they don’t know (22%). Most weathercasters who think their local climate has changed say the impacts have been approximately equally mixed between beneficial and harmful (60%); one third (33%) say the impacts have been primary or exclusively harmful, and 6% say the impacts have been primarily beneficial.
- Six in ten weathercasters (60%) think the local climate in their area will change over the next 50 years. About 4 in 10 (39%) of these weathercasters say the impacts will be mixed, while 30% say the impacts will be primarily or exclusively harmful, and 4% say the impacts will be primarily beneficial.
- Over one in five weathercasters (21%) say their opinion about climate change has changed in the past five years. Of those, most (82%) say they now feel more convinced that climate change is happening. Most commonly, they say their opinion changed because of: new peer-reviewed climate science (62%); the scientific community becoming more certain (49%); one or more climate scientists who influenced them (47%); or one or more broadcast meteorologists who influenced them (30%).

Reporting on climate change:

- A large majority of weathercasters (70%) say they feel very comfortable presenting historical local climate statistics (e.g., past 50 years) on-air. Conversely, only a minority say they feel very comfortable presenting a range of other kinds of climate change information on air, including: historical global climate statistics (33%); information about local climate change impacts (21%); adaptation options to reduce vulnerability (18%); future local climate projections (15%); information about global climate impacts (12%); information about mitigation strategies (12%); and future global climate projections (9%).
- Most weathercasters (67%) think that reporting on climate change will neither help nor hurt their careers, while 22% say it will help, and 11% say it will hurt.
- Only 9% of weathercasters think their audience is very interested in learning about the local impacts of climate change, but over 90% say their audience is at least ‘slightly interested.’
- Over the past year, nearly 4 in 10 weathercasters had informed their viewers – or others in their community – about the local impacts of climate change on-air (39%), on their own social media accounts (39%), at community events (39%), and at school visits (39%). Many also used their station website (33%) and station’s social media (29%) accounts. Personal blogs (12%), radio (9%) and newspaper columns (5%) were the least used channels to inform audiences about local climate change impacts.
- Facebook (88%) and Twitter (85%) were by far the most common social media tools used for communicating about climate change.

Climate Matters – a comprehensive climate change educational resource for broadcast meteorologists:

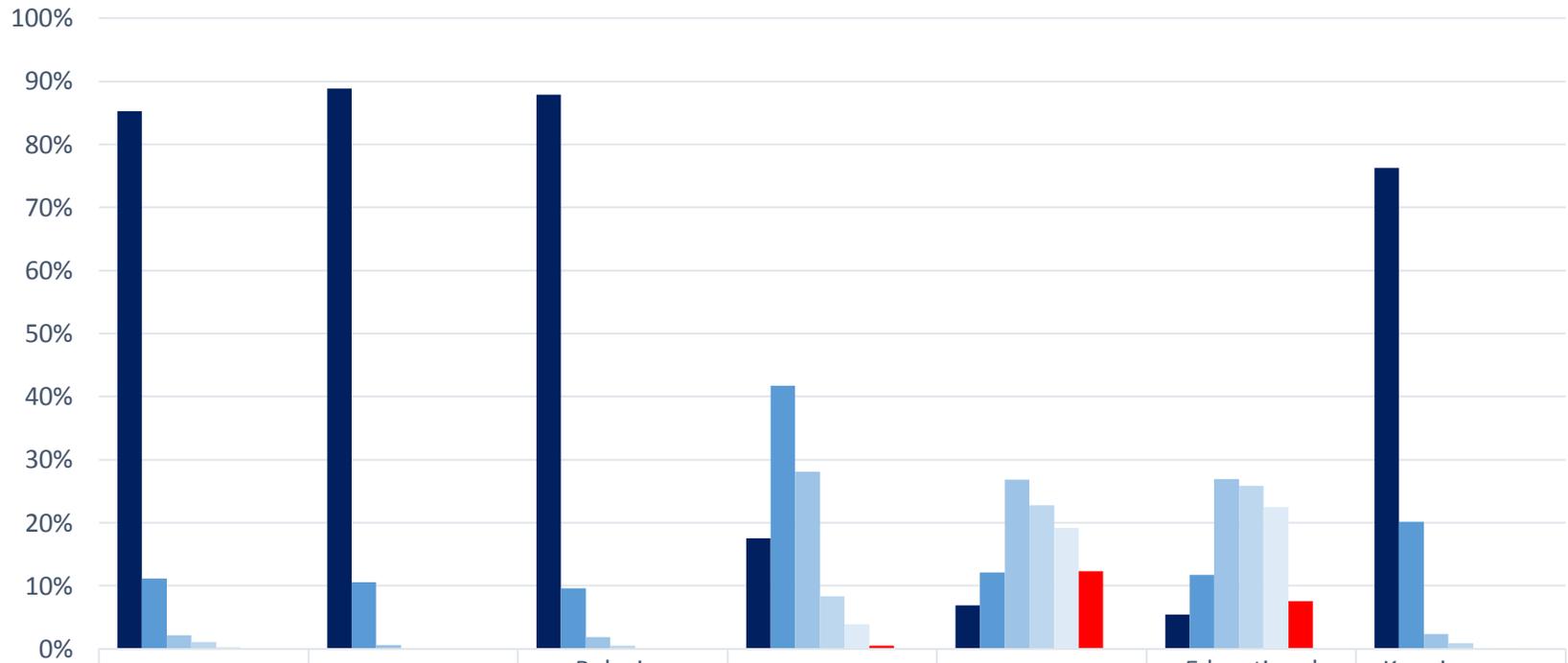
- Just under half (46%) of weathercasters had heard of *Climate Matters*. Of those who had, just over half (54%) currently receive the materials (via email), and 70% of those weathercasters use the materials.
- Most weathercasters who use *Climate Matters* materials found them to be easy to use in their climate reporting in social media (88%), on-air (72%) and on their station’s website (67%). Fewer than 10% found the materials hard to use.
- Weathercasters estimated that they get primarily positive (40%) or neutral (37%) feedback from viewers when they use *Climate Matters* materials, although they also receive some negative feedback (23%).

A diverse group of weathercasters participated in the survey:

- Approximately three-quarters are men (74%) and one quarter are women (26%), and they range in age from 18 to 29 (26%) to 60 to 69 (9%).
- Most hold a BS (59%) or MS (8%) in meteorology/atmospheric science, or a BS or BA (8%) or MS or MA (2%) in broadcast meteorology. Other commonly reported degrees are a certificate in meteorology/broadcast meteorology (19%), a BA in journalism/mass communication (17%), and a BA or BS in other disciplines (13%).
- They have worked as broadcast meteorologists from less than a year (2%) to more than 26 years (23%).
- About two-thirds hold a professional certification – the AMS CBM (31%), the AMS Seal of Approval (29%), or the NWA Seal of Approval (19%) – while 37% hold no seal of approval.
- The length of time working at their current station ranged from less than a year (9%) to more than 16 years (23%).
- They hold a range of positions including Chief Meteorologist (33%), Weekend Meteorologist (25%), Morning/Noon/Mid-Day Meteorologist (22%), Primary Weather Anchor (5%), Morning/Noon/Mid-Day Weather Anchor (4%), Weekend Weather Anchor (3%), On-Call Weather Anchor/Meteorologist (2%), and Weather Producer (1%).

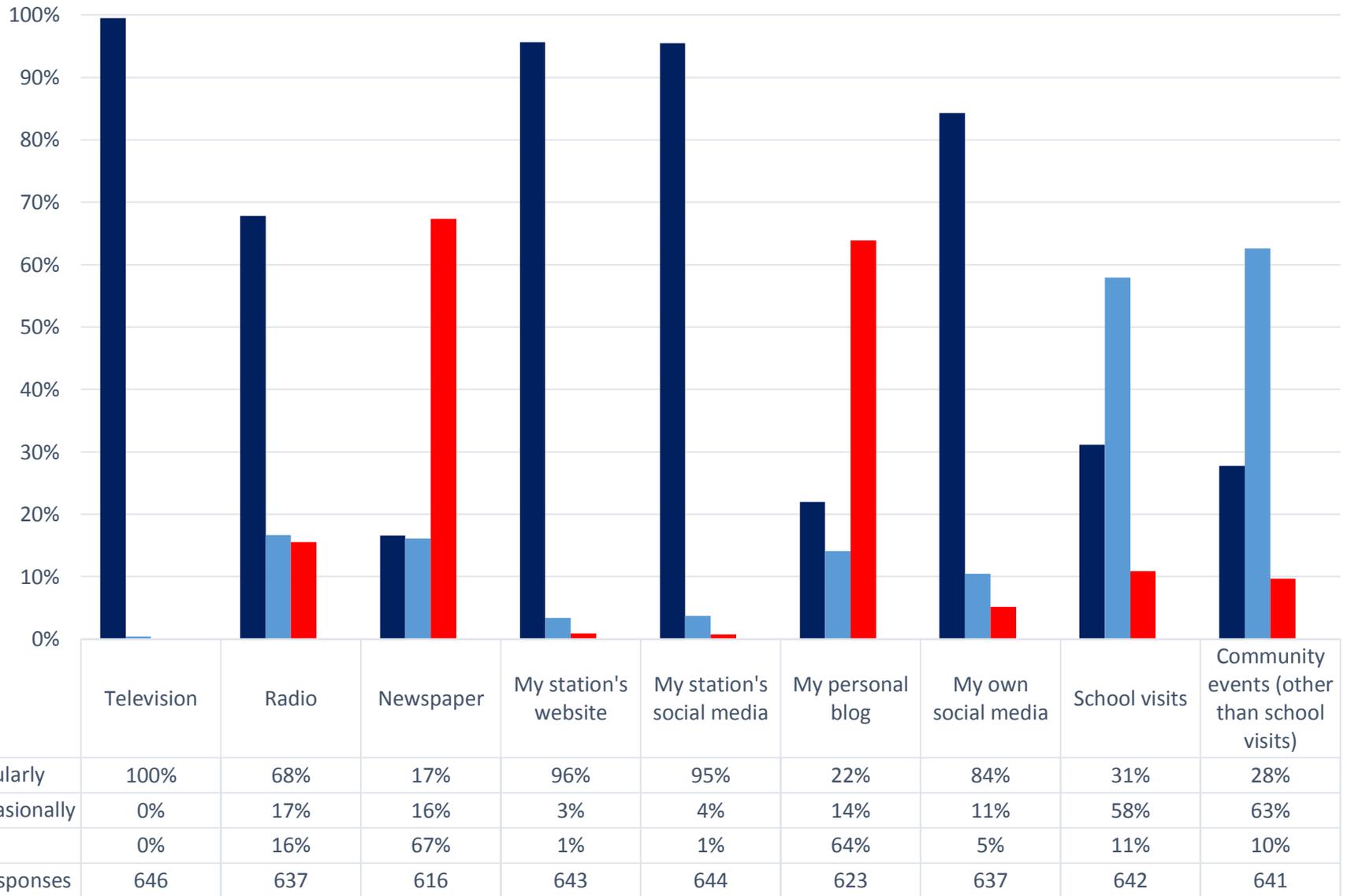
DETAILED FINDINGS: THE PRACTICE OF BROADCAST METEOROLOGY

How important are each of the following activities in your role as a weathercaster?

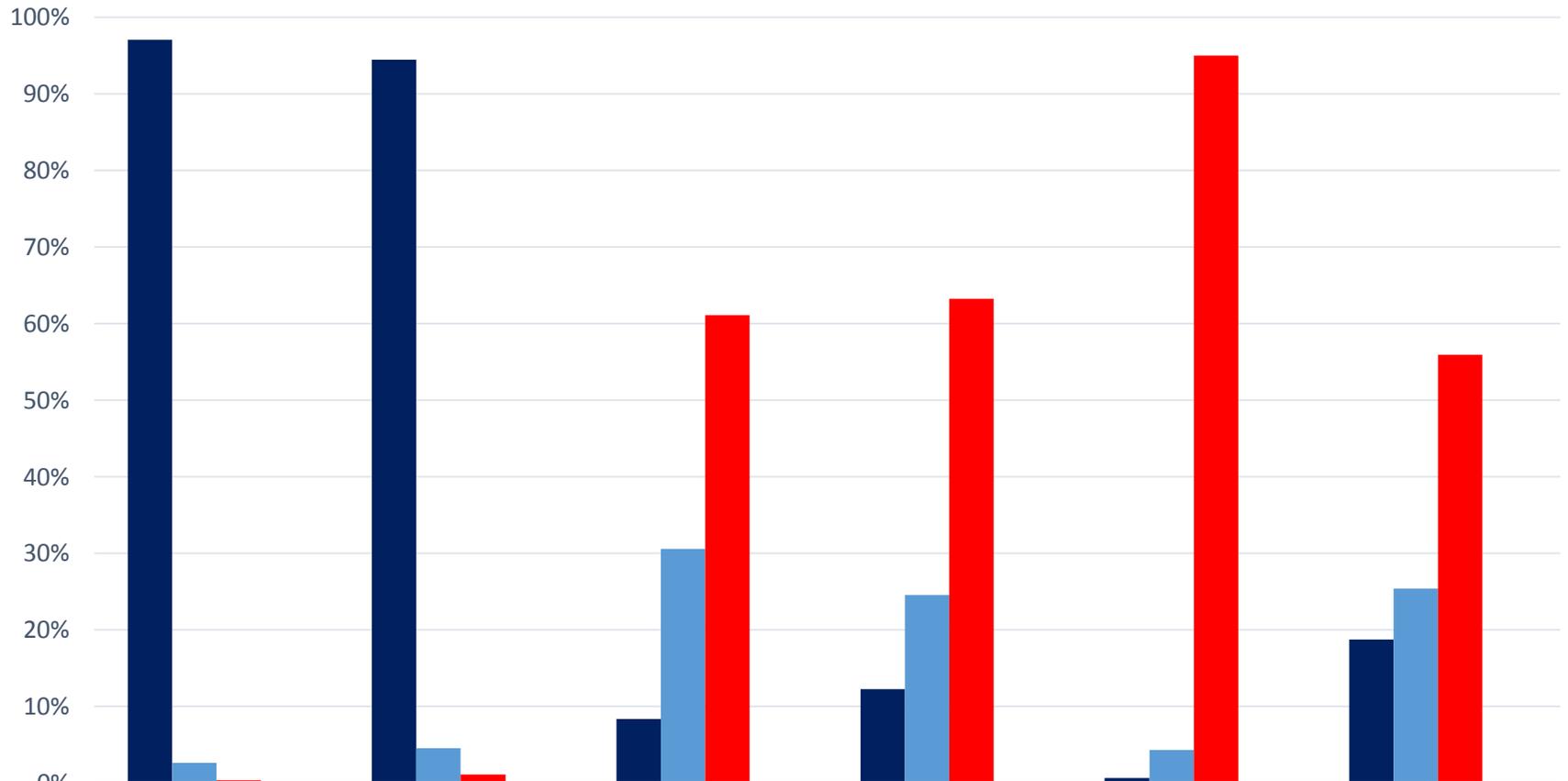


	Preparing the weather forecast	Reporting the weather forecast	Relaying weather safety watches/warnings from NWS	Educational outreach about weather	Educational outreach about climate change	Educational outreach about other science topics	Keeping news staff apprised of high-impact weather events
■ Extremely important	85%	89%	88%	18%	7%	5%	76%
■ Very important	11%	11%	10%	42%	12%	12%	20%
■ Moderately important	2%	1%	2%	28%	27%	27%	2%
■ Somewhat important	1%	0%	0%	8%	23%	26%	1%
■ Slightly important	0%	0%	0%	4%	19%	22%	0%
■ Not at all important	0%	0%	0%	0%	12%	8%	0%
Total Responses	646	646	645	645	642	646	646

Over the past 12 months, which if any of the following communication channels did you use as part of your job in broadcast meteorology?

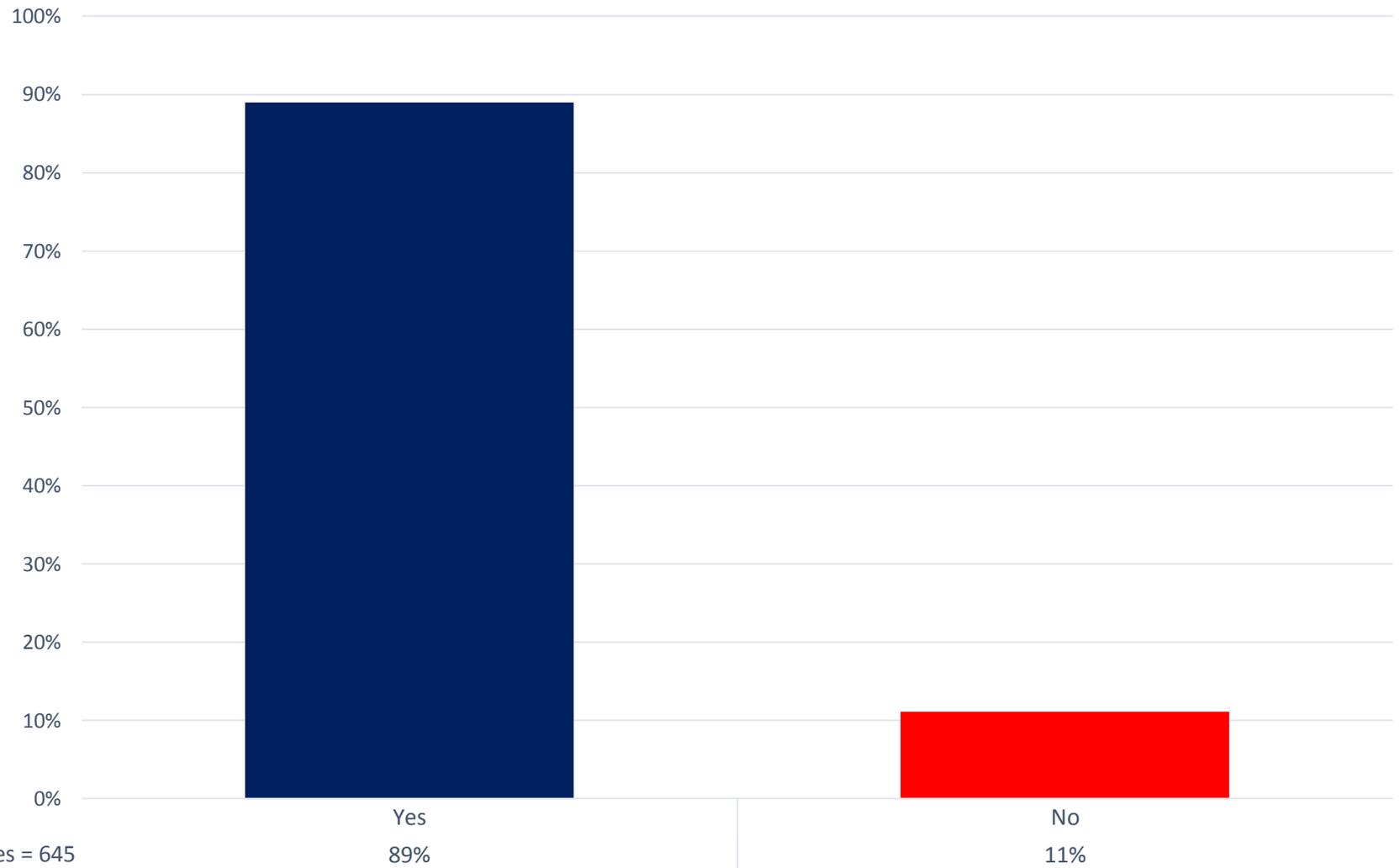


Over the past 12 months, which if any of the following online and social media tools did you use as part of your job in broadcast meteorology?



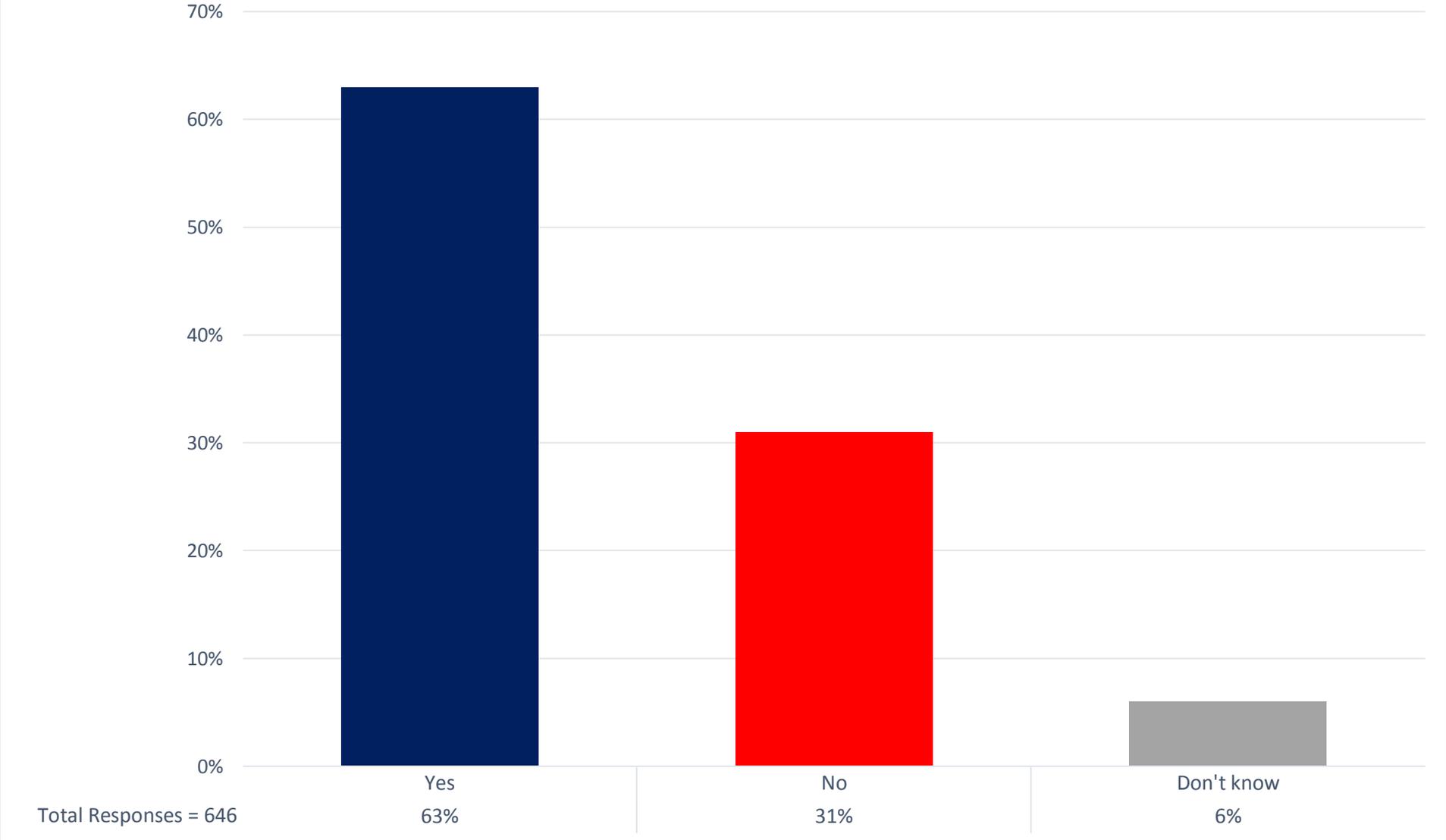
	Facebook	Twitter	Periscope	YouTube	Pinterest	Instagram
■ Yes, regularly	97%	94%	8%	12%	1%	19%
■ Yes, occasionally	3%	4%	31%	25%	4%	25%
■ No	0%	1%	61%	63%	95%	56%
Total Responses	646	646	612	612	603	615

*In the past 12 months, have you used an outdoor activities forecast during your weathercast (e.g., gardens, beach, ski, birding, golf) to engage your viewership?**



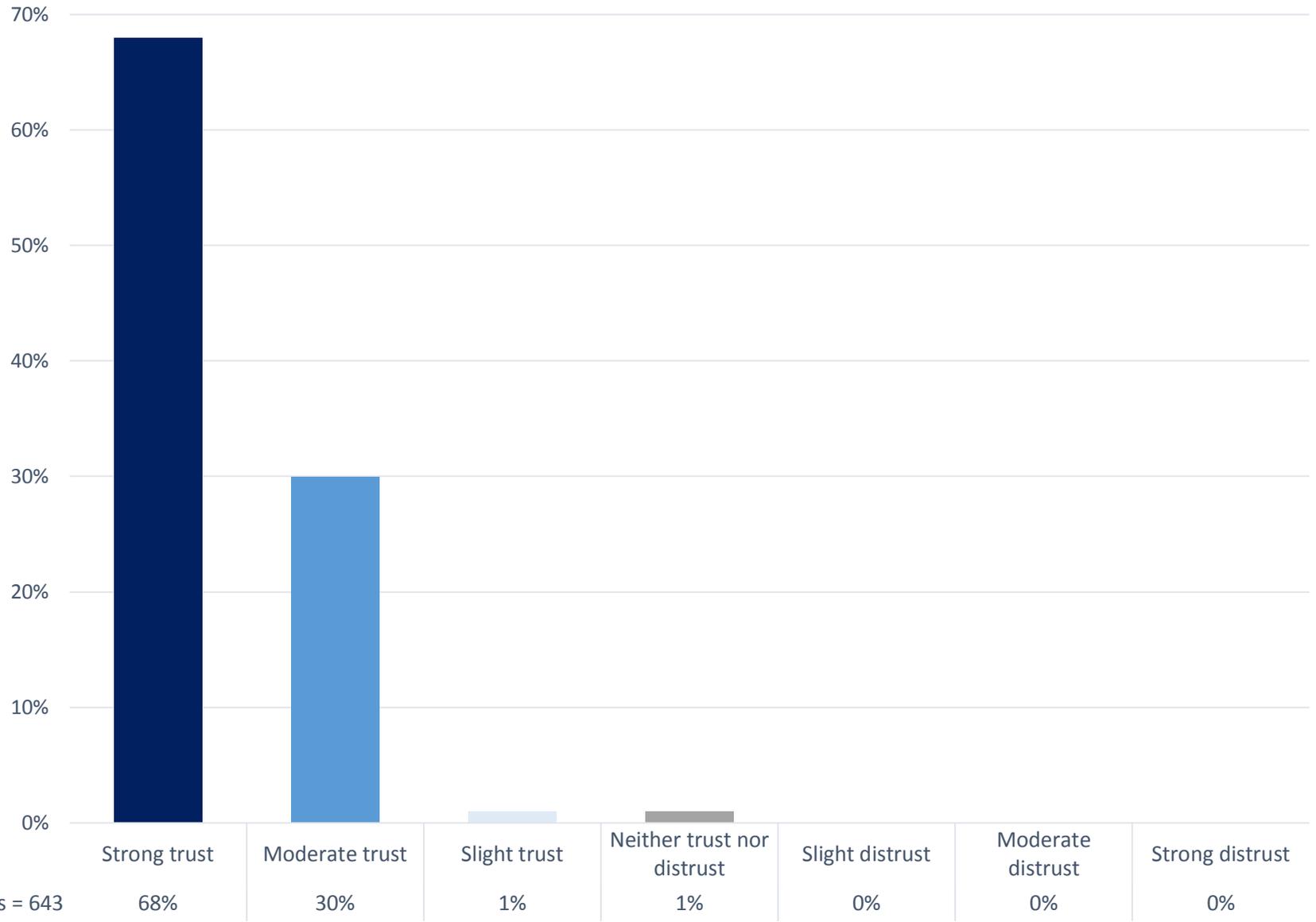
*The following question was asked as a follow-up: "What type(s) of activity forecasts have you used?" Responses have not yet been coded. n=490.

*In the past 12 months, has your station worked with a consultant who gave suggestions on your station's weather segments?**



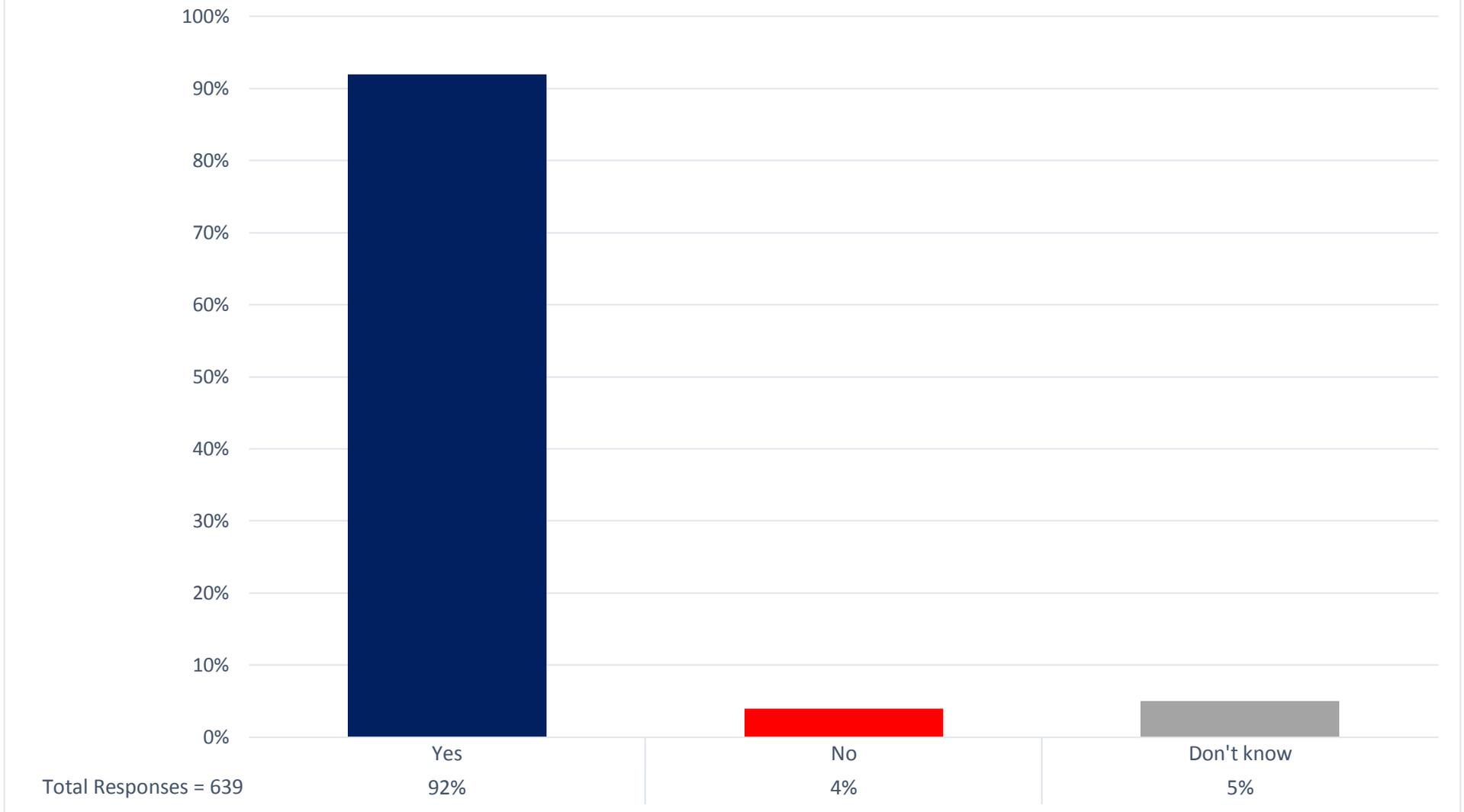
*The following question was asked as a follow-up: "Briefly, what advice did the consultant give the weather team?" Responses have not yet been coded. n=365.

To what extent do you believe your viewers trust you as a reliable source of weather information?



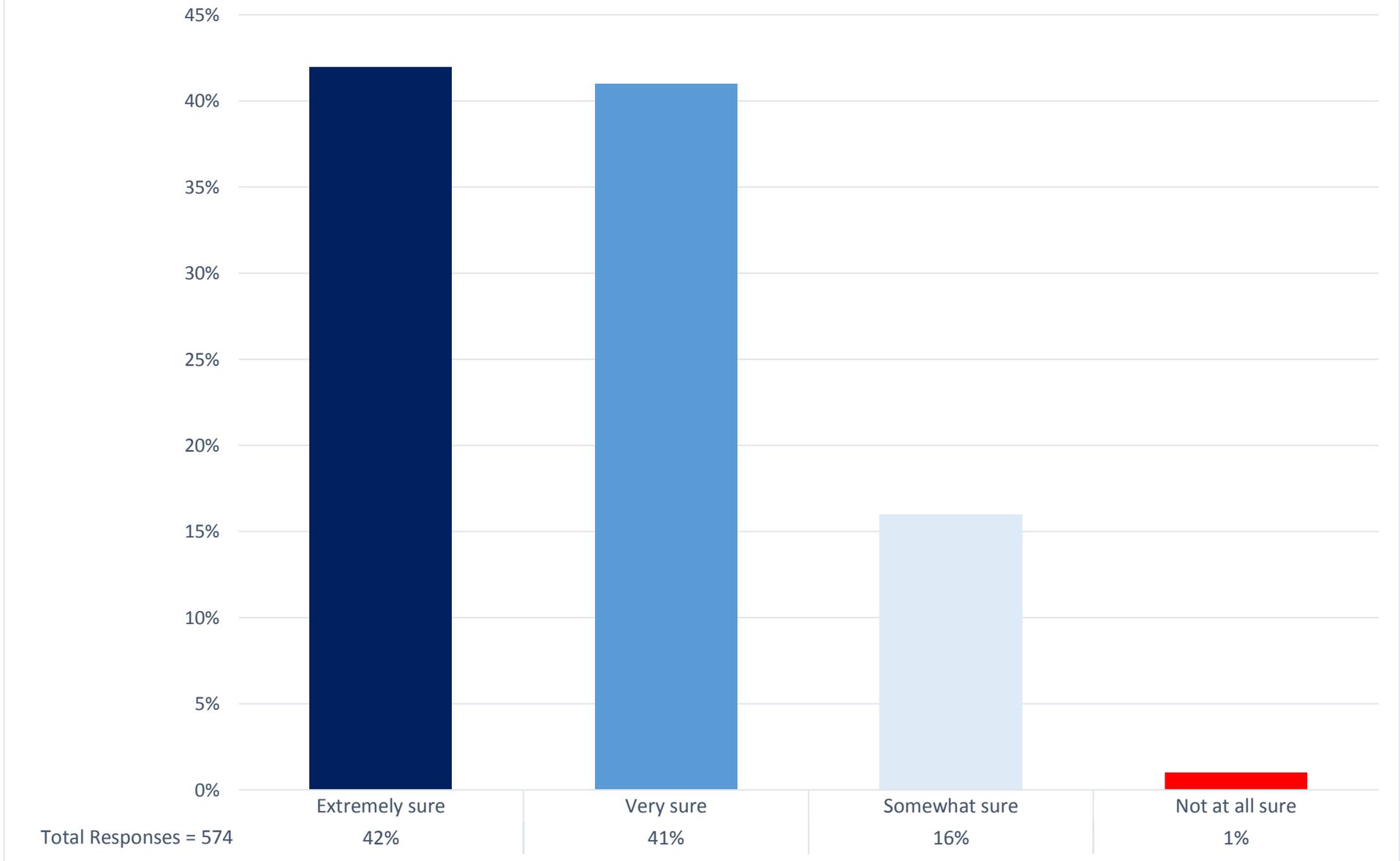
OPINIONS ON CLIMATE CHANGE

*Regardless of the cause, do you think climate change is happening?**



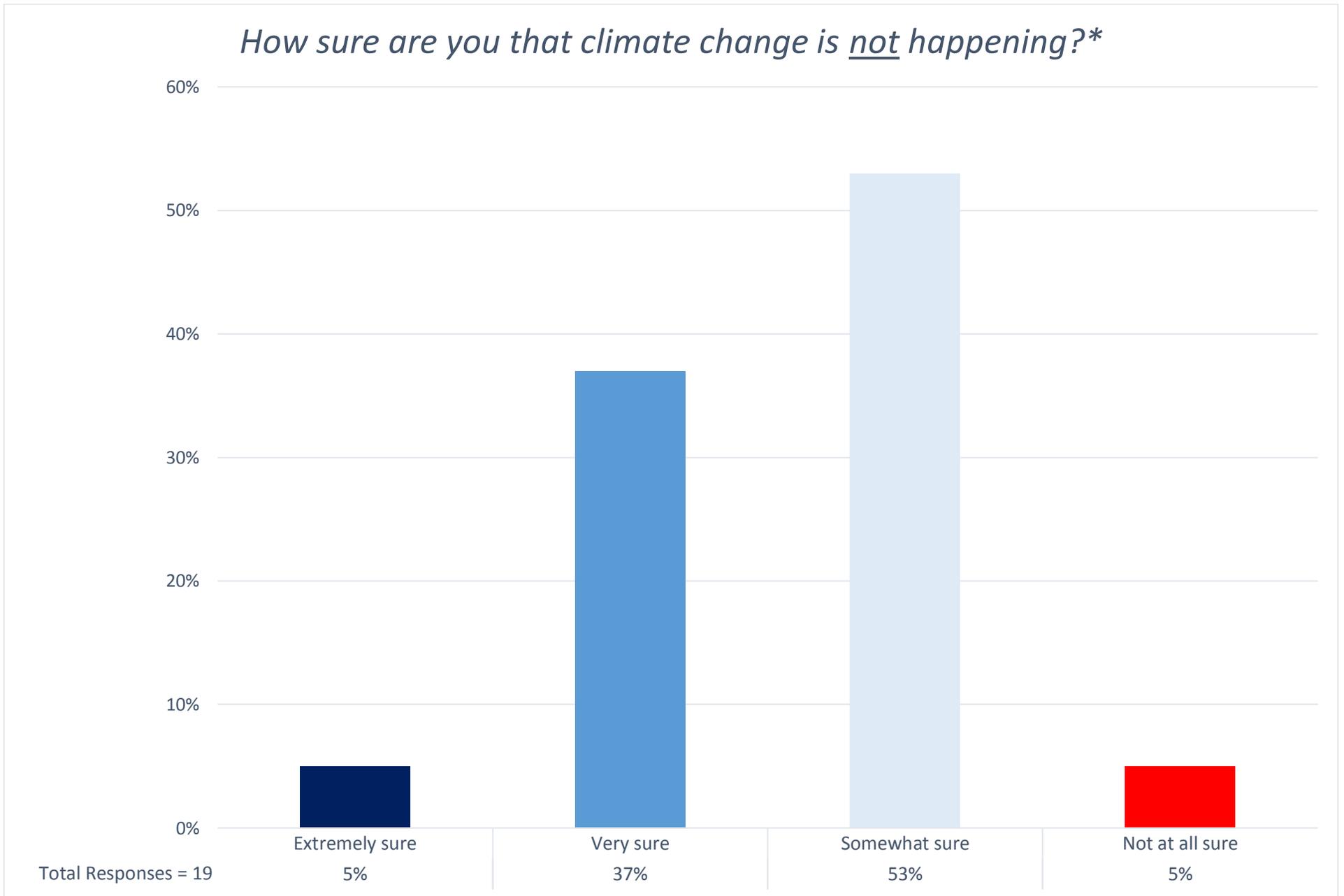
*Question was preceded by this statement: "Please read the following information: The American Meteorological Society (AMS) defines climate change as: "Any systematic change in the long-term statistics of climate elements (such as temperature, pressure, or winds) sustained over several decades or longer. Climate change may be due to: natural external forcings, such as changes in solar emission or slow changes in the earth's orbital elements; natural internal processes of the climate system; or anthropogenic forcing."

*How sure are you that climate change is happening?**



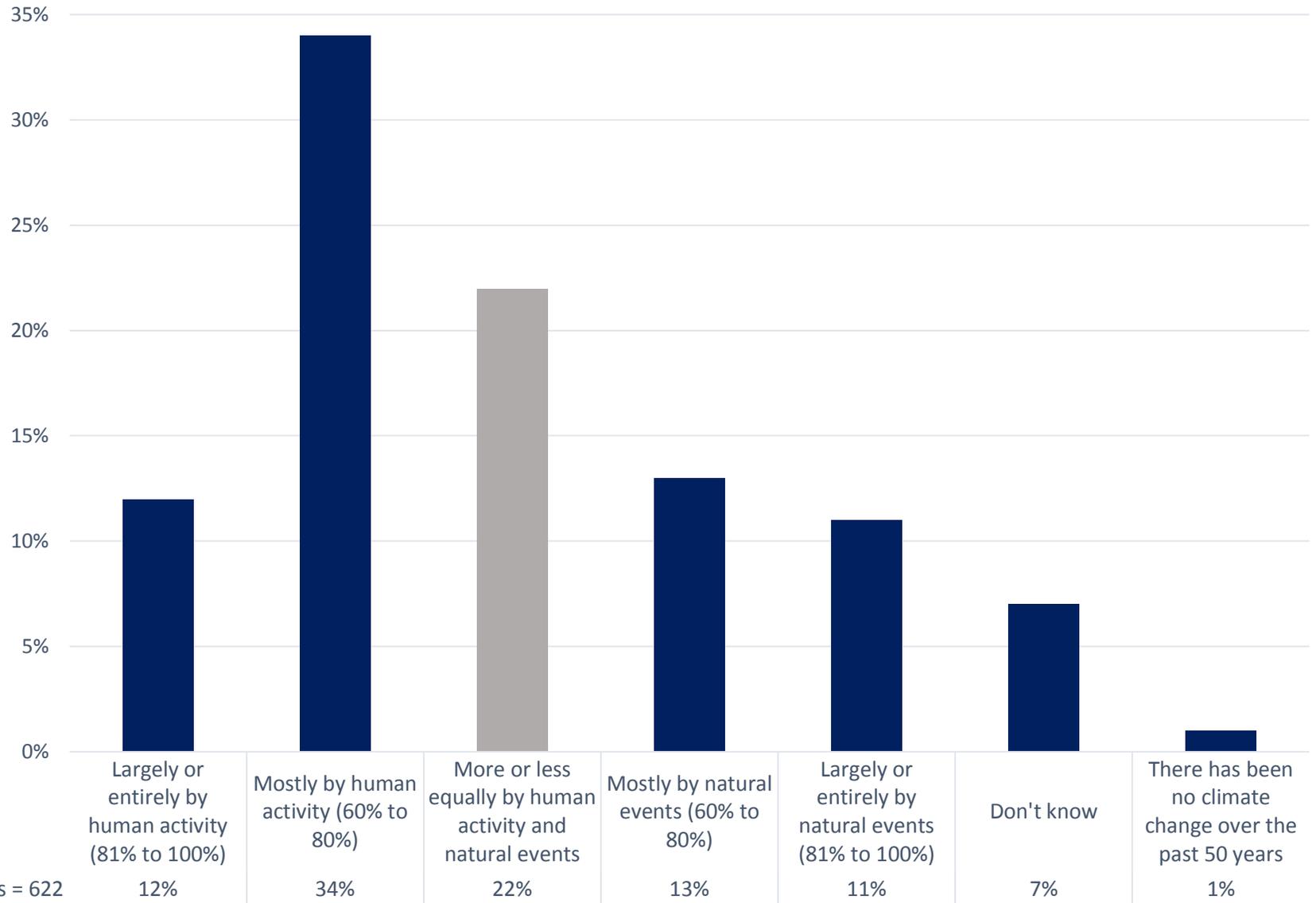
*Question asked only of those who previously responded that climate change is happening.

*How sure are you that climate change is not happening?**

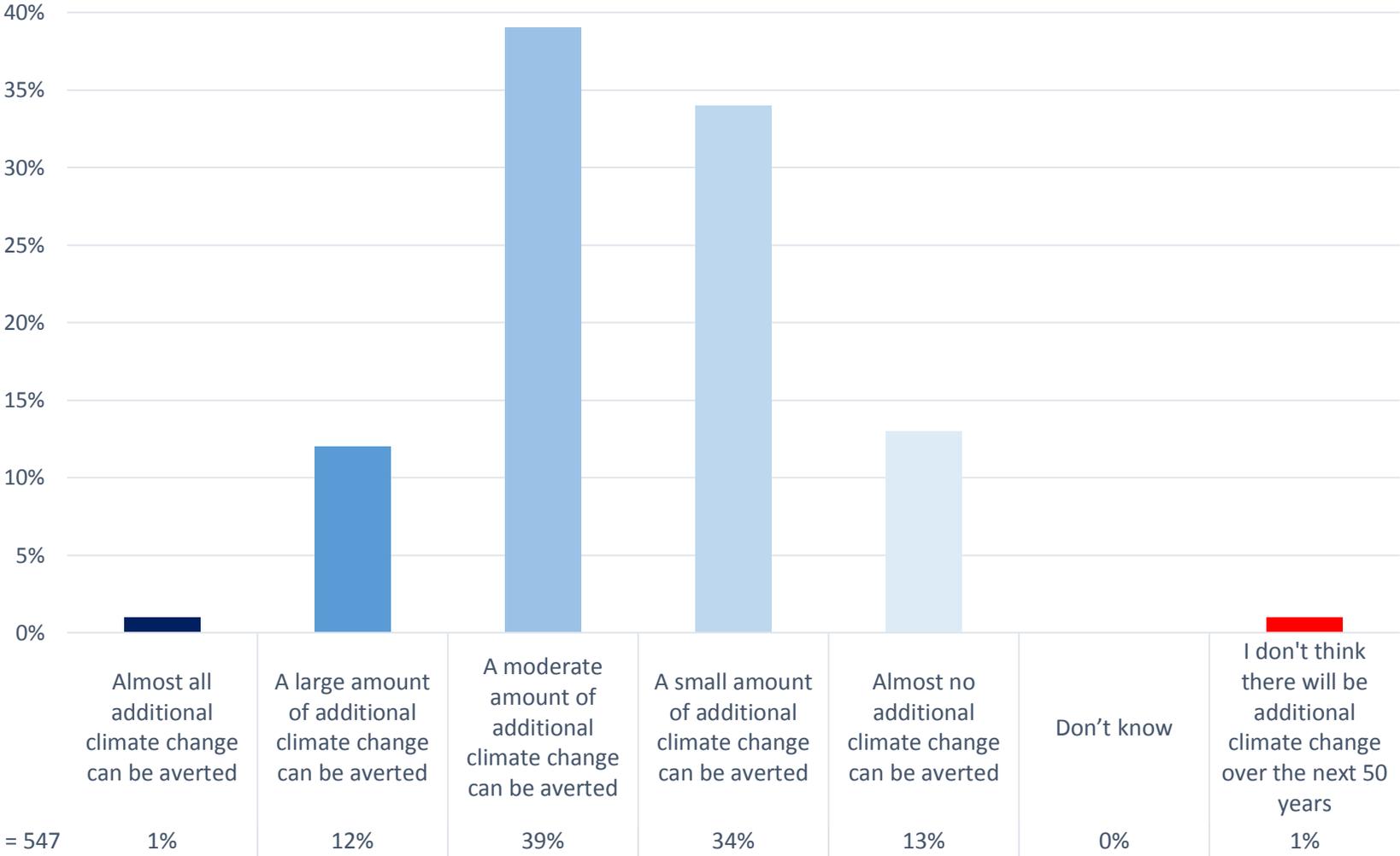


*Question asked only of those who previously responded that climate change is not happening.

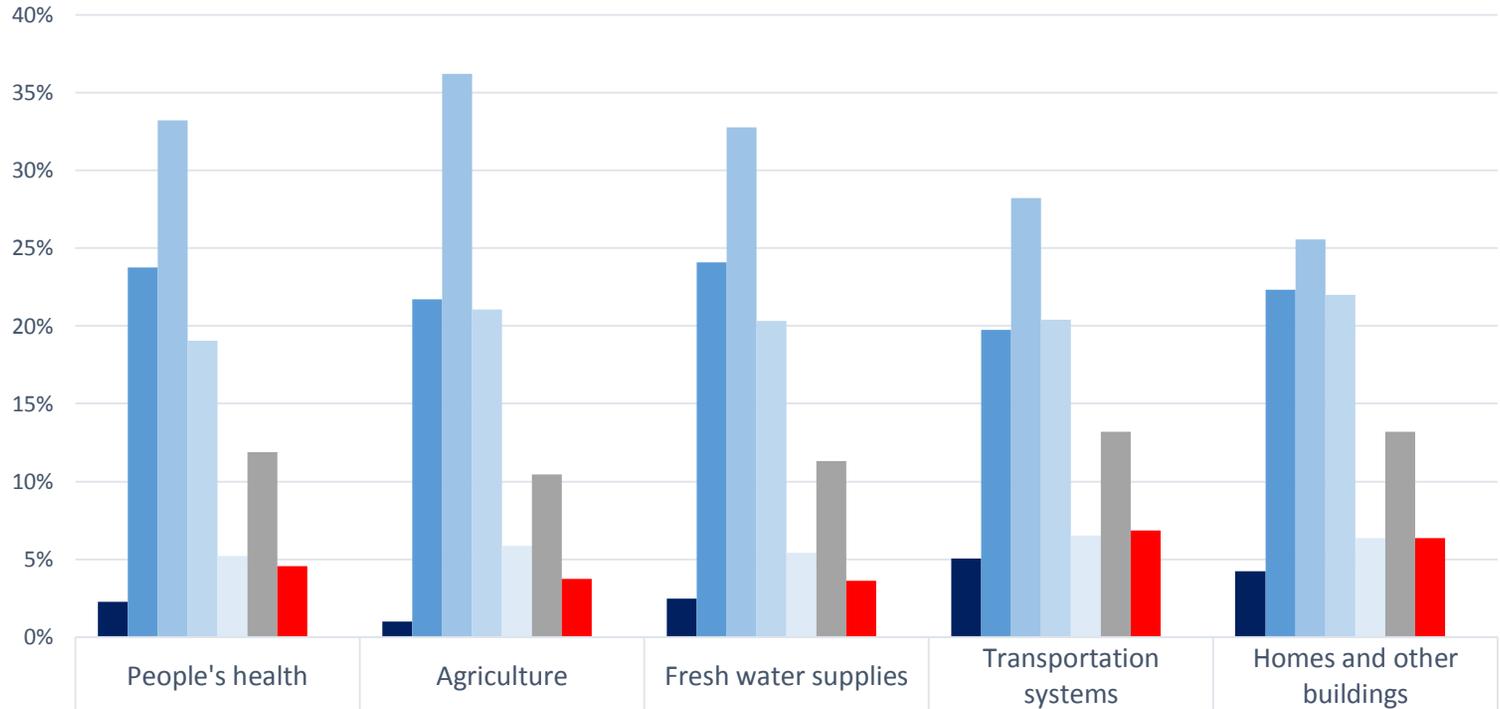
Do you think that the climate change that has occurred over the past 50 years has been caused...



Over the next 50 years, to what extent can additional climate change be avoided if mitigation measures are taken worldwide (such as substantially reducing emissions of carbon dioxide and other greenhouse gases)?

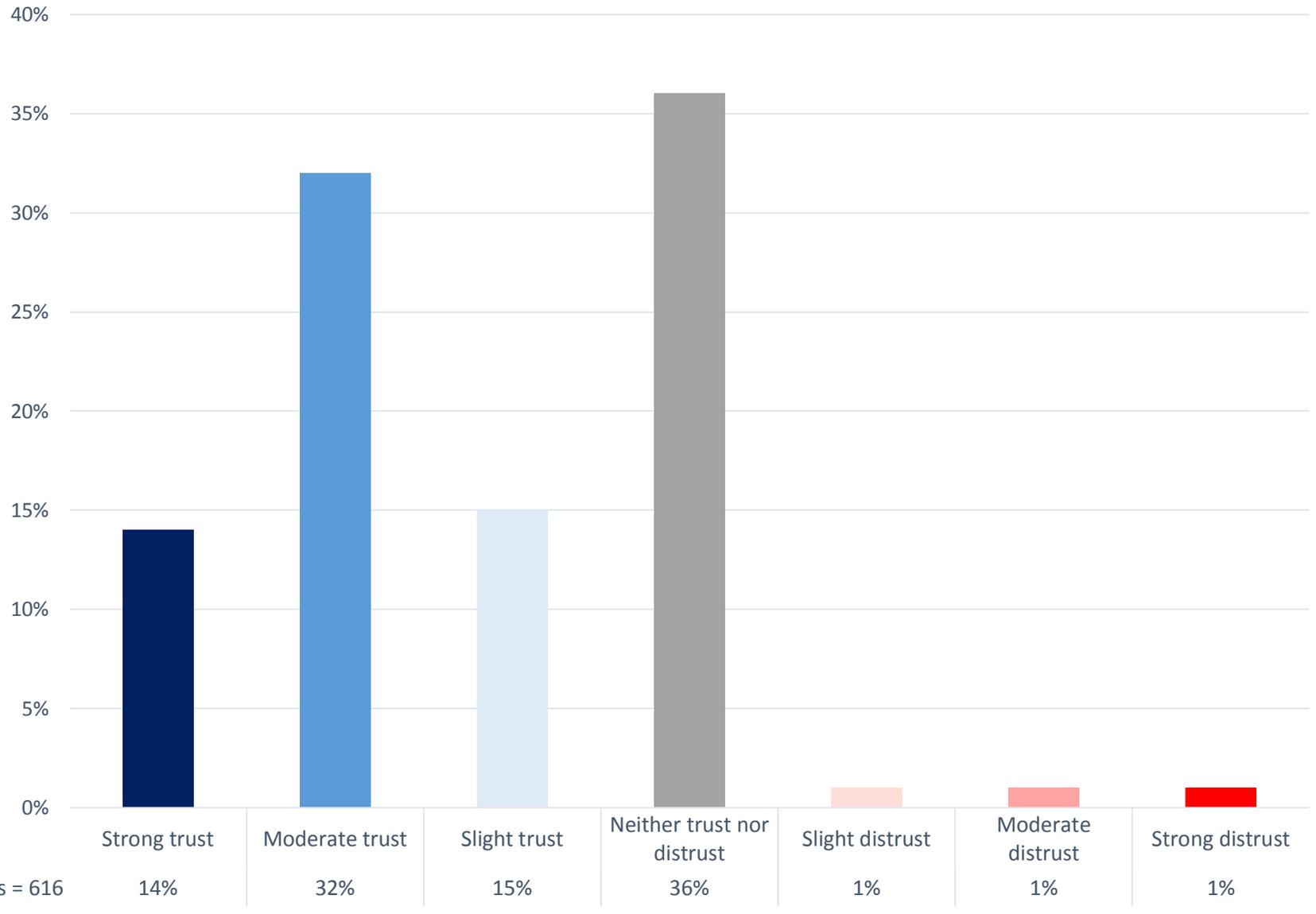


Over the next 50 years, in the United States, to what extent can the following be protected from harmful impacts of climate change if adaptation measures (i.e., actions to reduce vulnerability) are taken?

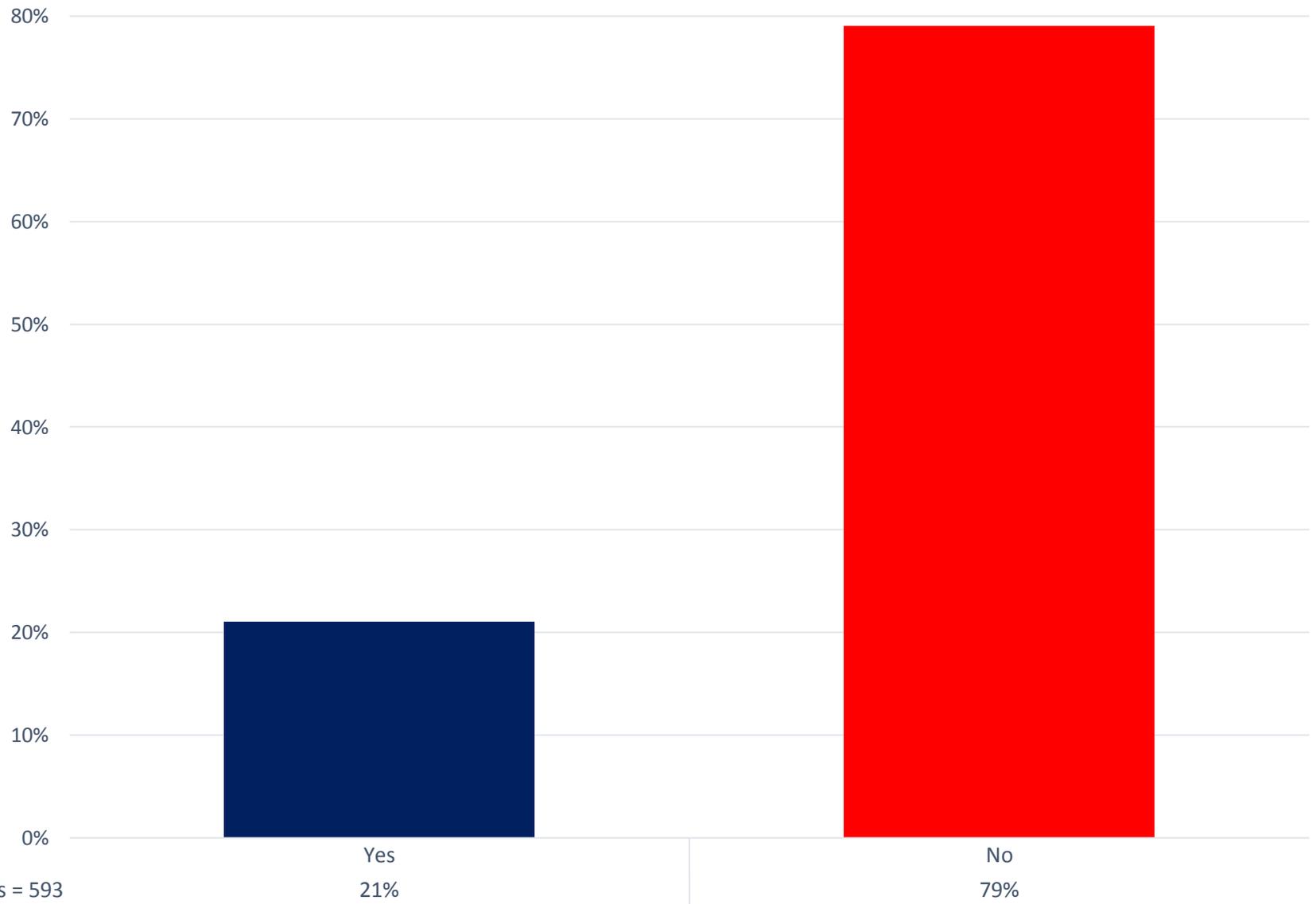


■ Almost all	2%	1%	2%	5%	4%
■ Large amount	24%	22%	24%	20%	22%
■ Moderate amount	33%	36%	33%	28%	26%
■ Small amount	19%	21%	20%	20%	22%
■ Almost none	5%	6%	5%	7%	6%
■ Don't know	12%	10%	11%	13%	13%
■ No harm due to climate change	5%	4%	4%	7%	6%
Total Responses	614	613	610	613	614

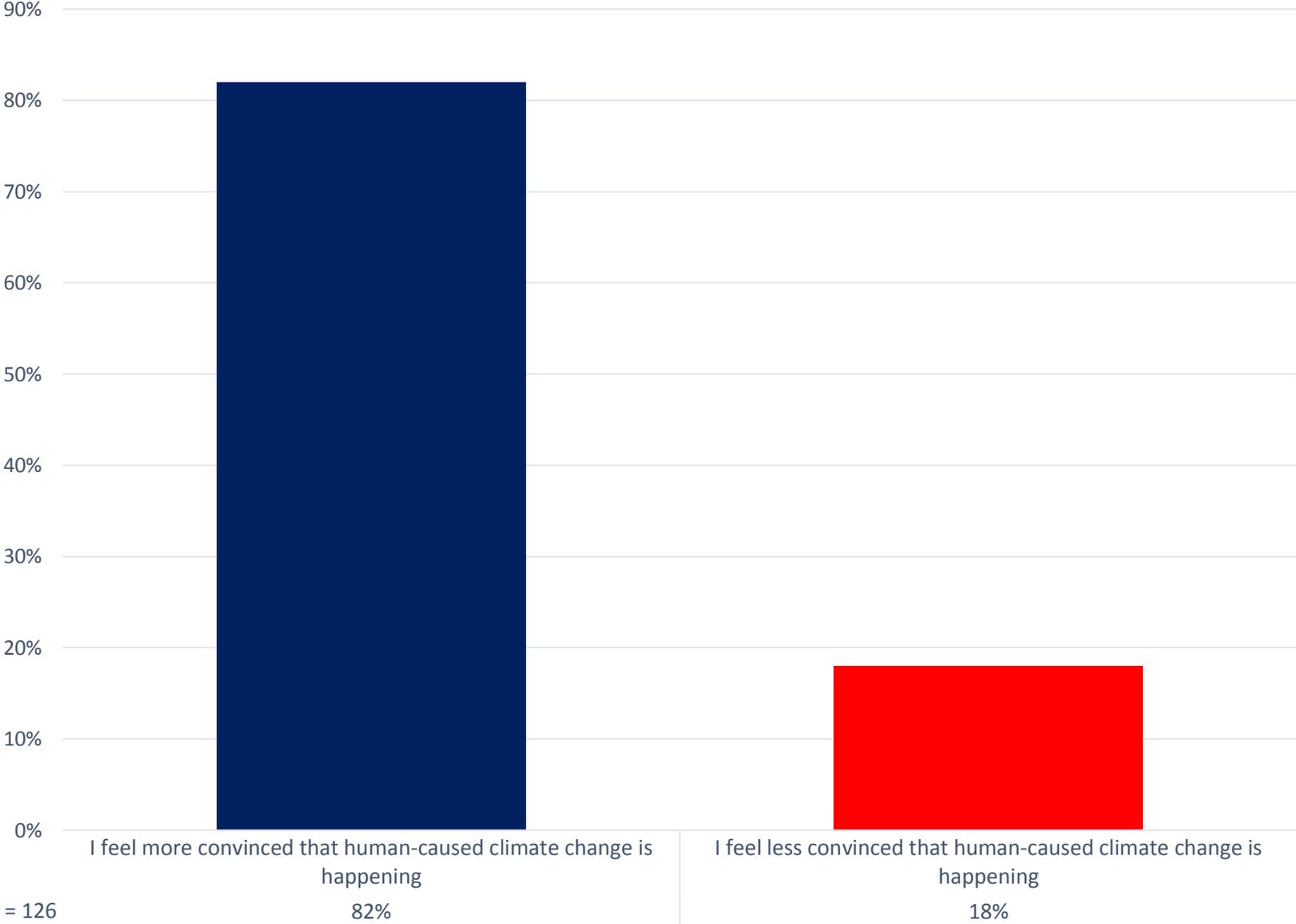
To what extent do you believe your viewers trust you as a reliable source of climate change information?



Has your opinion/position on climate change changed in the past five years?

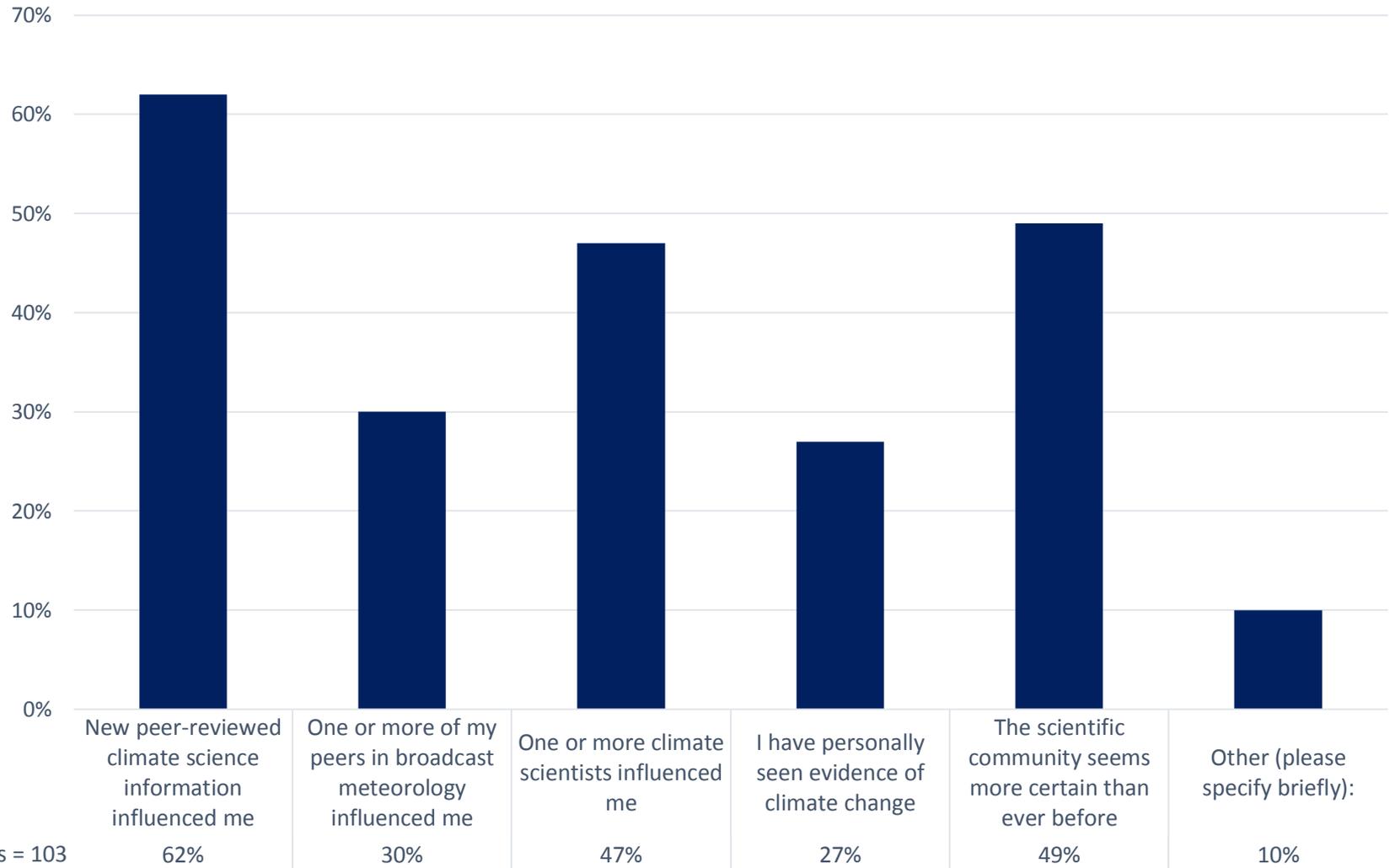


*How has your opinion/position changed?**



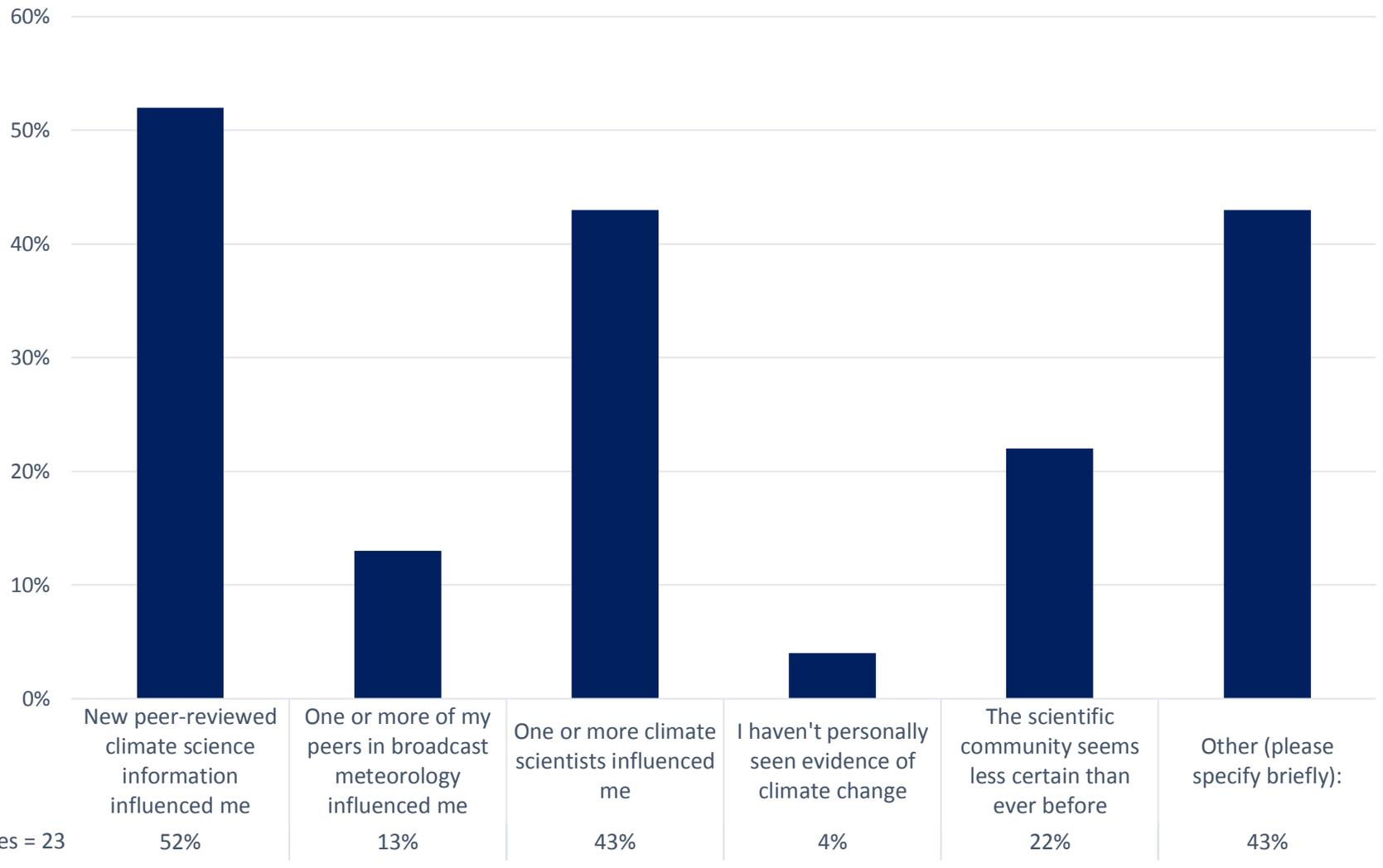
*Question asked only of those who stated in the previous question that their opinion has changed.

*Which if any of the following reasons contributed to your being more convinced that human-caused climate change is happening? (check all that apply)**



*Question asked only of those who stated in the previous question that they are more convinced human-caused climate change is happening.

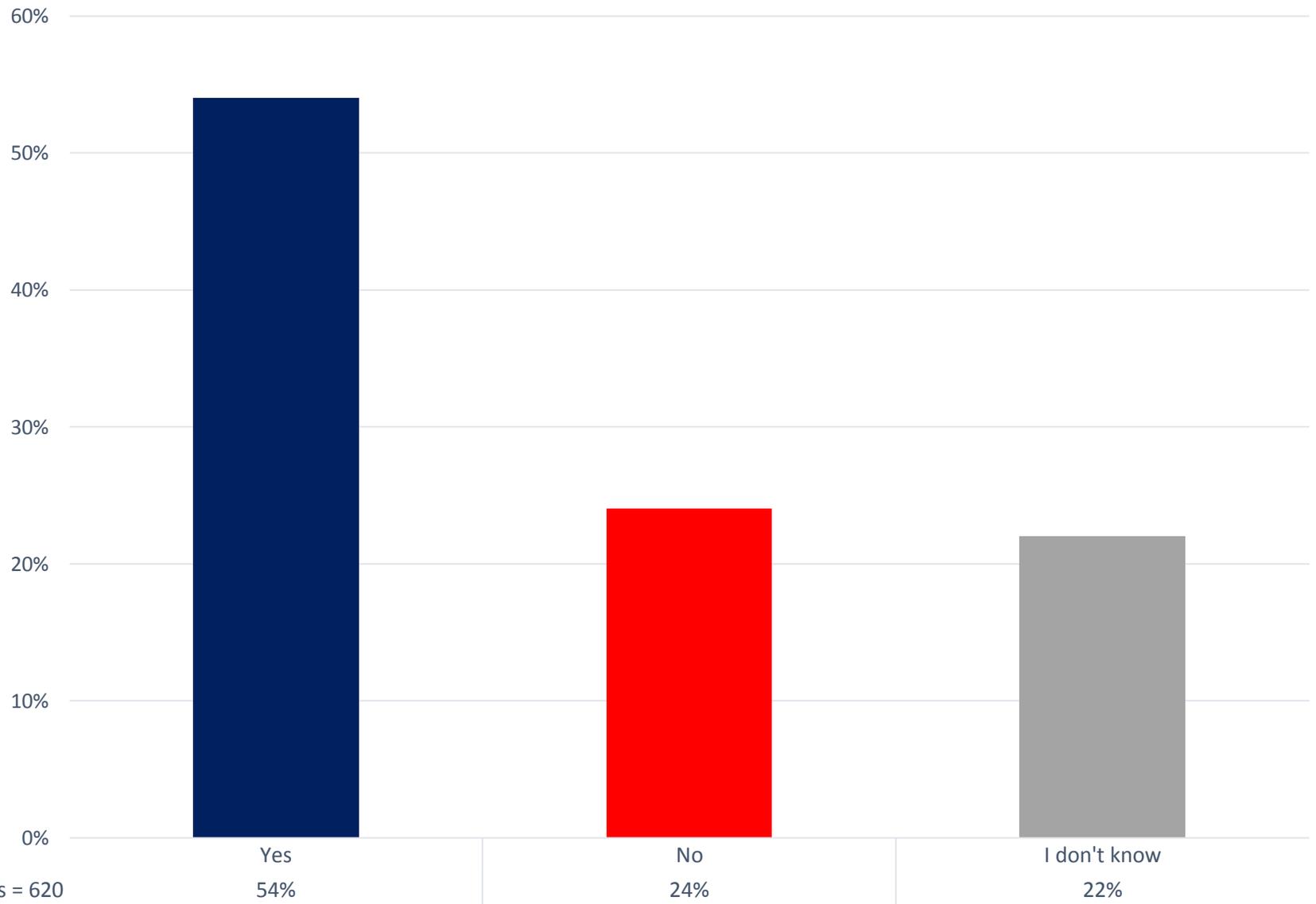
*Which if any of the following reasons contributed to your being less convinced that human-caused climate change is happening? (check all that apply)**



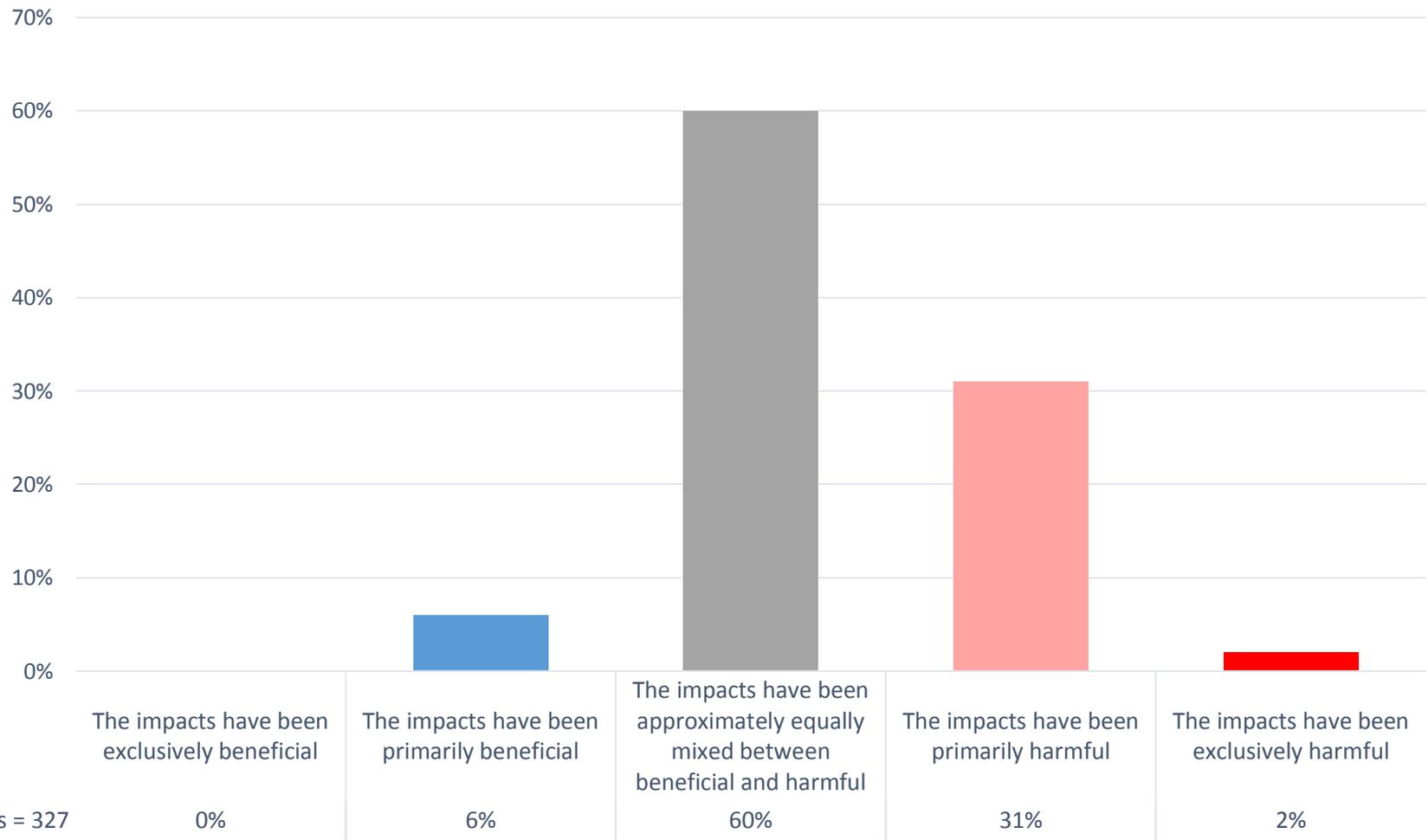
*Question asked only of those who stated in the previous question that they are less convinced human-caused climate change is happening.

LOCAL IMPACTS OF CLIMATE CHANGE

To the best of your knowledge, has the local climate in the area covered by your media market changed over the past 50 years?



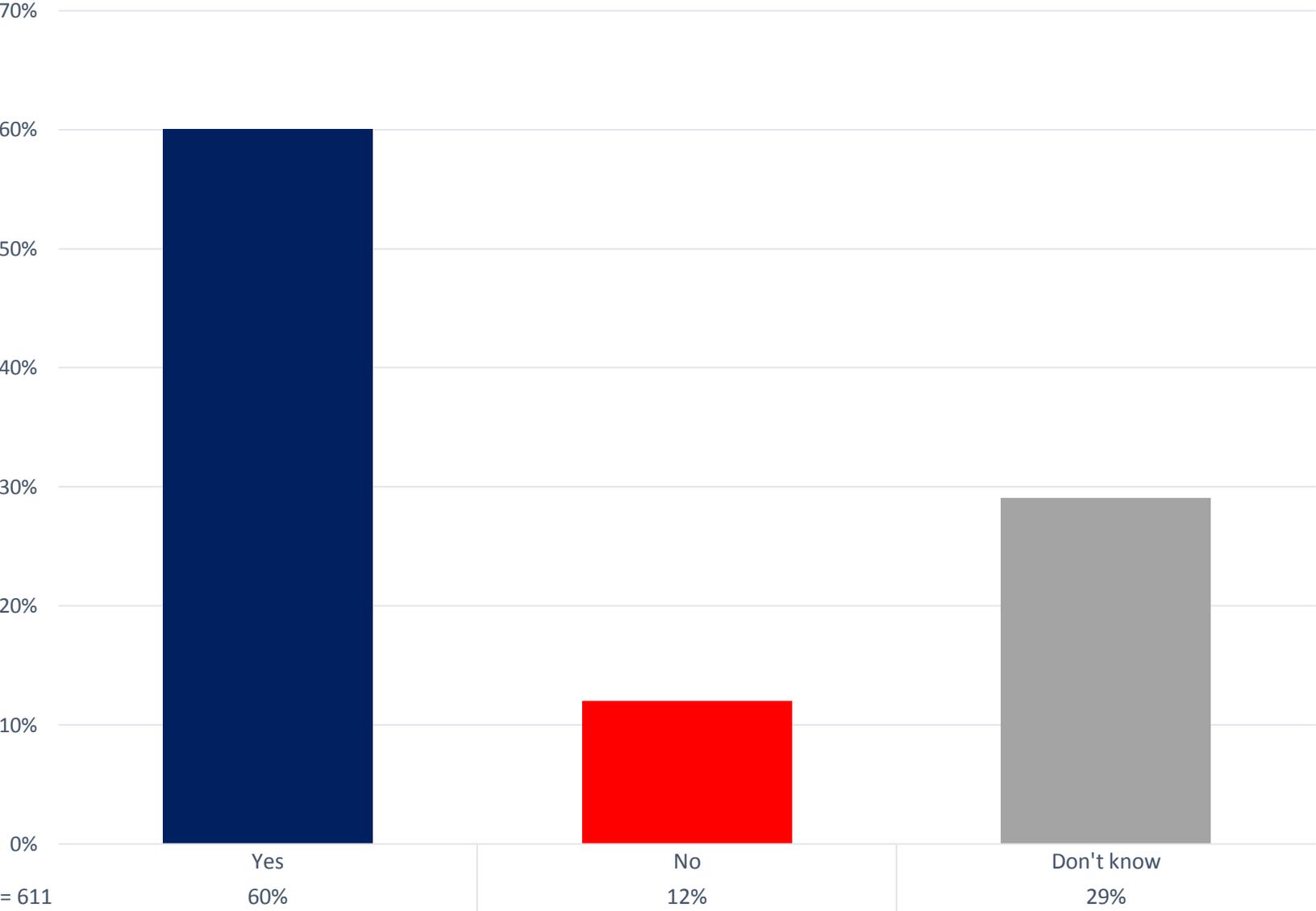
Which of the following best describes the impact(s) of the local climate change in your media market over the past 50 years^o*



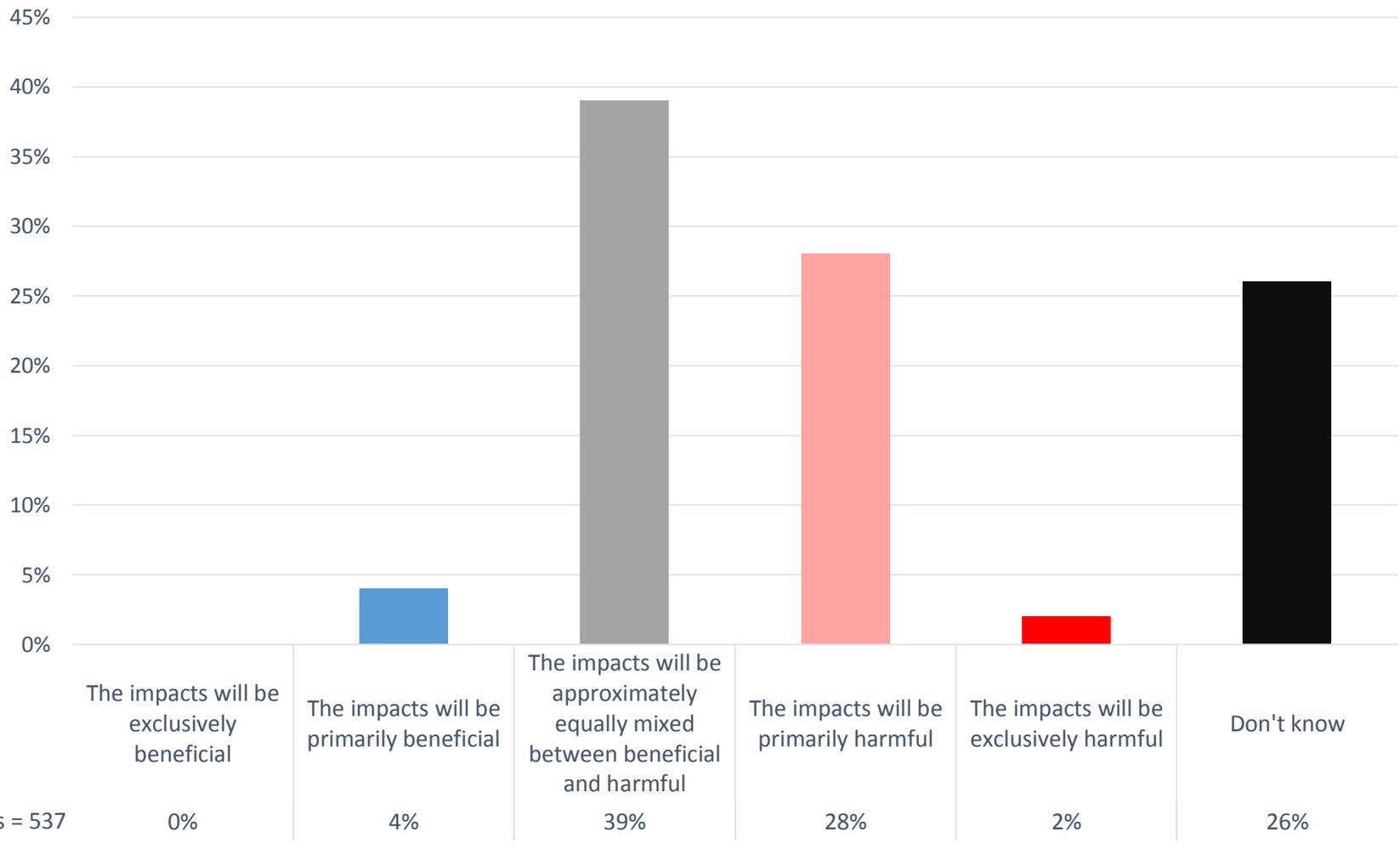
*Question asked only of those who stated in the previous question that the local climate has changed and of those who were unsure.

^oThe following questions were asked as a follow-up: “Briefly, in your own words, what has been the most harmful impact of climate change in your media market over the past 50 years?” (n=277), “Briefly, in your own words, what has been the most beneficial impact of climate change in your media market over the past 50 years?” (n=247). Responses have not yet been coded.

To the best of your knowledge, will the local climate in your media market change over the next 50 years?



*Which of the following best describes the impact(s) of the local climate change in your media market over the next 50 years?**^o

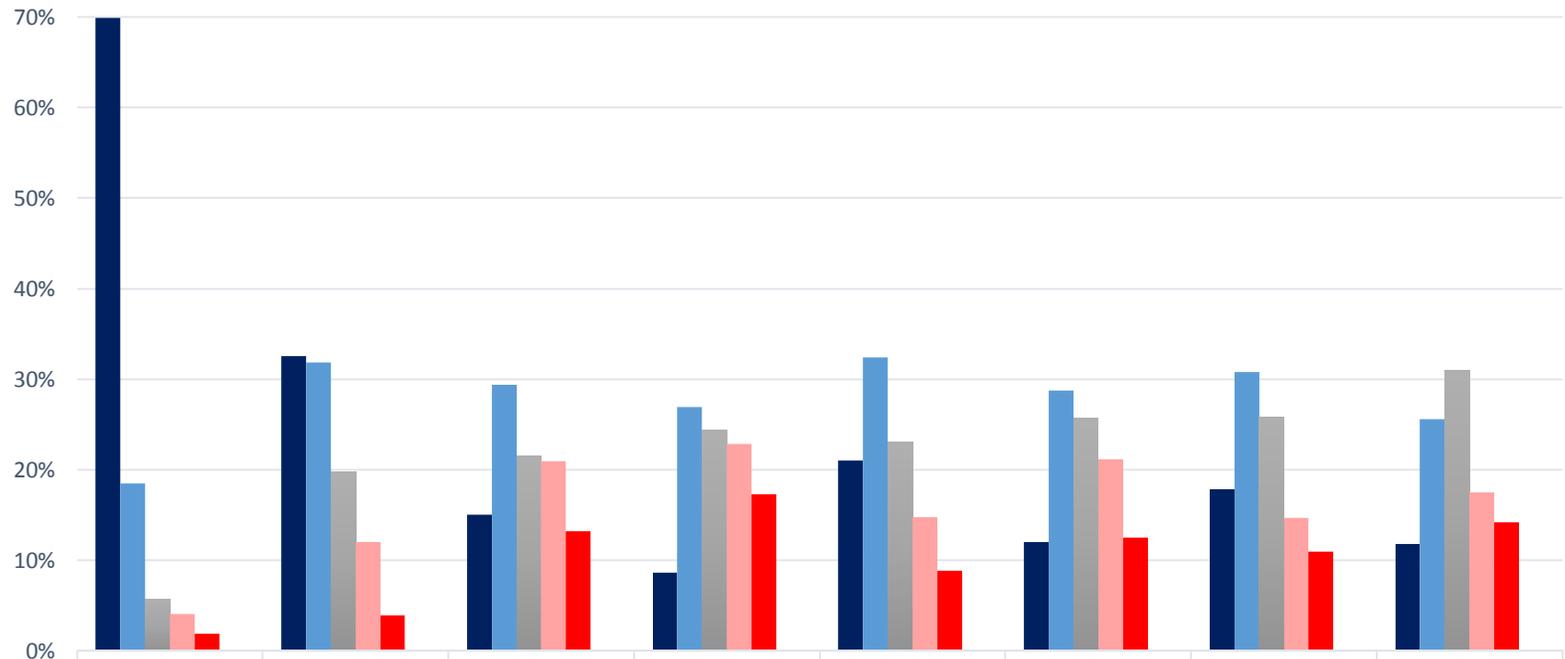


*Question asked only of those who stated in the previous question that the local climate will change and of those who were unsure.

^oThe following questions were asked as a follow-up: “Briefly, in your own words, what is likely to be the most harmful impact of climate change in your media market over the next 50 years?” (n=325), “Briefly, in your own words, what is likely to be the most beneficial impact of climate change in your media market over the next 50 years?” (n=291). Responses have not yet been coded.

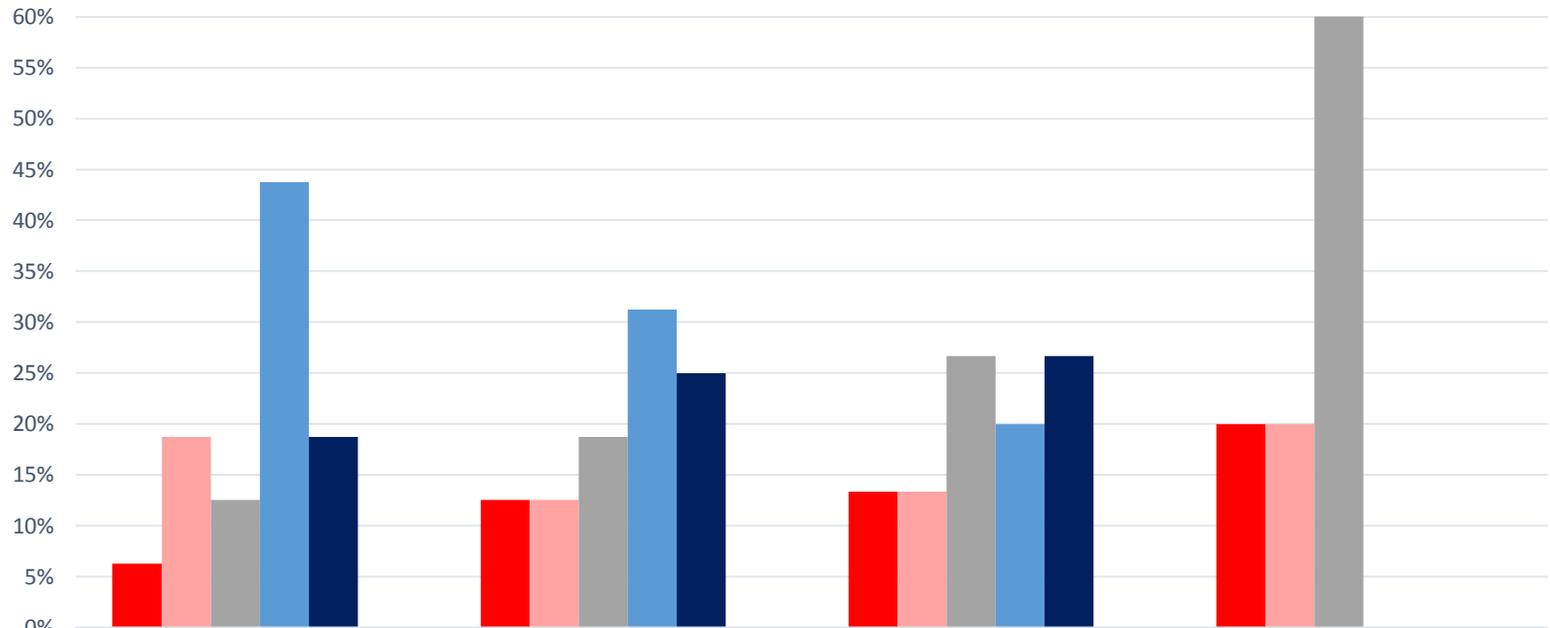
REPORTING ON CLIMATE CHANGE

How comfortable or uncomfortable are you (or would you be) in presenting the following kinds of materials to your viewers on air?



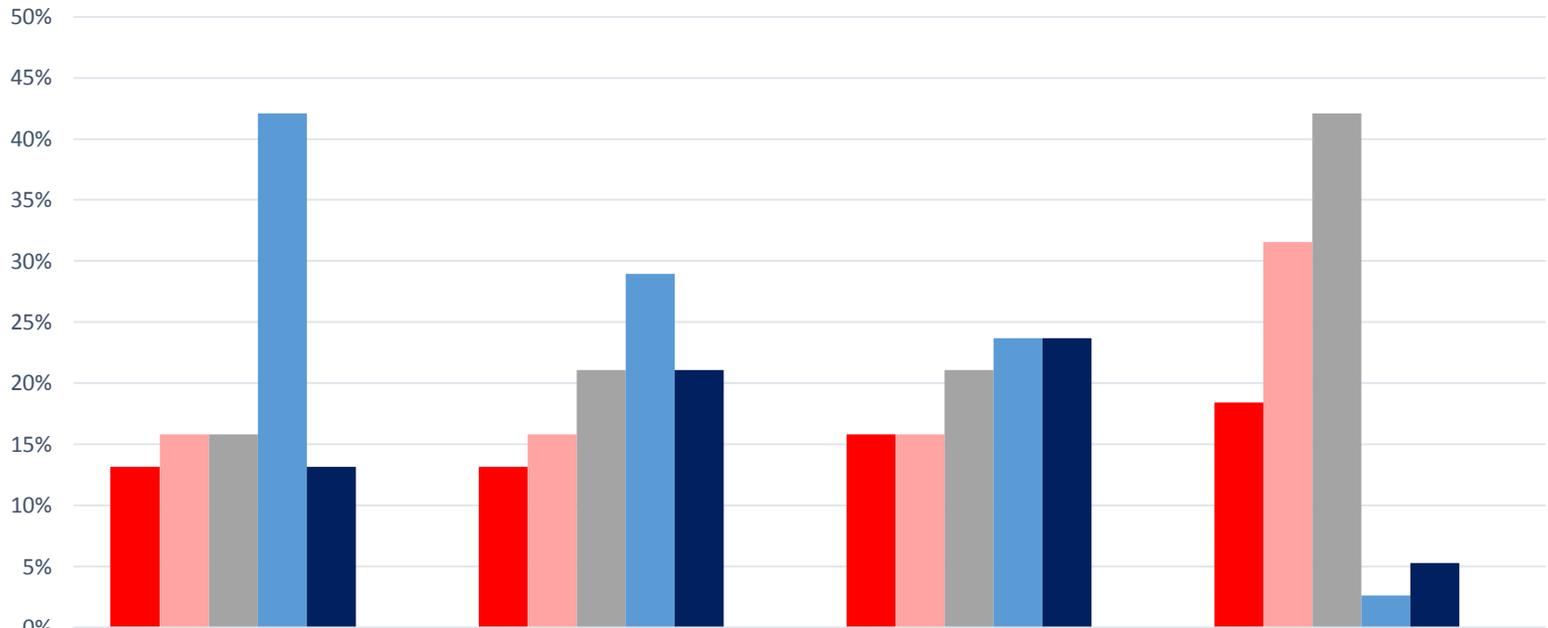
	Historical local climate statistics	Historical global climate statistics	Future local climate projections	Future global climate projections	Information about local climate change impacts	Information about global climate change impacts	Information about local climate change adaptation options	Information about global climate change mitigation strategies
Very comfortable	70%	33%	15%	9%	21%	12%	18%	12%
Somewhat comfortable	18%	32%	29%	27%	32%	29%	31%	26%
Neutral or Don't Know	6%	20%	22%	24%	23%	26%	26%	31%
Somewhat uncomfortable	4%	12%	21%	23%	15%	21%	15%	18%
Very uncomfortable	2%	4%	13%	17%	9%	13%	11%	14%
Total Responses	595	593	593	591	590	592	594	594

For those who indicated they feel uncomfortable presenting about historical local climate statistics. Please indicate how much each of the following contributes to your discomfort in presenting about this topic:



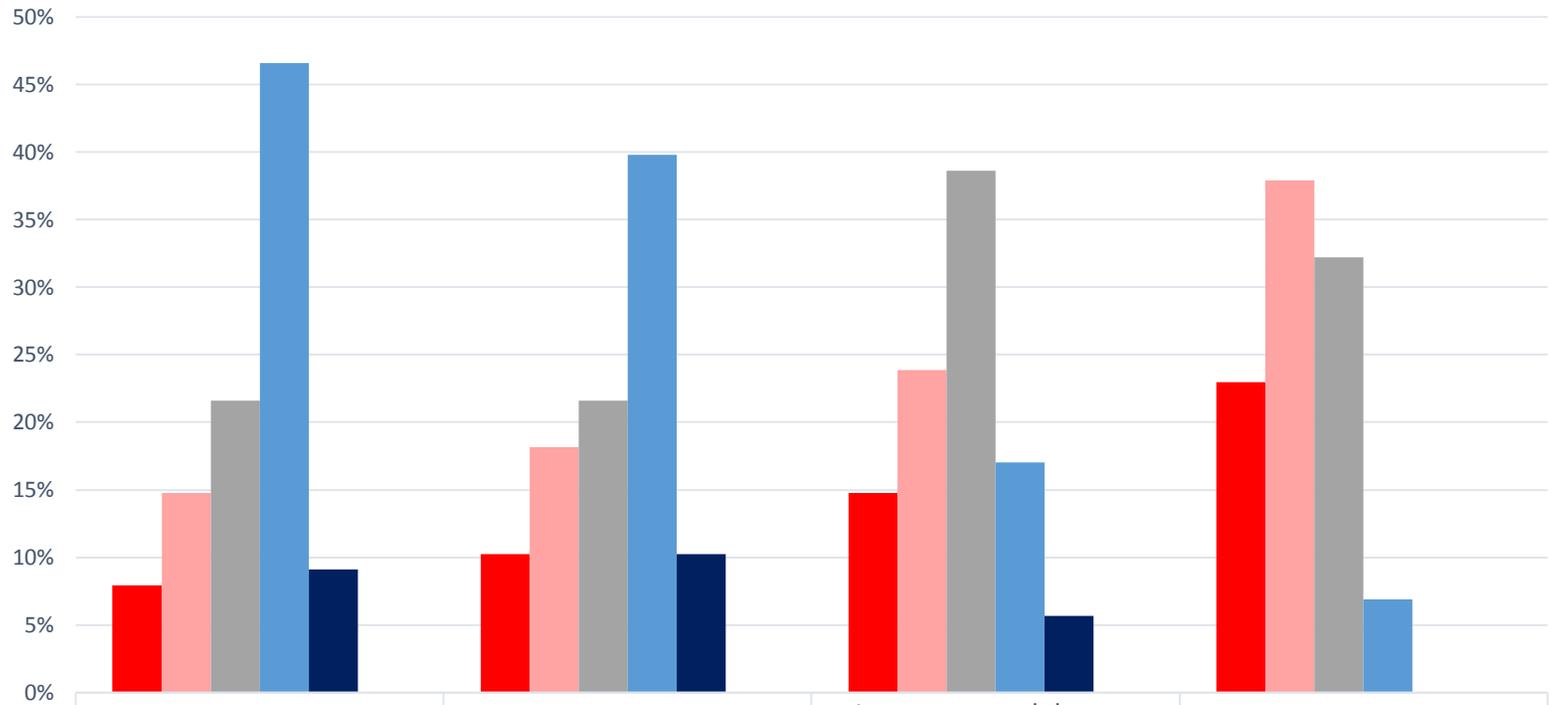
	I don't know enough about the topic.	I am concerned that my viewers would be upset.	I am concerned that my management would be upset.	I am concerned that my anchors would be upset.
Strongly Disagree	6%	13%	13%	20%
Disagree	19%	13%	13%	20%
Neither Agree nor Disagree	13%	19%	27%	60%
Agree	44%	31%	20%	0%
Strongly Agree	19%	25%	27%	0%
Total Responses	16	16	15	15

For those who indicated they feel uncomfortable presenting about historical global climate statistics. Please indicate how much each of the following contributes to your discomfort in presenting about this topic:



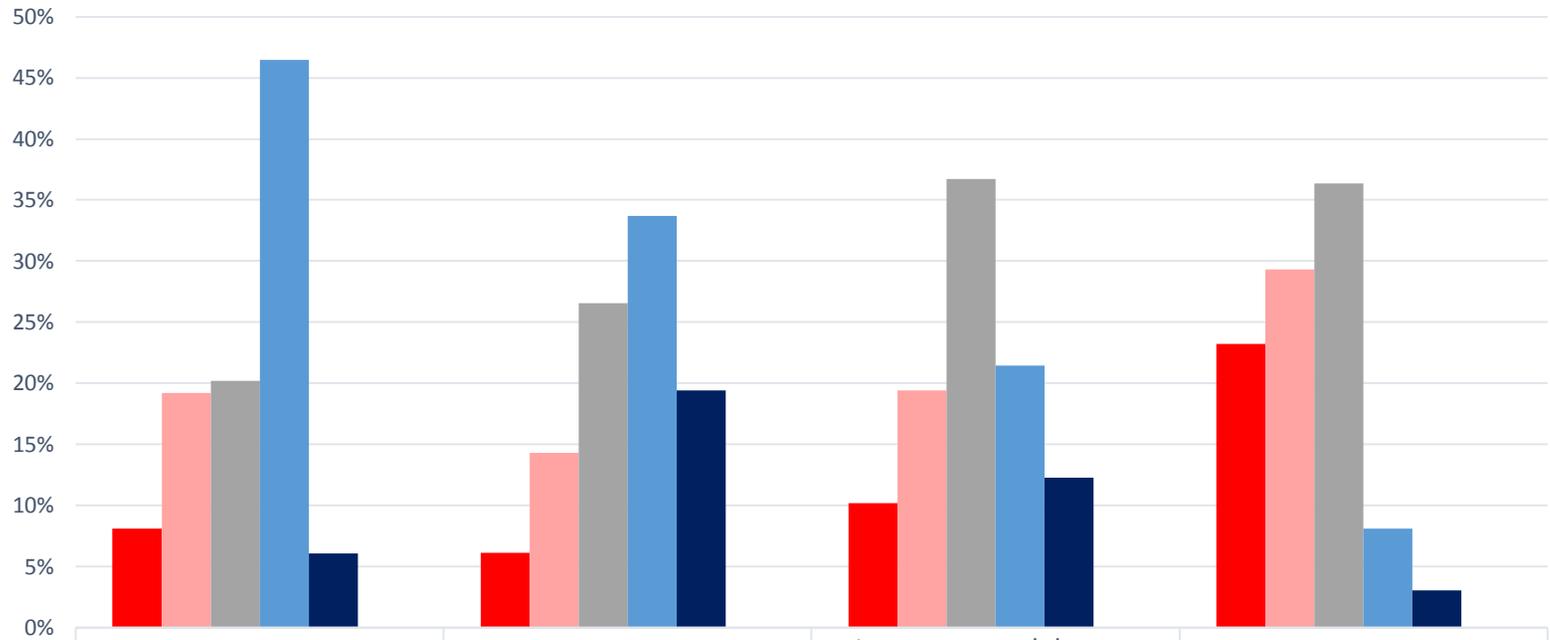
	I don't know enough about the topic.	I am concerned that my viewers would be upset.	I am concerned that my management would be upset.	I am concerned that my anchors would be upset.
■ Strongly Disagree	13%	13%	16%	18%
■ Disagree	16%	16%	16%	32%
■ Neither Agree nor Disagree	16%	21%	21%	42%
■ Agree	42%	29%	24%	3%
■ Strongly Agree	13%	21%	24%	5%
Total Responses	38	38	38	38

For those who indicated they feel uncomfortable presenting about future local climate projections. Please indicate how much each of the following contributes to your discomfort in presenting about this topic:



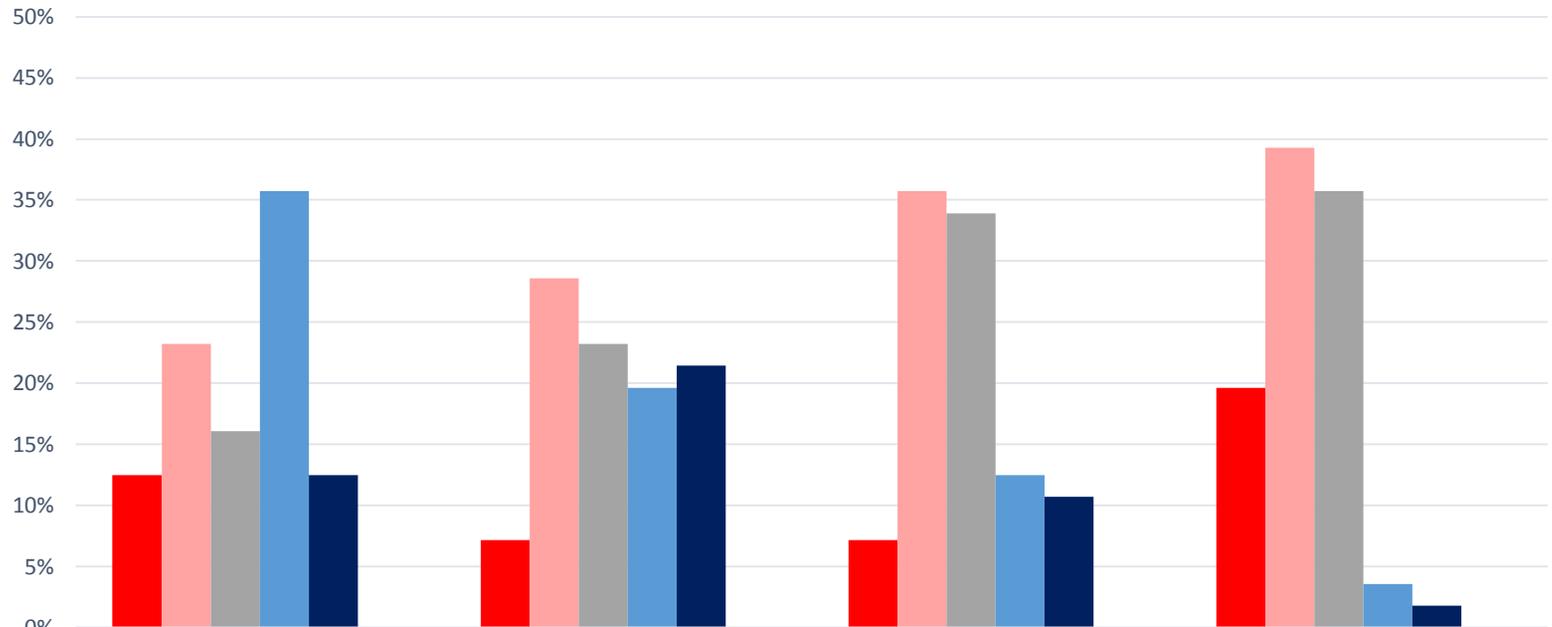
	I don't know enough about the topic.	I am concerned that my viewers would be upset.	I am concerned that my management would be upset.	I am concerned that my anchors would be upset.
Strongly Disagree	8%	10%	15%	23%
Disagree	15%	18%	24%	38%
Neither Agree nor Disagree	22%	22%	39%	32%
Agree	47%	40%	17%	7%
Strongly Agree	9%	10%	6%	0%
Total Responses	88	88	88	87

For those who indicated they feel uncomfortable presenting about future global climate projections. Please indicate how much each of the following contributes to your discomfort in presenting about this topic:



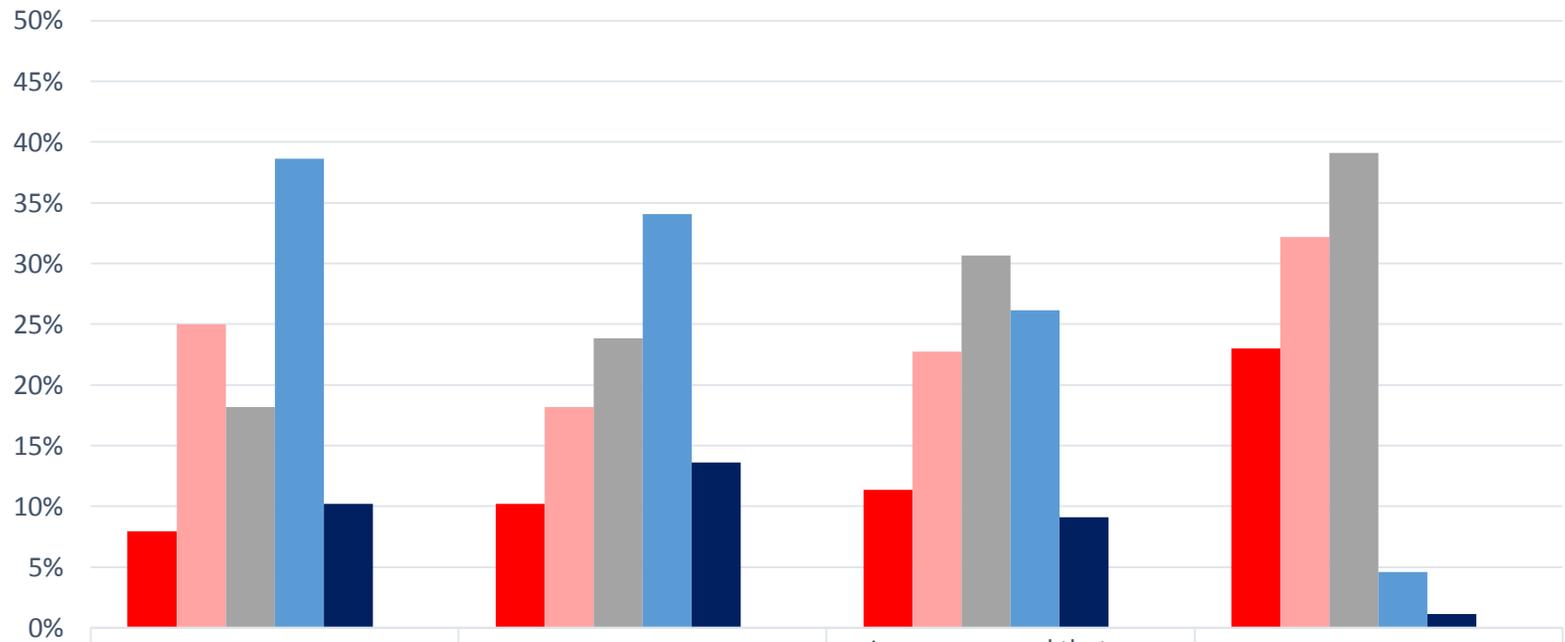
	I don't know enough about the topic.	I am concerned that my viewers would be upset.	I am concerned that my management would be upset.	I am concerned that my anchors would be upset.
Strongly Disagree	8%	6%	10%	23%
Disagree	19%	14%	19%	29%
Neither Agree nor Disagree	20%	27%	37%	36%
Agree	46%	34%	21%	8%
Strongly Agree	6%	19%	12%	3%
Total Responses	99	98	98	99

For those who indicated they feel uncomfortable presenting about information about local climate change impacts. Please indicate how much each of the following contributes to your discomfort in presenting about this topic:



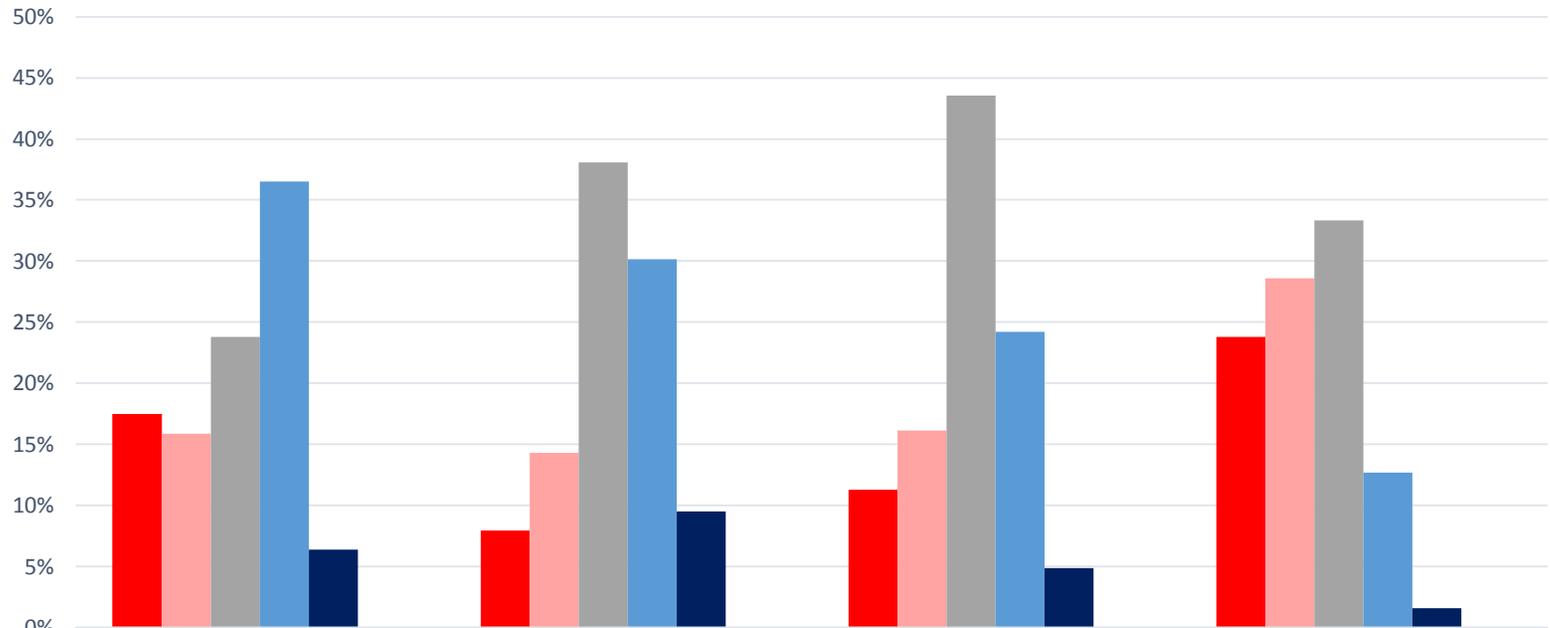
	I don't know enough about the topic.	I am concerned that my viewers would be upset.	I am concerned that my management would be upset.	I am concerned that my anchors would be upset.
Strongly Disagree	13%	7%	7%	20%
Disagree	23%	29%	36%	39%
Neither Agree nor Disagree	16%	23%	34%	36%
Agree	36%	20%	13%	4%
Strongly Agree	13%	21%	11%	2%
Total Responses	56	56	56	56

For those who indicated they feel uncomfortable presenting about information about global climate change impacts. Please indicate how much each of the following contributes to your discomfort in presenting about this topic:



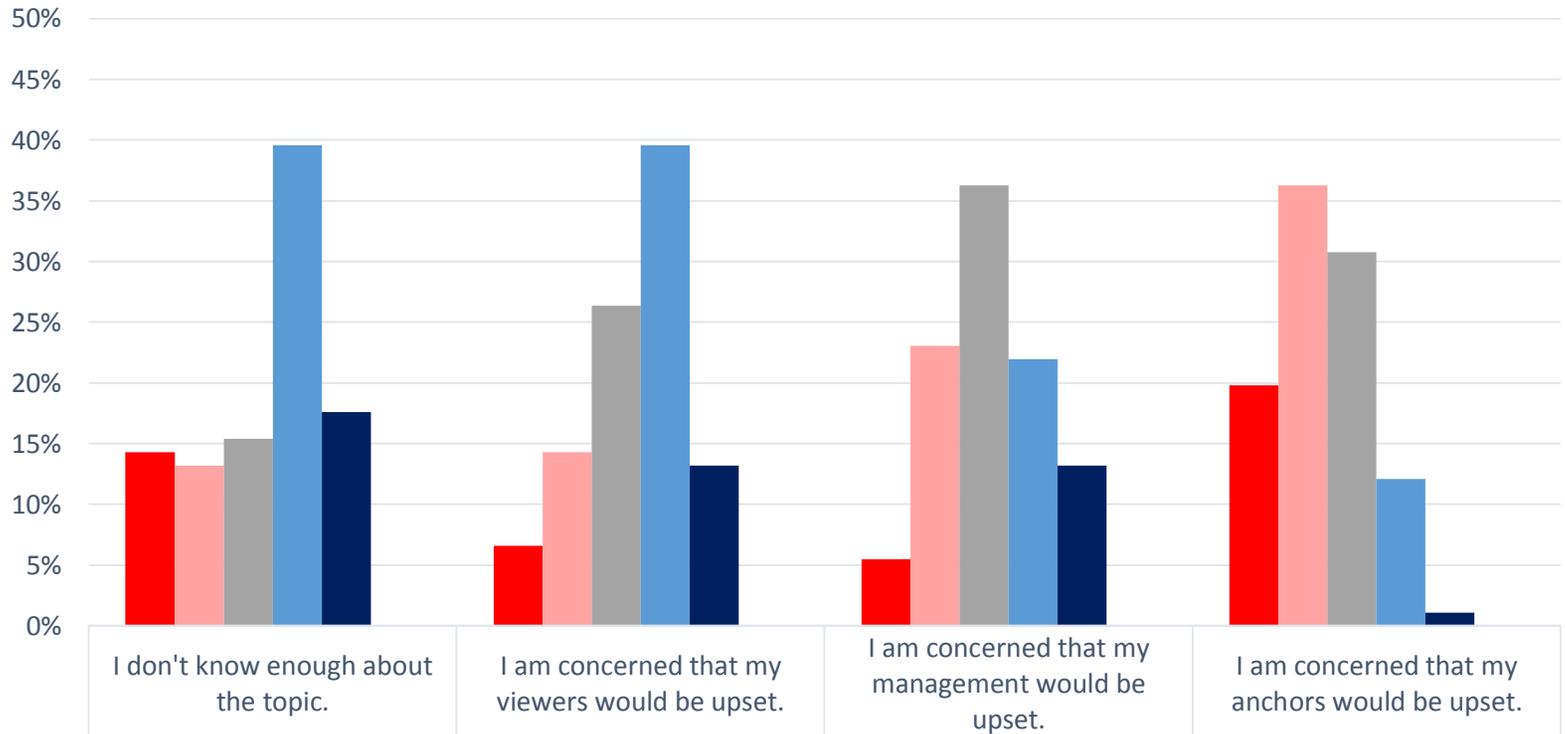
	I don't know enough about the topic.	I am concerned that my viewers would be upset.	I am concerned that my management would be upset.	I am concerned that my anchors would be upset.
Strongly Disagree	8%	10%	11%	23%
Disagree	25%	18%	23%	32%
Neither Agree nor Disagree	18%	24%	31%	39%
Agree	39%	34%	26%	5%
Strongly Agree	10%	14%	9%	1%
Total Responses	88	88	88	87

For those who indicated they feel uncomfortable presenting about information about local climate change adaptation options. Please indicate how much each of the following contributes to your discomfort in presenting about this topic:



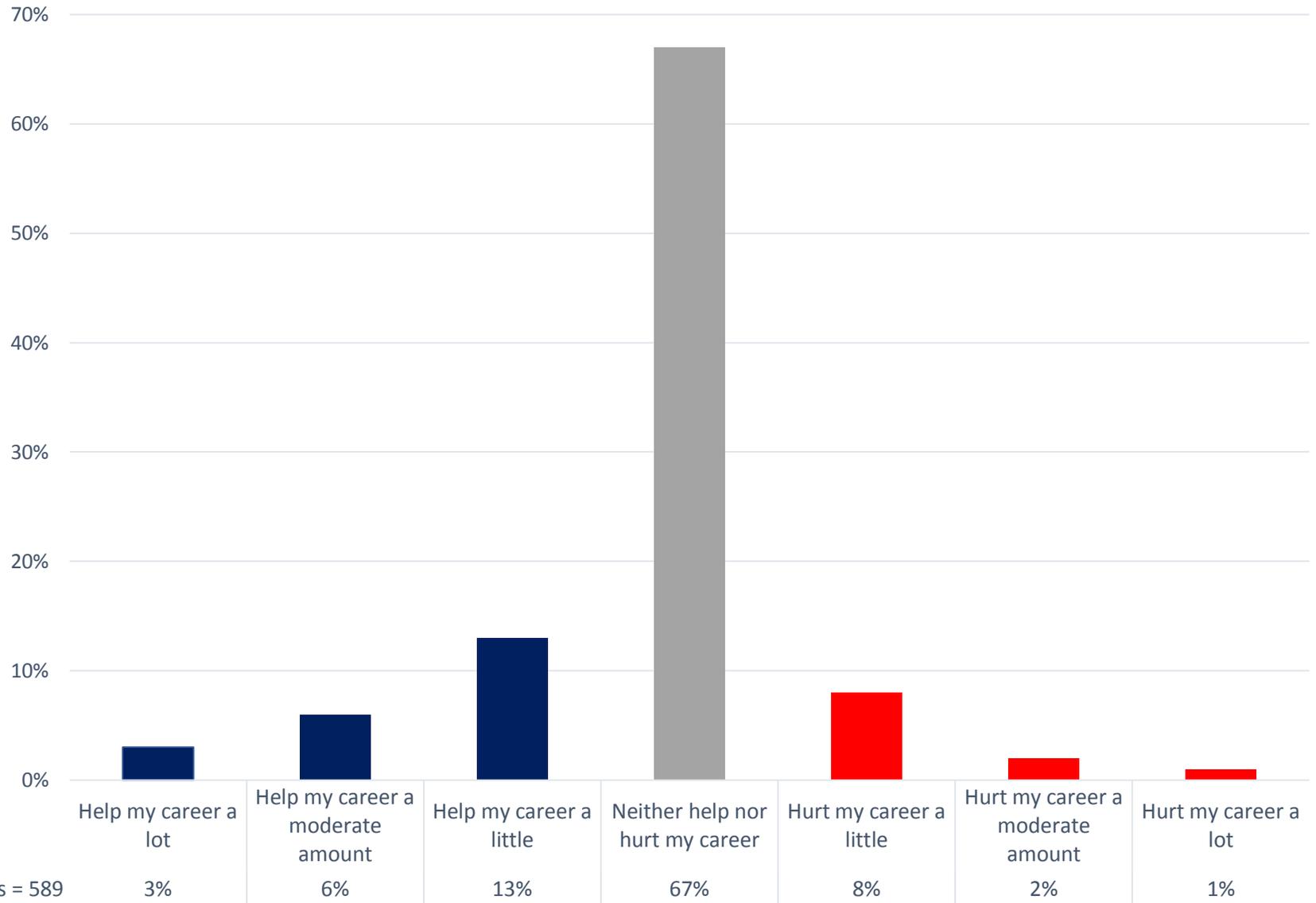
	I don't know enough about the topic.	I am concerned that my viewers would be upset.	I am concerned that my management would be upset.	I am concerned that my anchors would be upset.
■ Strongly Disagree	17%	8%	11%	24%
■ Disagree	16%	14%	16%	29%
■ Neither Agree nor Disagree	24%	38%	44%	33%
■ Agree	37%	30%	24%	13%
■ Strongly Agree	6%	10%	5%	2%
Total Responses	63	63	62	63

For those who indicated they feel uncomfortable presenting about information about global climate change mitigation. Please indicate how much each of the following contributes to your discomfort in presenting about this topic:

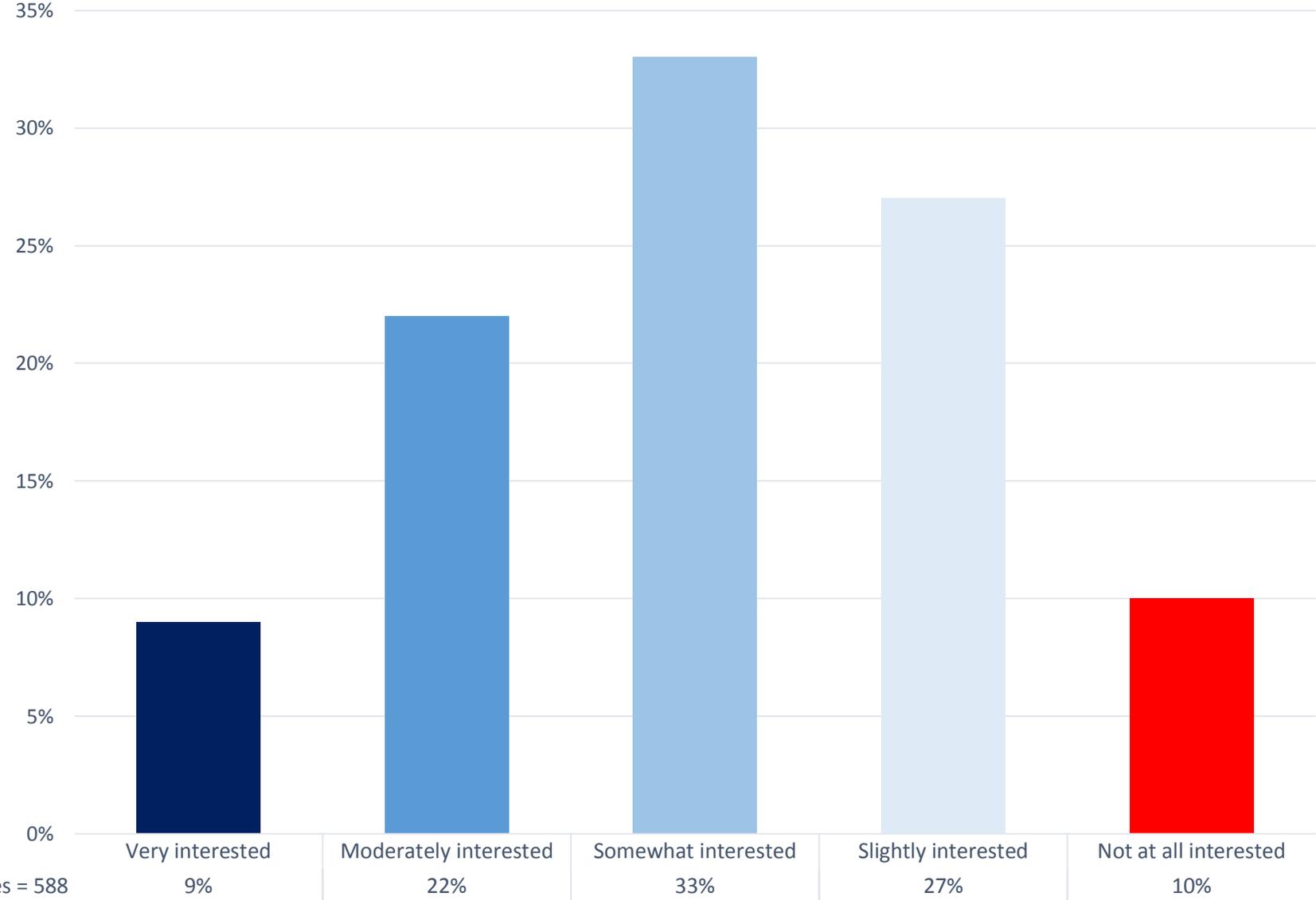


■ Strongly Disagree	14%	7%	5%	20%
■ Disagree	13%	14%	23%	36%
■ Neither Agree nor Disagree	15%	26%	36%	31%
■ Agree	40%	40%	22%	12%
■ Strongly Agree	18%	13%	13%	1%
Total Responses	91	91	91	91

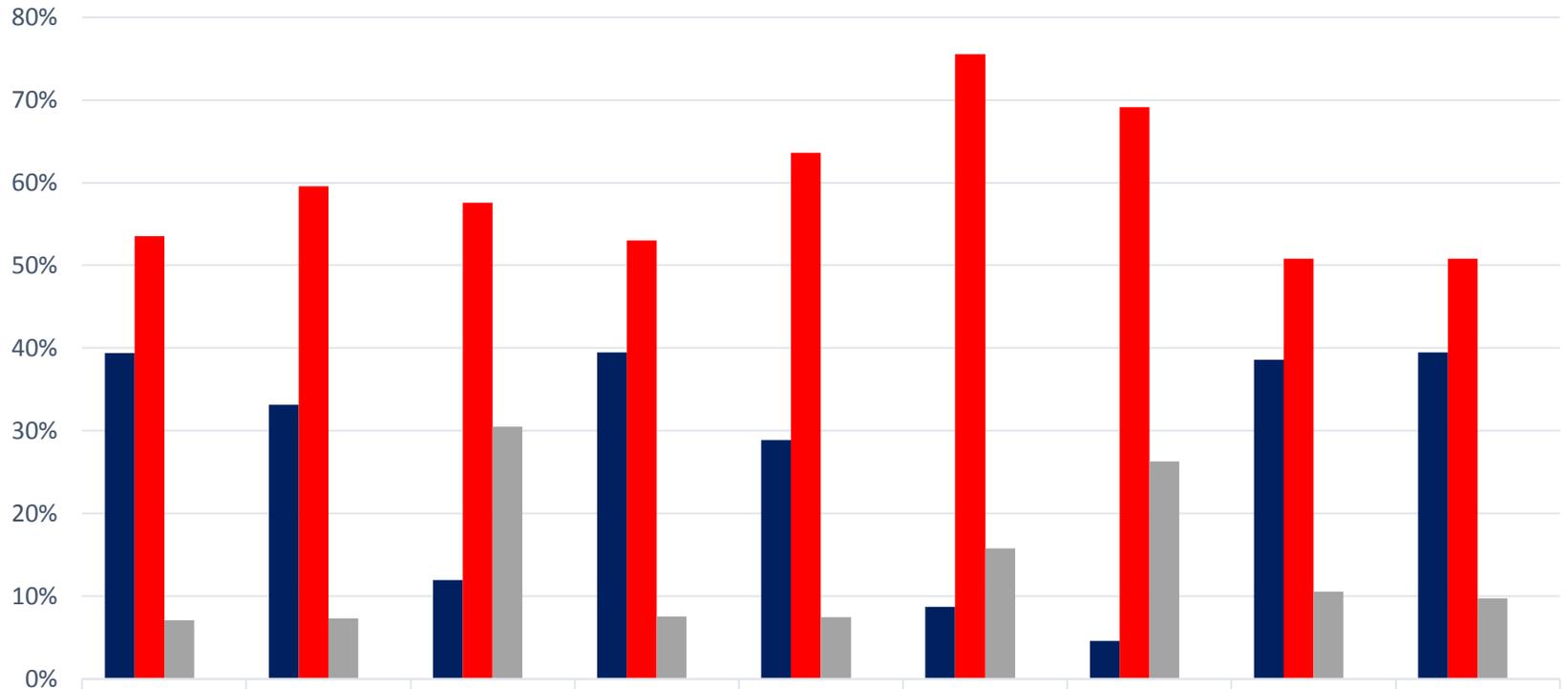
Please select the statement which best reflects your opinion: "Reporting on the local impacts of climate change will likely..."



How interested do you think your audience is in learning about local impacts of climate change?

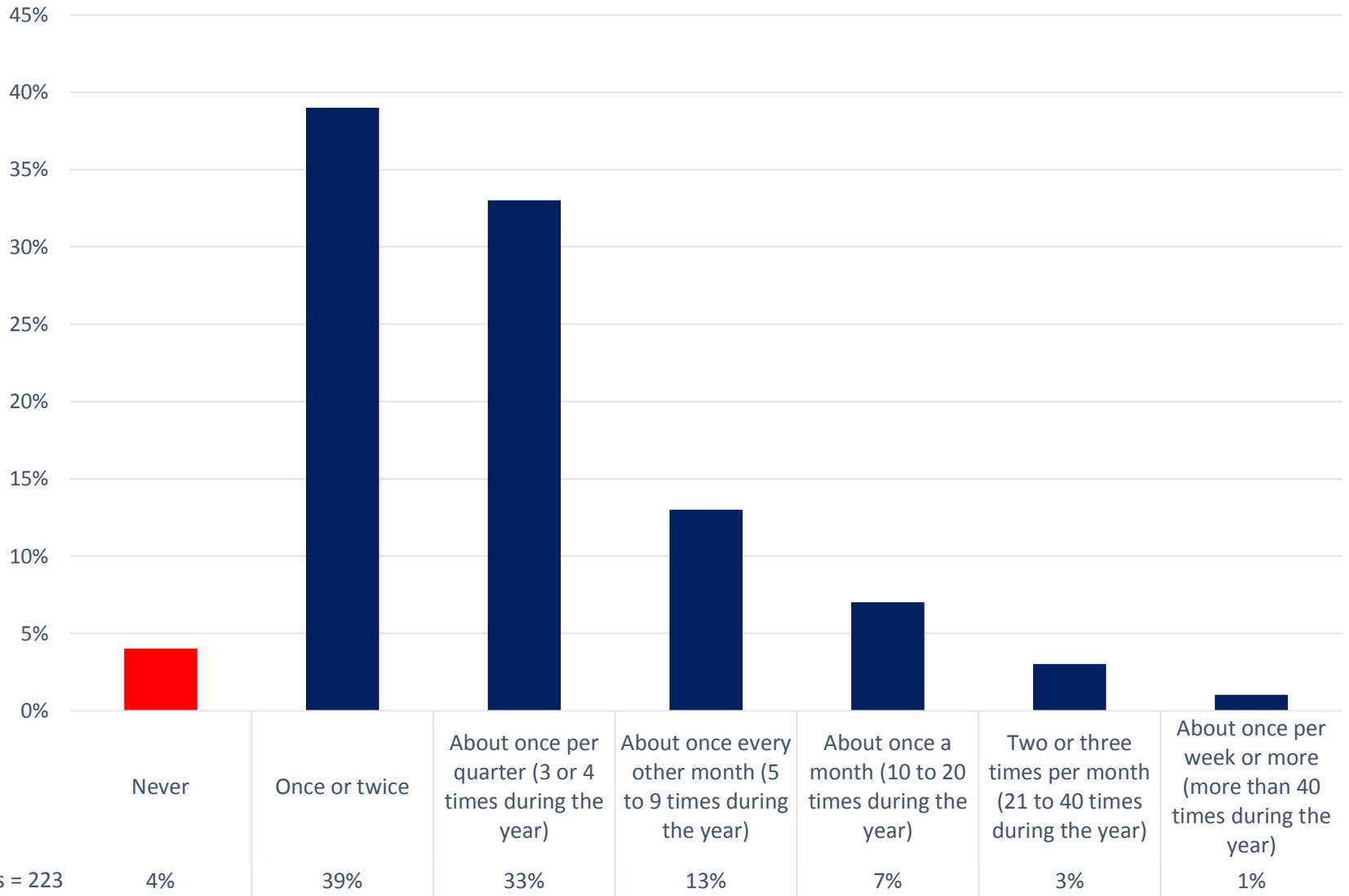


Over the past 12 months, did you use the following channels to inform your viewers, or other people in your community, about the local impacts of climate change?



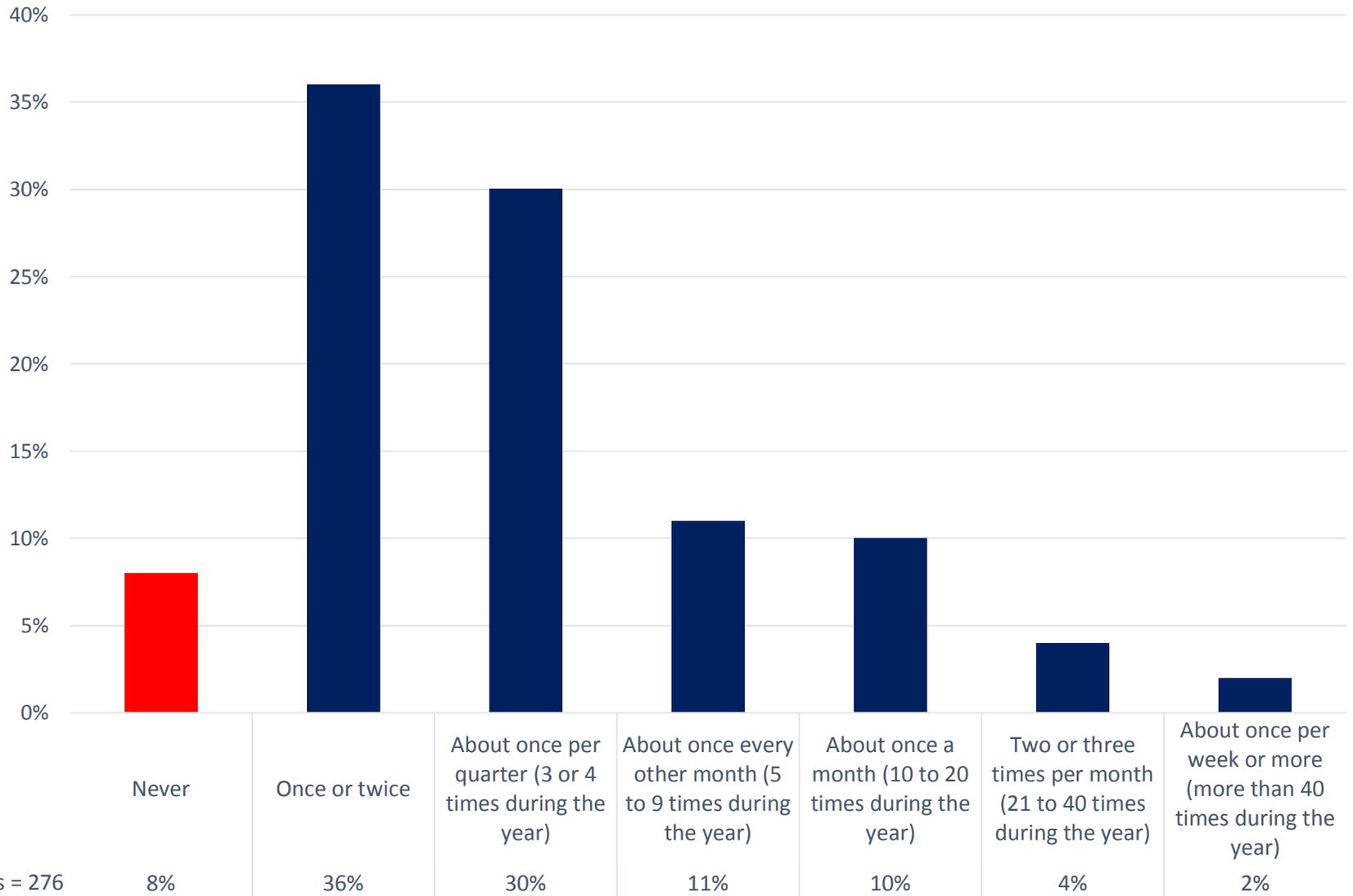
	On-air	On my stations' website	On my personal blog	On my social media	On my station's social media	On radio	In a newspaper column	At school visits	At community events (other than school visits)
■ Yes	39%	33%	12%	39%	29%	9%	5%	39%	39%
■ No	54%	60%	58%	53%	64%	76%	69%	51%	51%
■ Not applicable to me	7%	7%	30%	8%	7%	16%	26%	11%	10%
Total Responses	566	561	568	568	561	564	567	567	565

*Over the past 12 months, about how often did you report on the local impacts of climate change on-air?**



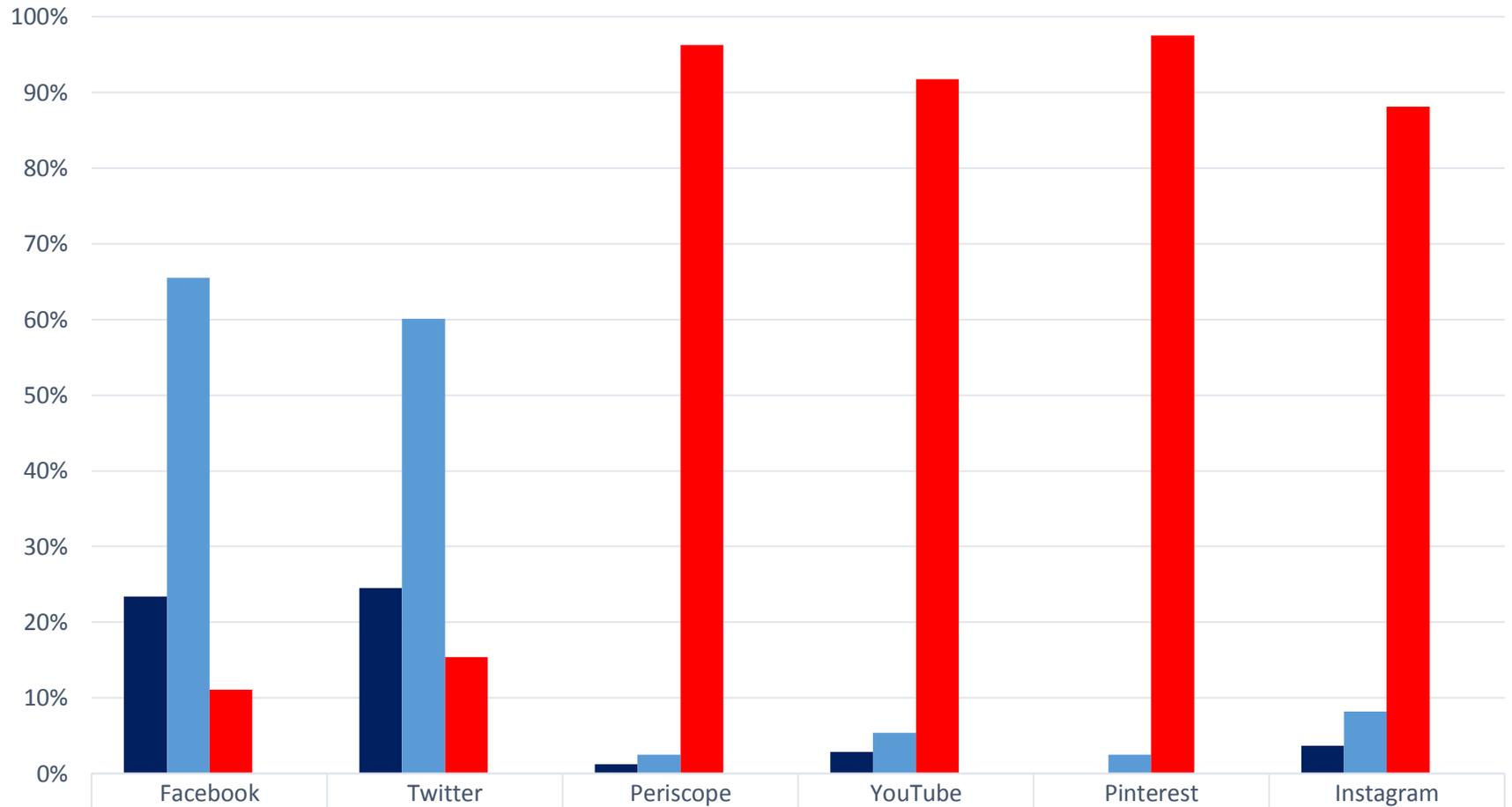
* Question was only asked of people who said they reported about climate change on-air in the past 12 months.

*Over the past 12 months, about how often did you report on the local impacts of climate change online?**



* Question was only asked of people who said they reported about climate change online in the past 12 months.

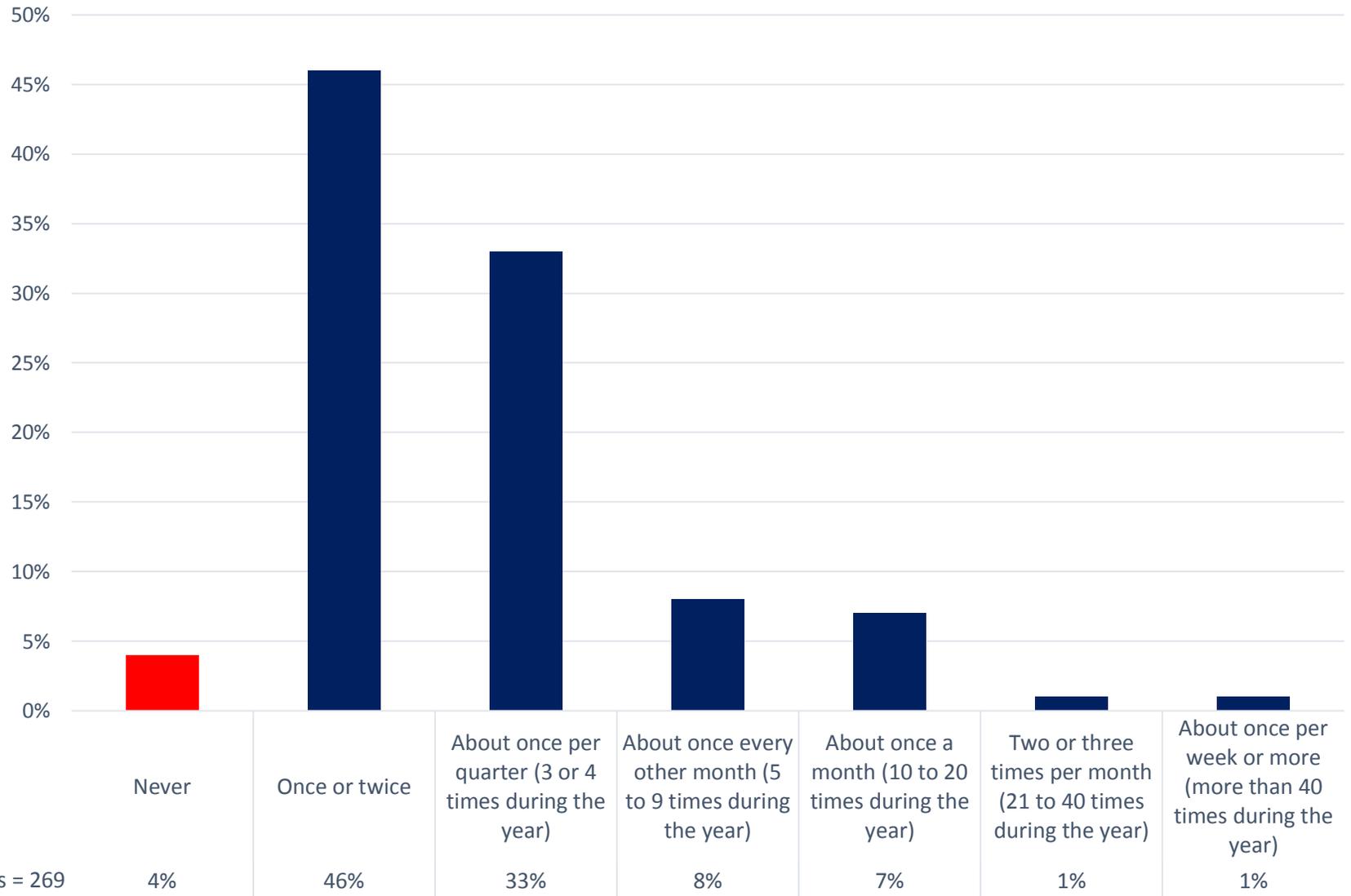
*Over the past 12 months, how often did you use the following social media tools in your reporting about local impacts of climate change?**



	Facebook	Twitter	Periscope	YouTube	Pinterest	Instagram
Regularly	23%	25%	1%	3%	0%	4%
Occasionally	65%	60%	2%	5%	2%	8%
Did not use	11%	15%	96%	92%	98%	88%
Total Responses	252	253	241	242	242	244

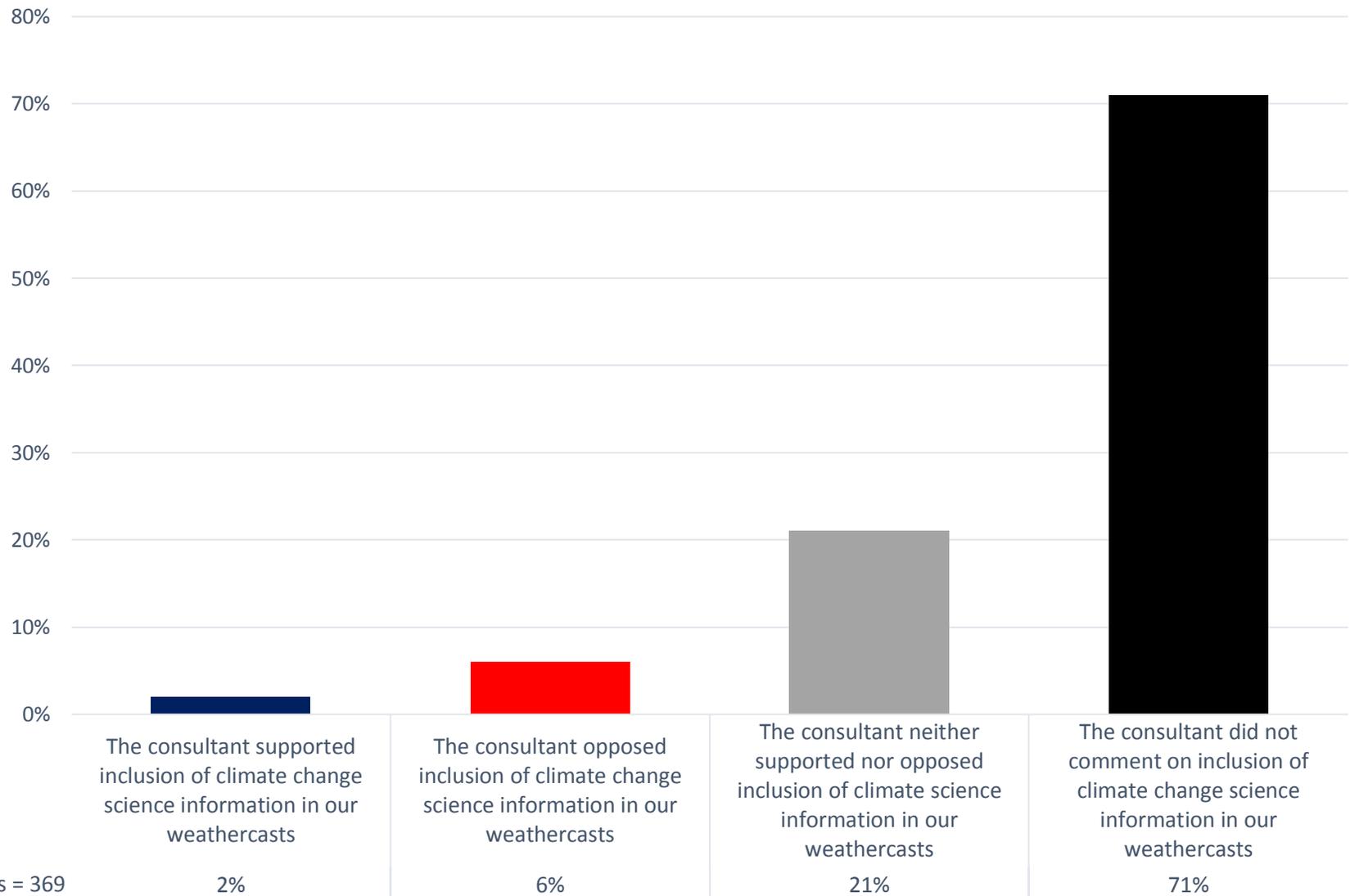
* Question was only asked of people who said they reported about climate change on social media in the past 12 months.

*Over the past 12 months, about how often did you report on the local impacts of climate change at community or school events?**



* Question was only asked of people who said they reported about climate change at community or school events in the past 12 months.

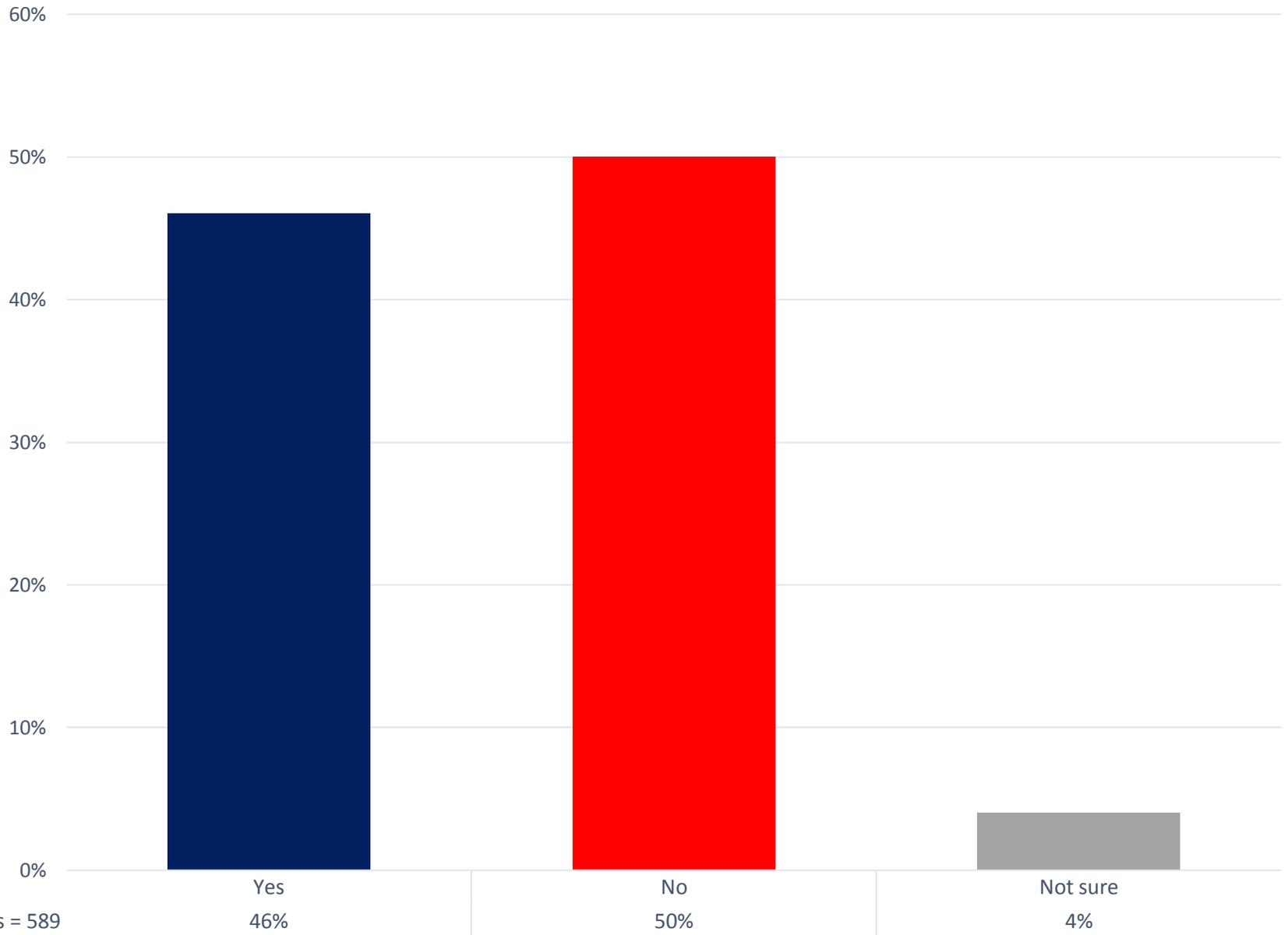
Did the consultant explicitly support or oppose inclusion of climate change science information in your station's weathercasts?*



*Question asked only of those who previously stated that they worked with a consultant.

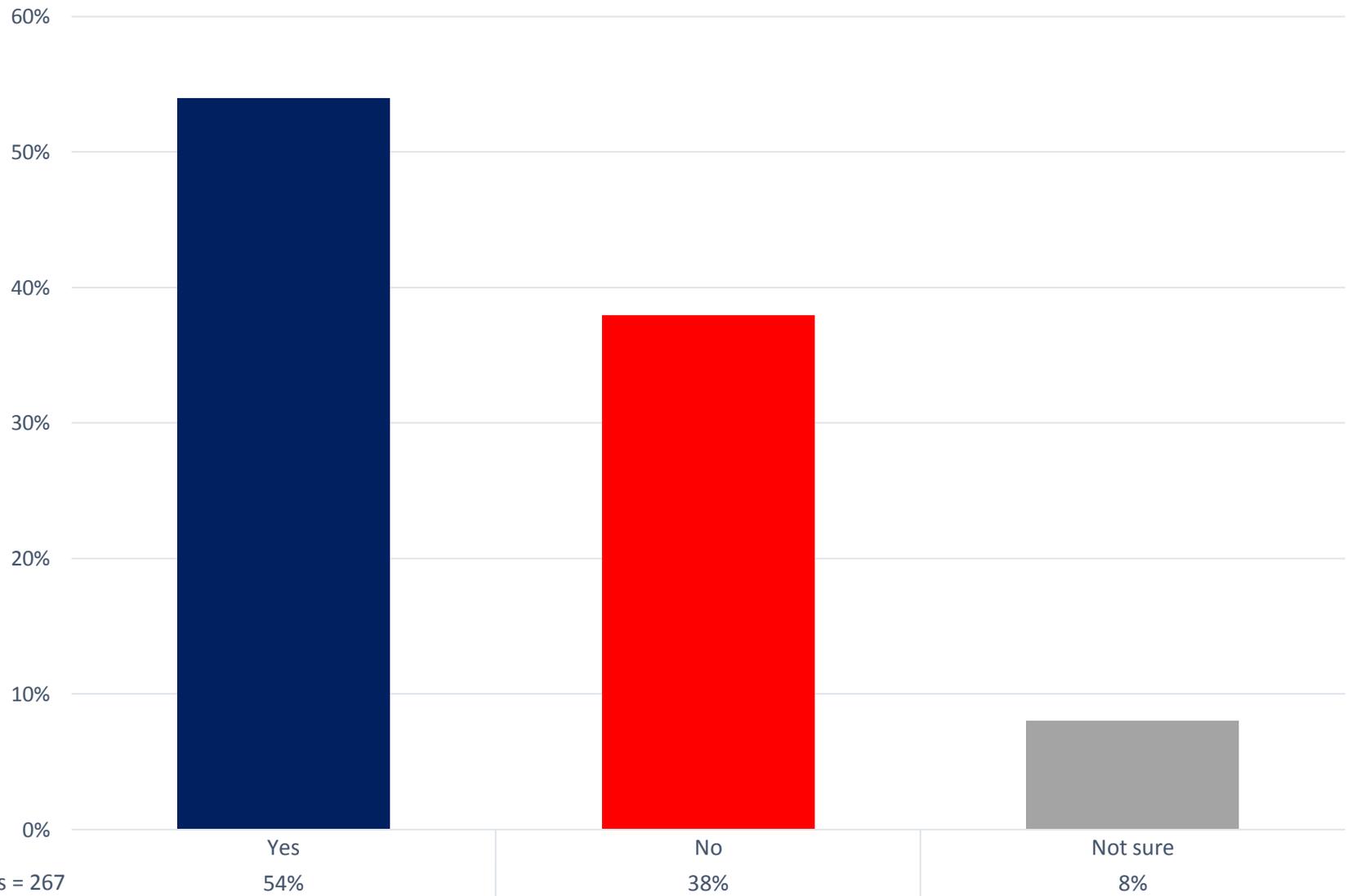
CLIMATE MATTERS USERS SECTION

Before today, had you heard of Climate Matters?



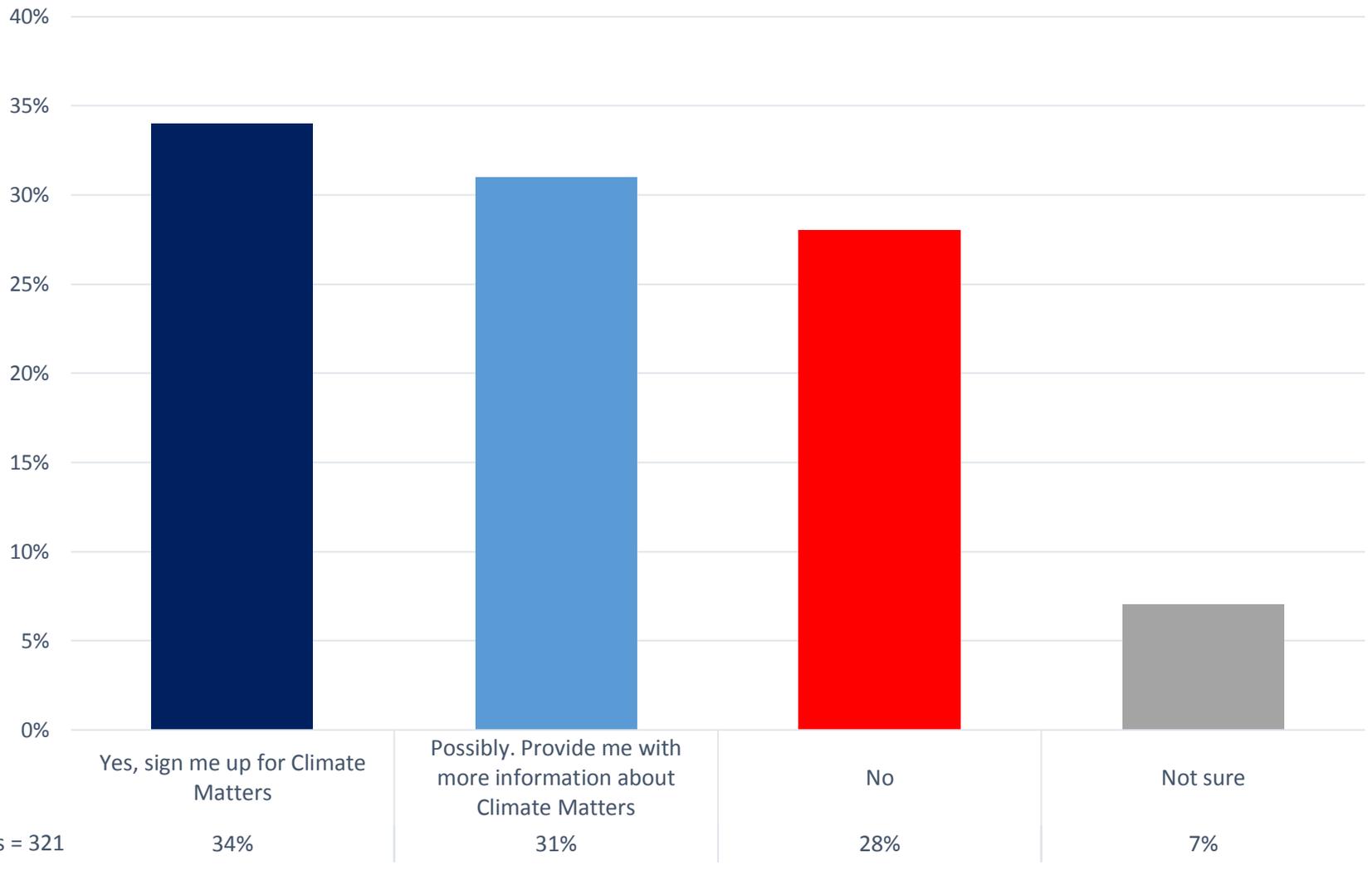
Total Responses = 589

*Do you currently receive Climate Matters materials (via email) from Climate Central?**



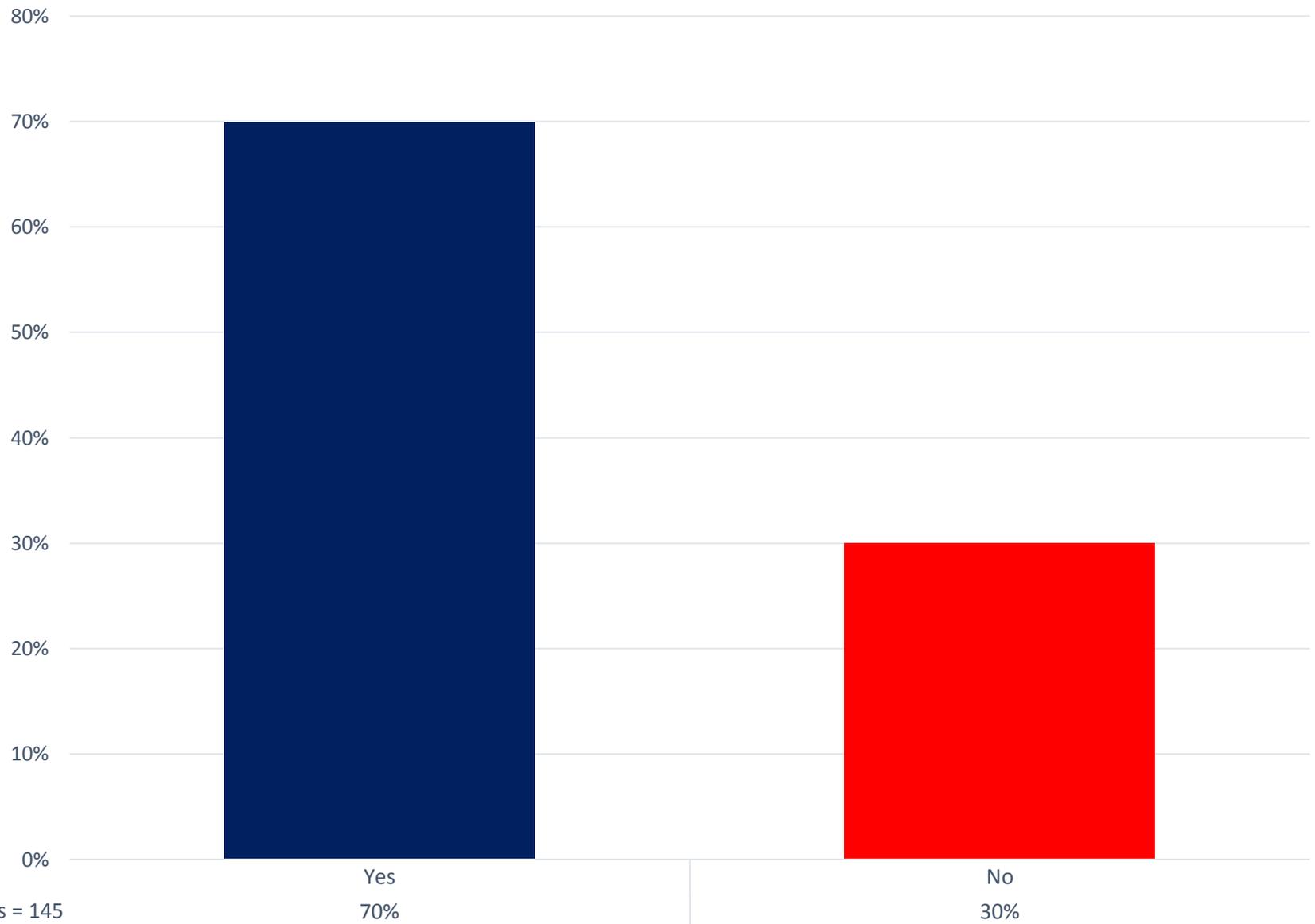
*Question asked only of those who previously stated they had heard of Climate Matters.

*Are you interested in signing up to receive free weekly Climate Matters materials, or in learning more about Climate Matters (via email) to determine your interest?**



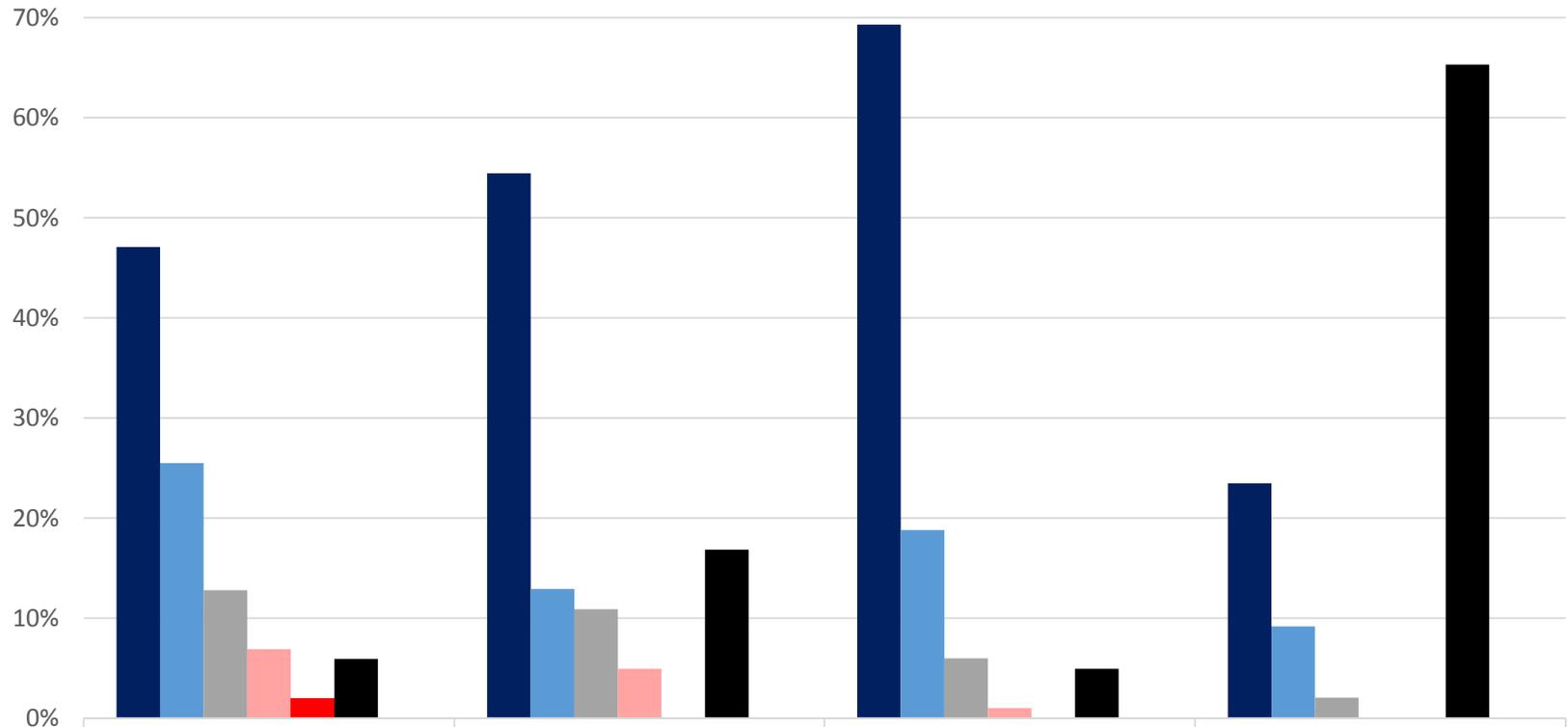
*Question asked only of those who previously stated they were not receiving Climate Matters materials.

*Do you use Climate Matters materials from Climate Central?**



*Question asked only of those who previously stated they did receive Climate Matters materials.

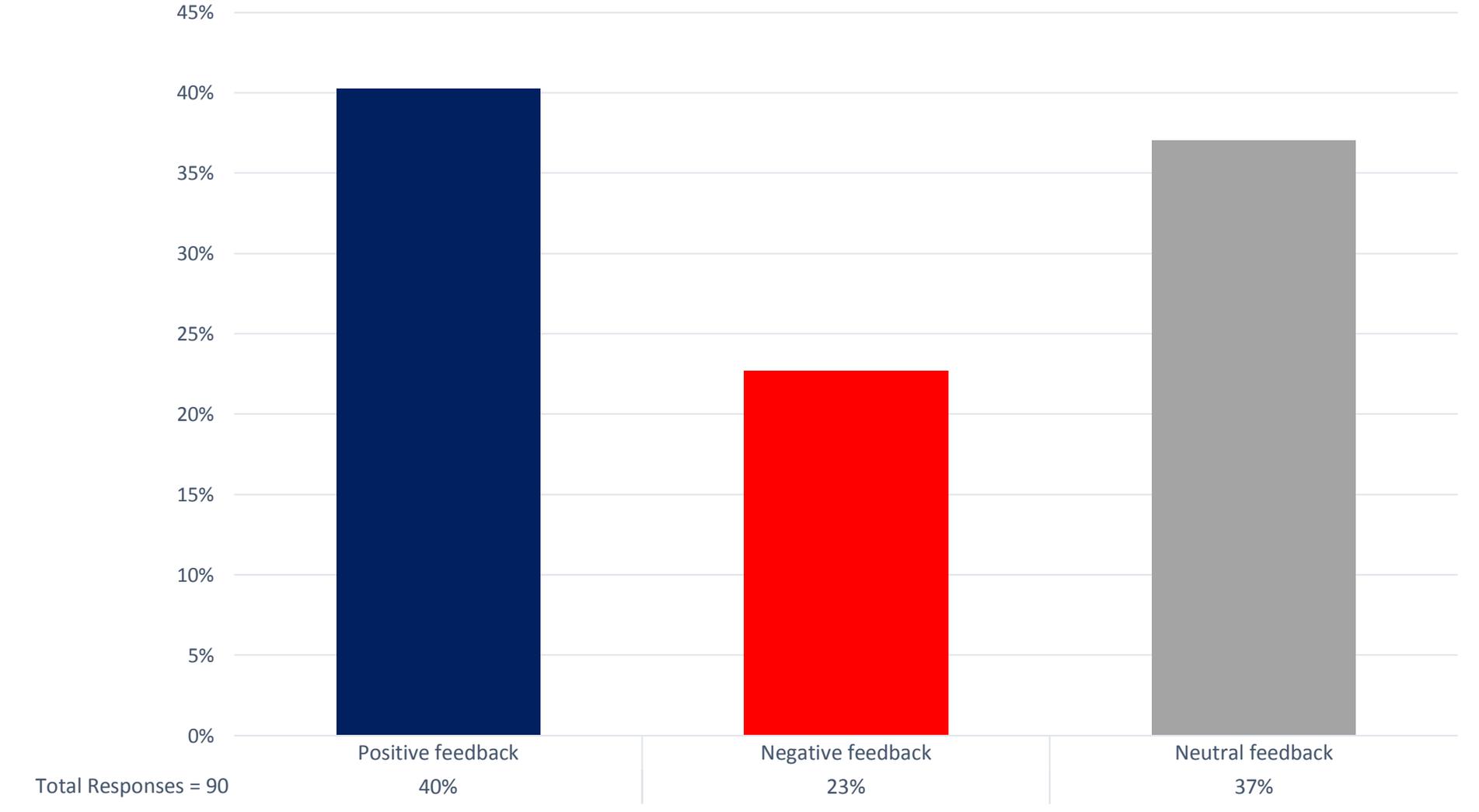
How easy or hard is it for you to use Climate Matters graphics in your reporting?*



	On-air	On my station's website	In social media	On my personal blog
Very easy	47%	54%	69%	23%
Somewhat easy	25%	13%	19%	9%
Neither easy nor hard	13%	11%	6%	2%
Somewhat hard	7%	5%	1%	0%
Very hard	2%	0%	0%	0%
Not applicable	6%	17%	5%	65%
Total Responses	102	101	101	98

*Question asked only of those who previously stated they used Climate Matters materials.

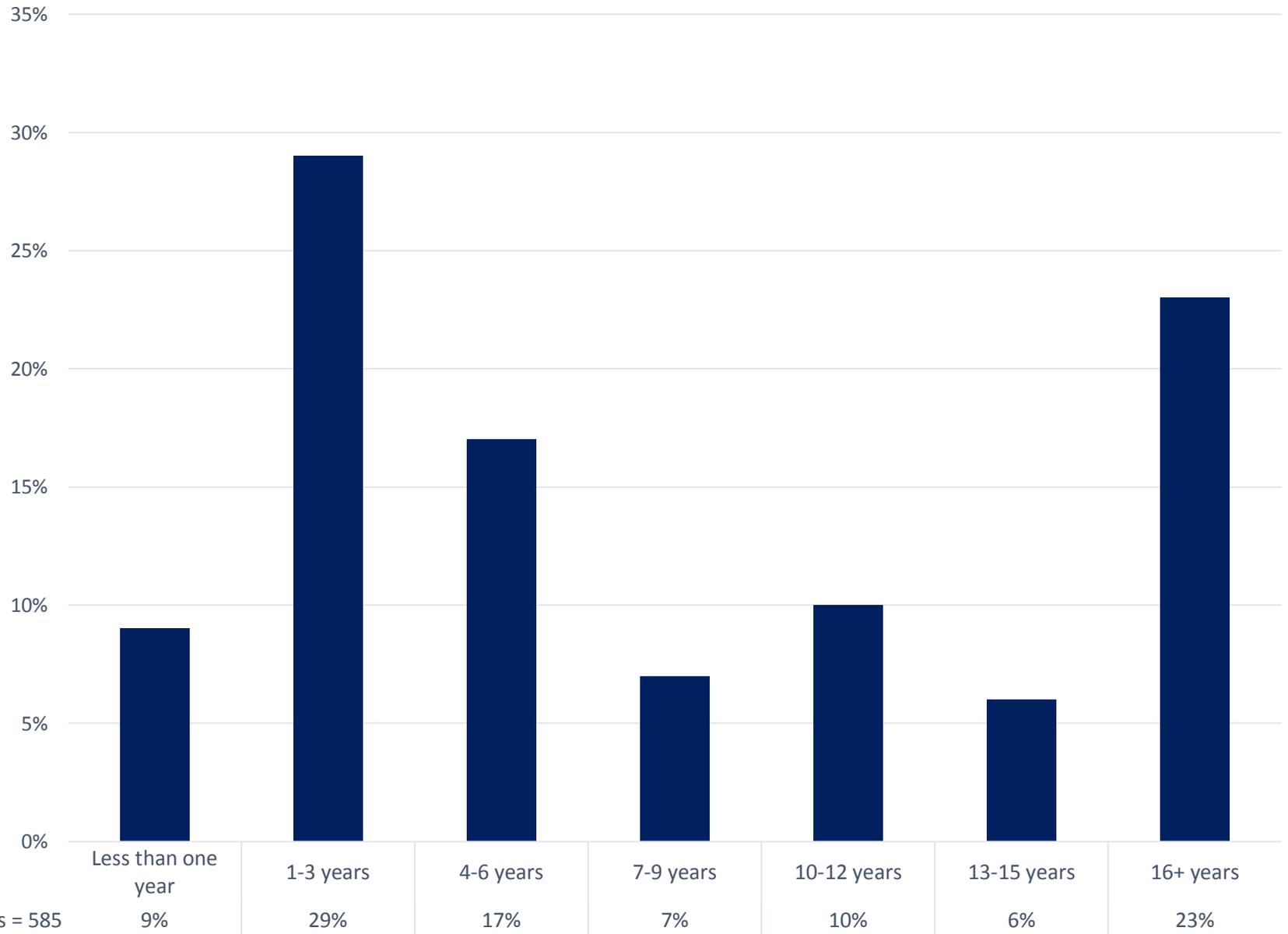
*Approximately what percentage of the feedback you receive from viewers regarding your use of Climate Matters materials is positive? negative? neutral?**



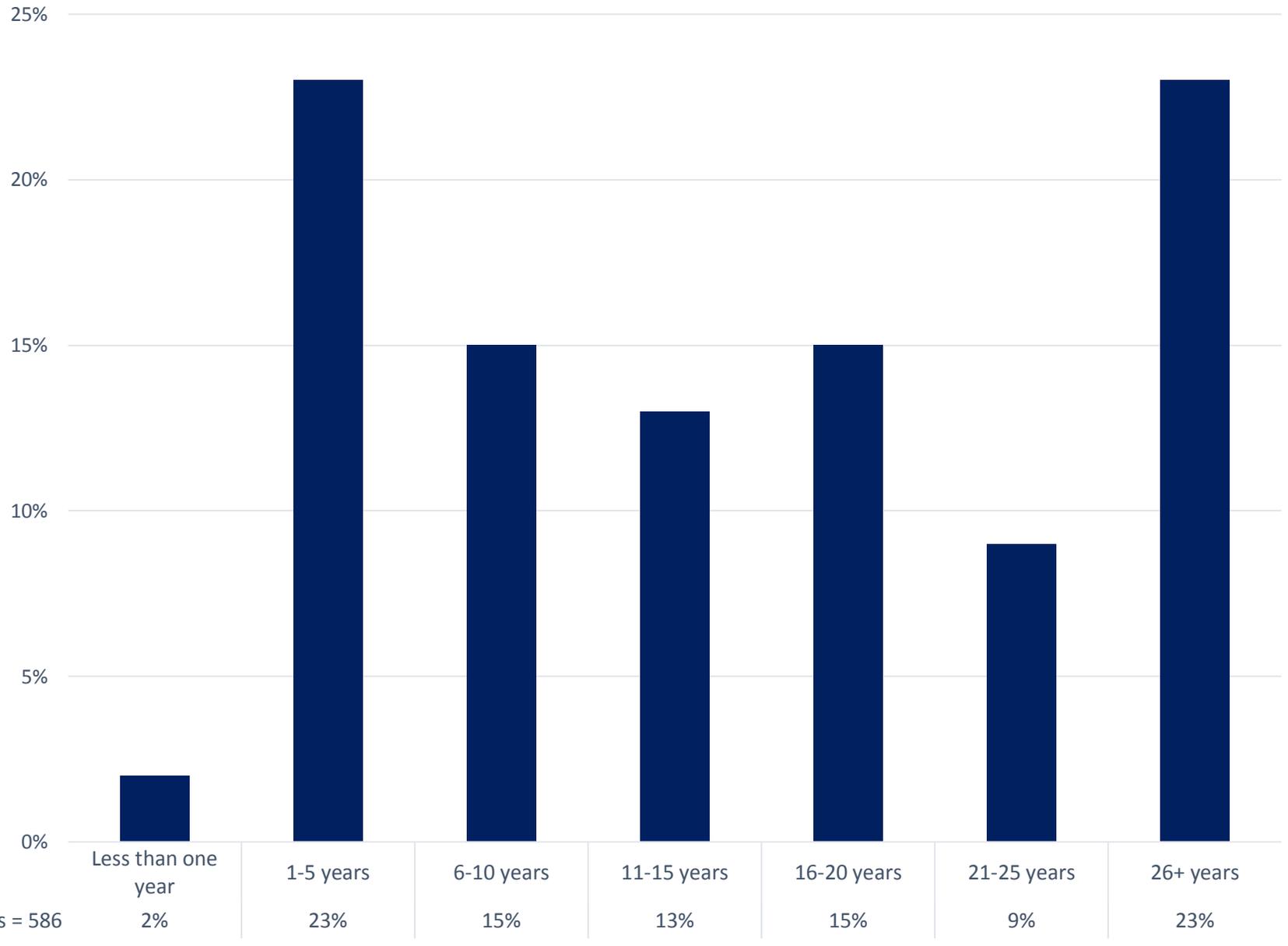
*Question asked only of those who previously stated they used Climate Matters materials.

GENERAL INFORMATION ABOUT THE WEATHERCASTER

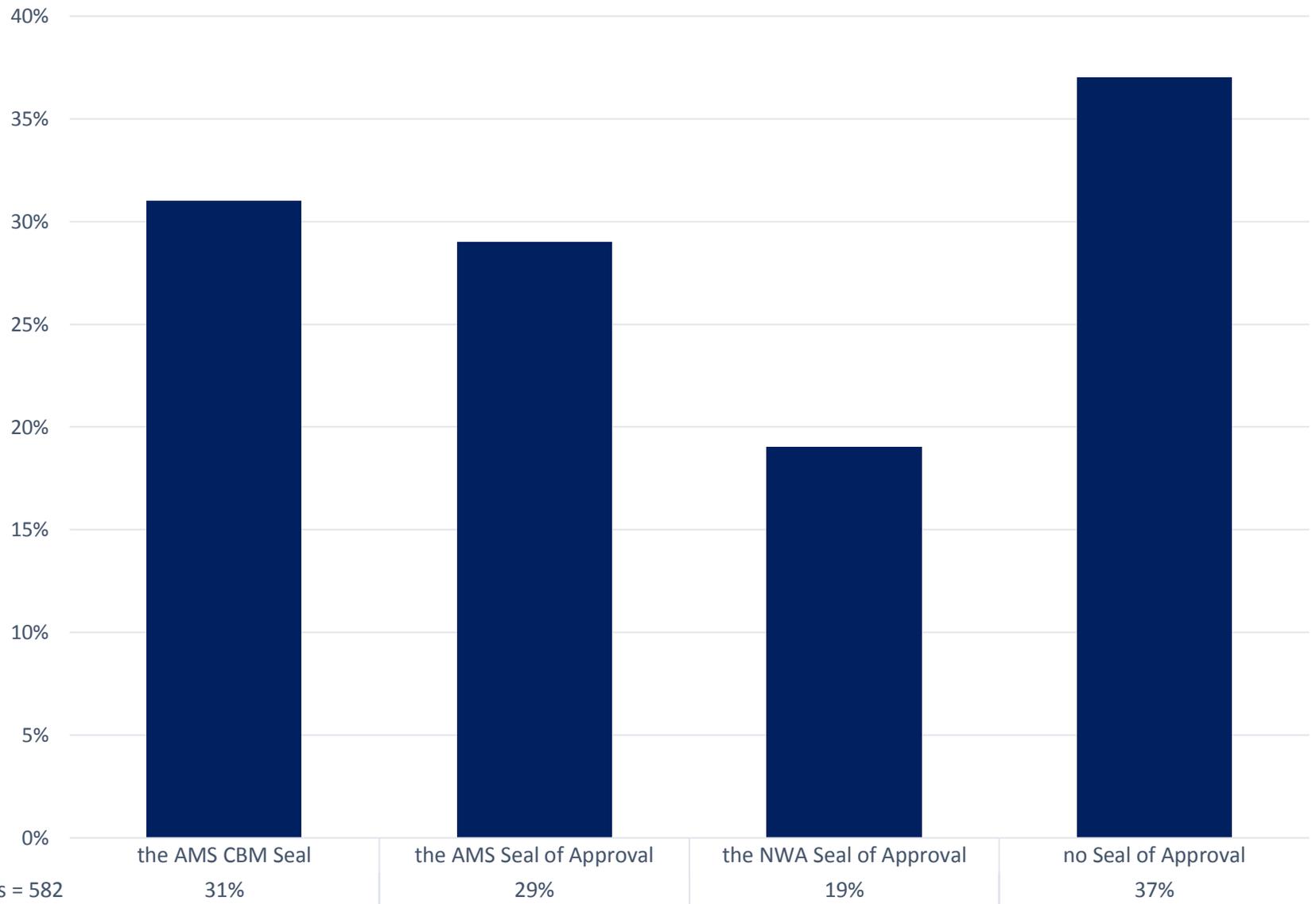
How long have you worked at your current news station?



How many years have you worked as a broadcast meteorologist?

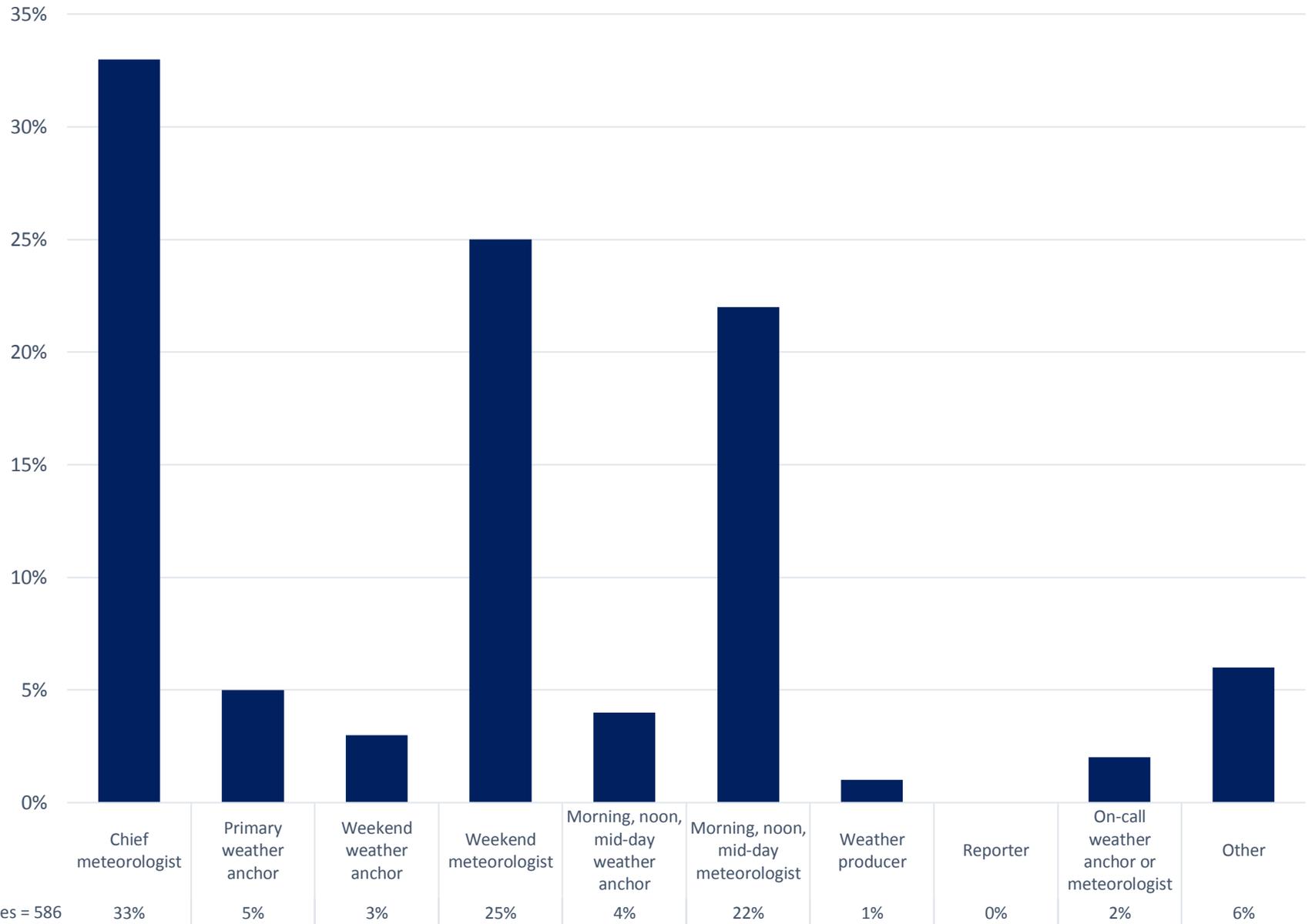


Which, if any, AMS and NWA Seals of approval do you have? (check all that apply)

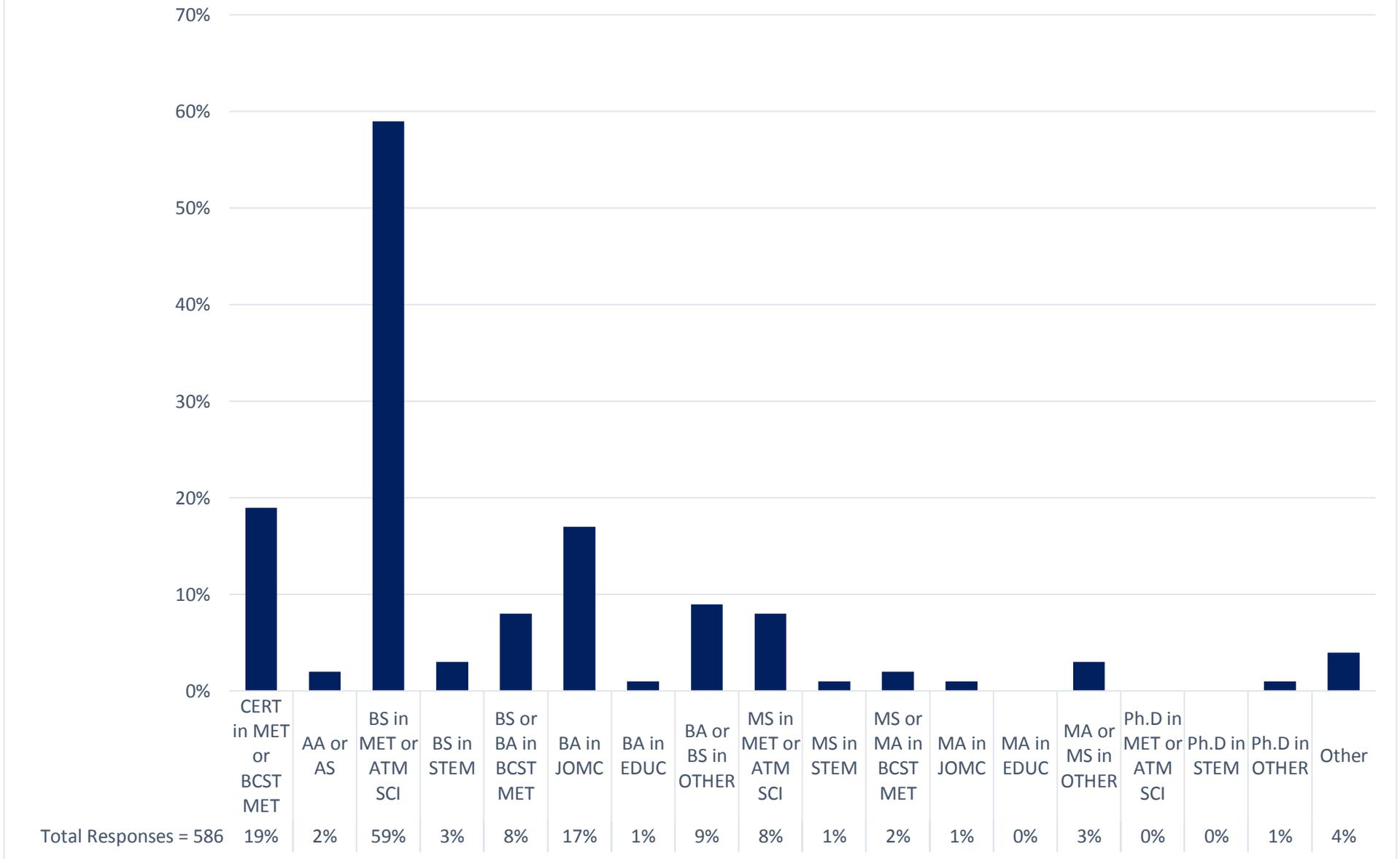


Total Responses = 582

Which best describes your current position?

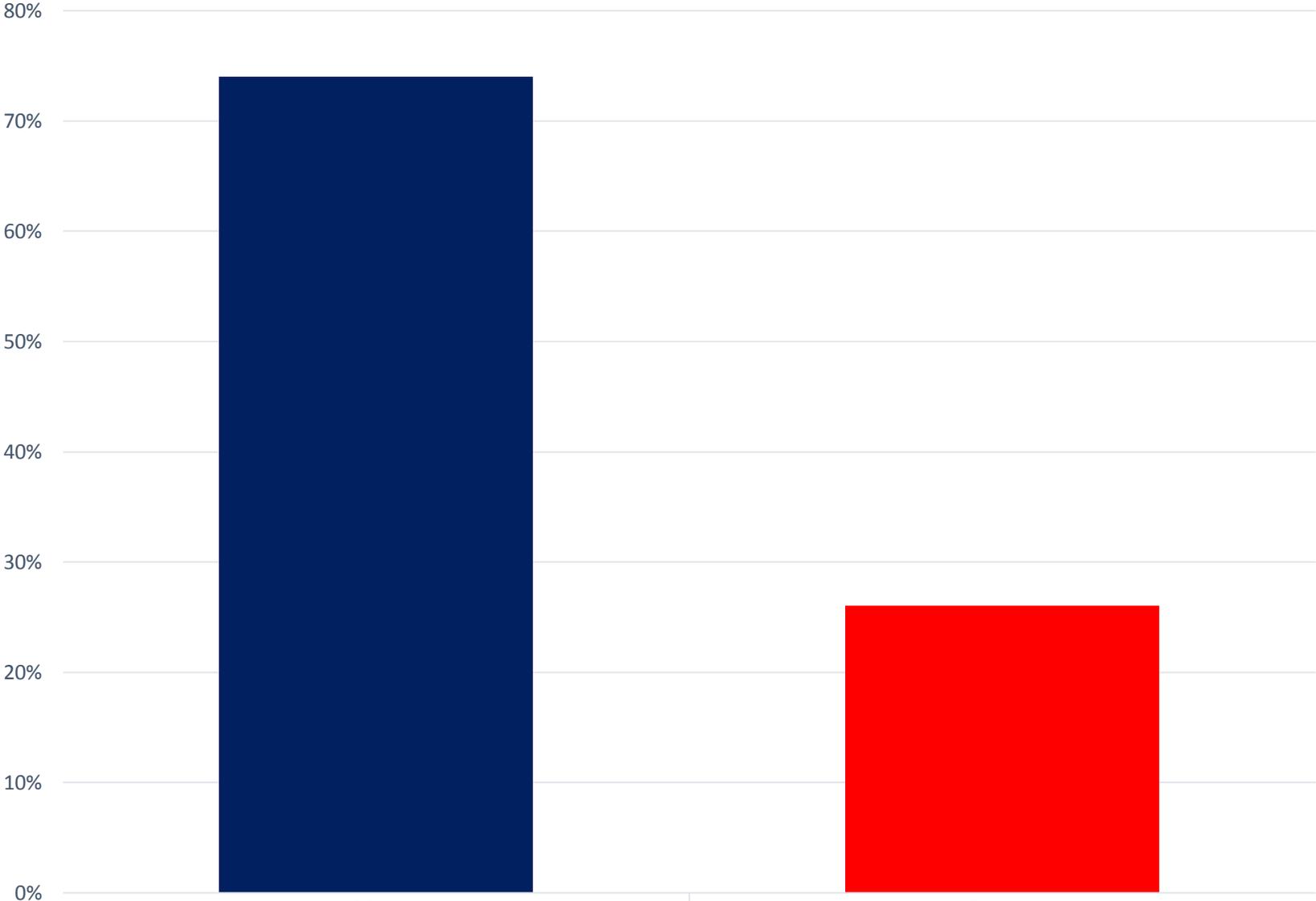


Which educational degrees do you hold (check all that apply)*



*CERT= Certificate program; BCST MET= Broadcast Meteorology; MET= Meteorology; ATM SCI= Atmospheric Science; STEM= Science, Technology, Engineering, Mathematics; JOMC= Journalism & Mass Communication; EDUC= Education

What is your gender?

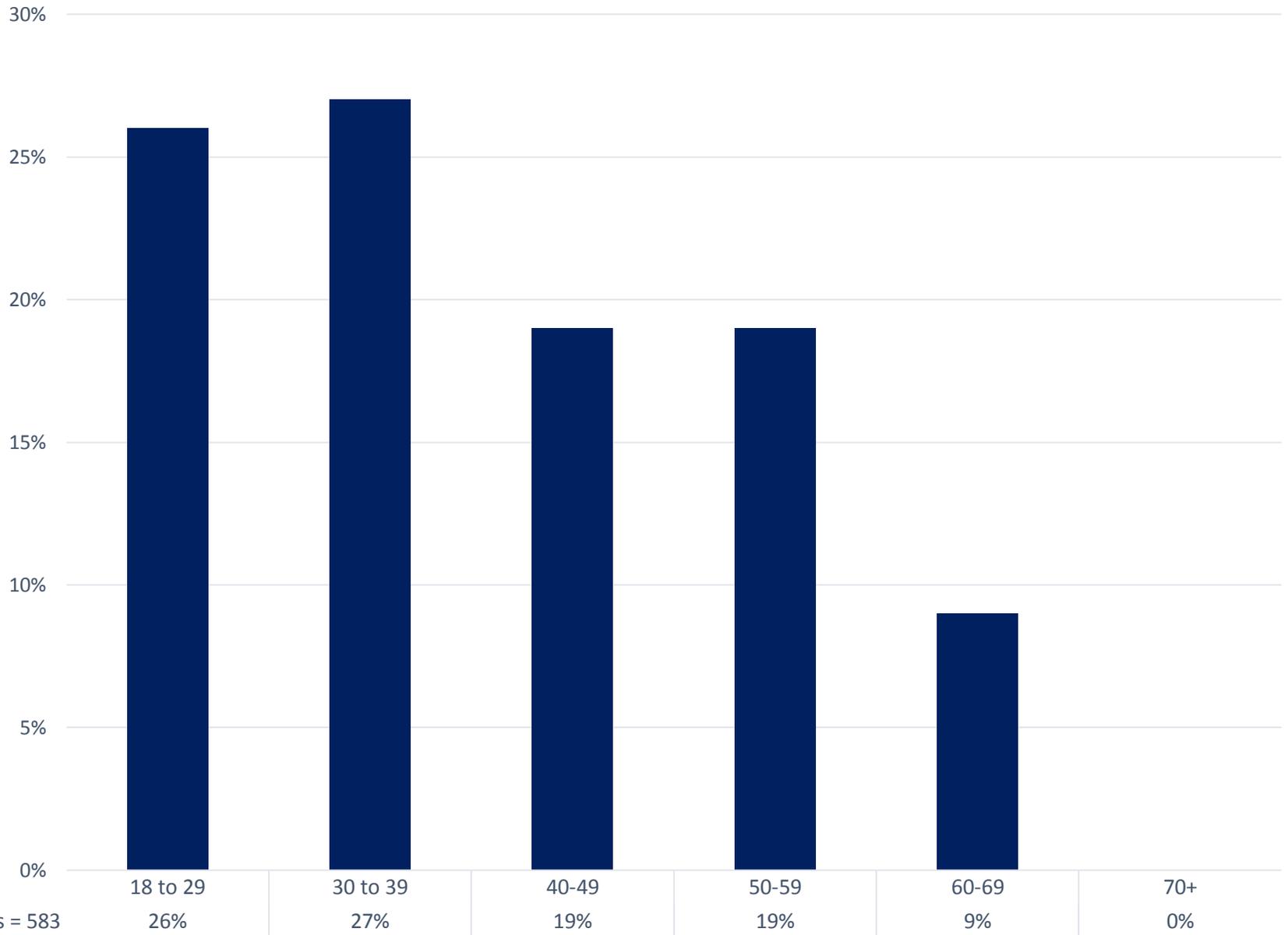


Total Responses = 583

Male
74%

Female
26%

What is your age?



Survey Methodology

Sampling frame. We built upon the methods used in our 2015 survey which attempted to survey every person currently working in broadcast meteorology in the United States. In 2015, we used Cision, a commercial database of news professionals (<http://www.cision.com/us/pr-software/media-database>), to obtain an initial list of people currently working in broadcast meteorology. We then verified and updated that list by manually searching the websites of all local broadcast affiliate television stations, regional cable broadcast corporations, and national television stations – a process that yielded 2,226 people who were working in English-speaking markets (the survey was not available for non-English speakers), and able to be contacted via email. In 2016, using the 2015 list as the baseline, we performed the same procedure to validate and update the list. This yielded 2,100 professionals, 126 lower than in 2015 and largely due to retirements and career changes.

Survey procedure. The survey was administered online using Qualtrics survey software. On January 6, 2016, an invitation to participate was emailed to 2,100 broadcast meteorology professionals. We received 67 bounced emails for which no alternative email address could be located, resulting in a revised sampling frame of 2,033. The survey was fielded between January 6 and January 31; non-respondents were sent up to five email reminders, approximately once per week. For each person who participated, a \$10 donation was given to the AMS or NWA Student Fund; participants were allowed to direct the donation to the fund of their choice.

Response rates. Of the 2,033 people in our sampling frame, 646 completed at least a portion of the survey – yielding a participation rate of 31.8%, while 593 of those completed the survey in its entirety – yielding a survey completion rate of 29.2%. It is important to note that 1,344 people (66.1% of our total sample) did not open any email associated with this survey. We are therefore unable to determine if these people choose not to participate, or if our emails were captured by spam filters, denying the opportunity to participate. Of those who participated, 92% completed the entire survey. The median time to complete the survey was 15 minutes.

Comparison of survey participants to population. To assess the extent to which those who participated in our survey differed systematically from the population of broadcast meteorologists, we conducted follow-up analyses on gender and position (the only available comparison metrics): survey respondents were more likely to be chief meteorologists (33%) than the population (24%); there were not significant differences in terms of gender (74% male in the survey versus 72% in the population).