

October 2022

A GLARING ABSENCE

THE CLIMATE CRISIS IS VIRTUALLY NONEXISTENT IN SCRIPTED ENTERTAINMENT

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**GOOD
ENERGY**

EXECUTIVE SUMMARY

In 2022, the Intergovernmental Panel on Climate Change stated that climate change is now accelerating faster than we can adapt to it. Despite its long history of being politicized in the United States, research suggests a large majority of Americans are concerned about climate change, and this concern is increasing.

Entertainment narratives have the power to shape our understanding of the world around us and mobilize us to take action. Research has examined the prevalence and impact of a wide range of health and social issues in scripted entertainment (e.g., immigration, criminal justice, gun safety), but little is known about how often climate change is acknowledged, nor the extent to which entertainment audiences are interested in these kinds of portrayals. To address this gap, the USC Norman Lear Center's Media Impact Project (MIP) conducted a research project with support from Good Energy, a story consultancy for the age of climate change.

To establish a baseline for representation of the climate crisis in scripted entertainment, we first monitored the frequency of mentions of 36 keywords related to climate change in 37,453 scripted TV episodes and films from 2016-2020. We found:

Climate change is largely absent in scripted entertainment.

- Mentions of climate change keywords appeared in 1,046 out of the 37,453 analyzed TV and film scripts from this period. That means that 2.8% of all scripts included any climate-related keywords, and only 0.6% of

scripted TV and films mentioned the specific term "climate change."

- More than half of episodes with climate mentions were dramas and one-third were comedies.
- CBS led U.S. broadcast networks: 7.5% of CBS episodes included at least one climate mention. *Madam Secretary* (CBS) alone had more mentions than any other individual broadcast network.
- Among cable networks, Showtime had the largest raw number of climate mentions. However, a greater proportion of NatGeo episodes (14.6%) included climate mentions than any other cable network, due to the series *Mars*.
- HBO Max led the streamers in likelihood of climate mentions with such content appearing in 6.4% of episodes. Netflix had the most raw climate mentions, owing to their vast content library.
- When extreme weather events are mentioned, they are rarely linked to climate change (10%). Similarly, when climate change is mentioned, it is rarely discussed alongside the fossil fuel industry (12%) or individual climate actions (8%).
- Despite their rarity, scripted TV episodes with climate mentions were viewed more than 1.2 billion times, and theatrically released scripted films with climate mentions earned upwards of \$8.6 billion.

Once we established that climate change is rarely mentioned in scripted entertainment, we conducted an audience survey to examine Americans' climate beliefs, entertainment preferences, and appetite for climate portrayals.

There is audience demand for climate portrayals.

- Survey respondents believe the average American is less concerned about the climate crisis than they are personally. Still, they retain hope.
- **They seek fictional characters in TV and film whose outlook aligns with their own, but feel existing characters do not share their level of concern about climate.**
- More than three in four learn about social issues from scripted entertainment at least occasionally, but only 25% hear concerns about the climate crisis from these sources, far less than other media sources.
- They have difficulty recalling any recent depictions of the climate crisis, positive or negative. The most frequently cited examples are *The Day After Tomorrow* from 2004 and the film *2012*, which addressed a series of disasters unrelated to climate change.
- Nearly half of audience members want to see fictional TV/films that include climate-related storylines, particularly in drama, action adventure, and sci-fi genres.
- Those who are hopeful about climate solutions are 3.5 times more likely to say they want to see climate portrayals in fictional entertainment.

WHAT NEXT?

Based on our research findings, we propose the following recommendations for the entertainment industry to normalize climate conversations:

- 1 Consider climate in all genres.** The majority of climate content appears in dramas, but such portrayals can be creatively woven into any number of genres, including comedy, children's programming, crime procedurals, satire, or even horror.
- 2 Connect the dots.** When climate change is addressed, it is rarely connected to the oil and gas industries that are accelerating it, nor actions that people can take to mitigate its impact. Similarly, extreme weather events are rarely linked to climate change.
- 3 Give voice to climate anxiety.** Audiences seek opportunities to connect with characters' outlooks on life. Thus, climate portrayals need not overtly persuade the audience so much as reflect their values, concerns, and even fears.
- 4 Show the intersections.** The climate emergency overlaps with all the issues we care about: racism, sexism, mental health, class, war, disability, and more. The climate crisis harms historically marginalized people first and worst.
- 5 Action!** Audiences are hungry for actions they can take to stop climate change. Fostering a sense of efficacy – the belief that change is possible – is crucial.

As the crisis worsens, stories that do not acknowledge climate will begin to feel divorced from reality. Thus, telling climate stories is not just good for the planet, it is in the best interest of an industry that seeks to engage audiences through authentic characters and narratives. Entertainment stories have the power to break down barriers, inspire action, and empower audience members to envision a better world. What stories will we choose to tell?

For more inspiration and tips for portraying climate on screen, check out *Good Energy's Cheat Sheet for Screenwriting in the Age of Climate Change*.¹

1. www.goodenergystories.com/playbook/climate-storytelling-cheat-sheet; www.goodenergystories.com/playbook

INTRODUCTION

In 2022, the Intergovernmental Panel on Climate Change (IPCC), a scientific body convened by the United Nations and composed of leading climate scientists from 195 countries, released its latest report on the threats posed by climate change.² **The warning from this global authority on climate science was clear: climate change is accelerating faster than our ability to adapt to it.**³ António Guterres, Secretary General of the United Nations, called the report “an atlas of human suffering and a damning indictment of failed climate leadership.”⁴

As part of the 2015 Paris Agreement,⁵ 189 countries committed to monitoring and lowering greenhouse emissions in an effort to hold global temperature increases under 1.5 degrees Celsius above pre-industrial levels, the point at which climate impacts would become increasingly dangerous. However, global temperatures have already increased an average of 1.1 degrees Celsius above pre-industrial levels and some experts estimate a 50% likelihood of crossing the 1.5 degree threshold by 2027.⁶

The current and likely future impacts of the climate crisis⁷ go beyond rising temperatures. The climate crisis also impacts sea levels, as well as the frequency and intensity of hurricanes, droughts, and wildfires,⁸ and the effects are often most pronounced within communities of color.⁹

Recent years vividly illustrate some of these consequences:

- In 2019, more than 13 million people across Asia and Africa were displaced due to storms, floods, and other extreme weather events.¹⁰
- In 2021, 40% of Americans resided in a county that experienced fire, floods, or other climate-related disasters, and 80% experienced a heat wave.¹¹
- In 2022, the Midwest experienced two separate one-in-a-thousand-year rain events¹² resulting in extreme flooding, property damage, and loss of human life. During one of these weather events, rainfall in eastern Kentucky fell 600% above normal, and at times, in excess of four inches an hour.¹³
- Similarly, in 2022, Europe saw one of its hottest and driest summers in decades. Southern France experienced raging wildfires that decimated the world-renowned Bordeaux wine region.¹⁴
- In summer 2022, Pakistan faced the worst flooding in its history with one-third of the country underwater due to heavy monsoon rains and melting glaciers. Despite its vulnerability, Pakistan has only been

2. www.ipcc.ch/report/ar6/wg2

3. www.nytimes.com/2022/02/28/climate/climate-change-ipcc-report.html

4. news.un.org/en/story/2022/02/1112852

5. The Paris Agreement, sometimes referred to as the Paris Climate Accord, is an international treaty on climate change. For more information, see: unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

6. www.cnbc.com/2022/05/10/climate-earth-set-to-break-1point5-degrees-celsius-goal-within-five-years.html

7. Though people use a variety of different terms to describe climate-related issues (global warming, climate change, extreme weather, or climate instability) we use the term “climate crisis” to encompass all of these terms. The climate crisis refers to the harm caused by burning fossil fuels that release greenhouse gasses into the atmosphere, making the climate hotter and more extreme here on earth.

8. climate.nasa.gov/effects

9. www.npr.org/2022/03/18/1087581328/understanding-the-link-between-racial-justice-and-the-fight-against-climate-change

10. reliefweb.int/report/world/more-13-million-people-internally-displaced-across-asia-2018

11. www.washingtonpost.com/climate-environment/2022/01/05/climate-disasters-2021-fires/

12. www.washingtonpost.com/climate-environment/2022/07/29/kentucky-st-louis-flood-climate-explainer/

13. www.nytimes.com/2022/08/05/us/kentucky-missouri-illinois-rain-flooding.html

14. www.cbsnews.com/news/europe-heat-wave-2022-latest-news-wildfires-drought-france-uk-spain-portugal/

responsible for 0.4% of the world's carbon dioxide emissions.¹³

- As this report is written, coastal Florida has been ravaged by Hurricane Ian, one of the most powerful storms to strike the U.S. in the last decade.¹⁴

BIPARTISAN SUPPORT FOR CLIMATE POLICIES

Though the climate crisis is a global issue, the topic has often been a source of political division in the U.S.¹⁵ The roots of this politicization can be traced back to the 1990s, when Exxon launched a 15-year campaign contesting the science behind climate change and raising alarms about potentially negative economic consequences of climate policies.¹⁶ By the early 2000s, many of these arguments had found their way into the political zeitgeist.¹⁷ Remnants of this division remain: among registered voters, 94% of Democrats believe climate change is a moderately or very big problem compared with 41% of Republicans.¹⁸ Democrats are also more likely to think the federal government is doing too little to reduce the effects of climate change (90%, compared with 39% of Republicans).

Despite this history of polarization, Americans are finding more common ground, particularly around policies aimed at reducing the effects of climate change. Data from the Pew Research Center shows bipartisan support for planting trees to absorb carbon emissions (92% of Democrats/88% of Republicans), providing tax credits to businesses for carbon capture/storage (90%/78%), tougher restrictions on power plant carbon emissions (89%/55%), and setting tougher fuel efficiency standards for cars (86%/52%).

Across parties, 80% of Americans believe fossil fuels are contributing to climate change.¹⁹

Young Americans are especially likely to favor policy proposals that address the climate crisis.²⁰ Compared to previous generations, Gen Z (born after 1996) and Millennials (born 1981-1996) are more likely to support phasing out gasoline-powered cars and use of oil, coal, and natural gas. They are also more likely than older generations to oppose offshore drilling and hydraulic fracturing (commonly referred to as “fracking”). Though generational differences in climate attitudes exist across parties, they are particularly pronounced among Republicans. Young Republicans are less likely than their older counterparts to support an increased use of fossil fuel energy sources, hydraulic fracturing, expanding offshore oil and gas drilling, and coal mining.

SHIFTING CLIMATE BELIEFS

Research from Yale's Program on Climate Change Communication (YPCCC) has categorized Americans into six distinct groups – “Six Americas” – based on their beliefs around global warming.²¹

THE ALARMED are the most engaged. They are worried about global warming and strongly support climate action, but do not necessarily know what they or others can do to solve the problem.

THE CONCERNED believe that human-caused global warming is a significant threat and support climate policies, but they also see climate change as a less immediate threat

THE CAUTIOUS are aware of global warming, but

13. www.cbsnews.com/news/pakistan-floods-death-toll-un-says-climate-change-warning-for-world

14. www.nytimes.com/interactive/2022/09/29/climate/hurricane-ian-florida-intensity.html

15. time.com/4874888/climate-change-politics-history/ <https://www.brookings.edu/research/the-challenging-politics-of-climate-change>

16. graphics.latimes.com/exxon-research

17. www.theguardian.com/environment/2003/mar/04/usnews.climatechange

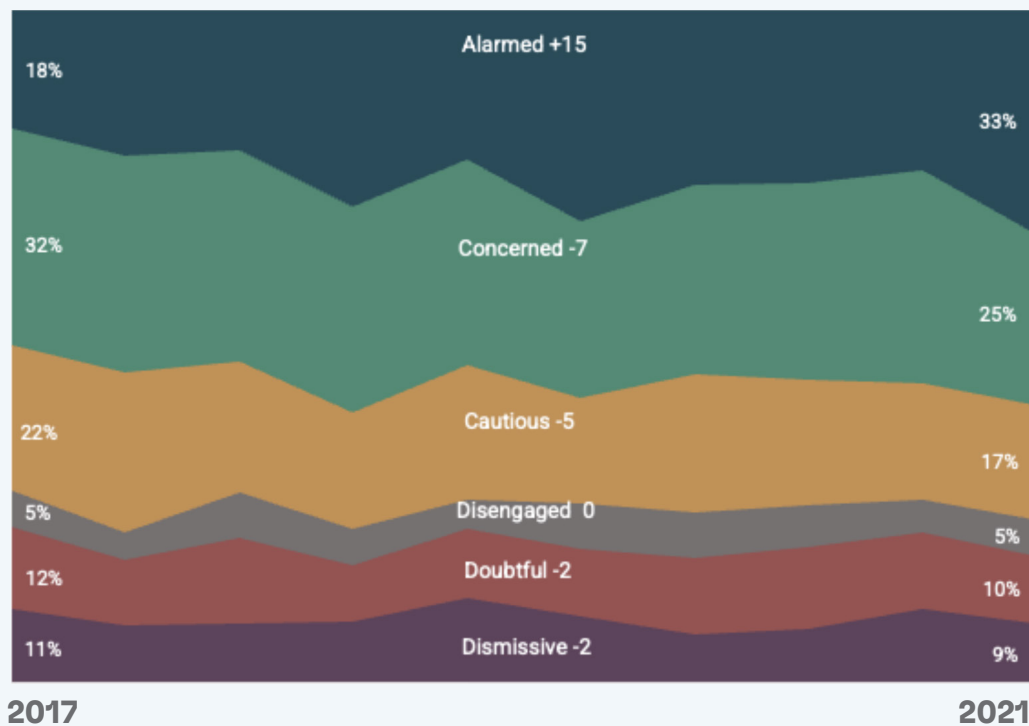
18. www.pewresearch.org/fact-tank/2020/02/28/more-americans-see-climate-change-as-a-priority-but-democrats-are-much-more-concerned-than-republicans

19. www.pewresearch.org/science/2020/06/23/two-thirds-of-americans-think-government-should-do-more-on-climate/ps_2020-06-23_government-and-climate_00-02

20. www.pewresearch.org/fact-tank/2021/05/26/key-findings-how-americans-attitudes-about-climate-change-differ-by-generation-party-and-other-factors

21. climatecommunication.yale.edu/about/projects/global-warnings-six-americas/; <https://climatecommunication.yale.edu/publications/global-warnings-six-americas-september-2021>

FIGURE 1. TRENDS IN YPCCC’S “SIX AMERICAS” AUDIENCE SEGMENTS, 2017-2021.



Data from 10 waves of the Climate Change in the American Mind national survey, June 2017–September 2021. (n=11,664).

uncertain about its causes and level of severity.

THE DISENGAGED are largely unaware of global warming.

THE DOUBTFUL are skeptical that global warming is occurring or human-caused and perceive it as a low risk.

THE DISMISSIVE firmly reject the reality of human-caused global warming and oppose most climate-related policies.

YPCCC’s research shows that Americans are becoming increasingly concerned about climate change.²² As of 2021, three-in-four Americans fall into the Alarmed, Concerned, and Cautious groups, with 60% in the first two categories. The Alarmed segment alone has doubled in size since 2017, and now outnumbers the Dismissive by more than three-to-one. At the same time, the Disengaged, Doubtful, and Dismissive groups have gotten smaller, and now represent less than 25%

collectively.

Cultural awareness of the intersections between climate change and mental health has also become more common, with environmentally rooted stress dubbed “eco-anxiety.”²³ A global study examining climate change and mental health among 10,000 youth aged 16 to 25 found that 59% were very or extremely worried about climate change.²⁴

Furthermore, 45% said that their worries about the climate crisis negatively affect their daily lives and functioning; 75% said that they think the future is frightening, and more than 50% reported feeling afraid, sad, anxious, angry, powerless, or helpless with regard to the climate crisis. Another study of Los Angeles County residents found those with household incomes under \$30,000 were twice as likely to report psychological distress due to a natural disaster as those with incomes above this threshold, and those under the age of 40 were also twice as likely as those over 60 to report psychological

22. climatecommunication.yale.edu/publications/global-warmings-six-americas-september-2021

23. www.nytimes.com/2022/02/06/health/climate-anxiety-therapy.html

24. [www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(21\)00278-3/fulltext#tbl1](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(21)00278-3/fulltext#tbl1)

distress due to a natural disaster.²⁵ Overall, these trends suggest Americans of all stripes are more ready to talk about climate change than ever before.

CLIMATE CHANGE IN SCRIPTED ENTERTAINMENT

Entertainment has the power to shape our understanding of the world around us and inspire us to take action. Over time, common narratives in the stories we see on screen can shape our beliefs and behaviors, and in turn, drive social and political change.²⁶ Research has examined the representation of a wide range of health and social issues in scripted entertainment, including immigration,²⁷ criminal justice,²⁸ gun safety,²⁹ and historically excluded communities,³⁰ as well as the impact of such depictions. For example, we found that exposure to immigration storylines was associated with more inclusive attitudes towards immigrants and a greater likelihood of taking immigration-related action.³¹ Given the power of entertainment to inform audiences and inspire action on a wide range of topics, it has the potential to promote public engagement on the climate crisis as well.

Little research, however, has assessed how frequently the climate crisis is discussed in scripted TV and film, nor examined the impact of climate portrayals in entertainment.³² A recent UCLA study measured the prevalence of sustainable behaviors in popular scripted TV. They found such behaviors are exceedingly rare, and when depicted, are typically not “high-impact” behaviors in terms of their effect on carbon emissions.³³ Our own research on single-use plastics is consistent with these findings. Popular scripted TV is awash in single-use plastics, with

an average of 28 items per episode, but only 7% of these items are shown being disposed of, and of these, the vast majority are littered.³⁴

STUDY OVERVIEW

The USC Norman Lear Center’s Media Impact Project (MIP) embarked on a research project with support from Good Energy, a story consultancy for the age of climate change that inspires, supports, and accelerates climate portrayals in scripted TV and film. The purpose of this research was to establish a baseline for the presence of the climate crisis in recent scripted TV and film. We also built upon prior research by gauging audience appetites for such portrayals. This included:

- An analysis of the frequency of 36 keywords related to climate change in 37,453 scripted TV episodes and films from 2016-2020.
- An audience survey of Alarmed, Concerned, and Cautious Americans, assessing their media preferences, beliefs about the climate crisis, their awareness of existing climate crisis portrayals on TV and film, and interest in seeing such portrayals.

The research informed the development of Good Energy’s *Playbook for Screenwriting in the Age of Climate Change*,³⁵ which launched in April 2022. This interactive digital resource is an open source guide to portraying climate change on-screen, in any and every storyline, across every genre, helping the entertainment industry explore the endless ways the climate emergency can deepen characters, enrich conflict, and color story worlds.

25. cesr.usc.edu/sites/default/files/LABSustainability_wave2_final.pdf

26. mediainimpactproject.org/healthequity

27. defineamerican.com/research/change-the-narrative

28. hollywood.colonofchange.org/crime-tv-report

29. everytownsupportfund.org/report/gun-safety-depictions-on-tv

30. For examples of research on historically-excluded communities in entertainment, see: sorayagiaccardi.com/resources

31. defineamerican.com/research/change-the-narrative/

32. YPCCC’s Anthony Leiserowitz studied the impact of the film *The Day After Tomorrow* in 2004: https://climatecommunication.yale.edu/wp-content/uploads/2016/02/2004_11_Before-and-after-The-Day-After-Tomorrow.pdf

33. www.greenproductionguide.com/wp-content/uploads/2022/06/ucla-ioes-practicum-pga-green-sustainable-behavior-final-report-2019-1.pdf

34. www.plasticpollutioncoalition.org/flipthescriptdownload

35. www.goodenergystories.com/playbook

CLIMATE CHANGE IS LARGELY ABSENT IN SCRIPTED ENTERTAINMENT

To establish a baseline for representation of the climate crisis in scripted entertainment, we monitored the frequency of mentions of 36 keywords related to climate change in 37,453 scripted TV episodes and films from 2016-2020. Throughout this report, we use the word “episodes” to refer to individual film and TV scripts.

For each mention of a climate keyword, we identified the platform, network, genre, sub-genre, country of origin, viewership, and box office results. Additionally, we evaluated the intersections between climate keywords and extreme weather events, the coal/oil industries, and individual climate actions.³⁶

HOW PREVALENT IS CLIMATE CHANGE?

Climate change is rarely mentioned.

- In total, we identified 1,772 mentions of climate change keywords, which appeared in 1,046 TV and film scripts.
- That means only 2.8% of analyzed scripts included any climate change keywords, and 0.6% of scripted TV and films mentioned the specific term “climate change.”
- For context, the word “dog” was mentioned almost 13 times as frequently as all 36 climate keywords combined in the same time frame.

ONLY 2.8% OF ANALYZED SCRIPTS INCLUDED ANY CLIMATE CHANGE KEYWORDS, AND ONLY 0.6% OF SCRIPTED TV AND FILMS MENTIONED THE SPECIFIC TERM “CLIMATE CHANGE.”

Scripted content uses limited climate language.

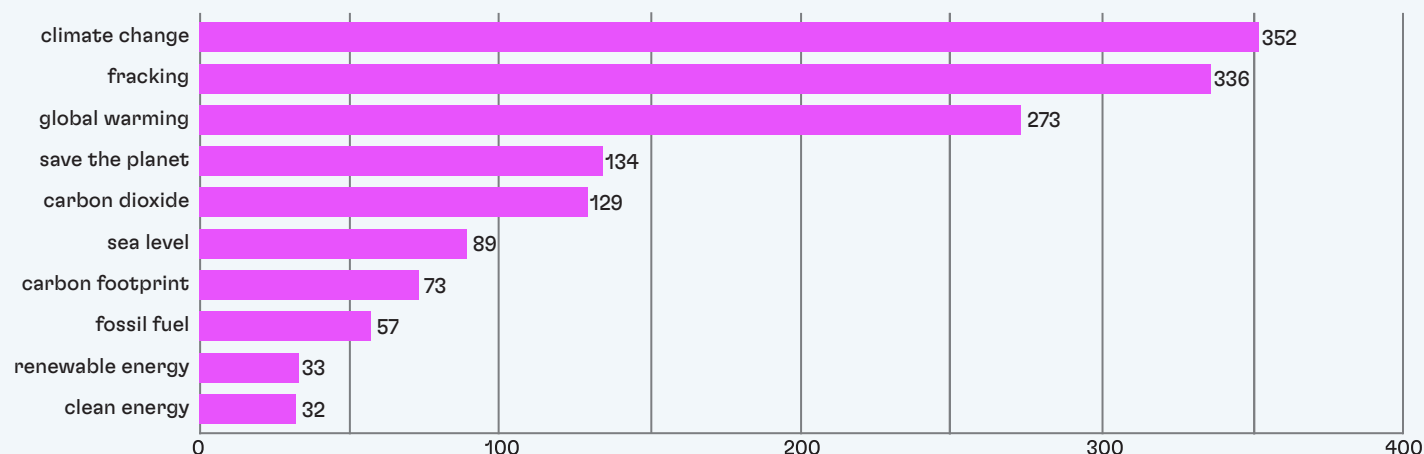
- Only five of the 36 analyzed keywords had more than 100 mentions across the five-year analysis period.
- *Climate change*, *fracking*, and *global warming* were by far the most frequently mentioned keywords.

TABLE 1. CLIMATE CHANGE KEYWORDS.

- biodiversity
- carbon capture
- carbon dioxide
- carbon emission
- carbon footprint
- care about the planet
- clean energy
- climate catastrophe
- climate change
- climate crisis
- climate disaster
- climate emergency
- climate justice
- climate migration
- climate refugee
- climate solutions
- deforestation
- dying planet
- energy efficient
- fossil fuel
- fossil fuel industry
- fracking
- global warming
- green energy
- greenhouse effect
- greenhouse gas
- ice caps
- melting glaciers
- ocean pollution
- plastic pollution
- reforestation
- renewable energy
- save the planet
- sea level
- solar energy
- wind energy

³⁶ See Appendix A for detailed methodology. The relevance of individual keyword mentions to climate change was not evaluated. As such, mentions of some keywords (e.g., “save the planet”) may not be related to climate change.

FIGURE 2. MOST FREQUENTLY MENTIONED KEYWORDS.



- Several additional climate terms were not included in the analysis because of their absence in scripted content. The following terms did not appear in the 37,453 analyzed scripts: *Climate adaptation, climate anxiety, climate impact, climate resilience, coal pollution, monocropping, planet is burning, and runaway climate change.*

Climate mentions are dramatic.

- Over half (56%) of the 1,046 episodes with climate mentions were dramas, one-third (33%) were comedies, and 11% were comedy-dramas.
- Within these genres, the most common sub-genres were sci-fi (157 episodes), sitcom (147), action (95), political (70), horror (39), crime (35), adventure (24), romantic (22), satire (19), and anime (17).³⁷

TABLE 2. MOST VIEWED TV EPISODES WITH CLIMATE MENTIONS.

	SHOW NAME	CLIMATE KEYWORD	VIEWERS ³⁹
1	<i>The Big Bang Theory</i> (CBS)	global warming	16.4 million
2	<i>NCIS</i> (CBS)	fossil fuel	16.0 million
3	<i>NCIS</i> (CBS)	carbon footprint	12.9 million
4	<i>Young Sheldon</i> (CBS)	fossil fuel	11.5 million
5	<i>This Is Us</i> (NBC)	carbon dioxide	10.9 million
6	<i>MacGyver</i> (CBS)	fracking	10.9 million
7	<i>Doctor Foster</i> (BBC)	fracking	10.3 million
8	<i>Blue Bloods</i> (CBS)	global warming	10.2 million
9	<i>This Is Us</i> (NBC)	renewable energy	9.6 million
10	<i>Blue Bloods</i> (CBS)	carbon footprint	9.6 million

Scripted climate mentions have a wide reach.³⁸

- Despite climate keywords appearing only sparingly on TV, they were still viewed more than 1.2 billion times in aggregate.
- The climate mention with the most views – at 16.4 million – was a joke about global warming on *The Big Bang Theory*. In the episode, Raj mentions that he sponsors the penguins at the L.A. Zoo because “they’re losing their homes to global warming, and my car gets, like, seven miles a gallon, so I felt bad.”

37. Google identifies each episode’s specific sub-genre. Sometimes sub-genres are straightforward like “action,” while others are more descriptive combinations like “action sci-fi,” “action family” or “action romance.”

38. We attempted to locate viewership and box office data for each episode with climate mentions, but were able to do so for 60%. The majority of episodes with no reach data were either streaming or international content. At the same time, because this analysis did not evaluate the relevance of individual climate mentions, some of these mentions (e.g., “save the planet” in superhero films) may not be related to climate change.

39. Viewership is from the primary network that aired the episode. Nine of the top 10 aired in the United States, *Doctor Foster* on BBC was the exception.

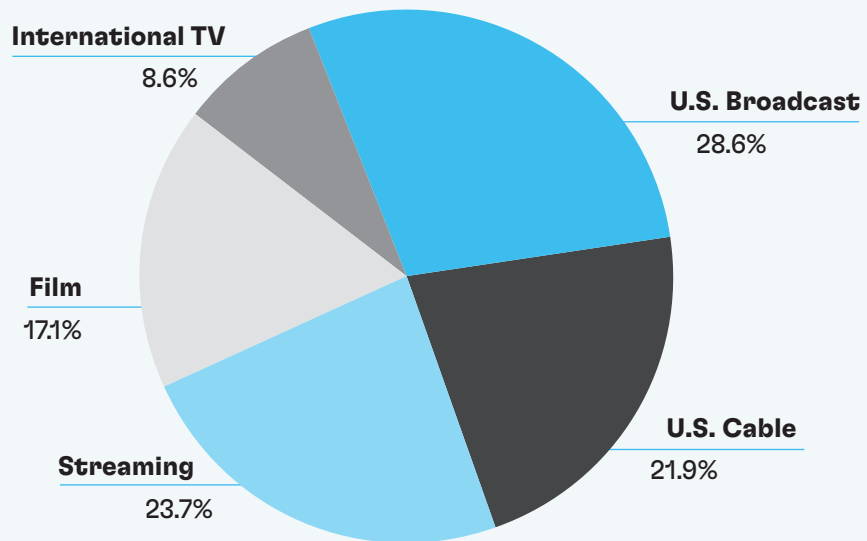
- One hundred scripted films with theatrical releases included 193 climate keyword mentions. Most of these had a single climate mention, while some had multiple mentions. These films cumulatively earned over \$8.6 billion.

WHAT PLATFORMS FEATURE CLIMATE MENTIONS?

Climate mentions are fairly evenly spread across different platforms.

- Twenty-nine percent of all climate mentions appeared on broadcast TV, followed by 24% on streaming, 22% on cable TV, and 17% in films. Nine percent appeared on content airing on broadcast and cable networks from outside of the U.S.

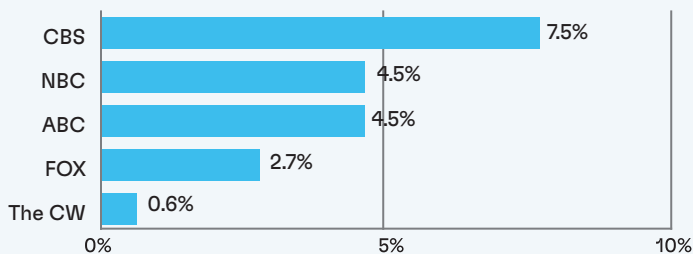
FIGURE 3. PERCENT OF ALL CLIMATE MENTIONS BY PLATFORM.



CBS leads broadcast networks in climate mentions.

- TV shows on the five U.S. broadcast networks mentioned climate keywords a total of 503 times.
- CBS led all broadcast networks with 241 total climate mentions. *Madam Secretary* alone had 94 mentions in 20 unique episodes, more than the total for any other broadcast network. *Madam Secretary* included several in-depth storylines on the climate crisis, including a deep look at climate migration and refugees.
- On CBS, 7.5% of all analyzed episodes included climate mentions. NBC and ABC each had climate mentions in 4.5% of analyzed episodes.

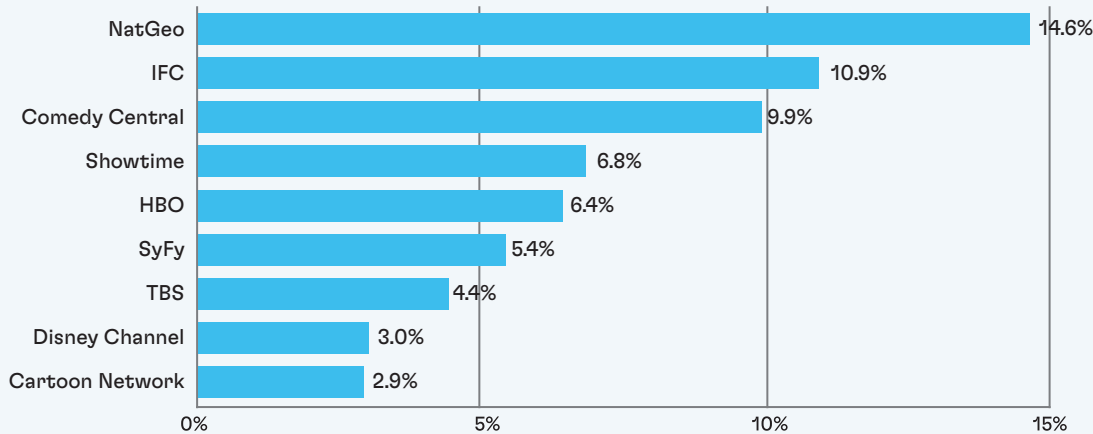
FIGURE 4. PERCENT OF BROADCAST TV EPISODES WITH ANY CLIMATE MENTIONS.



NatGeo leads cable networks, with climate mentions in 14.6% of episodes.

- Thirty cable networks mentioned climate keywords a total of 389 times. Showtime series featured the most raw climate mentions of any cable station, with 50 mentions. This is largely due to mentions on *Shameless*, *Billions*, and *Ray Donovan*.
- For the nine cable networks with the most climate mentions, we analyzed the percentage of episodes with any mentions.⁴⁰ Here, NatGeo led the way, owing entirely to 44 climate mentions on 7 episodes of the sci-fi series *Mars*.

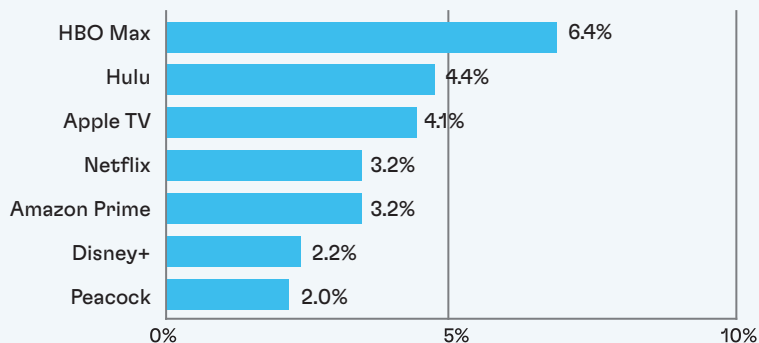
FIGURE 5. PERCENT OF CABLE TV EPISODES WITH ANY CLIMATE MENTIONS.



HBO Max leads streaming platforms, with climate mentions in 6.4% of episodes.

- The seven analyzed streaming platforms⁴¹ mentioned climate keywords a total of 419 times. In terms of raw numbers of keyword mentions, Netflix had the most, with 296. However, owing to its vast library of content (4,621 scripts analyzed), only 3.2% of episodes included any mentions.
- Across all streaming platforms, two Netflix series (*The Politician* and *BoJack Horseman*) had the most climate mentions, with 52 and 43, respectively.
- HBO Max content included climate-focused series like *The Head*, a survival thriller series about climate change researchers in Antarctica. Climate mentions also appeared in HBO Max romantic comedy *Superintelligence*, in which a corporate executive quits her job to advocate for the environment, and the series *Love Life*, where a character notes “...just 100 companies are responsible for more than 70% of global carbon emissions.”

FIGURE 6. PERCENT OF STREAMING EPISODES WITH ANY CLIMATE MENTIONS.



40. Because of the sheer amount of cable content, we were unable to calculate denominators (scripts in the database) for each network. Instead, we did so for the top nine cable networks in terms of climate mentions, which accounted for 237 of the 389 total mentions.

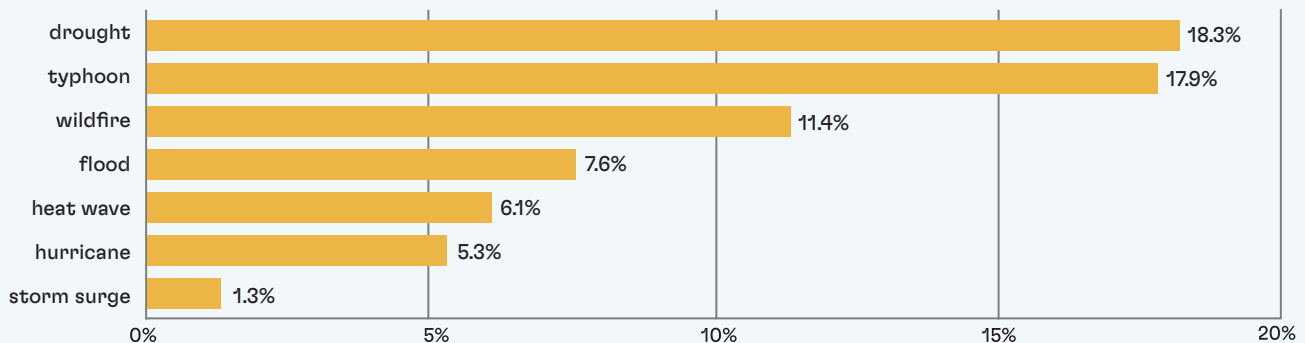
41. The streaming platforms analyzed were Amazon Prime, Apple TV, Disney+, HBO Max, Hulu, Netflix, and Peacock.

DO CLIMATE MENTIONS INTERSECT WITH RELATED ISSUES?

Extreme weather mentions infrequently acknowledge climate change.

- Extreme weather events (drought, flood, heat wave, hurricane, storm surge, typhoon, and wildfire) were mentioned 4,108 times.
- Only 10% of these extreme weather mentions appeared in episodes that also included any of the 36 climate change keywords.⁴²

FIGURE 7. PERCENT OF EXTREME WEATHER MENTIONS CO-OCCURRING WITH CLIMATE MENTIONS.



Likewise, coal and oil industry mentions rarely appear alongside climate change.

- There were 305 mentions of the following industry keywords: *oil drilling, oil industry, oil extraction, oil pipeline, coal industry, coal mine, and coal pollution.*
- Only 12% of all climate mentions appeared in episodes alongside coal and oil industry keywords.

Only 8% of climate mentions appear alongside individual climate action.

- A 2021 Project Drawdown study distilled the top 20 high-impact climate actions for households and individuals for reducing climate change, which includes actions like recycling, reducing food waste, and driving electric cars.⁴³
- These individual actions were mentioned alongside climate keyword mentions in 236 scripts. In *Silicon Valley* (HBO), there was a discussion of a character “saving the planet” by driving an electric vehicle. On *Grace & Frankie* (Netflix), carpooling was mentioned as a way to help reduce the character’s carbon footprint.

EXTREME WEATHER MENTIONS INFREQUENTLY ACKNOWLEDGE CLIMATE CHANGE. LIKEWISE, COAL AND OIL INDUSTRY MENTIONS RARELY APPEAR ALONGSIDE CLIMATE CHANGE.

42. We did not evaluate whether the concepts were associated in the dialogue, just whether they were present in the same episode. As such, 10% is likely an overestimate of mentions that explicitly drew a connection between extreme weather and climate change.

43. The top 20 high-impact climate actions are: reduced food waste, plant-rich diets, recycling, reduced plastic, composting, recycled paper, public transit, carpooling, electric cars, hybrid cars, telepresence, electric bicycles, distributed solar photovoltaics, insulation, LED lighting, solar hot water, high-performance glass, high efficiency heat pumps, smart thermostats, and low-flow fixtures.

THERE IS AUDIENCE DEMAND FOR CLIMATE PORTRAYALS.

Our research found that terms related to climate change are rarely mentioned in scripted TV and film. We conducted a cross-sectional survey during the fall of 2021 to understand audiences' entertainment preferences and appetite for more climate portrayals.

We recruited 2,003 Americans 18 and older representing the Alarmed, Concerned, and Cautious “Six Americas” segments using the market research recruitment platform CINT. Survey respondents were limited to these audiences because these segments represent 75% of Americans and continue to grow in size, while the bottom three segments (Disengaged, Doubtful, and Dismissive) continue to shrink. Further, research from YPCCC suggests that these audiences are the most likely to engage in climate actions and may be more receptive to climate portrayals in scripted entertainment.⁴⁴ We implemented quotas to approximate U.S. Census data and proportionally match representation of the Alarmed, Concerned, and Cautious segments.⁴⁵ Hereafter, we refer to these survey respondents as “audience members.”⁴⁶

WHAT DO WE KNOW ABOUT THIS AUDIENCE?

Audience members believe they are more concerned about the climate crisis than the average American, but still they retain hope.

- Audience members believe that the climate crisis is less important to the average American than it is to them personally, and that the average American is less worried about the climate crisis than they are personally. They likewise believe that the average American is less concerned with both the personal harm and harm to future generations.⁴⁷
- The Alarmed are significantly more hopeful about climate solutions than the Cautious, who are more hopeful than the Concerned.

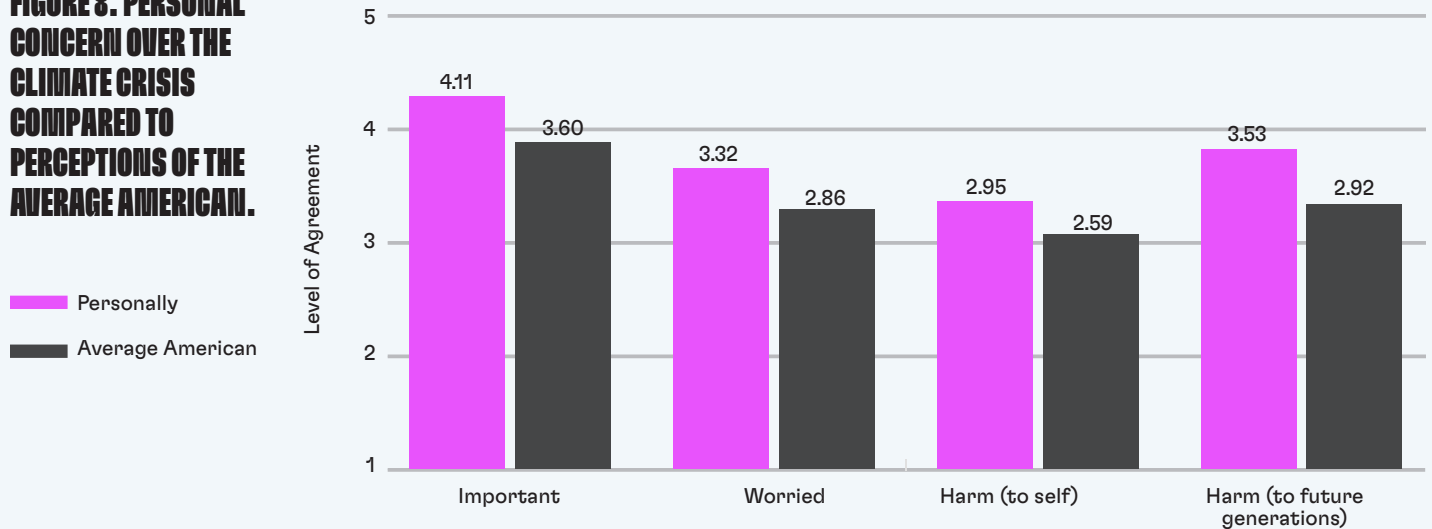
44. climatecommunication.yale.edu/about/projects/global-warmings-six-americas

45. To segment audiences into these categories, we used the Six Americas Super Short Survey (SASSY) REST API made available by YPCCC. The SASSY REST API segments audiences into the Six Americas categories instantly using the four-item SASSY scale. Additional information on SASSY scoring can be found at climatecommunication.yale.edu/visualizations-data/sassy

46. See Appendix B for detailed methodology.

47. We utilized a modified version of the SASSY scale to assess what audiences think the average American believes about the climate crisis. See Appendix B for the modified SASSY items.

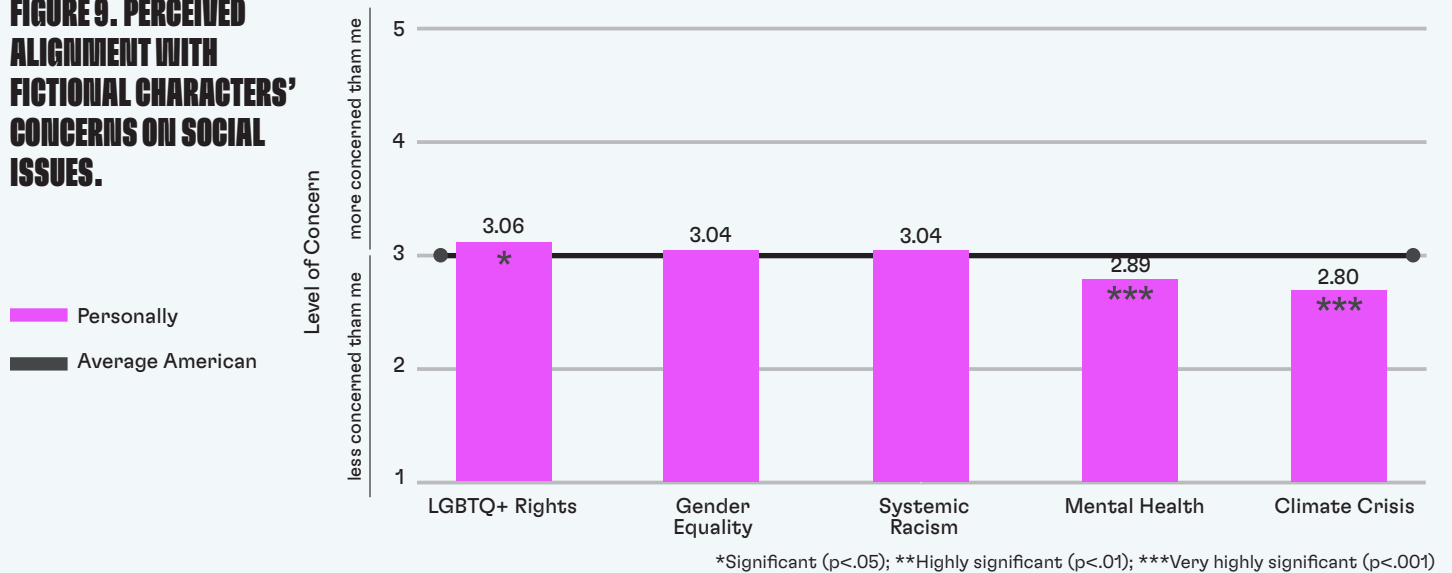
FIGURE 8. PERSONAL CONCERN OVER THE CLIMATE CRISIS COMPARED TO PERCEPTIONS OF THE AVERAGE AMERICAN.



Audience members seek fictional characters in TV and film who align with their outlook on life, but feel existing characters do not share their level of concern about the climate crisis.

- Audience members are most likely to enjoy fictional TV and films that put them in a good mood, enable them to identify with the characters’ outlook on life, inspire them to discuss the content with others, and allow them to live through and share characters’ experiences.
- Yet, they believe fictional characters are less concerned than they are about the climate crisis and mental health, despite close alignment on other social issues like gender equality and systemic racism.

FIGURE 9. PERCEIVED ALIGNMENT WITH FICTIONAL CHARACTERS’ CONCERNS ON SOCIAL ISSUES.



AUDIENCE MEMBERS SEEK FICTIONAL CHARACTERS IN TV AND FILM WHO ALIGN WITH THEIR OUTLOOK ON LIFE, BUT FEEL EXISTING CHARACTERS DO NOT SHARE THEIR LEVEL OF CONCERN ABOUT THE CLIMATE CRISIS.

Fictional TV and film are important sources of information about social issues, but relatively few report hearing about the climate crisis from scripted entertainment.

- More than three-in-four respondents (77%) report learning about social issues from fictional TV or film at least occasionally.
- However, only 25% say they hear about the climate crisis from fictional TV or fictional films. Audience members are most likely to hear about concerns associated with the climate crisis from documentaries (43%), TV news or talk shows (42%), and social media (35%).

FIGURE 10. PERCENT WHO LEARN ABOUT SOCIAL ISSUES FROM FICTIONAL TV OR FILM.

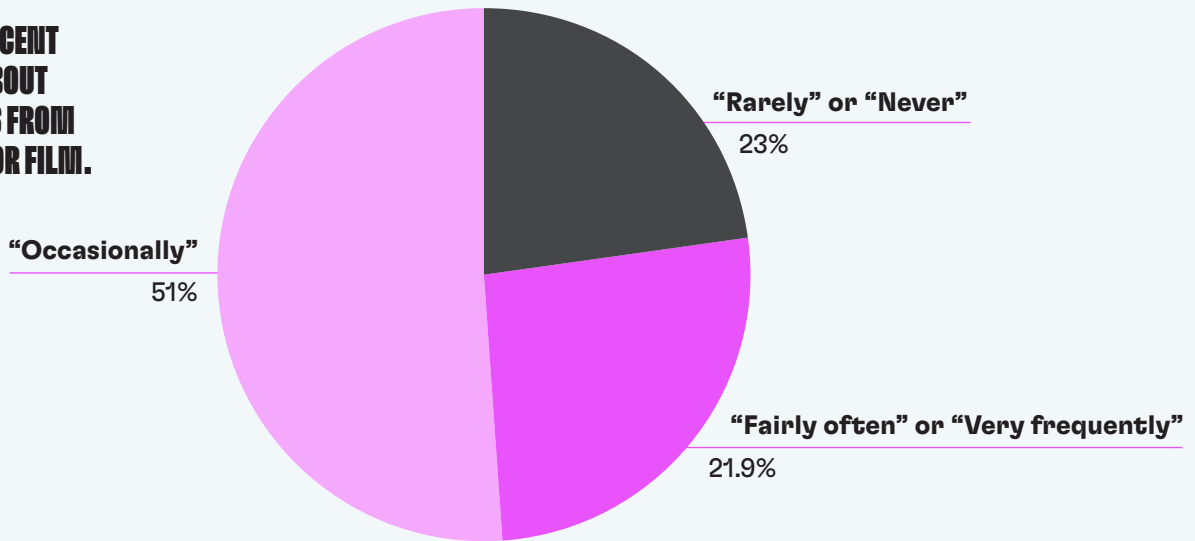
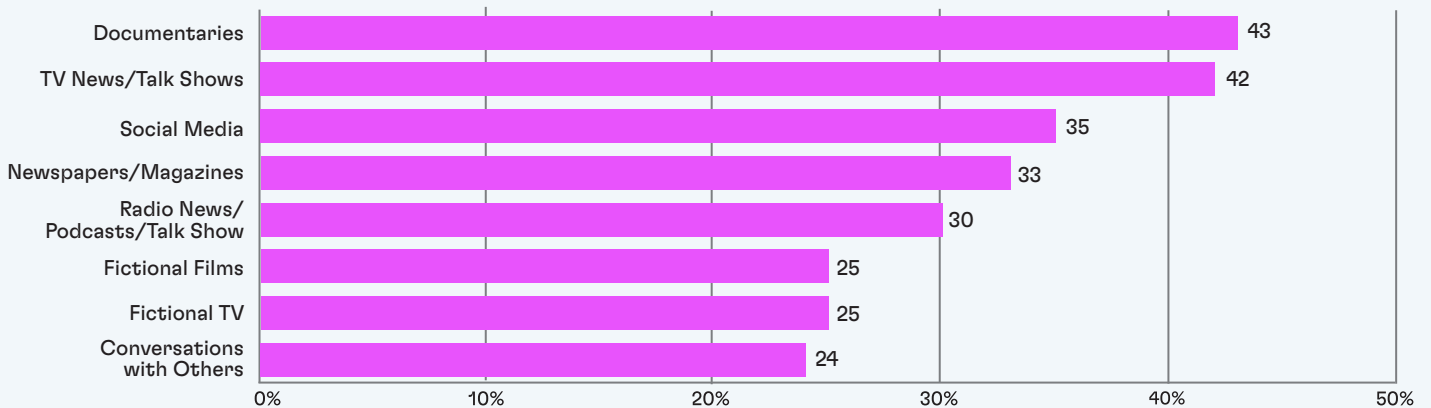


FIGURE 11. PERCENT WHO HEAR ABOUT THE CLIMATE CRISIS FROM DIFFERENT SOURCES.



IS THERE AUDIENCE DEMAND FOR CLIMATE PORTRAYALS IN ENTERTAINMENT?

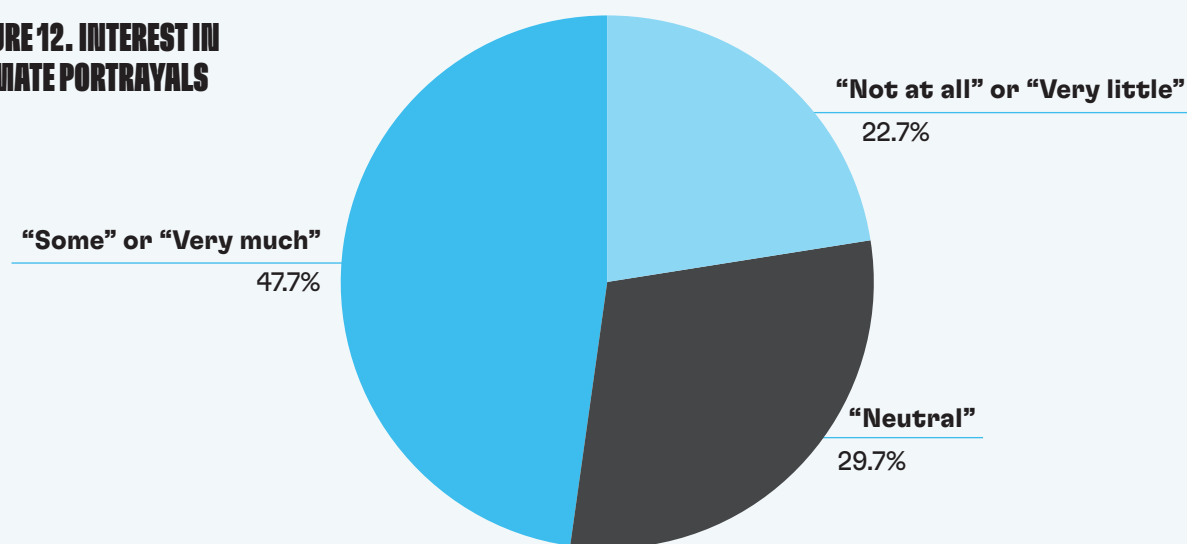
Audience members have difficulty recalling any recent examples of climate portrayals, positive or negative.

- We asked survey participants to think of examples of existing fictional climate portrayals they have found particularly informative, memorable, and inspiring, as well as those they found misleading, uninspiring, or demotivating.⁴⁸ By far, the most common responses for both were variations of “I don’t know” (68%).
- The most mentioned piece of content, both positive and negative, was *The Day After Tomorrow*, which was released in 2004.
- Some of the most commonly mentioned examples suggest audiences are conflating climate change with disasters more generally. The second most mentioned item was the film *2012*, which depicts earthquakes, volcanic eruptions, tsunamis, and floods resulting from a Mayan prophecy. None of these disasters are related to climate change. Similarly, in *La Brea* (NBC), a giant sinkhole opens up in the middle of Los Angeles.

There is a sizable audience that is open to seeing more climate representation in fictional TV and film.

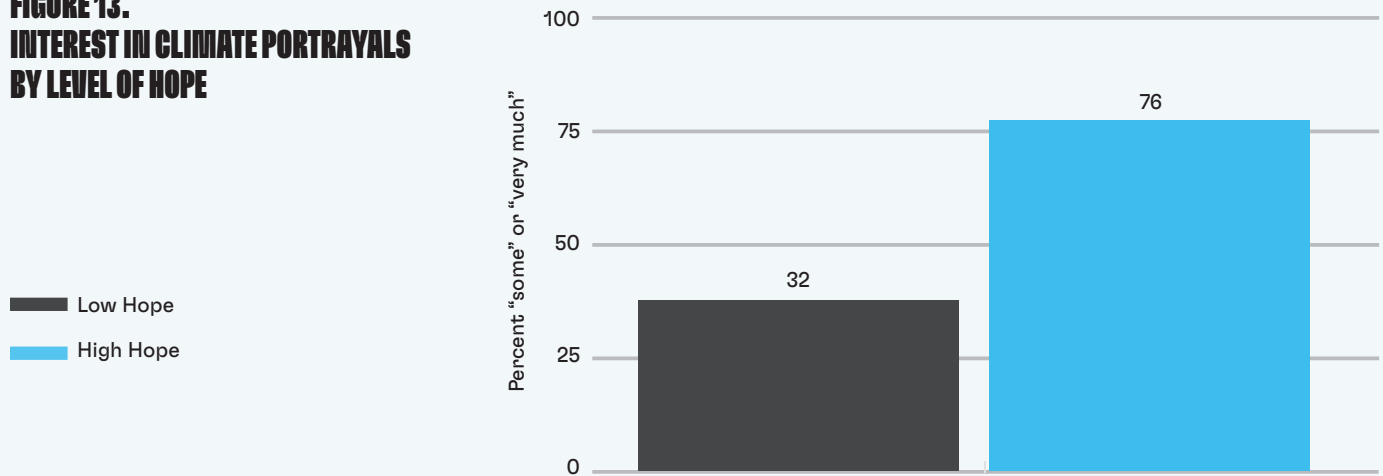
- Nearly half (48%) of audience members say they want to see more fictional TV shows and films with themes related to the climate crisis “some” or “very much,” and another 30% are “neutral.”
- Those who are hopeful about climate solutions are 3.5 times more likely to say they want to see climate portrayals.
- They are most interested in seeing climate portrayed in action/adventure (45%), sci-fi/fantasy (43%), drama (43%), and mystery/thriller (41%) genres.

FIGURE 12. INTEREST IN CLIMATE PORTRAYALS



48. These data were collected prior to the release of *Don't Look Up*, Netflix's popular climate allegory.

FIGURE 13.
INTEREST IN CLIMATE PORTRAYALS
BY LEVEL OF HOPE



Audience members believe there are several things fictional TV and film can do to more effectively address the climate crisis.

- These include normalizing climate conversations in everyday life, modeling positive climate actions that people can adopt, connecting the climate crisis to racial justice and other intersectional justice issues, inspiring innovation to address the crisis in new ways, and showing what a better future could look like if our society takes decisive climate action.

BY FAR, THE MOST COMMON RESPONSE WAS “I DON’T KNOW” (68%), FOLLOWED BY 2004’S *THE DAY AFTER TOMORROW* AND THE MAYAN PROPHECY DISASTER FILM *2012*, WHICH WAS NOT ABOUT CLIMATE CHANGE.



WHAT NEXT?

Climate content in scripted entertainment is very limited. Using a very broad set of search terms, we identified approximately 1.7 climate mentions per script in about 1,000 (out of 37,000) TV and film scripts over a five-year period. This content is far from evenly distributed, however. Showtime and HBO Max are outperforming other networks and streaming platforms in their inclusion of climate content across a variety of properties. There are also individual standout shows, including *Madam Secretary* (CBS), *The Politician* (Netflix), *Mars* (NatGeo), and *BoJack Horseman* (Netflix).

Our survey findings corroborate this lack of climate content. Audience members have trouble recalling any recent substantial climate storylines in fictional TV or film, and relatively few say they have heard concerns about the climate crisis from scripted entertainment. In general, they feel fictional characters do not share their concerns about climate change, despite perceiving them as equally or more concerned about some other social issues. Given this, it is no surprise that Americans vastly underestimate public support for climate policies.⁴⁹

Despite their absence, there is demand for such portrayals. Far from alienating audiences, over a five-year period, TV shows with climate content drew 1.2 billion viewers, and films brought in \$8.6 billion in box office earnings. The vast majority of American audience members are at least open to seeing climate issues portrayed in fictional entertainment, and the appetite for such portrayals is especially strong among those who are most hopeful about solutions.

Based on these research findings, we propose the following recommendations for the entertainment industry to normalize climate conversations and more authentically address the realities of the climate crisis:

- 1 Consider climate in all genres.** The majority of climate content appears in dramas, but audience members are also interested in seeing the climate crisis addressed in action, adventure, and sci-fi genres. Such portrayals can be creatively woven into any number of genres,⁵⁰ including comedy, children's programming, crime procedurals, satire, or even horror. It is not necessary to tell the whole story of climate change in a single episode, but portray it in small ways where possible.
- 2 Connect the dots.** When climate change is addressed, it is rarely connected to the oil and gas industries that are accelerating it,⁵¹ nor actions that people can take to mitigate its impact.⁵² Similarly, extreme weather events are rarely linked to climate change. Drawing more explicit connections, and linking them to local concerns within the show's setting, can make the climate crisis more concrete to viewers.
- 3 Give voice to climate anxiety.** Most Americans say they learn about social issues from scripted TV and film at least occasionally. But what people most enjoy in entertainment – other than a mood boost – is the opportunity to identify with characters' outlook on life and share their experiences. In other words, climate portrayals need not overtly inform or persuade the audience so much as reflect their values and concerns.⁵³

49. grist.org/politics/americans-think-climate-action-unpopular-wrong-study

50. www.goodenergystories.com/playbook/what-is-a-climate-story

51. www.goodenergystories.com/playbook/the-villain's-backstory

52. www.goodenergystories.com/playbook/impacts

53. www.goodenergystories.com/playbook/climate-character-psychology

4

Show the intersections. The climate emergency isn't just an "environmental" issue; it overlaps with all the issues we care about: racism, sexism, mental health, class, war, disability, and more.⁵⁴ The climate crisis harms historically marginalized people first and worst.

5

Action! Promote action by showing practical and realistic solutions. Fear-inducing or dystopian narratives, while dramatic, can breed cynicism and inaction. Audiences are hungry for actions⁵⁵ they can take to reduce their own carbon footprint, as well as ways they can collectively influence climate policy. We know that viewers are more motivated to take actions they see modeled by entertainment characters, particularly when these actions are depicted as having an impact. Fostering this sense of efficacy, the belief that change is possible, is crucial.

As the crisis worsens and more Americans gain first-hand experience to climate change, stories that do not acknowledge climate will begin to feel irrelevant or divorced from reality. That means that telling climate stories is not just good for the planet, it is in the best interest of an industry that seeks to engage audiences through authentic characters and narratives. As Dorothy Fortenberry – producer of *The Handmaid's Tale* and the upcoming climate anthology series *Extrapolations* – noted, "If climate isn't in your story, it's science fiction."⁵⁶

Although the situation is dire, reversing course is still possible if the U.S. and other major greenhouse emissions contributors take decisive action. But this kind of coordinated response requires mass mobilization and public outcry. Stories – particularly those in entertainment – have the power to break down barriers, inspire action, and empower audience members to envision a better world. Integrating the climate crisis into entertainment is not only good for the planet, it is also about telling more authentic stories that reflect audiences' reality. What stories will we choose to tell?

54. www.goodenergystories.com/playbook/intersectionality-and-justice

55. www.goodenergystories.com/playbook/climate-solutions-on-screen

56. www.goodenergystories.com/playbook/what-is-a-climate-story



APPENDIX A

FREQUENCY ANALYSIS DETAILED METHODOLOGY

To establish a baseline for representation of climate change in scripted entertainment, the USC Norman Lear Center's Media Impact Project (MIP) measured the frequency of mentions of 36 keywords related to climate change in 37,453 scripted TV and films from 2016-2020. The source of data for this analysis was the Norman Lear Center Script Database, which includes transcripts for over 141,000 pieces of scripted content from television and films.⁵⁷

CLIMATE KEYWORDS AND RELATED TOPICS

An initial list of 66 keywords was derived from recommendations from Good Energy and advisors. These keywords were tested in the Norman Lear Center Script Database, and the list was narrowed to 36 keywords.

The final keywords include general important terms, waste and pollution, climate solutions, and colloquial phrases. All keywords were searched with common stemming and variations. For

example, "fracking" represents "frack, fracked, & fracking" and "ice caps" includes "icecap, icecaps, ice cap, & ice caps."

We identified an additional seven terms related to extreme weather events, nine related to the coal/oil industries, and 20 related to individual climate actions.

ANALYSIS

We analyzed the frequency of mentions of each climate keyword, and a team of eight researchers manually coded the genre, subgenre, country of origin, network/platform, viewership/box office totals for each mention.

We searched all scripts from the time period for mentions of the extreme weather terms. Within this dataset, we tallied the intersections with climate keywords. That is, the number of scripts with extreme weather terms that also mentioned one or more climate keywords. Within the subset of scripts with climate keyword mentions, we tallied the intersections with coal/oil terms and individual climate actions.

57. Due to the ever-expanding universe of scripted entertainment, we cannot guarantee that the 37,453 analyzed scripts represent every scripted film and TV episode, but the 5,760 films and the 31,693 TV episodes in the script database represent the vast majority of scripted entertainment airing from 2016-2020 in the U.S. market.

APPENDIX B

AUDIENCE SURVEY DETAILED METHODOLOGY

SAMPLE

We conducted a cross-sectional survey to understand audience perceptions of existing climate portrayals and appetites for new ones. Survey recruitment was administered by market research recruitment platform CINT, and data were collected online using Qualtrics in November and December 2021. Respondents were required to be 18 or older, live in the U.S, and represent the Alarmed, Concerned, or Cautious “Six Americas” segments. Survey respondents were limited to these audiences because they represent a growing majority of Americans, are the most likely to engage in climate actions, and represent those most likely to be receptive to climate portrayals in scripted entertainment. We implemented quotas to approximate U.S. Census data, as well as proportional representation of Alarmed, Concerned, and Cautious.⁵⁸ The total sample consisted of 2,003 American adults. Participants were ideologically and geographically diverse:

- The majority were white/Caucasian (69%), followed by Black/African-American (15%), Hispanic/Latinx (8%), and Asian/Asian-American (4%).⁵⁹
- Nearly half (47%) reported living in a small city or suburban area, followed by 32% in a large city or urban area, and 20% in a rural area.
- On social issues, audiences tended toward moderate ideology (42%), as opposed to very liberal (36%) or very conservative (22%). This pattern was similar for economic issues, where 43% identified as moderate, 33% identified as liberal, and 24% identified as conservative.

PROCEDURE AND MEASURES

Participants began by answering the Six Americas Super Short Survey (SASSY) to categorize them into one of six audience segments. Those categorized as Disengaged, Doubtful, or Dismissive were screened out. Nearly half of respondents (47.5%) fell into the Alarmed category, 29.5% Concerned, and 23% Cautious.⁶⁰

Those screened in answered questions about their media habits, climate crisis attitudes, perceptions of existing climate portrayals, and appetite for additional discussion of the climate crisis in entertainment media (Table 3).

58. To segment audiences into these categories, we used the Six Americas Super Short Survey (SASSY) REST API made available by YPCCC. The SASSY REST API segments audiences into the Six Americas categories instantly using the four-item SASSY scale. Additional information on SASSY scoring can be found at climatecommunication.yale.edu/visualizations-data/sassy

59. Participants could select multiple races/ethnicities when answering this question; as a result, percentages total more than 100.

60. These percentages align closely with the latest findings from Yale’s Six Americas survey released in September 2021, as proportions of the total of 75%: 44% Alarmed, 33% Concerned, and 23% Cautious.

ANALYTIC STRATEGY

Data were downloaded into SPSS v28 for cleaning and analysis, and descriptive statistics (e.g., means, frequencies) were analyzed. In some cases, *t*-tests were used to compare groups.

TABLE 3. SURVEY ITEMS

SCREENING ITEMS
<p>Please confirm your age:</p> <ul style="list-style-type: none"> ● I am 18 or older ● I am under 18 years old
<p>[SASSY] Recently, you may have noticed that global warming has been getting some attention in the news. Global warming refers to the idea that the world's average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the world's climate may change as a result.</p> <ol style="list-style-type: none"> 1. How important is the issue of global warming to you personally? 2. How worried are you about global warming? 3. How much do you think global warming will harm you personally? 4. How much do you think global warming will harm future generations of people?
<p>[modified SASSY]</p> <ol style="list-style-type: none"> 1. How important is the issue of global warming to most Americans? 2. How worried do you believe most Americans are about global warming? 3. How much do you think the average American thinks global warming will harm them personally? 4. How much do you believe the average American thinks global warming will harm future generations of people?
USES & GRATIFICATIONS (BARTCH & VIEHOFF, 2010)
<p>In general, the fictional TV shows and films I most enjoy:</p> <ol style="list-style-type: none"> 1. Inspire me to think about meaningful issues 2. Inspire me with new insights 3. Put me in a good mood 4. Inspire me to talk about the TV show/ movie with others 5. Allow me to experience emotions that I avoid in everyday life
<p>What do you like about watching your favorite fictional TV shows and films?</p> <ol style="list-style-type: none"> 1. I like being moved to tears 2. I enjoy the adrenaline boost 3. I can experience feelings that are difficult for me to allow in everyday life 4. I identify with the characters' outlook on life 5. I like to live through and share the characters' experiences 6. I like to slip into the role of the characters
LEARNING FROM ENTERTAINMENT MEDIA
<p>How often do you learn something about social issues when you watch fictional TV shows and films?</p> <ul style="list-style-type: none"> ● Never ● Rarely ● Occasionally ● Fairly often ● Very frequently
<p>How often have you heard about concerns associated with the climate crisis from any of the following sources?</p> <ol style="list-style-type: none"> 1. Conversations with friends, family, and/or colleagues 2. Social media 3. Newspapers/ magazines 4. Radio news/ talk shows/ podcasts 5. Television news/ talk shows 6. Fictional TV shows 7. Fictional films 8. Documentaries

APPETITE FOR CLIMATE PORTRAYALS

Would you like to see fictional TV shows and films that include themes or stories related to the climate crisis?

- Not at all
- Very little
- Neutral
- Some
- Very much

Please slide the markers below to indicate how much you would like to see stories incorporating content related to the climate crisis in each of the following fictional TV and film genres:

1. Action/ Adventure
2. Children's
3. Comedy
4. Drama
5. Dramedy
6. Horror
7. Mystery/ Thriller
8. Romantic Comedy
9. Sci Fi/ Fantasy
10. Soap Opera

PERCEPTION OF EXISTING CLIMATE PORTRAYALS

How effective do you think existing fictional TV and films are when it comes to addressing the climate crisis in the following ways:

1. Normalizing climate conversations in everyday life
2. Modeling positive climate actions that people can adopt in everyday life
3. Showcasing that the responsibility for climate change is not just on individuals, but on systems, structures, and organizations
4. Helping people navigate overwhelming feelings –such as anger, grief, anxiety, fear, loneliness – caused by the climate crisis
5. Helping people find courage and hope in the face of an overwhelming and difficult climate crisis
6. Making the connection between the climate crisis, racial justice, and other intersectional justice issues
7. Showing a wide variety of relatable characters who care about the climate crisis
8. Elevating characters such as climate leaders, scientists, and solutionists who care passionately about people and the fate of our planet as role models
9. Bridging partisan divides to shift political will towards climate action
10. Inspiring innovation to address the climate crisis in new ways
11. Showing people what a better future could look like if our society takes decisive climate action
12. Making people more aware of the extreme climate consequences society may be heading towards if we don't take action
13. Reflecting the truth about how the climate crisis affects our lives

Overall, to what extent do the characters you see in fictional TV shows and films reflect your level of concern regarding the following issues:

1. Climate crisis
2. Gender equality
3. LGBTQ+ rights
4. Mental health issues
5. Systemic racism

In general, the fictional TV shows and films I have seen with content related to the climate crisis:

1. Inspire me to think about meaningful issues
2. Inspire me with new insights
3. Put me in a good mood
4. Inspire me to talk about the TV show/ movie with others
5. Allow me to experience emotions that I avoid in everyday life

When watching fictional TV shows and films with content related to the climate crisis:

1. I like being moved to tears
2. I enjoy the adrenaline boost
3. I can experience feelings that are difficult for me to allow in everyday life
4. I identify with the characters' outlook on life
5. I like to live through and share the characters' experiences
6. I like to slip into the role of the characters

OPEN-ENDED QUESTIONS

Could you please list one example of a fictional TV show or film with a strong depiction of the climate crisis that you found particularly informative, memorable, or inspiring? Briefly explain what made this depiction strong. If none, please indicate "none."

Could you please list one example of a fictional TV show or film with a not-so-strong depiction of the climate crisis that you found misleading, uninspiring, or demotivating? Briefly explain what made this depiction strong. If none, please indicate "none."

CLIMATE CRISIS HOPE

Please select your level of agreement with the following statements:

1. I believe people will be able to solve problems caused by the climate crisis
2. I know what to do to help solve problems caused by the climate crisis
3. The climate crisis is beyond my control, so I won't even bother trying to solve problems caused by the climate crisis
4. Even when some people give up, I know there will be others who will continue to try to solve problems caused by the climate crisis
5. I believe that scientists will be able to find ways to solve problems caused by the climate crisis
6. The climate crisis is so complex we will not be able to solve problems that it causes
7. I am willing to take actions to help solve problems caused by the climate crisis
8. The actions I can take are too small to help solve problems caused by the climate crisis
9. The actions I can take are too small to help solve problems caused by the climate crisis
10. I believe more people are willing to take actions to help solve problems caused by the climate crisis

DEMOGRAPHIC VARIABLES

With which gender do you most identify?

- Male
- Female
- Non-binary
- Decline to state

Are you Hispanic or Latinx?

- Yes
- No

Which of the following best represents your race? [Select all that apply]

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- Middle Eastern
- White
- Other (please specify) _____
- Decline to state

What is the highest level of school that you have completed or the highest degree you have received?

- Less than high school degree
- High school graduate (high school diploma or equivalent including GED)
- Some college but no degree
- Associate's degree in college (2-year)
- Bachelor's degree in college (4-year)
- Master's degree
- Doctoral degree/ professional degree (JD, MD, PhD)
- Other (please specify) _____

Information about income is very important to understand. Would you please give us your best guess? Please indicate the answer that includes your entire household income in 2020 before taxes.

- \$0 to \$9,999
- \$10,000 to \$14,999
- \$15,000 to \$19,999
- \$20,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$199,999
- \$200,000 or more
- Not sure / Decline to state

Which of the following best represents your religious affiliation, if any?

- None / Atheist / Agnostic
- Buddhist
- Catholic
- Christian (please specify) _____
- Hindu
- Jewish
- Muslim
- Other (please specify) _____
- Don't know / Decline to state

Overall, what description best represents your political ideology?

- Very liberal
- Liberal
- Moderate
- Conservative
- Very conservative
- Don't know / Decline to state

Which of the following best represents where you live?

- Large city / Urban area
- Small city / Suburban area
- Countryside / Rural area
- Other (please specify) _____
- Not sure / Decline to state

What is your current age?

- 18 - 24 years
- 25 - 34 years
- 35 to 44 years
- 45 to 54 years
- 55 to 64 years
- 65 to 74 years
- 75 to 84 years
- 85 years or above
- Decline to state

ABOUT US

THE NORMAN LEAR CENTER

The Norman Lear Center (www.learcenter.org) is a nonpartisan research and public policy center that studies the social, political, economic and cultural impact of entertainment on the world. The Lear Center translates its findings into action through testimony, journalism, strategic research and innovative public outreach campaigns. On campus, from its base in the USC Annenberg School for Communication & Journalism, the Lear Center builds bridges between schools and disciplines whose faculty study aspects of entertainment, media and culture. Beyond campus, it bridges the gap between the entertainment industry and academia, and between them and the public. Through scholarship and research; through its conferences, public events and publications; and in its attempts to illuminate and repair the world, the Lear Center works to be at the forefront of discussion and practice in the field.

At the Lear Center's Media Impact Project (www.mediaimpactproject.org), we study the content, audiences, and impact of media and entertainment. Our goal is to prove that media matters, and to improve the quality of media to serve the public good. We partner with media makers and funders to create and conduct program evaluation, develop and test research hypotheses, and publish and promote thought leadership on the role of media in social change.

GOOD ENERGY

Good Energy (www.goodenergystories.com) is a nonprofit story consultancy for the age of climate change. Our mission is to inspire, support, and accelerate stories in scripted TV and film that reflect the world we live in now—and help us envision a better future. We aim to make it as easy as possible to portray the climate emergency on-screen in entertaining and artful ways, in any storyline, across every genre. Made up of writers, artists, academics, and experts who understand the human side of climate change, Good Energy bridges the gap between climate experts, people on the front lines of the crisis, and industry creatives.

Good Energy would not exist without the support of our extraordinary network of partners, including: the USC Norman Lear Center's Media Impact Project, Bloomberg Philanthropies, Walton Family Foundation, Quadrivium, Doc Society, CAA Foundation, Participant Media, Writers Guild of America - East, Sierra Club, The Center for Cultural Power, Hip Hop Caucus, IllumiNative, NRDC's Rewrite the Future, Yale Program on Climate Change Communication, YEA Impact!, and many more.

THANK YOU

Thank you to Matthew Goldberg, Martial Jefferson, Joshua Low, and Jennifer Marlon of the Yale Program on Climate Change Communication team for their assistance in utilizing the SASSY API.

The Norman Lear Center: Erica Rosenthal, Adam Amel Rogers, and Soraya Giaccardi. Special thanks to Erica Watson-Currie for survey assistance and Veronica Jauriqui for report design. The Norman Lear Center is led by Director Marty Kaplan and Managing Director Johanna Blakley.

Good Energy: Anna Jane Joyner, Bruno Olmedo Quiroga, EJ Baker, and Carmiel Banasky. Special thanks to the entire Good Energy team, and to the Walton Family Foundation for their support of this research.

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