WHAT DO VIDEO GAMERS THINK ABOUT GLOBAL WARMING?
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Introduction

This report presents results from a national survey, conducted as a partnership between the Yale Program on Climate Change Communication and Unity (the world’s leading platform for creating and operating interactive, real-time 3D (RT3D) content), investigating climate change knowledge, attitudes, policy preferences, and behavior among video game players in the United States. Interview dates: May 30 – June 7, 2022. Interviews: 2,034 U.S. adults (18+) in the United States who play video games. Funding for this research was made available through the Unity Charitable Fund at the Tides Foundation.

Video games have become one of humanity’s favorite forms of entertainment, with an estimated 3 billion players worldwide. People of all ages, nationalities, genders, and socioeconomic statuses play, and it is this broad and extensive reach that creates an enormous opportunity to address climate change. Through games, players can acquire new knowledge about the climate crisis and can be empowered to take individual and collective action at any scale and in any location. Members of the broad ecosystem of game developers, climate planners, activists, and communicators are excited about the potential of the video gaming community, but don’t yet understand how to best engage with it. This study helps lay a foundation for engagement that the gaming community can build on.

This research will help the video game community, including game companies, designers, programmers, journalists, and players (among others) better understand the gaming user base and identify opportunities to engage them in climate science and solutions.

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Cover image from Gibbon: Beyond the Trees by Broken Rules. Image used with permission.

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Executive Summary

This report describes global warming beliefs, attitudes, policy preferences, and behaviors among U.S. adults who play video games ($n = 2,034$). The survey was conducted from May 30 – June 7, 2022.

Video games have become one of humanity’s favorite forms of entertainment, with an estimated 3 billion players worldwide. People of all ages, nationalities, genders, and socioeconomic statuses play, and it is this broad and extensive reach that creates an enormous opportunity to address climate change. This study helps lay a foundation for engagement that the gaming community can build on.

Key findings from this study include the following:

**Global Warming Attitudes & Risk Perceptions**

- About three in four video gamers (73%) think global warming is happening, and the majority of video gamers (56%) understand that global warming is mostly human-caused. These proportions are nearly identical to the proportions in the U.S. population overall, as measured in the *Climate Change in the American Mind* study conducted in April and May of 2022 (72% believe global warming is happening, 56% believe it is human-caused).
- Seven in ten video gamers (70%) say they are either “somewhat” or “very” worried about global warming, compared with 64% of the U.S. population overall.
- Video gamers feel a range of emotions related to global warming. Half or more video gamers say they feel either “very” or “moderately” interested (68%), sad (57%), afraid (54%), disgusted (54%), angry (52%), hopeful (53%), or outraged (50%) when thinking about global warming. In comparison, fewer U.S. residents overall say they feel most of these emotions related to global warming (interested, 62%; disgusted, 51%; sad, 51%; afraid, 46%; angry, 44%; outraged, 42%; hopeful, 38%).
- About half of video gamers (48%) either “strongly” or “somewhat” agree that they have personally experienced the effects of global warming, compared with 43% of U.S. residents overall. By contrast, only about one in three (33%) video gamers say that global warming is harming people in the U.S. “right now,” which is much lower than the proportion of U.S. residents overall who say so (48%).
- Most video gamers think global warming will harm plant and animal species (74%), future generations of people (72%), people in developing countries (69%), the world’s poor (69%), people in the U.S. (67%), people in their community (60%), their family (58%), and themselves personally (56%). These proportions are similar to the U.S. population overall, although the percentage who think global warming will harm them personally is higher among video gamers than among the U.S. population overall (47%).

**Personal and Social Engagement with Global Warming**

- About one in five video gamers (22%) have seen or heard content related to global warming as part of gaming in the last 12 months, either as a topic in a game they have played (16%) or in a video gaming stream they have watched (16%).
- Additionally, about one in eight video gamers (13%) say they took actions based on the content they learned about global warming in a game or gaming stream.
• More than four in ten video gamers (45%) say they either “often” or "occasionally" discuss global warming with family and friends, compared with only about one in three U.S. residents overall (33%).
• About half of video gamers (51%) say they hear about global warming in the media once a month or more often, compared with 56% of U.S. residents overall. Furthermore, about one in three (34%) say people they know talk about global warming once a month or more often, compared with only 24% of the U.S. population overall.
• Most video gamers (61%) say taking action to reduce global warming is at least moderately important to their family and friends, compared with only 40% of U.S. residents overall. Furthermore, most video gamers (53%) say their family and friends make at least a moderate amount of effort to reduce global warming, compared with 40% of U.S. residents overall.
• About three in four video gamers (74%) say the issue of global warming is important to them personally, compared with only about two in three U.S. residents overall (64%).
• Most video gamers (63%) say they feel a personal sense of responsibility to help reduce global warming.
• Video gamers say they either “strongly” or “somewhat” trust family and friends (69%), climate scientists (69%), educators (64%), environmental organizations (63%), television weather reporters (59%), community leaders (49%), journalists (47%), religious leaders (45%), the mainstream news media (43%), online influencers and personalities (36%), corporations (35%), or political leaders (32%) as sources of information about global warming.

Who Should Act on Global Warming?
• About half of video gamers are at least "moderately confident" that people from the gaming community, working together, can affect what local businesses (52%), corporations (52%), their state government (50%), the federal government (49%), or their local government (48%) does about global warming.
• Most video gamers (56%) say that the gaming industry has a responsibility to act on global warming, and it should do what it can to reduce its own carbon emissions.
• Additionally, more than four in ten video gamers (45%) think the video gaming industry should be doing either “much more” (14%) or “more” (31%) to address global warming.
• Most video gamers (54%) think global warming should be either a “very high” or “high” priority for the president and Congress. Additionally, about six in ten video gamers (61%) think developing sources of clean energy should be either a “very high” or “high” priority. These proportions are about the same as the U.S. population overall (51% and 61%, respectively).

Personal and Collective Actions to Limit Global Warming
• More than half of video gamers (59%) say they either “probably” or “definitely” would sign a petition about global warming. Many video gamers also say they would volunteer their time (49%) or donate (48%) to an organization working on global warming, contact government officials about global warming (45%), or meet with an elected official or their staff (41%). The proportion of video gamers who say they would engage in these actions is higher than the U.S. population overall, where half or fewer say they would sign a petition (51%), volunteer (32%), donate (31%), contact officials (29%), or meet with an elected official (27%).
• Additionally, more than four in ten video gamers (44%) would support an organization engaging in non-violent civil disobedience against corporate or government activities that make global warming worse, and 38% would personally engage in such non-violent civil disobedience. In contrast, only 27% of U.S. residents overall say that they would support non-violent civil disobedience, and 17% say they would personally engage in it.

• A majority of video gamers (52%) say they are either “probably” (25%) or “definitely” (19%) willing to join a campaign to convince elected officials to take action to reduce global warming or are currently participating in such a campaign (7%). In contrast, only 27% of U.S. residents overall say they would participate in a campaign for climate action, and only about 1% say they are currently doing so.

• About half of video gamers (49%) say they have rewarded companies that are taking steps to reduce global warming by buying their products one or more times in the past 12 months. More than four in ten video gamers (43%) say they have punished companies that are opposing steps to reduce global warming by not buying their products one or more times.

Global Warming’s Six Americas

• Research conducted by the Yale Program on Climate Change Communication and the George Mason University Center for Climate Change Communication has found that people in the United States can be categorized into six distinct groups based on their beliefs and attitudes about climate change (Global Warming’s Six Americas). About three in ten video gamers are Alarmed (29%), while only 7% are Dismissive. Additionally, about one in four video gamers are Concerned (27%) about global warming, and another one in four are Cautious (25%). About one in twelve (8%) are Doubtful, and few video gamers (4%) are Disengaged. These proportions are similar to the U.S. population overall.
1 Global Warming Beliefs

1.1 About three in four video gamers think global warming is happening.

Video gamers who think global warming is happening outnumber those who think it is not happening by a ratio of nearly 5 to 1.

About three in four video gamers (73%) think global warming is happening. By contrast, 15% of video gamers think global warming is not happening and 12% say they don’t know.
1.2 About half of video gamers are "extremely" or "very" sure global warming is happening. Very few are as sure it isn’t happening.

About half of video gamers (51%) are either "extremely" or "very" sure global warming is happening. Far fewer (8%) are "extremely" or "very" sure global warming is not happening.
1.3 A majority of video gamers think global warming is mostly human-caused.

The Intergovernmental Panel on Climate Change’s Sixth Assessment report (2021), written and reviewed by thousands of climate experts worldwide, states: "It is unequivocal that human influence has warmed the atmosphere, ocean and land."\(^1\)

The majority of video gamers (56%) understand that global warming is mostly human-caused. By contrast, about one in three (34%) think it is due mostly to natural changes in the environment.

1.4 A majority of video gamers understand that most scientists think global warming is happening.

A 2016 review by John Cook and colleagues² found that six independent, peer-reviewed studies examining the extent of the scientific consensus about global warming have concluded that between 90% and 100% of climate scientists are convinced that human-caused global warming is happening. A more recent study found that as many as 98% of climate scientists are convinced that global warming is happening and human-caused.³

A majority of video gamers (52%) understand that most scientists think global warming is happening. By contrast, about one in three video gamers (30%) think there is a lot of disagreement among scientists about whether or not global warming is happening. Few video gamers (6%) believe that most scientists think global warming is not happening.


2 Emotional Responses to Global Warming

2.1 Seven in ten video gamers are worried about global warming.

Seven in ten video gamers (70%) say they are at least "somewhat worried" about global warming. This includes about three in ten video gamers (29%) who are "very worried."

![Seven in ten video gamers are worried about global warming chart](chart.png)
2.2 Most video gamers feel a range of emotions about global warming.
When asked how strongly they feel various emotions when thinking about global warming, about two in three video gamers (68%) say they feel either “very” or “moderately” interested. Additionally, half or more say they feel sad (57%), afraid (54%), disgusted (54%), angry (52%), hopeful (53%), or outraged (50%) when thinking about global warming.

![Most video gamers feel a range of emotions about global warming](image)

How strongly do you feel each of the following emotions when you think about the issue of global warming?

June 2022
3  Perceived Risks of Global Warming

3.1 About half of video gamers say they have personally experienced the effects of global warming.

About half of video gamers (48%) either “strongly” or “somewhat” agree that they have personally experienced the effects of global warming, while 52% “strongly” or “somewhat” disagree.

I have personally experienced the effects of global warming.

June 2022
3.2 About one in three video gamers think people in the U.S. are being harmed "right now" by global warming.

Only about one in three video gamers (33%) think people in the U.S. are being harmed by global warming "right now."

![Bar chart showing responses to the question of when global warming will start to harm people in the U.S.](chart.png)

Unity Yale Program on Climate Change Communication

June 2022
### 3.3 More than half of video gamers think they will be harmed by global warming, but think others will be harmed more.

A majority of video gamers understand that global warming will cause harm. Video gamers are most likely to think that plant and animal species (74%), future generations of people (72%), people in developing countries (69%), the world's poor (69%), and people in the U.S. (67%) will be harmed either "a great deal" or "a moderate amount" by global warming. More than half think people in their community (60%), their family (58%), and themselves personally (56%) will be harmed.

<table>
<thead>
<tr>
<th>Category</th>
<th>A great deal</th>
<th>A moderate amount</th>
<th>Only a little</th>
<th>Not at all</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant and animal species</td>
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<td>22</td>
<td>10</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Future generations of people</td>
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<td>21</td>
<td>11</td>
<td>8</td>
<td>9</td>
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<tr>
<td>The world's poor</td>
<td>46</td>
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<td>11</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>People in developing countries</td>
<td>43</td>
<td>26</td>
<td>11</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>People in the United States</td>
<td>36</td>
<td>31</td>
<td>15</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>People in your community</td>
<td>28</td>
<td>32</td>
<td>18</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Your family</td>
<td>27</td>
<td>31</td>
<td>19</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>You personally</td>
<td>25</td>
<td>31</td>
<td>21</td>
<td>15</td>
<td>8</td>
</tr>
</tbody>
</table>

How much do you think global warming will harm...?

June 2022
4 Personal and Social Engagement with Global Warming

4.1 About one in five video gamers have seen or heard content related to global warming as part of gaming in the last 12 months.

About one in five video gamers (22%) have seen or heard content related to global warming as part of gaming in the last 12 months. This includes video gamers who say global warming was a topic in a game they have played (16%) or a topic in a video gaming stream they have watched (16%).

Specifically, many video gamers said they had seen or heard content about the impacts of global warming (13%), causes of global warming (11%), or solutions to global warming (11%). A few (5%) said they saw or heard content raising doubts about the reality of, causes of, or solutions to global warming, or that they did not remember (1%) what kind of content related to global warming they saw.

Additionally, about one in eight video gamers (13%) say they took actions based on the content that they learned about global warming in a game or gaming stream.
4.2 Most video gamers "rarely" or "never" discuss global warming with family and friends.

A majority of video gamers (55%) say they either "rarely" or "never" discuss global warming with family and friends, while 45% say they discuss global warming either "occasionally" or "often."
4.3 About half of video gamers hear about global warming in the media at least once a month; fewer hear people they know talking about it at least once a month.

About half of video gamers (51%) say they hear about global warming in the media once a month or more often, while about three in ten (31%) say they hear about global warming in the media several times a year or less often, and nine percent say they never hear about global warming in the media.

About one in three video gamers (34%) say they hear people they know talk about global warming once a month or more often. In contrast, more than half say they either hear people they know talk about it several times a year or less often (37%) or never hear people they know talk about global warming (20%).
4.4 About three in four video gamers say the issue of global warming is personally important.

About three in four video gamers (74%) say the issue of global warming is either "extremely" (17%), "very" (24%), or "somewhat" (33%) important to them personally. About one in four (26%) say global warming is either "not too" (15%) or "not at all" (11%) personally important.
4.5 Most video gamers say they feel a personal sense of responsibility to help reduce global warming.

Most video gamers (63%) say they feel a personal sense of responsibility to help reduce global warming. By contrast, only 37% say they do not feel a personal sense of responsibility to help reduce global warming.

I feel a personal sense of responsibility to help reduce global warming.

June 2022
4.6 Most video gamers perceive social norms for taking action on global warming.

Social science research has shown that two types of social norms can have a powerful influence on people's behavior: injunctive norms (e.g., the belief that family and friends expect you to behave in a given way) and descriptive norms (e.g., the belief that family and friends are themselves behaving in that way).

Most video gamers (61%) perceive an injunctive norm, saying it is either "extremely" (14%), "very" (20%), or "moderately" important (27%) to their family and friends that they take action to reduce global warming. Most video gamers (53%) also perceive a descriptive norm, saying their family and friends make either "a great deal of effort" (11%), "a lot of effort" (16%), or "a moderate amount of effort" (26%) to reduce global warming.

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5 Information Needs and Trusted Sources

5.1 Most video gamers say they need more information about global warming.

About seven in ten video gamers (69%) say they need more information to make up their mind about global warming, including about one in ten (13%) who say they need “a lot” more information. About three in ten video gamers (31%) say they do not need any more information.

On some issues, people feel that they have all the information they need in order to form a firm opinion, while on other issues they would like more information before making up their mind. For global warming, where would you place yourself?

June 2022
5.2 Most video gamers are interested in a variety of topics related to global warming.

When asked about the types of topics related to global warming they would be interested in learning about, most video gamers they would be either “very” or “somewhat” interested in learning about the causes of global warming (60%), what harms global warming might cause (60%), what they can do to reduce global warming (60%), global warming in general (59%), how global warming might affect them (58%), how scientists study global warming (58%), actions that are being taken by governments in response to global warming (58%), and actions that are being taken by businesses in response to global warming (55%).
5.3 Video gamers trust family and friends most, followed by climate scientists, as sources of information about global warming.

When asked how much they trust various sources of information about climate change, about seven in ten video gamers say they either “strongly” or “somewhat” trust family and friends (69%) and climate scientists (69%), including 31% who say they “strongly trust” climate scientists and 22% who say they “strongly trust” family and friends. More than half of video gamers also say they “strongly” or “somewhat” trust educators (64%), environmental organizations (63%), and television weather reporters (59%) as sources of information about global warming. About half or fewer video gamers say they trust community leaders (49%), journalists (47%), religious leaders (45%), the mainstream news media (43%), online influencers and personalities (36%), corporations (35%), or political leaders (32%) as sources of information.

<table>
<thead>
<tr>
<th>Source</th>
<th>Strongly trust</th>
<th>Somewhat trust</th>
<th>Somewhat distrust</th>
<th>Strongly distrust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family and friends</td>
<td>22</td>
<td>48</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Climate scientists</td>
<td>31</td>
<td>36</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Educators</td>
<td>18</td>
<td>45</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>Environmental organizations</td>
<td>24</td>
<td>38</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Television weather reporters</td>
<td>15</td>
<td>44</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>Community leaders</td>
<td>10</td>
<td>39</td>
<td>32</td>
<td>19</td>
</tr>
<tr>
<td>Journalists</td>
<td>10</td>
<td>37</td>
<td>30</td>
<td>22</td>
</tr>
<tr>
<td>Religious leaders</td>
<td>12</td>
<td>33</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>The mainstream news media</td>
<td>9</td>
<td>34</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>Online influencers and personalities</td>
<td>10</td>
<td>27</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>Corporations</td>
<td>9</td>
<td>25</td>
<td>36</td>
<td>29</td>
</tr>
<tr>
<td>Political leaders</td>
<td>9</td>
<td>23</td>
<td>33</td>
<td>35</td>
</tr>
</tbody>
</table>

How much do you trust or distrust the following as a source of information about global warming?

June
2022
6 Efficacy Beliefs

6.1 Few video gamers think it is too late to do anything about global warming.

Only about one in three video gamers (34%) either “strongly” or “somewhat” agree that it is too late to do anything about global warming. By contrast, about two in three (66%) “strongly” (31%) or “somewhat” (35%) disagree.

Additionally, fewer than half of video gamers (45%) either “strongly” or “somewhat” agree that the actions of a single individual won’t make any difference in global warming, while most video gamers (55%) disagree.

Video gamers are more divided about whether technology can address global warming. About half of video gamers (51%) either "strongly" or "somewhat" agree that "new technologies can solve global warming without individuals having to make big changes in their lives," while 49% of video gamers either "strongly" or "somewhat" disagree.
### 6.2 Video gamers are confident they can influence businesses and governments.

Perceived collective efficacy regarding global warming – the belief that like-minded citizens can work together to influence what government and business leaders do about global warming – is an important motivator for individuals to take collective action. About half of video gamers are at least "moderately confident" that people from the gaming community, working together, can affect what local businesses (52%), corporations (52%), their state government (50%), the federal government (49%), or their local government (48%) does about global warming.

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5 Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science, 9*, 75-78. [https://doi.org/10.1111/1467-8721.00064](https://doi.org/10.1111/1467-8721.00064)
7 Global Warming and the Gaming Industry

7.1 Most video gamers believe the gaming industry has a responsibility to reduce its own carbon emissions.

Most video gamers (56%) say that the gaming industry has a responsibility to act on global warming, and it should do what it can to reduce its own carbon emissions. By contrast, about one in three video gamers (35%) say that the gaming industry does not have a responsibility to act and does not need to reduce its carbon emissions.
7.2 More than four in ten video gamers think the video gaming industry should be doing more to address global warming.

More than four in ten video gamers (45%) think the video gaming industry should be doing either “much more” (14%) or “more” (31%) to address global warming. About one in three (33%) say the video game industry is currently doing the right amount.

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June 2022
8  Global Warming and Clean Energy as Government Priorities

8.1  Most video gamers think global warming should be a "high" or "very high" priority for the president and Congress.

Most video gamers (54%) think global warming should be either a “high” or “very high” priority for the president and Congress. Additionally, about six in ten video gamers (61%) think developing sources of clean energy should be a “high” or “very high” priority.

Do you think the following should be a low, medium, high, or very high priority for the president and Congress? [Global warming]

June 2022
9 Who is Responsible for Action on Global Warming?

9.1 Most video gamers want corporations and industry to do more to address global warming. Most also want more action from citizens and government.

Most video gamers (61%) say corporations and industry should do either "much more" (31%) or "more" (30%) to address global warming. Half or more video gamers say developing countries such as China, India, and Brazil (60%); the United States (59%); the U.S. Congress (59%); citizens themselves (58%); other industrialized countries such as England, Germany, and Japan (57%); their local government officials (56%); the Republican Party (56%); the Democratic Party (56%); President Biden (56%); their governor (56%); the media (53%); or they personally (50%) should do more.
10 Personal and Collective Actions to Limit Global Warming

10.1 Many video gamers are willing to take political actions to reduce global warming.

More than half of video gamers (59%) say they would sign a petition about global warming. About half of video gamers say they would volunteer their time (49%) or donate (48%) to an organization working on global warming, and four in ten or more would contact government officials about global warming (45%), or meet with an elected official or their staff (41%).

More than four in ten video gamers (44%) would support an organization engaging in non-violent civil disobedience against corporate or government activities that make global warming worse, and 38% would personally engage in such non-violent civil disobedience.

How likely would you be to do each of the following things if a person you like and respect asked you to?

June 2022
10.2 Most video gamers are participating in, or willing to join, a campaign to convince elected officials to take action to reduce global warming.

A majority of video gamers (52%) say they are either currently participating in a campaign to convince elected officials to take action to reduce global warming (7%), or are “definitely” (19%) or “probably” (25%) willing to join such a campaign.
10.3 About half of video gamers have engaged in consumer activism in the past 12 months.

About half of video gamers (49%) say they have rewarded companies that are taking steps to reduce global warming by buying their products one or more times in the past 12 months. More than four in ten video gamers (43%) say they have punished companies that are opposing steps to reduce global warming by *not* buying their products one or more times in the past 12 months.
10.4 About one in three video gamers intend to increase their consumer activism actions on global warming over the next 12 months.

About one in three video gamers (36%) say that over the next 12 months, they intend to buy products of companies that are taking steps to reduce global warming more frequently than they are now. About four in ten (44%) say they intend to buy products from these companies about as frequently as they are now.

One in three video gamers (33%) also say that over the next 12 months, they would like to punish companies that are opposing steps to reduce global warming by not buying their products more frequently than they are now. About four in ten (44%) say they plan to avoid products from these companies about as frequently as they do now.
11 Global Warming’s Six Americas

11.1 Alarmed video gamers outnumber Dismissive video gamers by a ratio of four to one.

Research conducted by the Yale Program on Climate Change Communication and the George Mason University Center for Climate Change Communication has found that people in the United States can be categorized into six distinct groups based on their beliefs and attitudes about climate change (Global Warming’s Six Americas). The Alarmed are convinced climate change is happening, human-caused, and an urgent threat, and they strongly support climate policies. The Concerned think human-caused climate change is happening and is a serious threat, and they support climate policies. However, they tend to believe that climate impacts are still distant in time and space, and thus the issue remains a lower priority. The Cautious have not yet made up their minds: Is climate change happening? Is it human-caused? Is it serious? The Disengaged know little to nothing about climate change and rarely if ever hear about it. The Doubtful do not think climate change is happening, or they believe it is just a natural cycle. The Dismissive are convinced climate change is not happening, human-caused, or a threat, and they oppose most climate policies.

Video gamers who are Alarmed outnumber those who are Dismissive by a ratio of four to one – about three in ten video gamers (29%) are Alarmed, and while only 7% are Dismissive. Additionally, about one in four video gamers are Concerned (27%) about global warming, and another one in four are Cautious (25%). About one in twelve (8%) are Doubtful, and few video gamers (4%) are Disengaged.
12 Video Gamer Characteristics

The charts/graphics throughout Section 12 summarize the video game-related characteristics of survey participants.

12.1 In a typical week, about how many days do you spend at least 30 minutes playing a video game?
12.2 Would you consider yourself to be a …

Would you consider yourself to be a…?
- Hardcore Gamer (i.e., you are a dedicated gamer and play seriously or competitively)
- Core/Mid-Core Gamer (i.e., you regularly play video games but are not super serious or competitive)
- Casual Gamer (i.e., you sometimes play video games but in short sessions or infrequently)

June 2022
12.3 Which of these platforms do you usually play games on?

![Platform Usage Chart]

- Smartphone/tablet (such as an iPhone/iOS, Android, etc.): 85% Yes, 15% No
- Console (such as Xbox, PlayStation, Nintendo Switch (Docked w/TV), etc.): 62% Yes, 38% No
- PC/Mac (Desktop or laptop): 51% Yes, 49% No
- Handheld console (such as Nintendo Switch (Unlocked/Handheld), PS Vita, Steam Deck, etc.): 37% Yes, 63% No
- VR or virtual reality (such as Oculus Quest/Rift, Sony PlayStation VR, etc.): 25% Yes, 75% No

June 2022
12.4 Which of the following types of video games do you usually play?
12.5 Please rate how important each of the following gameplay elements is to you when playing video games …
12.6 How much do you enjoy the following game elements and activities?

![Bar chart showing enjoyment levels for different game elements and activities.]

- Gameplay that requires long-term planning and strategy:
  - Enjoy a great deal: 14%
  - Enjoy a lot: 20%
  - Enjoy somewhat: 30%
  - Enjoy a little: 20%
  - Don’t enjoy at all: 16%

- Helping other players:
  - Enjoy a great deal: 14%
  - Enjoy a lot: 22%
  - Enjoy somewhat: 27%
  - Enjoy a little: 19%
  - Don’t enjoy at all: 18%

- Working towards a common goal with other players:
  - Enjoy a great deal: 16%
  - Enjoy a lot: 23%
  - Enjoy somewhat: 25%
  - Enjoy a little: 18%
  - Don’t enjoy at all: 18%

- Being an agent of chaos and destruction:
  - Enjoy a great deal: 15%
  - Enjoy a lot: 20%
  - Enjoy somewhat: 23%
  - Enjoy a little: 17%
  - Don’t enjoy at all: 25%

June 2022
12.7 How many of your friends or relatives play video games?

![Bar chart showing the distribution of how many friends or relatives play video games. The chart includes categories for all or nearly all, most, some, a few, and none. The numbers for each category are as follows: 9 (all or nearly all), 19 (most), 27 (some), 36 (a few), and 8 (none).]

June 2022
12.8 How frequently, if at all, do you play video games in the following ways?

- **On your own, not networked or online**
  - Always: 21%
  - Often: 29%
  - Sometimes: 20%
  - Rarely: 12%
  - Never: 8%

- **With family members or friends (physically present and/or connected via the Internet)**
  - Always: 9%
  - Often: 18%
  - Sometimes: 31%
  - Rarely: 20%
  - Never: 22%

- **Networked with others you may or may not know**
  - Always: 10%
  - Often: 21%
  - Sometimes: 28%
  - Rarely: 19%
  - Never: 23%

June 2022
### 12.9 How often do you visit or use the following?

<table>
<thead>
<tr>
<th>Service</th>
<th>Many times a day</th>
<th>About once a day</th>
<th>Almost every day</th>
<th>Every few days</th>
<th>Every few weeks</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playstation Network</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>YouTube Gaming</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>10</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Nintendo Network</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Xbox Live</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Gaming news websites (such as Kotaku, Game Informer, or IGN)</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Steam</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Epic Games Store</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Other gaming forums or message boards (such as GameFAQs or IGN Boards)</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Twitch</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Origin</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Battle.net</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Google Stadia</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Uplay</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>itch.io</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

June 2022
12.10 How often do you visit or use the following to find gaming-related information?

![Bar chart showing the frequency of use for different social media platforms. The chart includes YouTube (general), Facebook, Instagram, TikTok, Reddit, Twitter, and Discord. The data is from June 2022.](image)
12.11 We now have some questions about places where you generally get news and information (not just information about gaming). How often do you watch, listen to, or read content from the following?

<table>
<thead>
<tr>
<th>Source</th>
<th>Never</th>
<th>Every few weeks</th>
<th>Every weeks</th>
<th>Almost every day</th>
<th>About once a day</th>
<th>Many times a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social media websites (such as Facebook or Twitter)</td>
<td>20</td>
<td>10</td>
<td>16</td>
<td>15</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Local TV news</td>
<td>20</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>The Weather Channel</td>
<td>27</td>
<td>13</td>
<td>14</td>
<td>14</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>The national nightly network news on CBS, ABC, or NBC</td>
<td>32</td>
<td>13</td>
<td>14</td>
<td>14</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>News aggregators such as Google News</td>
<td>36</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Your local newspaper, either in print or online</td>
<td>37</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>The Fox News Channel</td>
<td>42</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>CNN</td>
<td>42</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>National newspapers (such as the Wall Street Journal or The Washington Post), either in print or online</td>
<td>48</td>
<td>8</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>MSNBC</td>
<td>50</td>
<td>7</td>
<td>11</td>
<td>9</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Reddit</td>
<td>51</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>National Public Radio (NPR)</td>
<td>56</td>
<td>7</td>
<td>11</td>
<td>6</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>News websites (such as Vox or the National Review Online)</td>
<td>58</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
Appendix I: Survey Method

The data in this report are based on a survey of 2,034 U.S. residents, aged 18 and older, who self-identified as video game players. The credibility interval for the sample, including the design effect (which accounts for the effect of weighting the data), is plus or minus 2 percentage points. The survey was conducted May 30 – June 7, 2022. All questionnaires were self-administered by respondents in a web-based environment. The median completion time for the survey was 15 minutes. Respondents were asked one screening question, “How often do you play video games?”, and respondents who provided any response indicating that they played video games more often than “Never” continued with the survey and were included in the final sample.

The sample was drawn by Nexus Polling from an online opt-in panel. To ensure that the final sample matched national demographic norms for video gamers, initial sampling quotas of key demographic groups were used to stratify the sample, and then demographic weights were constructed, post survey. Because there is no publicly available benchmark data for video gamers in the United States, the demographic parameters for the sample quotas and weights were estimated based on norms from the nationally representative Climate Change in the American Mind study. These norms were determined based on responses to the question “How often do you play video games?”

This project was a partnership between the Yale Program on Climate Change Communication and Unity. The survey instrument was designed by Anthony Leiserowitz, Jennifer Carman, Seth Rosenthal, and Jennifer Marlon of Yale University, with support by Marina Psaros and Malika Srivastava at Unity. The charts were designed by Liz Neyens and Jennifer Marlon of Yale University.

Rounding error and tabulation

For tabulation purposes, percentage points are rounded to the nearest whole number. As a result, percentages in a given chart may total slightly higher or lower than 100%. Summed response categories (e.g., “strongly agree” + “somewhat agree”) are rounded after sums are calculated. For example, in some cases, the sum of 25% + 25% might be reported as 51% (e.g., 25.3% + 25.3% = 50.6%, which, after rounding, would be reported as 25% + 25% = 51%).
Appendix II. Sample Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>n (unweighted)</th>
<th>% (weighted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,034</td>
<td>100</td>
</tr>
<tr>
<td>Man</td>
<td>1,035</td>
<td>54</td>
</tr>
<tr>
<td>Woman</td>
<td>931</td>
<td>43</td>
</tr>
<tr>
<td>Another gender identity</td>
<td>68</td>
<td>3</td>
</tr>
<tr>
<td>Gen Z (1997 or later)</td>
<td>427</td>
<td>22</td>
</tr>
<tr>
<td>Gen X (1965 - 1980)</td>
<td>481</td>
<td>23</td>
</tr>
<tr>
<td>Baby Boomers (1946 - 1964)</td>
<td>397</td>
<td>19</td>
</tr>
<tr>
<td>Silent (1928 - 1945)</td>
<td>41</td>
<td>2</td>
</tr>
<tr>
<td>Less than high school</td>
<td>79</td>
<td>4</td>
</tr>
<tr>
<td>High school</td>
<td>637</td>
<td>34</td>
</tr>
<tr>
<td>Some college</td>
<td>720</td>
<td>31</td>
</tr>
<tr>
<td>Bachelor's degree or higher</td>
<td>598</td>
<td>31</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>53</td>
<td>6</td>
</tr>
<tr>
<td>Black</td>
<td>217</td>
<td>11</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>437</td>
<td>16</td>
</tr>
<tr>
<td>Native American or Alaska Native</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>White</td>
<td>1,242</td>
<td>60</td>
</tr>
<tr>
<td>Multiple Races or Other Background</td>
<td>65</td>
<td>4</td>
</tr>
<tr>
<td>Northeast</td>
<td>343</td>
<td>17</td>
</tr>
<tr>
<td>Midwest</td>
<td>432</td>
<td>21</td>
</tr>
<tr>
<td>South</td>
<td>808</td>
<td>39</td>
</tr>
<tr>
<td>West</td>
<td>449</td>
<td>23</td>
</tr>
<tr>
<td>U.S. Territory</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Republican (including leaners)</td>
<td>688</td>
<td>33</td>
</tr>
<tr>
<td>Democrat (including leaners)</td>
<td>841</td>
<td>41</td>
</tr>
<tr>
<td>Independent/Other</td>
<td>243</td>
<td>13</td>
</tr>
<tr>
<td>No party/Not interested in politics</td>
<td>262</td>
<td>13</td>
</tr>
</tbody>
</table>