2022

CLIMATE SOLUTIONS

NARRATIVE TRENDS



Commissioned by: The Solutions Project Developed by: Conspire for Good



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The Solutions Project is a national nonprofit organization that promotes climate justice through grantmaking and amplifying the stories of frontline community leaders in the media. The organization seeks to accelerate the transition to 100% renewable energy and equitable access to healthy air, water and land by supporting climate justice organizations, especially those led by women of color.

The Solutions Project.org

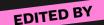


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A letter from Gloria Walton, CEO of The Solutions Project



Narratives and dominant worldviews influence our values, and shape how we think, and how we relate to each other. Media is essential in influencing the public discourse and shaping our perspectives. Too often, current narratives fail to capture the voices and experiences of Black, Brown, Indigenous, and other communities of color. And when there are stories about our communities, it often portrays us as victims instead of showing us as decision makers, changemakers, and visionaries. At The Solutions Project, we fund the people closest to the problems because they are creating the most intersectional solutions. We amplify their stories because we know communities on the frontlines have the power to shape their own narratives.

We are in a pivotal moment where digital media is taking activism to a new level, newsrooms are building climate teams, and audiences are demanding for climate stories in films and entertainment. Not just any stories - stories that are focused on solutions to the climate crisis, narratives that give us hope and allow us to reimagine a world that's more equitable and sustainable.

In 2018, we started tracking media trends to analyze three things: (1) media's coverage of equity, justice, women's leadership, and communities of color in regards to renewable energy, (2) the public dialogue and narrative on renewable energy, and (3) how funding gaps in climate philanthropy correlates with a lack of media coverage. In 2021, we also examined articles focused on food solutions and water systems.

Our annual Climate Solutions Narrative Trends Report showed us journalists were increasingly connecting equity's role in the renewable energy transition. Out of the articles we sampled on renewable energy, our research found that:

- In 2018, only 7% referenced communities of color
- In 2019, only 6% mentioned equity, justice, and communities of color
- In 2020 and 2021, the death of George Floyd and the Movement for Black Lives helped drive national discussion of equity issues, which in 2021 set a record number of articles referencing issues of equity and justice at 30%

Journalists were writing more renewable energy stories that centered people and recognized that communities of color played a pivotal role in innovating climate justice solutions. This year as we reflect on our 2022 sample, we found that articles covering communities of color were more likely to focus on solutions; such as regenerative agriculture and food access. This shift pushes back against the trend of most articles centering solutions coming from governments. Additionally, we found that a majority of the people who were quoted in articles identified as women.



Another key insight with this year's report is the significant amount of coverage of electric vehicles and charging stations (10% of renewable energy coverage); yet there is a big difference when we compare that with public transportation (2%) which many Black, Indigenous, People of Color and low-income communities rely on in urban areas. When we cover solutions, we need to ensure that we're discussing a diverse and equitable range of experiences across communities.

We also noticed that there was a slight decrease in the articles that had an equity lens. After the resurgence of the Black Lives Matter movement in 2020, corporations and governments were quick to put out statements on justice and talk about commitments to equity. Referenced above, our reports in 2020 and 2021 were reflective of this dialogue and saw a record increase in coverage of equity and communities of color. It's too soon to tell if the coverage increase over the last few years was just a trend, or a true shift. What we know for sure, is that philanthropy needs to continue to support building up more communicators from communities of color. It doesn't just matter what is said, but who is constructing the narrative. This is why programs like Communicating Our Power matter.

This is an opportunity for us to demonstrate that the last few years were not just a moment, but real steps towards transformational change. From the Justice40 Initiative to the recent celebration of the Inflation Reduction Act, there is progress, but we need action and implementation - and we need to ensure that we don't lose sight of equity and justice along the way.

Communities inspire us. Communities transform narratives. Communities innovate solutions. Philanthropy has the opportunity to invest in the power of grassroots communities. Media has the ability to uplift and amplify community-based solutions and stories. Let's join forces, each doing our part, to resource and support the frontlines.

¡Sí, se puede!

In solidarity,

Aforia Watton

6 EXECUTIVE SUMMARY

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Introduction

For the past five years, this report has tracked and analyzed narrative trends in the news related to renewable energy in the United States. Since 2021, this report tracked narratives more broadly related to **climate solutions**, including food and water systems in our analysis, alongside renewable energy.

The climate on our planet is made up of many complex systems. The climate crisis impacts all of these systems, including the things necessary for our survival as a species: food, water, and safety. As such, climate solutions include a broad set of policies, practices, and technologies that aim to reduce carbon emissions, mitigate the impacts of climate change, and help us live in balance with the planet—from resilient infrastructure, affordable green housing, and disaster preparedness to agricultural practices, energy innovation, and addressing pollution. Many voices are also declaring that climate solutions should be more systemic—correcting, avoiding, or mitigating injustices in our global economy—while building stronger, more resilient communities.

The media narratives about the solutions humanity is pursuing—to ensure all people have healthy, safe, and sustainable food, water, and energy—is important. These narratives not only keep us informed about what's happening; they also shape our understanding of the need for these solutions and what we believe is possible moving forward. This in turn influences decision makers at every level of government and industry, as well as individual consumers.





Journalists have the difficult task of reporting on climate-related disasters and climate solutions in a way that draws readers' attention and provides sufficient context for us to understand not only what is happening, but why, to whom, and what might be done about it. We know that human impacts have contributed to global warming, which in turn is increasing the frequency and intensity of severe weather events around the world. Yet in water-related articles—those that reported most consistently on drought, flooding, or other natural disasters in our analysis—only 20% made the link to climate change.

In addition to the prolonged drought, intense flooding, and other weather crises in the United States that drove news coverage in 2022, another coverage driver was Russia's invasion of Ukraine, which caused oil prices to soar and impacted lives across the United States and around the world. The war and restricted commodities also contributed to inflation, which impacted US food systems—from the cost of fertilizer to the cost of wheat. This coverage affected public opinion and heavily influenced actions taken by policy makers.

Given the numerous weather crises, inflation, and food shortages, it's easy to understand why so much of the media narrative focused on the problems and challenges we face. Across coverage of renewable energy, water, and food systems, fewer than half of articles included solutions to the many complex problems posed by climate change, even though many solutions already exist.

Still, there were some bright spots in our research, including a plethora of articles covering the many actions being taken at the federal and state levels to implement climate solutions, after decades of community organizing, innovation, and policy change at the local level. Or of articles that quoted a person, a majority of them quoted a woman. Also of note was the uptick in positive/solutions-focused messaging in coverage of water systems, paired with a decrease in "doom and gloom" messaging. Lastly, even as we saw a decline in coverage through an equity lens and references to communities of color, these stories continue to provide solutions at a higher rate than articles that do not.



In 2022, we analyzed 7,250 news and opinion articles and 3,900 top-engagement social media posts focused on climate solutions. Our analysis spanned three issue areas related to climate solutions:

Renewable energy: Articles covering renewable energy, emphasizing reporting on renewable energy viability, solutions, and implementation. We also looked for articles focused on leadership by frontline communities and how renewable energy can transform the lives of those most affected by climate change.

Water: Coverage of water systems, including access, safety, and efficiency in drinking water, sewer, and stormwater infrastructure. We paid particular attention to how these issues relate to climate change and emphasized coverage of how water infrastructure and policy affect communities—especially communities of color.

Food systems: A broad view of the intersecting structures that affect agricultural sustainability and food production, including issues like soil health, land use, and uptake of regenerative agriculture strategies and practices. We also tracked food systems policies, including food access, food safety, and policies affecting farmers and agriculture workers.





Key Findings

CROSS-VERTICAL

- → Continuing the trend from 2021, of articles that quoted or referenced a person, a majority of them quoted a woman.
- → While coverage of natural disasters still dominated many headlines in our 2022 sample, it somewhat lessened in intensity from the previous year. For example, in the water vertical, 59% of articles in 2021 mentioned natural disasters compared with 45% in 2022.
- → While the number of positive/solutions-focused articles in renewable energy coverage was down (67% positive in 2021 down to 55% in 2022), the "positivity gap" among the different issue areas lessened, compared to 2021. There was a spread of only 19 percentage points between positivity in water coverage (36% positive) and renewable energy (55% positive). This compares with a spread of 40 percentage points between water and renewable energy in 2021.
- → At the state level, implementation of plans outlined in the Infrastructure Investment and Jobs Act and the Inflation Reduction Act are in full swing, with elements of the legislation appearing in all three verticals, from EV systems to investments in water infrastructure.
- → Coverage trends across verticals show the federal government has taken action on climate change and climate solutions, but also that states, communities, and advocates are calling for more and better effort and investment.
- → As in 2021, articles in our 2022 sample that mentioned communities of color were more likely to focus on solutions than articles that contained no mention of communities of color. In 1,220 articles that referenced communities of color, 52% included solutions, compared with 46% in solutions-focused articles that did not mention communities of color.



RENEWABLE ENERGY

- → Messages showing the **federal government as leading on renewable energy** are still dominant, appearing in 25% of the articles in our sample. This is compared with messages on business leadership appearing in 20% of articles and movement leadership messages appearing in 11% of articles. Still, the Biden administration has struggled to deliver on its big promises, particularly for equity: of articles that suggest the federal government is leading on renewable energy, only 4% discuss equitable solutions being implemented now.
- The fossil fuel lobby had a strong presence in 2022 media coverage, leveraging the Russia-Ukraine war and high gas prices to push **messaging about the scarcity and importance of oil.** While there were many messages related to renewable energy increasing safety (244 messages), improving the economy (263 messages), and being resilient and reliable (166 messages), messaging directly countering the pro-oil and oil scarcity narrative was slim. Only 25 articles (1%) featured messaging about how wars and armed conflict stand in the way of fully realizing the benefits of renewable energy for safety, resilience, and socioeconomic well being.
- → Articles referencing issues of equity or justice fell in 2022 to 27%. This level is closer to what we saw in 2020, which potentially means the increase in equity references in 2021 was temporary—boosted by the Movement for Black Lives' narrative work in 2020 and the Biden administration's early commitments to environmental justice in 2021.
- → Positive/solutions-focused messaging also fell in 2022, appearing in 55% of coverage compared to 2021's 67%. There are several possible explanations for this shift, including efforts by Republicans and centrist Democrats to block or stall implementation efforts, as well as some disillusionment in seeing the Biden administration struggle to back up its promises with adequate capacity and resources across agencies.
- → Coverage of **electric vehicles and charging station infrastructure** was significant, appearing in just under 10% of all renewable energy coverage. This compares with public transportation which was mentioned in less than 2% of articles.
- → Despite some stories arguing that renewable energy is expensive to produce or for consumers to buy (152 articles/6%), the dominant narrative was that renewable energy is cheap and getting even more affordable (214 articles/8%).





WATER

- → Natural disasters were the single biggest theme driving coverage of water-related issues in 2022, appearing in 45% of articles in our sample. This is a drop from 2021 when natural disasters appeared in 59% of articles in our sample. The next largest driver of coverage was water contamination, appearing in 29% of articles (up from 2021's 24%) and drought also appearing in 29% of articles.
- → Changes in "doom and gloom" messaging. There has been a downturn in "doom and gloom" messaging in water reporting as increasing federal and state infrastructure modernization projects offer light in a media landscape otherwise darkened by crisis coverage.
- → Positive/solutions-focused coverage increased in 2022 to 36% compared to 27% in 2021, likely related to increased state-level implementation of water infrastructure projects funded by the infrastructure bill.
- → Only 40% of articles concerning contaminated water contained references to equity and justice or communities of color—a damning statistic given the disproportionate impact of contamination in low-income communities, especially those of color.
- → **Government** was again positioned as leading on water solutions (518 articles/22%), with movement leaders coming in second place (120 articles/5%).



FOOD SYSTEMS

- → Rising food prices for consumers was a predominant theme in food-related coverage in our sample, impacted by drought and other climate issues, the Russia-Ukraine conflict, and supply chain shortages.
- → Movement and local communities were positioned as leading on food system issues, even more than the federal government. Messaging about food system solutions being led by movements/communities/advocates appeared in 342 articles (14%), compared to leadership by the federal government appearing in 279 articles (11.5%).
- → Coverage of **regenerative agriculture practices continued to grow** in 2022, appearing in 323 articles, or 13% of articles in our sample.
- → **Doom-and-gloom messaging in food systems reporting has remained** at 2021 levels, or even slightly above, even as positive and solutions-focused messaging has also increased.
- → Equity and justice messaging fell in 2022 to 25%, down from 2021's 34%. References to communities of color also fell from appearing in 21% of articles in 2021 to 15% of articles in 2022. In 2021, the Biden administration was talking about equity and justice more frequently than in 2022, which partially explains the dip in equity messaging. And in 2021, there was a big media focus on food insecurity related to COVID impacting communities of color in particular, a narrative that was not as strong in 2022.
- → 14% of articles (342 instances) contained messaging that positioned advocates and communities as leading on food issues, with half of that messaging referencing equity and justice and/or communities of color. This shows that movement leaders have been effective in drawing attention to these narrative frames.



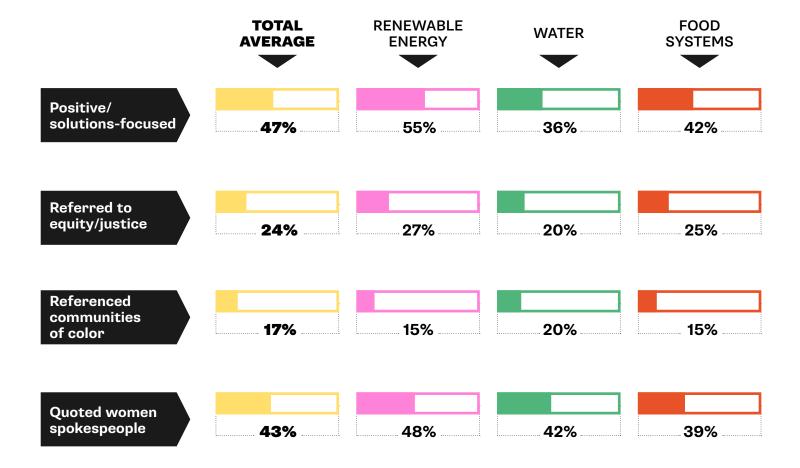


By the Numbers

TOTAL ARTICLES REVIEWED:

7,250

(711 opinion or editorial)





Looking Ahead

KEY OPPORTUNITIES: JOURNALISTS

- → Continue to highlight solutions. Climate disasters are likely to increase in frequency and severity. Every story on a natural disaster provides an opportunity to highlight a path forward—solutions that are being proposed by local communities and leaders, or solutions that are already happening but need more visibility to scale.
- → Even as the Biden administration continues to implement its policy agenda impacting infrastructure, the economy, and climate change, there is still state-level movement by advocacy organizations and state and local leaders to advance climate solutions—sometimes faster and more targeted than those happening at the federal level. Highlighting these local efforts to national audiences can help shift the conversation—away from climate doom and gloom or the slow movement of a divided Congress and toward what's possible because it is already happening.
- → As implementation of the Inflation Reduction Act and other climate policies continue to roll out across the country, it's important to consider the investments being made through an equity lens—covering not only which investments are made and where, but also who these investments impact and which communities have been historically left behind. Journalists can also consider highlighting what community-led solutions are already happening that might be scaled.
- → Coverage of racial justice issues certainly reached new heights in the aftermath of George Floyd's murder and the ensuing protests and organizing work of the Movement for Black Lives. But it's important to not see racial justice as a new trend but rather a continuing frame.

KEY OPPORTUNITIES: ADVOCATES

→ Narrative analysis in 2022 shows advocates still need to present a vision and story for climate solutions that is as clear as the vision for 100% renewable energy. There is no coherent or consistent narrative in coverage tying together the interrelated food, water, and energy systems impacted by climate change. Nor is there a clear vision for coordinated solutions that would collectively address climate change. While the solutions are relatively clear in the energy sector—despite some debate as to what counts as "clean" energy—solutions for food and water systems, when reported, are overwhelmed by a deluge of disaster reporting. To create a meme and movement around "climate solutions" and "climate justice" as a whole, advocates will need to tell a clearer story about how these varied issues are connected.



- → There were not as many crises in 2022—and COVID coverage continued to cool off—which reduced the draw of press coverage to water and food issues. There's still plenty of disasters happening, but we're likely to see one of two trends as these disasters become more commonplace: (1) coverage of disasters decline as they become less newsworthy; or (2) coverage continues at the same clip but with many disasters happening simultaneously, not all disasters are covered equally. We already see this latter trend happening in US media coverage of foreign climate disasters; it's possible newsrooms will face decisions in the future about which simultaneous domestic disasters get priority coverage. Advocates should be prepared to help draw journalists' attention to communities and community impacts that might be overlooked. Then, with the more slow-rolling, on-going climate disasters, e.g., the Colorado River or seasonal wildfires, advocates will need to develop strategies to keep up interest and avoid crisis fatigue.
- → With the electric vehicle craze and growing EV infrastructure expanding throughout the country, advocates can piggyback on news coverage of the sector to help focus some of the reporting on the need for the benefits to reach communities equitably. Every federal or state move related to EV policy, or new reports about EV infrastructure or sales, is an opportunity to reach out to reporters or write an op-ed to frame these developments through an equity lens. This is a good example.
- → In the context of the Russia-Ukraine war and strong industry messaging about oil scarcity and the importance of oil from Saudi Arabia or domestic solutions like ethanol production, advocates can counter this narrative by talking about renewable energy as the solution to energy independence and security, emphasizing that these technologies already exist and are already in use.
- → The Biden administration is making some bold moves on climate solutions, but has failed to follow through on several promises. There is an opportunity for The Solutions Project and its partners to continue to highlight movement leaders who pushed for the positive changes in the first place, as well as those who are calling for accountability in the administration for its continued leasing of lands for resource extraction, disregard for tribal sovereignty, and its lack of action to back its bold equity claims.









RENEWABLE ENERGY COVERAGE

Who's covering renewable energy? How equitably?

Based on our sample, outlets with highest number of renewable energy-focused articles; number of renewable energy articles containing equity and justice-focused messaging.

► Top by equity proportion

▶ Bottom by equity proportion

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NATIONAL MEDIA

	Outlet	Renewable energy articles	Equity %
1.	The New York Times	192	24%
2.	AP The Associated Press	171	22%
3.	The Houston Chronicle	101	17%
4.	APNews.com	80	6%
5.	Business Insider	71	24%
6.	The Boston Globe	63	32%
7.	San Jose Mercury News	59	22%
8.	Sacramento Bee	37	22%
9.	Buffalo News	35	23%
10.	Seattle Times	30	33%





INDUSTRY & TRADE

► Top by equity proportion

▶ Bottom by equity proportion

	Outlet	Renewable energy articles	Equity %
1.	The Hill	170	31%
2.	Clean Technica	91	26%
2.	GreenBiz	73	25%
3.	Utility DIVE	63	32%
4.	Grist	61	41%
5.	Climatewire	61	31%
5.	Inside Climate News	55	33%
6.	Greenwire	45	42%
7.	Environment and Energy Daily	43	28%
9.	EcoWatch	27	33%

Where is renewable energy covered?

STATES MENTIONED

Based on our sample of state and local renewable energy coverage, number of times each state was mentioned.

1.	New York	268
2.	California	164
2.	Texas	130
3.	Massachusetts	63
4.	Florida	50
5.	Virginia	42
6.	Illinois	39
7.	Ohio	35
8.	Washington	34
9.	Minnesota	31







Who's speaking on renewable energy?

HUMAN-CENTERED REPORTING

Human-centered reporting is critical to honestly and equitably capturing the impacts of climate change and the solutions to tackle these intersecting problems. However, not all news articles covering renewable energy quote or reference people; some focus exclusively on the *what* without mentioning a *who*.



Human-centered reporting is on the upswing: in 2021, 73% of articles in our sample quoted or referenced a person.

WOMEN

For the **third year in a row,** in renewable energy coverage, of articles that quoted a person, **a** majority of them quoted a woman.



Note: This analysis identifies 'women' as those with she/her pronouns in articles or whose gender identification is otherwise evident through online research.





Most-referenced women

Based on our sample, number of times each woman was mentioned or quoted in renewable energy coverage.

Continuing a trend seen since 2019, the most-referenced women in our sample of renewable energy coverage are overwhelmingly affiliated with the government.

1.	Jennifer Granholm	Secretary of Energy	79
2.	Deb Haaland	Secretary of the Interior	39
2.	Kyrsten Sinema	US Senator (I-Arizona)	38
3.	Ivanka Trump	Former Senior Advisor, Trump White House	31
4.	Kathy Hochul	Governor, New York	26
4.	Nancy Pelosi	Speaker of the House, US Representative (D-California)	26
5.	Kamala Harris	Vice President	25
6.	Leah Stokes	Climate Policy Expert; Professor, UC Santa Barbara	23
7.	Abigail Ross Hopper	President and CEO, Solar Energy Industries Association	20
7.	Gina McCarthy	Former White House Climate Advisor	19
8.	Heather Zichal	Former CEO, American Clean Power Association	18
9.	Dianne Feinstein	US Senator (D-California)	16
9.	Alexandria Ocasio-Cortez	US Representative (D-New York)	15
10.	Katharine Hayhoe	Chief Scientist, The Nature Conservancy	13
10.	Brenda Mallory	Chair, White House Council on Environmental Quality	12
10.	Patty Murray	President pro tempore, US Senate	11
11.	Kate Brown	Governor, Oregon	11
11.	Karine Jean-Pierre	White House Press Secretary	11
11.	Gretchen Whitmer		
12.	Maura Healey	Governor/former Attorney General, Massachusetts	10
12.	Tina Smith	Senator (D-Minnesota)	10





INSTITUTIONS AND ORGANIZATIONS

Most-referenced institutions

Based on our sample, number of times each institution was mentioned or a spokesperson from that institution was quoted.

1.	US Department of Energy	241	Federal or International Government
2.	US Environmental Protection Agency	137	Federal or International Government
3.	Tesla	98	Business, Utility, or Trade Group
4.	United Nations	97	Federal or International Government
5.	US Department of the Interior	89	Federal or International Government
6.	White House	68	Federal or International Government
6.	ExxonMobil	68	Business, Utility, or Trade Group
7.	Center for Biological Diversity	60	Nonprofit or NGO
8.	Chevron	59	Business, Utility, or Trade Group
9.	Amazon	58	Business, Utility, or Trade Group
10.	International Energy Agency	57	Federal or International Government
11.	Sierra Club	46	Nonprofit or NGO
12.	General Motors	44	Business, Utility, or Trade Group
13.	Pacific Gas and Electric Company	38	Business, Utility, or Trade Group
14.	Natural Resources Defense Council	36	Nonprofit or NGO
14.	Ford Motors	36	Business, Utility, or Trade Group
15.	California Public Utilities Commission	35	State, Local, or Tribal Government
16.	Solar Energy Industries Association	31	Professional Association
17.	US Supreme Court	30	Federal or International Government
18.	US Department of Agriculture	28	Federal or International Government





RENEWABLE ENERGY MESSAGES & NARRATIVE

Messaging by the Numbers

TOTAL ARTICLES REVIEWED:

2,476

15%
REFERENCED
COMMUNITIES
OF COLOR
376 articles

27%
REFERRED
TO EQUITY
& JUSTICE
665 articles

48%
QUOTED A WOMAN
SPOKESPERSON
OR LAWMAKER
1,184 articles

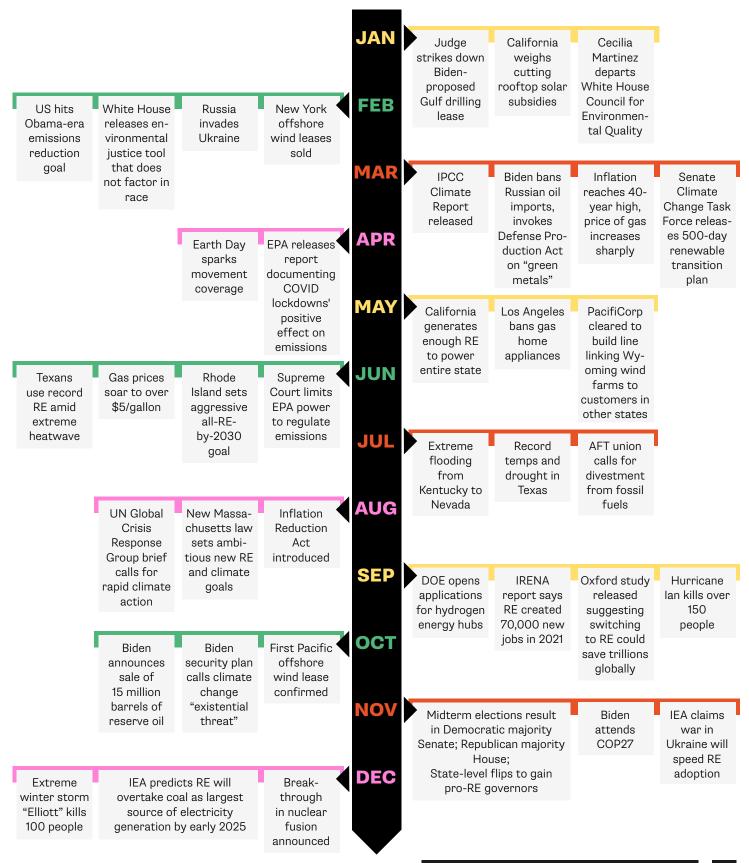
55%
POSITIVE/
SOLUTIONSFOCUSED
1.367 articles







Renewable Energy Events & Coverage Drivers







Renewable Energy Narrative Alignment

We have broken down the larger renewable energy narrative into three major sub-narratives:



The positive narrative is shaped by stories and messages that endorse one or more aspects of the renewable energy movement's vision for the future: 100% is possible, 100% is happening, 100% is equitable.



The neutral narrative contains messages that may support an aspect of the positive narrative but detract or could detract from another, e.g., corporate renewable energy commitments prove 100% is possible and happening, but may ignore or undermine equity.



Competing message trends either oppose the positive, solutions-focused narrative or actively compete for attention and therefore dilute the positive and neutral narratives.





Renewable Energy Narrative Analysis

* While we tracked a long list of messages that appeared in coverage, the analysis in this section focuses on dominant messages and themes rather than the exhaustive list.

FEDERAL ENERGY ACTION MARKED BY OPPOSITION, COMPROMISE

Top Messages In This Trend

POSITIVE

- Renewable energy is a climate solution happening now
- Renewable energy is good for the economy
- Renewable energy movement leadership led to government action
- Renewable energy solutions should be more equitable
- Renewable energy solutions are led by the federal government

NEUTRAL

- Anti-renewable organizations and individuals are stopping the green energy transition
- Policies are delaying growth of renewable energy

COMPETING

- Renewable energy is partisan
- Renewable energy is not reliable

As in previous years of this analysis, messages related to government-spurred growth of renewable energy dominated coverage. In 2022, that coverage included messaging about the various challenges the Biden administration has faced in making good on its 2021 renewable energy investment pledges. Specifically, coverage highlighted a lack of alignment within the administration around how that money would be used, as well as political opposition and other delay tactics funded by the fossil fuel industry. Messaging related to equity and federal energy action also had traction in 2022, however was also largely in the context of the Biden administration failing to deliver on its initially-strong climate equity rhetoric. Coverage of implementation framed the administration in lacking the staffing, infrastructure, or will to follow through on climate justice commitments.

Biden administration tried to follow up on strong renewable energy pledges

Our 2021 analysis showed significant government-led messaging around renewable energy, stemming from a variety of climate- and justice-related commitments made by the Biden administration in its





first few months of office. These included everything from Executive Orders on the climate crisis and advancing racial equity to the Justice 40 Initiative and a goal to invest in electric vehicles for the federal government and charging stations across the country.

The administration made some progress in 2022 including, for example, creating a Clean Energy Corps, authorizing offshore wind development, and advancing electric vehicle infrastructure. Each of these initiatives led to spikes in coverage of federal action on renewable energy.



his home state of West Virginia.

Significant opposition fueled by fossil fuel lobby

These and other administration-led efforts to deliver on renewable energy faced significant obstacles and opposition. In June, a Supreme Court ruling crippled the EPA's regulatory powers related to the energy sector, driving coverage about the impacts of the decision for energy development and utilities. This ruling came about as a result of a Republican strategy to stack courts against exactly this type of climate action.

Beyond the EPA ruling, the Biden administration was forced to temper its renewable energy ambitions in the face of resistance from Republicans and the Democrats' fractious relationship with US Senator Joe Manchin. While the Senator eventually said yes to heavily compromised renewables legislation, his obstructionism helped the fossil fuel industry in

Messaging and coverage of curtailed federal efforts to support renewable energy acknowledged the role of money from the fossil fuel industry. For example, a <u>Houston Chronicle article</u> quoted Scientist Michael Mann, whose testimony before the House Oversight Committee in February 2022 criticized oil and gas industry efforts to delay the phase-out of fossil fuels: "If we are to meet this monumental challenge, we need all hands on deck. We cannot have industry and their PR firms working at cross-purposes." The same article also quoted Mark van Baal, founder of Follow This: "Exxon Mobil is really like a tobacco company that pledges to prohibit smoking in their factories by 2050 while continuing to produce and sell cigarettes."





Several articles took aim specifically at Senator Manchin's relationship with fossil fuel interests. A *New York Times* article, for example, stated that: "At every step of his political career, the senior U.S. senator from West Virginia helped a local power plant that is the sole customer of his private coal business. Along the way, he blocked ambitious climate action." And other articles pointed to an increase in oil and gas campaign contributions to Democrats in general. The Houston Chronicle reported: "Over the past 3½ years, 29 percent of the oil sector's more than \$100 million in direct political contributions has gone to Democrats, up from 21 percent during the 2018 election cycle and 15 percent in 2016, according to campaign data compiled by the nonprofit Open Secrets."

The Biden administration also came under fire for its plan to lease millions of acres for offshore drilling, furthering <u>critiques</u> that the administration isn't putting its money where its mouth is.

While not dominant in coverage, anti-clean energy transition messaging still received some <u>play</u> in response to the Biden administration's efforts. This messaging, from spokespeople like Frank Macchiarola, senior VP of policy at the American Petroleum Institute, argued that moving too quickly will raise costs to consumers: "Policy makers must know that a swift transition comes at a cost to the American consumer."

Stories in US media about multilateral efforts to transition from fossil fuels, such as at the <u>COP27</u>, showed international leaders face similar challenges in taking concrete actions that limit fossil fuel use.

Despite bold promises, equity didn't move as much as advocates hoped

Government spokespeople were the most prominent messengers in coverage, appearing in 607 articles with messaging suggesting the federal government is leading on renewable energy. Of those articles, only 24 (4%) discuss equitable solutions being implemented now.

One of the challenges to implementing the Biden administration's equitable clean energy development agenda was a lack of staff in the right positions and agencies to actually do the work. In January 2022, Cecilia Martinez, Biden's senior director for environmental justice, left the White House Council for Environmental







Quality, along with the council's public engagement director David Kieve. The resignations left the council's chair, Brenda Mallory, with a lot of pressure to deliver on project deadlines for the Justice40 Initiative: "There's just anxiety that we're not going to be able to do what we say, and that really worries people because real people's lives are affected by that." And it wasn't just the Council for Environmental Quality that lacked capacity. Environmental Justice advocates expressed concern about "the many vacant senior positions in important agencies across the federal government—especially EPA—that would be needed to turn Biden's environmental justice pledges into a reality."

Other missteps, such as the administration's release of a tool to try to help identify environmental justice communities that <u>did not include race</u>, left movement leaders skeptical that Biden's efforts would yield anything positive. And some federal renewable energy projects taking place on Tribal lands have also met <u>resistance</u> and concern from activists, while others, to the administration's credit, moved forward with better coordination.

While some advocates acknowledged that the equity-focused plans being developed by federal leadership, including the EPA, are steps in the right direction, many leaders are counting in lives the time it will take to implement these plans. As Rashaad Thomas, a Phoenix writer, put it, "What I'm thinking is, in three to four years, how many Black and brown people are going to end up with cancer...Or any other disease related to environmental justice?"

ELECTRIC VEHICLE DEMAND SPURRED BY GAS CRISIS, BUSINESS

AND GOVERNMENT INVESTMENT

Top Messages In This Trend

POSITIVE

- Demand for renewable energy is growing
- Renewable energy supply/infrastructure is growing
- Renewable energy solutions are led by the federal government
- Renewable energy solutions are led by state/local governments

NEUTRAL

Renewable energy solutions are led by business

COMPETING

Renewable energy is partisan





Over 2022, coverage around electric vehicles (EVs) rose steeply, a reason for the year's uptick in messaging concerning renewable energy supply growth (397 total messages) and in business leadership (497 total messages). Of about 200 articles concerning electric vehicles, almost half contained messaging attributing renewable energy leadership to business.

Several articles <u>reported</u> on California surpassing 1 million sales and leases of plug-in EVs, and businesses contributed to this growth messaging: Tesla's Elon Musk <u>promised</u> growth not only in vehicle production, but also energy storage and solar production, while GM <u>announced</u> plans to commit \$7 billion to an EV facility. And new industry innovations also received coverage, such as Delta's <u>launch</u> of an EV charging system that employs artificial intelligence capabilities.

Soaring EV interest is attributable in part to increased gas prices, a related issue that received significant media <u>coverage</u>, including highlighting that EVs are <u>three times cheaper</u> to fuel than a gas car.

This demand, however, is not solely coming from consumers and businesses—government action to invest in EVs has spurred their growth: President Biden made progress on his 2021 commitment to transition the federal fleet of vehicles (600,000 strong) to all-electric, and transportation funding from last year's infrastructure bill is being allocated to states for deployment—even Texas. So keen has the administration been to encourage EV adoption that internet conspiracy theories popped up, centered around the false idea that the Biden administration intentionally drove up gas prices to encourage more people to switch to electric.

Increased demand for green metals poses environmental problems

Coverage of demand for the "green metals" used in the manufacture of EVs, batteries, and other infrastructure <u>spiked</u> in 2022. This demand came in part thanks to <u>President Biden</u> invoking the <u>Defense Production Act to secure production of green metals</u>.

One story out of Colorado painted a picture of what this new demand might mean for a just transition for former coal miners. Sean Hovorka, a production superintendent, was quoted saying "you've gotta have the lithium that goes into the batteries for your Teslas and all that stuff...we knew that we were gonna be part of the green energy movement." However, mining for so-called "green rocks" has many of the same detrimental environmental effects as mining for coal—so we may see increased pressure from movement leaders to source these materials in a more sustainable fashion.





INFRASTRUCTURE AND ENERGY SUPPLY BOLSTERED BY GOVERNMENT

AND LOW COSTS; SOME IMPLEMENTATION CAUSES STAGNATION

Top Messages In This Trend

POSITIVE

- Demand for renewable energy is growing
- Renewable energy supply/infrastructure is growing

NEUTRAL

Policies are delaying growth of renewable energy

COMPETING

- Renewable energy is too expensive for consumers
- Renewable energy is too expensive to produce

Solar panel tariffs may slow supply growth

At the beginning of 2022, Biden extended, but modified, Trump-era tariffs on solar panels, which had been due to expire February 6th—a move many saw as a blow to future solar expansion. David Amster-Olszewski, founder and CEO of solar company Sunshare, said, "tariffs are creating a disadvantage...just at the time when we are working to increase solar adoption and meet 100% renewable goals being set by states and the federal government." But tariffs were not the only factor limiting renewable energy expansion: rising prices on other elements, like turbines and batteries, threatened the widespread affordability of clean energy. However, on balance, renewable energy remains cheaper than fossil fuels, due in part to the also-soaring cost of oil and natural gas. In 241 instances of supply expansion messaging, the majority also included messaging about business leadership, rather than government leadership.

Plenty of renewable energy being generated, but grid can't use it fast enough

The increase in renewable energy generating power—especially solar—has vastly outpaced the infrastructural ability to use it. In fact, as *Inside Climate News* reported, "the nation's largest electric grid operator is so clogged with requests from energy developers seeking connections to its regional transmission network in the eastern United States that it is proposing a two-year pause on reviewing more than 1,200 energy projects." This is due to the proliferation and decentralization of new clean energy projects. Many movement leaders have expressed concern about this backlog. CleanEnergy Grid, a national group advocating for modernization of high voltage transmission, said these backlogs are "needlessly increasing electricity costs for consumers by delaying the construction of new projects





which are cheaper than existing electricity production. Because most of these projects are located in remote rural areas, this backlog is harming rural economic development and job creation."

Renewable energy is still incredibly cheap and getting cheaper

Most technology gets cheaper over time, and renewable energy is no exception. According to a *New York Times Magazine column*, "Since 2010, the cost of solar power and lithium-battery technology has fallen by more than 85 percent, the cost of wind power by more than 55 percent." In a *New York Times* op-ed, Joseph Curtin of the Rockefeller Foundation wrote that "wind and solar are now the cheapest sources of new generation in most of the world," making it unlikely that coal plants will be able to compete with clean energy by 2030.



Wind projects take flight

Large state and federal investments in wind power drove coverage of the projects they funded, including an offshore wind farm off Long Island that is expected to power 70,000 homes. Of the project, New York Governor Kathy Hochul <u>said</u>, "If you ask what the energy future looks like, I say: The answer, my friends, is blowing in the wind."

At the federal level, the Bureau of Ocean Energy Management announced the first offshore wind energy lease sale in the context of rising gas prices. Interior Secretary Deb Haaland highlighted job creation as a motivation for the projects: "The Biden-Harris administration is committed to supporting a robust clean energy economy, and the upcoming Carolina Long Bay offshore wind energy auction provides yet another excellent opportunity to strengthen the clean energy industry while creating goodpaying union jobs".





CLEAN ENERGY OFFERS SAFETY, PROTECTION

Top Messages In This Trend

POSITIVE

- Demand for renewable energy is growing
- Renewable energy supply/infrastructure is growing

NEUTRAL

Policies are delaying growth of renewable energy

COMPETING

- Renewable energy is too expensive for consumers
- Renewable energy is too expensive to produce

A series of messages pushed an overall narrative that renewable energy offers safety—not only from natural disasters by stopping global warming, but also in terms of health crises from polluting fossil fuels and by increasing energy independence and curtailing the need for war.

Russia-Ukraine war prompts some messaging around renewables and the importance of energy independence

Russia's invasion of Ukraine in 2022 was described in some coverage, including a March 2022 *New York Times* column, as a "fossil fuel war." Columnist Farhad Manjoo argued that "by accelerating our transition to cheap and abundant renewable fuels, we can address two grave threats to the planet at once: the climate-warming, air-polluting menace of hydrocarbons and the dictators who rule their supply." In the same article, Leah Stokes, a political scientist at the University of California, Santa Barbara, furthered the point, claiming not enough people are talking about the connection between the Russia-Ukraine war and energy: "This narrative has not been out there—that this war is why we need to get off of fossil fuels."

A news <u>article</u> in the *New York Times* made a similar case that same month: "As the world reels from spikes in oil and gas prices, the fallout from Russia's invasion of Ukraine has laid bare a dilemma: Nations remain extraordinarily dependent on fossil fuels and are struggling to shore up supplies precisely at a moment when scientists say the world must slash its use of oil, gas and coal to avert irrevocable damage to the planet." And, in a <u>Salon op-ed</u>, Carl Pope, former Executive Director of the Sierra Club, pointed to a range of crises that make this "the perfect moment for even conservatives to embrace a decarbonized energy sector and accelerate the shift from coal, oil and methane to wind, sun and other clean technologies."





Messaging about state and local governments taking things into their own hands was evident as a bipartisan group of Midwestern lawmakers tried to replace Russian oil with ethanol, advancing energy legislation that, while not renewable, complemented President Biden's ban on Russian energy. Representative Cheri Bustos, an Illinois Democrat associated with the bipartisan group, was quoted as saying: "With the cost of this war hitting Americans at the gas pump, it's time to bolster our fuel supply with home-grown biofuels."



Movement leaders highlight renewable energy as key to community safety

Renewable energy coverage throughout 2022 included significant references to renewable energy as it relates to safety. And a case study from 2021 provides important context and precedent for messaging: The devastating impacts of the Arctic Blast that hit Texas, Mississippi, Louisiana, Alabama, and Tennessee were caused in part by a failure of natural gas plants and pipelines, and movement leaders suggested that renewable energy poses a safer, more reliable alternative, capable of powering home heating in emergency situations. A post-mortem report on the Arctic Blast, released by the Movement For Black Lives in collaboration with Smile Trust (a grantee of The Solutions Project, sponsor of this analysis), highlighted "how the fossil fuel industry created the 'perfect' storm that left communities across [these states] living in dire, inhumane conditions." Leaders called for "pull[ing] resources from the fossil fuel industry and mak[ing] meaningful investments in our shared vision of community safety through climate mitigation and renewable energy."

Indeed, messaging included over 200 references to renewable energy's capacity to improve safety, and over 100 instances of messaging about renewable energy being resilient and reliable. As observed in water systems coverage, natural disasters and adverse weather events—storms, drought, flooding, etc.—were highly prevalent in 2021 and backward-looking coverage of these disasters combined with coverage of 2022's own major weather events. Many articles referenced the idea that maintaining safe, reliable power systems contributes to community resilience in these events. In fact, 30% of safety and resilience messaging occurred in articles that also referenced equity and justice or communities of color.



However, as referenced above, coverage over 2022 also included references to renewable energy unreliability—likely due in part to strong messaging by fossil fuel interests and right-wing lawmakers. As Gizmodo's Brian Kahn <u>observed</u>, "many conservative lawmakers have spent their time falsely demonizing renewables, relying on partial fixes and fossil fuel giveaways rather than the complete overhaul needed to ensure the lights stay on, and saying bitcoin mining will fix all this somehow."

Renewable energy offers better health outcomes-especially to communities of color

Although the majority of stories around renewable energy safety focused on resilience and safety, additional coverage of renewable energy promoted its role in public health (120 articles). The American Lung Association (ALA)'s *Zeroing in on Healthy Air* report, published in March, drew significant coverage. Along with the release, Harold Wimmer, national president and CEO of the Association, said, "Zeroemission transportation is a win-win for public health...the transportation sector is the nation's biggest source of carbon pollution that drives climate change and associated public health harms. This is an urgent health issue."

Of this health messaging, roughly half the articles employed an equity lens. This is attributable in part to several factors: (1) the ALA report, which outlines the disproportionate amounts of pollution concentrated in communities of color; (2) the Biden administration's equity-focused messaging about renewable energy and health; and (3) state and local commitments to end harmful resource extraction in areas that affect communities of color, such as the University Park neighborhood of Los Angeles.









Who's covering water? How equitably?

Based on our sample, outlets with highest number of water-focused articles; number of water articles containing equity and justice-focused messaging.

▶ Top by equity proportion

▶ Bottom by equity proportion

NATIONAL MEDIA

	Outlet	Water articles	Equity %
1.	AP The Associated Press	282	26%
2.	The New York Times	105	13%
3.	CBS News	78	3%
4.	San Jose Mercury News	70	17%
5.	Fox News	66	8%
6.	Sacramento Bee	39	15%
6.	Time	39	28%
7.	International Business Times	34	6%
7.	Tampa Bay Times	34	24%
8.	Honolulu Star Advertiser	33	18%
9.	Arizona Republic	29	24%
9.	Arkansas Democrat Gazette	29	7%
10.	San Francisco Chronicle	28	11%





INDUSTRY & TRADE

▶ Top by equity proportion

▶ Bottom by equity proportion

	Outlet	Water articles	Equity %
1.	Greenwire	201	21%
2.	The Hill	121	15%
3.	Environment and Energy Daily	58	21%
4.	E&E News PM	45	24%
5.	Inside Climate News	40	28%
5.	Climatewire	40	33%
6.	Grist	31	13%
6.	Gizmodo/Earther	31	6%
7.	GreenBiz	13	17%
8.	Inside Cal/EPA	12	33%
9.	EcoWatch	9	11%
10.	Clean Technica	8	13%

Where is water covered?

STATES MENTIONED

Based on our sample of state and local renewable water coverage, number of times each state was mentioned.

1.	California	177
2.	New York	168
3.	Florida	68
4.	Texas	52
5.	Colorado	40

6.	Arizona	39
7.	Washington	34
8.	Virginia	34
9.	Minnesota	33
10.	Hawai'i	33





Who's speaking on water?

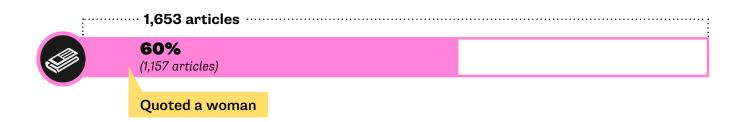
HUMAN-CENTERED REPORTING

Human-centered reporting is critical to honestly and equitably capturing the impacts of climate change and the solutions to tackle these intersecting problems. However, not all news articles covering water issues quote or reference people; some focus exclusively on the *what* without mentioning a *who*.



WOMEN

In water coverage, of articles that quoted a person, a majority of them quoted a woman.



Note: this analysis identifies 'women' as those with she/her pronouns in articles or whose gender identification is otherwise evident through online research.





Most-referenced women

Based on our sample, number of times each woman was mentioned or quoted in water systems coverage.

Continuing a trend seen since 2019, the most-referenced women in our sample of water systems coverage are overwhelmingly affiliated with the government.

1.	Radhika Fox	Principal Deputy Assistant Administrator, EPA	22
2.	Deanne Criswell	Administrator, FEMA	21
3.	Kamala Harris	Vice President	19
4.	Shelley Moore Capito	US Senator	16
5.	Kathy Hochul	Governor, New York	15
5.	Tanya Trujillo	Assistant Secretary, Department of the Interior	15
5.	Gretchen Whitmer	Governor, Michigan	15
6.	Karla Nemeth	Director, California Department of Water Resources	14
6.	M. Camille Calimlim Touton	Deputy Commissioner, US Department of the Interior	14
7.	Deb Haaland	Secretary of the Interior	13
7.	Karine Jean-Pierre	White House Press Secretary	13
8.	Debbie Dingell	US Representative (D-Michigan)	10
9.	Heather Cooley	Director of Research, Pacific Institute	8
9.	Michelle Lujan Grisham	Governor, New Mexico	8
10.	Melanie Benesh	Legislative Attorney, Environmental Working Group	7
10.	Lisa Evans	Senior Counsel, Earthjustice	7
10.	Jennifer Granholm	Secretary of Energy	7
10.	Fadwa Hammoud	Solicitor General, Michigan	7
10.	Rebecca Kimitch	Spokeswoman, Metropolitan Water District of Southern California	7
10.	Betsy Southerland	Former EPA Official	7





INSTITUTIONS AND ORGANIZATIONS

Most-referenced institutions

Based on our sample, number of times each institution was mentioned or a spokesperson from that institution was quoted.

1.	US Environmental Protection Agency	402	Federal or International Government
2.	US Department of the Interior	195	Federal or International Government
3.	US Army	167	Federal or International Government
4.	Federal Emergency Management Agency	141	Federal or International Government
5.	National Weather Service	138	Federal or International Government
6.	National Oceanic and Atmospheric Administration	103	Federal or International Government
7.	US Department of Agriculture	84	Federal or International Government
8.	United Nations	58	Federal or International Government
9.	California Environmental Protection Agency	56	State, Local, or Tribal Government
10.	White House	51	Federal or International Government
11.	Natural Resources Defense Council	49	Federal or International Government
12.	California Department of Water Resources	46	State, Local, or Tribal Government
13.	Accor	44	Business, Utility, or Trade Group
14.	Metropolitan Water District of Southern California	43	Business, Utility, or Trade Group
15.	US Department of Justice	41	Federal or International Government
16.	US Department of Energy	40	Federal or International Government
16.	US Drought Monitor	40	Federal or International Government
17.	Sierra Club National	39	Nonprofit or NGO
18.	National Hurricane Center	37	Federal or International Government
19.	Earthjustice	34	Nonprofit or NGO





Messaging by the Numbers

TOTAL ARTICLES REVIEWED:

2,358

20%
REFERRED
TO EQUITY
& JUSTICE

460 articles

20%
REFERENCED
COMMUNITIES
OF COLOR
474 articles

36%
POSITIVE/
SOLUTIONSFOCUSED
845 articles

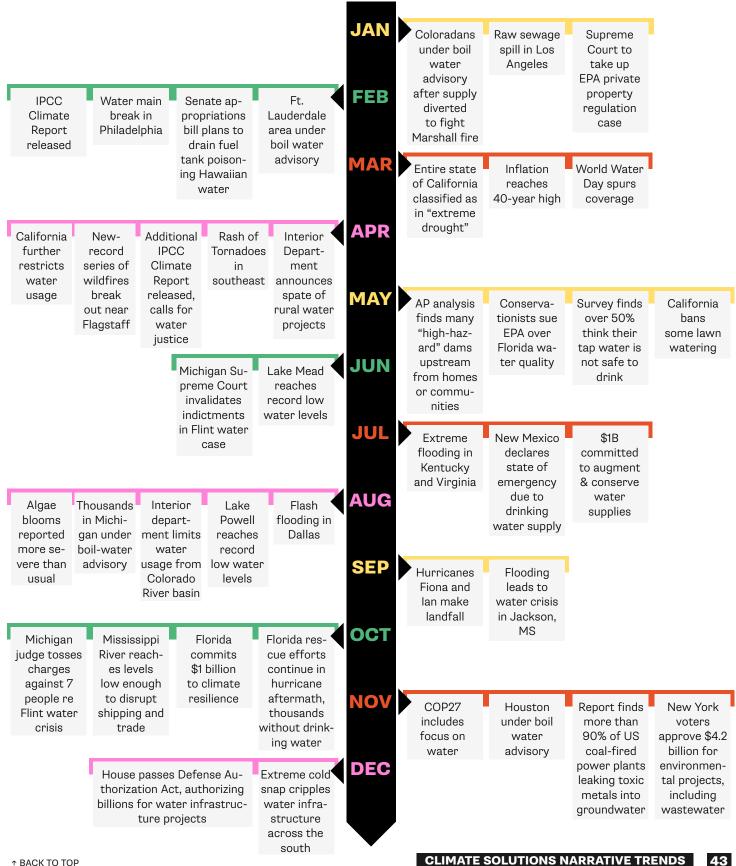
42%
QUOTED A WOMAN
SPOKESPERSON
OR LAWMAKER
985 articles







Water Events & Coverage Drivers







Water Narrative Alignment

We have broken down the larger renewable energy narrative into three major sub-narratives:



The positive narrative is shaped by stories and messages that focus on positive change for our water systems that's happening now: active projects, campaigns, and policy initiatives.



The neutral narrative contains messages that may support an aspect of the positive narrative but detract or could detract from another. It contains references to ongoing problems without explicit reference to possible solutions, as well as references to solutions that are hypothetical or controversial—not happening now.



Competing message trends consist of those that oppose a future with safe, universal, equitable access to functional water systems, or don't think one is possible. It also contains trends that actively compete for attention and therefore dilute the positive and neutral narratives.





Water Narrative Analysis

* While we tracked a long list of messages that appeared in coverage, the analysis in this section focuses on dominant messages and themes rather than the exhaustive list.

In 2021, we observed that coverage of water systems and water issues in the United States largely carried a narrative of crises with few solutions. The same was true for 2022, with contamination issues and natural disasters driving coverage.

CONTAMINATED WATER CRISES: BUSINESS AND GOVERNMENT BLAMED

Top Messages In This Trend

POSITIVE

Contaminated water cleanup is a solution happening now

NEUTRAL

- Contaminated water is bad for public health
- Contaminated water due to PFAs
- Contaminated water due to oil/fracking/fossil fuels
- Contaminated water due to flood water/sewage
- Contaminated water due to lead pipes
- Contaminated water due to industry/runoff/ag/pesticides
- Contaminated water especially affects BIPOC, indigenous, other vulnerable communities

COMPETING

Contaminated water due to PFAs is an isolated problem

Of the manifold water systems issues reported on in 2022, overwhelmingly the most-covered problems had to do with contamination—and messaging around contaminated water (1006 total messages) rose 76% from 2021 coverage. The most-covered source of contamination was PFAs (120), but other contaminants covered were fossil fuels, including fracking byproducts (114), industrial and/or agricultural runoff (114), floodwater (71), lead pipes (68), and sewage (48).





Inequitable impacts of contaminated water

Only 40% of articles concerning contaminated water contained references to equity and justice or communities of color—a damning statistic. Even in a media landscape that systemically under-covers these issues, it's abundantly clear that contaminated water is disproportionately affecting Black, Brown, and disadvantaged communities. One of the biggest contamination crises that drove coverage in 2022 was in Jackson, Mississippi, where flooding caused the city's water treatment plant to fail, leaving 180,000 residents without clean drinking water. Advocates were quick to condemn the crisis as being a result of human error, underinvestment in infrastructure, and environmental racism. In fact, 80% of Jackson residents are Black and 25% live in poverty. With pressure from movement leaders, the EPA opened a federal civil rights investigation into the state of Mississippi to determine if the state "discriminated against the majority Black population of the City of Jackson on the basis of race in the funding of water infrastructure and treatment programs and activities."

PFAs

As with coverage of PFAs in 2021, most 2022 stories that mentioned PFAs were at the state level. Some stories <u>highlighted</u> the inequitable, unjust impacts of PFA contamination on communities near chemical manufacturers, military sites, and airports, with many waste sites being located near low-income communities and communities of color. A story in *The New York Times* titled "PFAS: The 'Forever Chemicals' You Couldn't Escape if You Tried" painted a grim picture of the ubiquitous nature of these chemicals, pointing to a serious lack of regulation: "From packaging and products, PFAS have found their way into rainwater, soil, sediment, ice caps, and outdoor and indoor plants. The substances have been detected in the living tissues of animals around the world." A study released by Earthjustice in April 2022 took aim at Suncor Energy, a sand oil refinery, for dumping chemicals into Sand Creek and South Platte River: "Suncor's PFAs pollution is likely taken up by crops, creating another exposure point for the humans and animals that consume them."







Some solutions to PFAs appeared in coverage, including <u>cleanup</u> in the Hockanum River and other Connecticut sites and a process discovered by researchers at Northwestern University to <u>break down toxic chemicals</u> from everyday items. And at the federal level, the EPA took several steps to <u>address water pollution</u> in poor communities, <u>crackdown on PFAs</u>, and <u>designate</u> Forever Chemicals as hazardous.

There was also robust messaging about contamination's disproportionate effect on BIPOC, indigenous, and other vulnerable communities (55 articles), accompanied by messaging around the need for more equitable water policies (48 articles).

Polluters: Fossil fuels, industry & agriculture

News coverage related to water systems blamed fracking, industry, and agriculture for water contamination: 220 articles contained messaging about at least one of these parties as a cause for contamination. The scale of pollution is significant. A <u>report</u> from the Environmental Integrity Project published in March 2022 found that 50% of US waterways are impaired by pollution.

Of the articles we reviewed, 30% of articles about polluters contained references to equity and justice and/or communities of color. In May 2022, the Biden administration announced a new enforcement strategy designed to hold polluters accountable for the impacts they have on poor communities and communities of color. At a news conference announcing the strategy, Attorney General Merrick Garland said: "Although violations of our environmental laws can happen anywhere, communities of color, indigenous communities and low-income communities often bear the brunt of the harm caused by environmental crime, pollution and climate change".

Polluters specifically called out in coverage were companies working in fracking, oil, gas, and mining. Much of the coverage was sparked either by the release of studies/reports or government lawsuits or sanctions such as fines.

The agricultural industry also appeared in water systems coverage, primarily in the context of being <u>blamed</u> for nutrient pollution, which refers to "any excess nitrogen and phosphorus in bodies of water.... most commonly caused by human activities." Chemical fertilizers, used to help grow crops, often end up in groundwater, polluting it. Another source of nutrient pollution discussed in coverage comes from urban sewage—this most frequently contaminates water as the result of failed infrastructure or a natural disaster—both of which occurred in 2022.





EXTREME WEATHER

Top Messages In This Trend

POSITIVE

- Water solutions are led by the federal government
- Water solutions are led by state/local governments
- Water conservation is a solution happening now
- Updating water infrastructure is a solution that needs to happen
- Land and wetland conservation is a solution that needs to happen

NEUTRAL

- Drought is happening now
- Climate change is causing or worsening water problems
- Flooding is happening now
- Water scarcity is a problem happening now
- A natural disaster affecting the water especially affects BIPOC, indigenous, vulnerable communities

COMPETING

> There are no solutions; fixing water problems is impossible

2022 was another year of extreme weather. There were <u>18 natural disasters</u> that caused more than \$1B in damage each, well above the average.

From Texas to Maine, starting in January 2022 and closing out the year in December, severe winter storms impacted tens of millions of people. March set a new record with 233 tornadoes reported. Over the summer, flash flooding resulted from five 1,000-year rainfall events. The previously mentioned Jackson, Mississippi water crisis also resulted from flooding (and poor infrastructure). Montana also saw an historic flood, which caused evacuations in Yellowstone National Park. And in the fall, Florida and Puerto Rico were hit with hurricanes, receiving two feet of rain.

Coverage also followed a <u>year of extreme drought</u> across parts of the United States in 2022, with heatwaves setting new records, sparking <u>wildfires</u> in Arizona and New Mexico. And the Southwestern United States fought a megadrought, the most severe in the region in 1,200 years, driving significant coverage. Historically <u>low water levels in the Mississippi River</u> made it difficult for barges to get through and disrupted grain shipping. And of course, much coverage was dedicated to the <u>Colorado River</u>, which hit dangerously low levels.





Interestingly, while there were 362 instances of messaging discussing how climate change is causing or making climate problems worse in general, those messages only surfaced in about only 20% of articles reporting on drought, flooding, or other natural disasters. Following a correlation we observed last year, attribution of extreme weather to climate change was more likely to occur in non-"disaster reporting" contexts, such as coverage of the reports the UN IPCC issued this year.

A federal climate <u>report</u> released in November discussed cascading climate dangers: "As climate risks continue to increase in scale and frequency, multiple climate hazards and cascading climate impacts are disrupting essential societal systems in every part of the country." Another <u>report</u> was published by the state of California, "Indicators of Climate Change in California." In response, Yana Garcia, Secretary of the California EPA, said the report shows "how some of our glaciers have all but disappeared forever, and how a hotter and drier planet is threatening drinking water supplies and public health." And a Gallup poll showed that one-third of Americans have faced extreme weather events in recent years.

While the overall percentage of water articles mentioning equity and justice is down from 2021, our analysis found that 22% of articles that included messaging about extreme weather also mentioned equity and justice or communities of color. This is an increase over the previous year. Of disaster coverage that mentioned communities of color and/or equity and justice, only 30% of articles were positive or solutions focused.



Historic drought with little to do about it

2022 saw historically low levels of precipitation and drought conditions, not only in California and the Southwest, but into the mountain west and southeast, too— prompting messages about imminent drought (440 instances) and water scarcity (139 instances) to dominate coverage. Of articles containing these messages, only 25% contained messaging attributing the drought to climate change. Of drought articles, 28% were positive or solutions focused.

While droughts have plagued parts of the country since 2011—with a gap between 2017 and 2020—2022 started off particularly poorly: California's drought worsened when the Sierra Nevada snowpack was found to be dwindling. In a Sacramento Bee article, Sean de Guzman, manager of California's snow surveys, said, "Our snowpack has hit this flatline and we're not getting any snow...We're starting to get more concerned."





Coverage of <u>drought</u> continued into March, when Jon Gottschalck, chief of the Operational Prediction Branch at NOAA's Climate Prediction Center said in a NOAA release: "Severe to exceptional drought has persisted in some areas of the West since the summer of 2020 and drought has expanded to the southern Plains and Lower Mississippi Valley." In August, droughts were impacting over 30% of Americans, according to data from the US Drought Monitor. And a NOAA analysis released in November <u>showed</u> "October saw higher-than-average temperatures and lower-than-average precipitation."

Aside from a Native American tribe's <u>agreement</u> "to lease more of its water to help address dwindling supplies in the Colorado River Basin," the primary solution to drought discussed in much of the year's coverage was for residents to limit water consumption. Late in the year, the Biden administration <u>offered</u> \$84 million in federal funds for drought resilience projects.

With few options available, local and federal governments were forced to step up regulation and enforce measures to restrict water use. Las Vegas <u>limited</u> swimming pool sizes, and the Biden administration announced <u>major cuts</u> to use of water from the Colorado River, which is "reaching a tipping point in its 23-year drought" according to Bureau of Reclamation Commissioner Camille Calimlim Touton.



California spotlight

In California, Governor Newsom continued trying to convince residents to voluntarily stop using water, allowing the state's 436 local water agencies to "create their own plans to prepare for impending water shortages." The State Water Resources Control Board did adopt rules to fine residents for wasting water and prohibiting watering lawns within 48 hours after rainfall. In March, Newsom issued an executive order calling for stricter conservation measures and threatened in May that residents could see mandatory water cuts. Some local agencies took stricter steps, including the Virgenes Municipal Water District, which began cutting off water.





Despite the drought emergencies in California, the state's almond farms—a highly water-dependent crop—expanded by 78%, according to a report from Food & Water Watch. And perhaps unsurprisingly, some coverage focused on how celebrities routinely flout water restrictions. Finally, later in the year, according to a Gizmodo article, federal authorities stepped in and warned cities and industrial water users in California to prepare for cuts in 2023 "as the state enters what is likely to be a fourth consecutive year of drought."

Drought impacts food across the country

While California and California-based organizations received a high proportion of drought-related coverage, roughly 40 messages appeared connecting drought with rising food costs to consumers across the country. Drought <u>cost</u> California agriculture billions, disrupted grain shipping along the Mississippi river, caused vegetable prices to <u>soar</u>, and dairy cows to produce less.

The Colorado River Basin, which provides water for more than 40 million people, is in crisis and was a major focal point in 2022 coverage of drought-related issues in the United States. Lake Powell along the Utah-Arizona border saw water levels fall "to their lowest threshold ever, since the lake was created by the damming of the Colorado in 1963," according to <u>Grist</u>.

States served by the Colorado River are in an intense battle, strongly <u>asserting</u> their rights to water use from the river or. Meanwhile, tribes served by the river are <u>struggling</u> to gain usage rights. These conflicts allude to possible future conflicts or "water wars" in the future (11 messages). For example, Nebraska <u>preemptively</u> diverted water from the Platte River, which it shares with Colorado, "to secure its portion of the river's water supply and help protect communities, businesses, agriculture and the environment."



Major floods impacted water systems

Flooding was another major theme in coverage of water systems in 2022. In our sample, there were 333 instances of messaging about flooding, covering major floods including April's flooding (and tornadoes) in the southeast and devastating floods from Kentucky to Nevada in July. Stories also focused on floods' impacts on infrastructure and drinking water, with 21% of these articles mentioning contaminated drinking water.





Flooding in Jackson, Mississippi (see above), where flooding triggered a <u>major drinking water crisis</u>, led to messaging not only about neglected <u>infrastructure</u>, but also issues of equity. And in November, the release of the National Climate Assessment generated <u>coverage</u> tying flooding to "consequences beyond immediate damages...[including] runoff that damages crops and water supplies."

While most coverage was focused on the myriad crises and problems, there was some discussion of solutions to curtailing the impacts of flooding. An op-ed in the *Virginian-Pilot* penned by Christy Everett of the Chesapeake Bay Foundation and George Clarke, president of the construction firm MEB, Inc., called for Gov. Glenn Younkin to make good on his commitments for coastal resilience: "Fortunately, there is an efficient way to both prevent flooding and reduce pollution to waterways: strong investment in nature-based resiliency projects." And in the Great Lakes region, there was coverage of a <u>study</u> that "will help identify needs for better infrastructure to slow progression of... destructive forces," including flooding.

Mild wildfire season still affected water supplies

While many experts were predicting a devastating wildfire season in 2022 given drought and a shortage of firefighters, it was relatively mild. There was still some coverage of wildfires, including forced evacuations and red flag warnings across Arizona and New Mexico in <u>April</u>, and discussion of how wildfires and scorched trees can <u>disrupt</u> water supplies.

WATER INFRASTRUCTURE IMPROVING, LONG ROAD AHEAD

Top Messages In This Trend

POSITIVE

- Water solutions are led by the federal government
- Water solutions are led by state/local governments
- Water solutions are led by movement/communities/activists
- Contaminated water due to lead pipes is happening now
- Updating water infrastructure is a solution happening now
- Updating water infrastructure is a solution that needs to happen

NEUTRAL

- Climate change is causing or worsening water problems
- Contaminated water is bad for public health
- Contaminated water due to lead pipes is happening now

COMPETING

↑ BACK TO TOP

There are no solutions; fixing water problems is impossible





Our analysis in 2021 showed coverage of water-related infrastructure was largely negative—focused on problems and crises, with few solutions being discussed or implemented. 2022's outlook was slightly improved, with roughly 50% of coverage including messaging about the urgent need for infrastructure solutions and 50% including messaging about infrastructure solutions currently being implemented.

While instances of "doom and gloom" messaging related to water systems fell in 2022, there was a narrative about infrastructure updates being too expensive, especially for vulnerable communities. For example, an <u>article</u> in *The Daily Oklahoman* discussed a possible rate increase the city was considering to fund \$1.7 billion in infrastructure improvements.

Government leadership was again positioned as leading on water solutions, with movement leaders coming in second place, followed by tech. Interestingly, business was far behind, especially when compared with the volume of coverage in our renewable energy analysis that positioned business as leading on technology and implementation.

Federal Action

Articles in our sample discussed moves by federal agencies—aided by the infrastructure bill—to fix water infrastructure, respond to drought across the country, and authorize projects to improve flood protection. But even the government acknowledged that more needed to be done. The EPA in particular appeared in several articles over its water-related efforts and environmental justice rhetoric. In January, Administrator Michael Regan announced a \$688 million agenda to support water infrastructure, and vowed to "do better" to protect poor communities and increase monitoring and enforcement of air and water quality standards. This followed Administrator Regan's 2021 tour of impacted communities, which raised cautious hopes: "actually showing up, coming in to our communities to see, to breathe and to smell what we've been talking about for years," said Rev. James Caldwell of the Coalition of Community Organizations in Houston, Texas, in a *New York Times article*.

Still, the EPA's efforts met criticism in the face of many agency shortcomings. In May, Arizona Democrats turned their sights on the EPA's water programs for "failing" to reach Indigenous communities. In an effort to institutionalize the agency's commitment to environmental justice, the EPA launched a new office in September: the Office of Environmental Justice and External Civil Rights. But from data gaps to an NRDC report showing a history of racial disparities in allocating federal funding for water infrastructure, the media narrative shows skepticism about the agency's prospects for success in this area. And the EPA was hit by a lawsuit in August, which according to a Greenwire article, "aims to compel EPA to boost oversight and regulation of a slew of dumps and landfills holding toxic coal ash dust and sludge."





The agency's image with movement leaders wasn't helped by its <u>choice</u> to uphold a Trump-era decision not to regulate perchlorate in drinking water—the chemical has been linked to brain damage in infants. And while internal emails and memos showed activists helped <u>spur</u> the EPA to act on the lead contamination crisis in Benton Harbor, Michigan, there was fury over how long it took the agency to begin helping the majority-Black community.

A bright spot for the EPA appeared in May when the agency <u>upped</u> its ability to regulate contamination from Forever Chemicals, after a push from actor <u>Mark Ruffalo</u>, co-founder of The Solutions Project.

State action—and inaction

The Supreme Court <u>ruling</u> in June, which gutted the EPA's ability to regulate industry greenhouse gas emissions, emphasized the need for individual states to step up and take action, many of which made use of funds from the Infrastructure Investment and Jobs Act. For example, Michigan Governor Whitmer <u>signed</u> over \$4.7 billion for infrastructure projects, including money for water upgrades.

And Flint, Michigan was back in the news when the state's Supreme Court <u>invalidated</u> indictments related to the Flint water crisis. Around this time, Vice President Harris went on a <u>listening tour</u> of several cities that are working to remove lead pipes. States and cities undertaking such efforts that appeared in coverage included <u>New Jersey</u>, <u>Ohio</u>, <u>Denver</u>, <u>CO</u>, <u>Benton Harbor</u>, <u>MI</u>, <u>Jackson</u>, <u>MS</u>, and <u>Chicago</u>, <u>IL</u>—a list containing several majority-Black communities.













Who's covering food systems? How equitably?

Based on our sample, outlets with highest number of food systems-focused articles; number of food systems articles containing equity and justice-focused messaging.

- ▶ Top by equity proportion
- ▶ Bottom by equity proportion

NATIONAL MEDIA

	Outlet	Food systems articles	Equity %
1.	AP The Associated Press	130	18%
2.	The New York Times	129	29%
3.	Arkansas Democrat Gazette	111	15%
4.	Minnesota Star Tribune	59	27%
5.	The Houston Chronicle	58	29%
6.	APNews.com	49	10%
7.	CBS News	48	23%
8.	NBC News	46	41%
9.	Honolulu Star Advertiser	45	47%
9.	Bloomberg	45	11%
10.	Fox News	42	26%





INDUSTRY & TRADE

▶ Top by equity proportion

▶ Bottom by equity proportion

	Outlet	Food systems articles	Equity %
1.	Greenwire	105	19%
2.	The Hill	101	35%
3.	Environment and Energy Daily	61	21%
4.	GreenBiz	53	34%
5.	Grist	29	34%
6.	Climatewire	26	23%
7.	Inside Climate News	25	24%
8.	Treehugger	17	29%
9.	E&E News PM	12	33%
10.	Gizmodo/Earther	9	11%

Where are food systems covered?

STATES MENTIONED

Based on our sample of state and local food systems coverage, number of times each state was mentioned.

1.	New York	175
2.	California	132
3.	Arkansas	111
4.	Texas	97
5.	Minnesota	83

6.	Florida	57
7.	Ohio	52
8.	Virginia	47
9.	Washington	45
10.	Illinois	45





Who's speaking on food systems?

HUMAN-CENTERED REPORTING

Human-centered reporting is critical to honestly and equitably capturing the impacts of climate change and the solutions to tackle these intersecting problems. However, not all news articles covering food systems quote or reference people; some focus exclusively on the *what* without mentioning a *who*.



Human-centered reporting is on the upswing: In 2021, 63% of articles in our sample quoted or referenced a person.

WOMEN

In food systems coverage, of articles that quoted a person, a majority of them quoted a woman.



Compared to 39% in 2021.

Note: this analysis identifies 'women' as those with she/her pronouns in articles or whose gender identification is otherwise evident through online research.





Most-referenced women

Based on our sample, number of times each woman was mentioned or quoted in food systems coverage.

1.	Debbie Stabenow	US Senator (D-Michigan)	27
2.	Nikki Fried	Former Florida Commissioner of Agriculture	17
3.	Ivanka Trump	Former Senior Advisor, Trump White House	15
4.	Nancy Pelosi	Speaker of the House, US Representative (D-California)	10
5.	Deb Haaland	Secretary of the Interior	9
6.	Chellie Pingree	US Representative (D-Maine)	8
6.	Anne Schechinger	Midwest Director, Environmental Working Group (EWG)	8
6.	Abigail Spanberger	US Representative (D-Virginia)	8
7.	Cindy Axne	US Representative (D-lowa)	7
7.	Susan Collins	US Senator (R-Maine)	7
7.	Lisa Davis	Senior Vice President, No Kid Hungry Campaign	7
7.	Karine Jean-Pierre	White House Press Secretary	7
7.	Lisa Murkowski	US Senator (R-Alaska)	7
8.	Amy Klobuchar	US Senator (D-Minnesota)	6
8.	Kim Schrier	US Representative (D-Washington)	6
8.	Beth Thompson	Minnesota State Veterinarian	6
9.	Julie Anna Potts	President and CEO, North American Meat Institute (NAMI)	5
9.	Amelia Flores	Chairwoman, Colorado River Indian Tribes (CRIT)	5
9.	Tracy Stone-Manning	Director, Bureau of Land Management (BLM)	5
9.	Melinda French Gates	Co-Founder, Bill and Melinda Gates Foundation	5
9.	Denise Derrer-Spears	Spokeswoman, Indiana State Board of Animal Health	5
9.	Kathy Hochul	Governor, New York	5
9.	Diane Pratt-Heavner	Director of Media Relations, School Nutrition Association	5
9.	Kim Reynolds	Governor, Iowa	5
9.	Kyrsten Sinema	US Senator (I-Arizona)	5
9.	Tina Smith	Senator (D-Minnesota)	5





INSTITUTIONS AND ORGANIZATIONS

Most-referenced institutions

Based on our sample, number of times each institution was mentioned or a spokesperson from that institution was quoted.

1.	US Department of Agriculture	931	Federal or International Government
2.	United Nations	127	Federal or International Government
3.	US Environmental Protection Agency	100	Federal or International Government
4.	US Department of the Interior	75	Federal or International Government
5.	White House	54	Federal or International Government
6.	Centers for Disease Control and Prevention	53	Federal or International Government
6.	Walmart	53	Business, Utility, or Trade Group
7.	American Farm Bureau Federation	51	Professional Association
8.	Accor	50	Business, Utility, or Trade Group
9.	US Food and Drug Administration	41	Federal or International Government
10.	Tyson Foods	40	Business, Utility, or Trade Group
11.	University of Arkansas System Division of Agriculture	39	University or College
12.	Cargill	33	Business, Utility, or Trade Group
13.	US Drought Monitor	31	Federal or International Government
13.	Chicago Board of Trade	31	State, Local, or Tribal Government
14.	Facebook	29	Business, Utility, or Trade Group
14.	Amazon	29	Business, Utility, or Trade Group
14.	European Union	29	Federal or International Government
15.	National Oceanic and Atmospheric Administration	27	Federal or International Government
15.	JBS	27	Business, Utility, or Trade Group





FOOD SYSTEMS MESSAGES & NARRATIVE

Messaging by the Numbers

TOTAL ARTICLES REVIEWED:

2,416



15% **REFERENCED COMMUNITIES** OF COLOR 370 articles

25% **REFERRED TO EQUITY** & JUSTICE 608 articles

39% **QUOTED A WOMAN SPOKESPERSON** OR LAWMAKER 951 articles

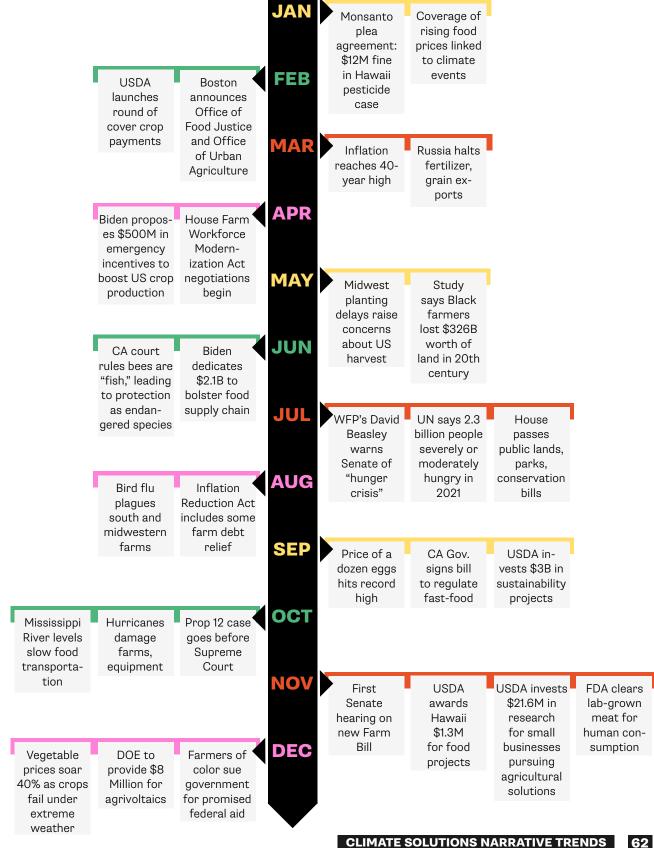
42% POSITIVE/ **SOLUTIONS-FOCUSED** 1,023 articles







Food Systems Events & Coverage Drivers







Food Systems Narrative Alignment

We have broken down the larger food systems narrative into three major sub-narratives:



The positive narrative emphasizes the aspects of our food system that are working equitably and sustainably, along with active campaigns to improve soil quality and sustainability, agriculture, and access to healthy food.



The neutral narrative contains messages that may support an aspect of the positive narrative but detract or could detract from another. It contains messages calling attention to the manifold issues within our food systems, even if solutions are not mentioned.



Competing message trends actively discredit food system solutions or compete for attention and therefore dilute the positive and neutral narratives.





Food Systems Narrative Analysis

* While we tracked a long list of messages that appeared in coverage, the analysis in this section focuses on dominant messages and themes rather than the exhaustive list.

WAR, SUPPLY CHAIN DISRUPTION, NATURAL DISASTERS, INFLATION

COMBINE TO CREATE COST-OF-FOOD CRISIS

Top Messages In This Trend

POSITIVE

 No messages that we aligned with the "positive narrative" were seen in this trend

NEUTRAL

- Food supply chain is unstable
- Climate change negatively impacts agriculture production now
- Growing food insecurity is a problem happening now
- COVID is making other food systems problems worse
- Contaminated food is happening now
- Pathogens/disease are negatively impacting agriculture production
- Natural disasters are negatively affecting food systems

COMPETING

 No messages that we aligned with the "competing narrative" were seen in this trend

Cost crisis

From climate disasters to war, coverage of food systems was dominated by the human-caused dynamics causing food prices to soar. Top messages focused on the unstable food supply chain (374 messages), food insecurity (236 messages), and contaminated food (195). There were also 53 instances of doom and gloom messaging focused on the food cost crisis. Grocery prices skyrocketed-the most in one year since 1979. And inflation paired with Avian flu were attributed with causing increased prices for Thanksgiving turkeys.





But the primary theme in coverage related to food costs was the impact of the Russia-Ukraine war, which together "account for more than a quarter of the global trade in wheat, as well as a fifth of corn sales," according to a *Houston Chronicle* article published in February. "It's not just the threats to grain shipments that could drive inflation," stated the article. "Fertilizer prices are skyrocketing on concerns that Russia's invasion of Ukraine will curtail global supplies." This prompted Secretary of Agriculture Tom Vilsack to warn US companies not to take advantage of the situation by price gouging fertilizer. The wheat market saw prices on a rollercoaster going up and down in response to war, sanctions, and market uncertainty. The Russia-Ukraine conflict drove anxiety globally about food supply chains, alongside drought conditions that hurt crops from the US Farm Belt to China: "Crops around the world are suffering from droughts. Drought is shrinking crops from the U.S. Farm Belt to China's Yangtze River basin, ratcheting up fears of global hunger and weighing on the outlook for inflation."

With many countries banning Russian oil in sanctions, the demand and price of oil increased, which impacted shipping prices.



Natural disasters

Natural disasters drove significant coverage of food-related issues in 2022, with 241 instances of messaging attributing agriculture problems to climate change. (Of these articles, 33 also contained doom and gloom messaging, which represents a decrease from 2021). At a virtual event at the World Economic Forum in January, IMF Managing Director Kristalina Georgieva was quoted arguing that "climate change is squeezing agricultural production hard enough to worsen global inflation," and that climate impacts would continue to increase food prices throughout the year.

Drought negatively impacted food production in the US. Exacerbating pre-existing issues and stressors, including increased fuel/fertilizer costs, drought forced ranchers to <u>slaughter</u> large percentages of their herds. And in <u>California</u>, more than half a million acres went unplanted due to dry conditions and drought. Farmers in the state's Shasta Water district were <u>warned</u> to stop diverting water for farm use, while several CA water districts were reported to face <u>difficult decisions</u> regarding water cuts and farmers. A Kansas town went





as far as to engage in "water mining," tapping ranch water from 70 miles away to "keep kitchen faucets and farm irrigators running."

In August, the Biden administration <u>announced</u> cuts to Colorado River water use for 2023, which are expected to impact farmers, among others. Indigenous communities received some coverage related to the Colorado River Basin, including some solutions-focused coverage highlighting Indigenous wisdom and experience in water management. According to <u>reporting</u> from the *Arizona Republic*, tribes are "taking a more active role in water management throughout the Colorado River Basin... also setting aside water and riverine areas to preserve and restore natural habitats." And Tribal leaders are beginning to be more <u>included</u> as equals in state and regional decisions being made about water use. In October, coverage turned to the <u>drought</u> along the Mississippi River, which impacted agriculture as well as shipping of agricultural products.

While most natural disaster coverage related to food focused on drought, there were several articles that drew attention to Hurricane lan's <u>impact</u> on Florida's citrus groves, which hurt production and caused orange and orange juice prices to <u>spike</u>.

Bird flu

Coverage in our sample included 131 messages related to pathogens and disease. Most of these articles discussed the impact of bird flu on US poultry and egg farmers. There is some research connecting changes in bird migrations due to climate change and increased chances of transmission of avian flu, but we didn't see this appear meaningfully in coverage.







MOVEMENT LEADERS FIGHT FOOD INSECURITY; BUSINESS LEADERS TURN TO TECH SOLUTIONS

Top Messages In This Trend

POSITIVE

- Food systems solutions are led by movements and communities
- Food systems solutions are led by science and tech
- Regenerative agriculture is a food systems solution happening now
- Regenerative agriculture is good for soil health
- Universal healthy food access is key to equity & justice
- Carbon sequestration is a food solution happening now
- Food sovereignty is a food solution happening now
- Universal healthy food access is a goal to strive for
- Urban farming is a food systems solution happening now
- Vertical farming is a food systems solution happening now
- Land conservation is a food solution happening now

NEUTRAL

- Food systems solutions are led by business
- Growing food insecurity is a problem happening now
- COVID is making other food systems problems worse
- Natural disasters are negatively affecting food systems

COMPETING

Regenerative agriculture is too expensive

Significant coverage of movement and community leaders pushing for solutions

Our analysis shows that there were 342 instances of messaging that positioned advocates and communities as leading on food issues, with half of that messaging referencing equity and justice and/ or communities of color. This shows that movement leaders have been effective in drawing attention to these narrative frames. First due to COVID, then due to inflation, there was a flood of coverage about food banks and other mutual aid organizations supporting food insecure communities. Within the articles referencing movement leadership, 77 were about food insecurity, and 40 focused on supply chain issues, while there were 58 articles with messaging about COVID's worsening of food issues.







Beyond direct interventions, coverage also highlighted lobbying efforts to encourage government—both federal and local—to implement more equitable policies (65 messages). For example, an article in *The Grio* about President Biden's equity commission at the Department of Agriculture, interviewed movement leaders who are helping push the department to address its history of discrimination and better support Black farmers. There were 45 articles containing messaging pushing for universal healthy food access, and 75 articles containing messaging in support of regenerative agriculture practices. This coverage included an article about 5 Black innovators who reshaped gardening and farming, an article about 12 women who are cultivating sustainable food systems, and an op-ed in The Hill from a senior VP from the Environmental Defence Fund arguing the importance of adapting food systems in the face of climate change, but with no mention of equity.

Another important trend in coverage of food systems was the variety of ways communities and small farmers are going hyperlocal to combat the food cost crisis. There were 102 messages related to food sovereignty, including increasing food equity by empowering people to grow their own food through urban or vertical farming (28 messages), and a number of articles about the more than 15,000 Climate Victory Gardens that have sprouted up around the country. An op-ed in the *Pittsburgh Post-Gazette* by Ryan Walsh at the food nonprofit Grow Pittsburgh, described gardens as "scenes of self-sufficiency and collective empowerment. They are among the oldest forms of mutual aid and food justice." Several articles drew attention to small farmers who have avoided high shipping costs by engaging local markets as well as the increased consumer demand for local food producers.

Businesses turn to tech solutions

In addition to coverage of movement and community leaders' responses to food insecurity, another trend in coverage was sponsored content highlighting businesses' efforts to engage in regenerative agriculture, including Keurig Dr Pepper, Egg Innovations and Natural Grocers. And Bayer and Perdue AgriBusiness announced a regenerative farming collaboration "aimed at large-scale carbon emission reductions and creating a model for a more sustainable food value chain spanning across Perdue's entire grain network."

There were also several business and technology stories about how business will make food cheaper and more environmentally friendly, including through <u>alternative meats</u>, <u>vertical farming</u>, and <u>artificial intelligence</u>. The Farmers Business Network in collaboration with the Environmental Defence Fund also <u>announced</u> the creation of a \$25 million fund to support sustainable farming practices.





GOVERNMENT LEADERSHIP

Top Messages In This Trend

POSITIVE

- Food systems solutions are led by the federal government
- Food systems solutions are led by state/local governments
- Enacting equitable food policies is a solution happening now
- Enacting equitable food/ag policies needs to happen
- Regenerative agriculture is a food systems solution happening now
- Food systems policies need to support rural communities
- Land conservation is a food solution happening now

NEUTRAL

- Food supply chain is unstable
- Climate change negatively impacts agriculture production now
- Growing food insecurity is a problem happening now
- COVID is making other food systems problems worse
- Contaminated food is happening now
- Pathogens/disease are negatively impacting agriculture production
- Natural disasters are negatively affecting food systems

COMPETING

- Regenerative agriculture is partisan
- Regenerative agriculture is too expensive

While messaging about movement/community leadership (342 messages) outpaced messaging about federal leadership (279) on the one hand and state leadership (213) on the other, overall government leadership messaging still clearly dominated. When combining state and federal leadership messaging there were 492 messages on this theme.

Coverage of federal leadership on food issues centered on the Inflation Reduction Act. This included a <u>failed attempt</u> by the Biden administration to launch a \$4 billion program to help Black farmers, which was rewritten to remove race and passed as part of the IRA, to the ire of Black farmers who felt betrayed. On the plus side, the act included \$20 billion for climate smart farming (regenerative agriculture), and according to <u>reporting</u> from the Arkansas Democrat-Gazette, "language addressing the agricultural and nutritional needs of rural communities, including financial resources for farmers and improvements to summer food programs." Also as part of IRA, the Department of Agriculture <u>canceled</u> \$800 million in debts for 13,100 farmers.





Even before IRA, the Department of Agriculture announced in February a partnership with farm groups that would shift up to 30 million acres of farmland to conservation practices by 2030, as well as a \$1 billion program to support climate smart commodities. Spurred in part by IRA's \$20 billion commitment to climate smart farming, there were 42 instances of messaging about regenerative agriculture, including several articles in December about cover cropping and Silvopasture.

Finally, in July, President Biden <u>announced</u> his administration's plan to plant over 1 billion trees, prompting coverage of the plan and the bipartisan legislation passed in 2021 directing the Forest Service to do just that.



FOOD CONTAMINATION A CONTINUING PROBLEM

Top Messages In This Trend

POSITIVE

- Food systems solutions are led by science/tech
- Universal healthy food access is a goal to strive for

NEUTRAL

- Emissions/pollution/contamination caused by food production are a problem happening now
- Contaminated food is happening now
- Pathogens/disease are negatively impacting agriculture production
- Emissions/contaminants caused by food production are bad for the environment
- Contamination is business's fault
- Contamination disproportionately affects BIPOC and/or vulnerable communities

COMPETING

 No messages that we aligned with the "competing narrative" were seen in this trend





Food and soil contamination continued to be a coverage trend in 2022, appearing in 230 articles, including 64 articles about bird flu (discussed above) and 25 articles about pollution from agricultural emissions.

Coverage included 19 articles about listeria or <u>E. Coli</u>. There was an Oregon ground beef <u>recall</u> in January, a nationwide ground beef <u>recall</u> in March, and an e. Coli <u>public health alert</u> surrounding food prep company HelloFresh in September. Listeria led to recalls of <u>beef jerky</u>, <u>smoked salmon</u>, and <u>ice</u> cream.

PFAs appeared in 12 articles related to food or soil contamination, <u>including</u> "beef produced at a small Michigan farm [which] was found to contain toxic 'forever chemicals' after the cattle were fed crops grown with fertilizer made from contaminated wastewater biosolids."

The solutions to issues of food contamination are complicated, leading to 16 instances of doom and gloom messaging about how to decontaminate food.

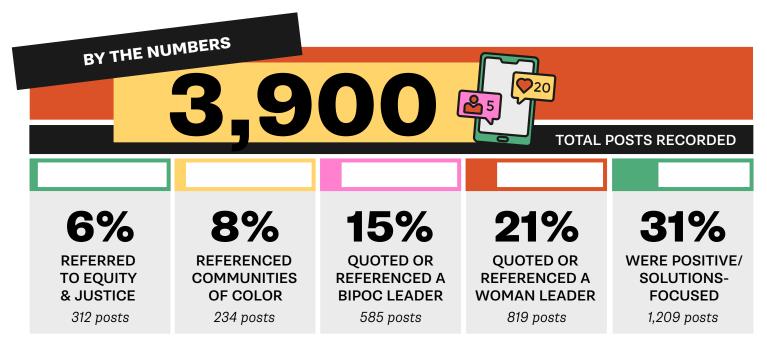
Another narrative trend in coverage of food contamination is contamination by food production, primarily in the form of emissions. There were 256 messages framing emissions and contaminants from food production as a problem. Only 21 of those messages (8%) placed blame on businesses/industry.

Taken together, messaging related to contamination of food and soil and contamination resulting from food production, appeared in just under 20% of articles in our sample. Of these articles, 38% were positive/solutions focused, and 18% mentioned equity and justice or communities of color.



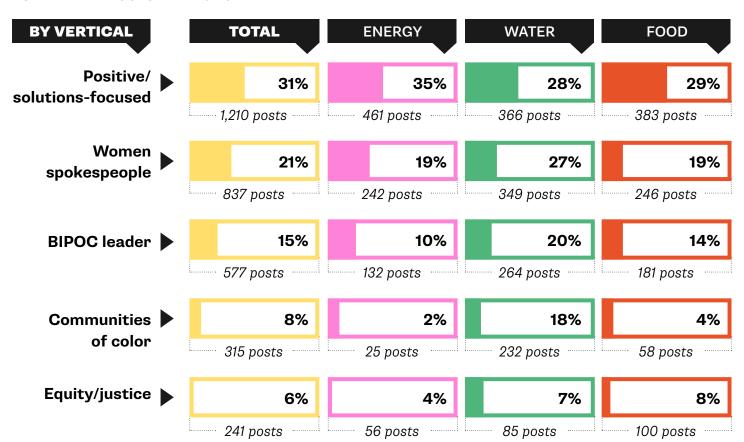






^{*} For each calendar week, we recorded and ranked the top 25 renewable energy, water and food systems posts by engagement, as measured by Sprout Social.

TOP WEEKLY POSTS BY ENGAGEMENT



Top Posters



TOP ENGAGEMENT POSTERS

All Twitter, unless otherwise specified.

	· ·
1.	@POTUS
2.	Fox Business - YouTube
3.	Fox News - YouTube
4.	Undecided with Matt Ferrell - YouTube
5.	@JoeBiden
6.	@WhiteHouse
7.	@RepMTG
8.	@VP
9.	@briantylercohen
10.	@TeamPelosi

TOP ENGAGEMENT EQUITY & JUSTICE POSTERS

1.	@POTUS
2.	@JoeBiden
3.	@WhiteHouse
4.	Undecided with Matt Ferrell - YouTube
5.	@RepMTG*
6.	@VP
7.	@TeamPelosi
8.	@SpeakerPelosi
9.	@MarshaBlackburn*
10.	@SenWhitehouse



TOP ENGAGEMENT POSTERS

All Twitter, unless otherwise specified.

1.	Vegas Dtech - YouTube	
2.	@katiehobbs	
3.	@ninaturner	
4.	Sin City Outdoors - YouTube	
5.	@POTUS	
6.	@WhiteHouse	
7.	@RepValDemings	
8.	@KamalaHarris	
9.	NBC News - YouTube	
10.	@equalityAlec	

TOP ENGAGEMENT EQUITY & JUSTICE POSTERS

1.	@katiehobbs
2.	@ninaturner
3.	@POTUS
4.	@WhiteHouse
5.	@RepValDemings
6.	@KamalaHarris
7.	@LittleMissFlint
8.	@karaokecomputer
9.	@SpeakerPelosi
10.	@Booker4KY

^{*}Note: Our methodology records any mention of equity, communities of color, positive or solutions-focused attitudes, and BIPOC or woman leaders, regardless of post sentiment.





TOP ENGAGEMENT POSTERS

All Twitter, unless otherwise specified.

1.	Poplar Preparedness - YouTube
2.	Epic Economist (Peter Schiff)- YouTube
3.	jeremiah babe - YouTube
4.	@SecBlinken
5.	Riverside Homestead Life - YouTube
6.	Alaska Prepper - YouTube
7.	@ShellenbergerMD
8.	@ninaturner
9.	@RockefellerFdn
10.	@chefjoseandres

TOP ENGAGEMENT EQUITY & JUSTICE POSTERS

1.	@SecBlinken	
2.	Alaska Prepper - YouTube	
3.	@ninaturner	
4.	@chefjoseandres	
5.	@RockefellerFdn	
6.	@ThiaBallerina	
7.	@RepMTG	
8.	@WhiteHouse	
9.	AlaskaGranny - YouTube	
10.	@POTUS	







MEDIA ANALYSIS

We source articles from LexisNexis, dividing our article pool into four categories: National, Lifestyle/ Magazine, Trade, and Alternative.

TOTAL OUTLETS:

68 National

Our pool of articles does not represent an exhaustive list of all available articles, but a representative sample of high-circulation, high-value coverage. We took direction from The Solutions Project for local outlets and trade publications to follow for relevant topics, as well as search terms.





Search terms





ENERGY

renewable energy, OR renewables, OR clean energy

AND

BIPOC communit* of color contamination environmental justice fracking frontline communit* geothermal green economy green energy human rights hydroelectric hydropower indigenous just transition native american net metering shutoffs solar solutions tidal energy tidal power wind energy wind power

WATER

drought, OR	infrastructure	
flood*, OR	native american	
sewer, OR	PFAs	
storm surge, OR	pollut*	
water, OR	potable	
	poverty	
AND	safe drinking water	
	scarcity	
arsenic	shutoffs	
asbestos	social justice	
clean water	stakeholders	
climate	storm	
climate change	underserved	
communit* of color	water management	
conservation	water policy	
contamin*	water shortage	
EJ communit*		
Emergency management agency	NOT	
emergency management director		
emergency management officials	cleaning products	
environmental justice	private equity	
EPA	recipe	
equity		
FEMA		
fracking		
frontline communities		
human rights		
hurricane		
indigenous		





FOOD SYSTEMS

agriculture, OR	food system	
farm, OR	food-insecure	
land use, OR	frontline communities	
rain garden, OR	grazing	
soil	herbicide	
	herds	
AND	human rights	
	hunger	
big agriculture	hungry	
carbon sequestration	indigenous	
climate change	inflation	
closed loop	infrastructure	
communit* of color	land use	
contamination	livestock	
crops	monopoly	
department of agriculture	native American	
EJ communit*	overgrazing	
environmental justice	pesticide*	
factory farm	pollut*	
farmworker	poverty	
FDA	price-fixing	
feedlot*	rain garden	
fisher*	ranch*	
food bank	regenerative	
food deserts	slaughterhouse	
food insecurity	social justice communities	
food insecurity	urban	
food prices	USDA	
food supply	vertical farm	



Social Listening

We source social media posts related to **climate solutions** using the social listening functionality available in Sprout Social.

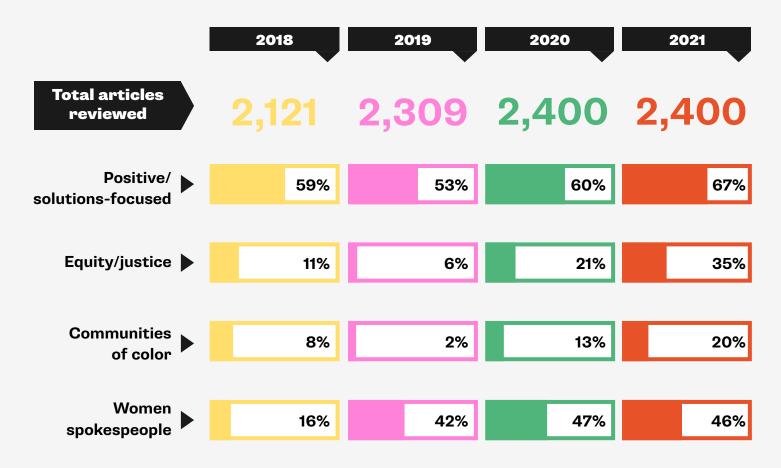
For each calendar week, we recorded and ranked the top 25 renewable energy, water and food systems posts by engagement. We aggregated, in our database, the post text, username, date, outlet, and URL of each post. We evaluated each post for key data points: whether it referred to a woman or BIPOC leader, whether it explicitly referenced a community of color, whether it referred to issues of equity and justice, and whether it was positive or solutions-focused.





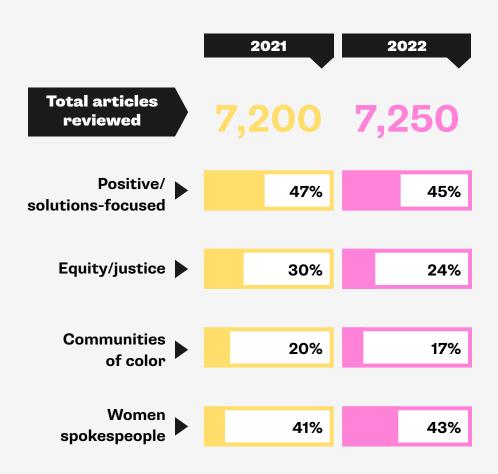
Appendix







ALL VERTICALS





LET'S CREATE THE FUTURE WE WANT.



DEVELOPED BY:





www.conspireforgood.com

www.thesolutionsproject.org