

Framing Climate Solutions: An Exploratory Quantitative Content Analysis

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Stories about what can be done to address climate change is seen by many as a possible way to combat climate anxiety, dread, and apathy. Yet little is known about how these stories are framed. In other words, what aspects of climate change do these stories focus on? For instance, problem stories about climate change are framed in several ways, such as those that emphasize health, national security, the economy, political conflict, the uncertainty of climate science, impending doom and more. Knowing how stories are framed is important because framing influences the opinions and attitudes audiences form about an issue and what actions (if any) they intend to take. We set out to understand the elements of climate solutions journalism and categorize those stories into frames in our study published in *Environmental Communication: Framing Climate Solutions: An Exploratory Quantitative Content Analysis* (email us if you can't access the study). By coding the elements of climate solutions stories and subjecting that data to cluster analysis, we found that climate solutions news (at least as published in text-based U.S. news outlets) falls into one of three categories or groups, with one category predominating. The characteristics of each cluster and their prevalence show journalists what types of climate solutions news they're producing and offers insight into how they may want to approach such stories going forward.

Key Findings: Three Types of Climate Solutions Stories

We find that climate solutions news from the U.S. falls into three different frames or clusters. The most prevalent frame (88%) we named *The Future is Now* because these stories tend to focus on climate adaptation over climate mitigation, with little mention of the causes or impacts of climate change (except environmental). The second most prevalent frame (8%) features responses that draw on people's identities (often place-based) and showcase working beyond partisanship to solve issues, leading us to call it the *Undeterred Stewards* frame. Stories in this frame are about equally focused on adaptation and mitigation, often cite burning of fossil fuels as a cause of climate change, and frequently mention impacts on human health, property, and the economy. Such stories also often mention climate change's victims. The final cluster (4%) we called the *Moral Mitigation* frame because stories in this group focus more on mitigation rather than adaptation and include a lot of elements of moral judgment: who's responsible for causing and solving the problem, moral language, as well as mention of climate victims.

Adapt or Mitigate?

The fact that climate solutions news focuses more so on adaptation than mitigation is news because early climate coverage (i.e., in the 1980s) was more centered on mitigation. While it is not surprising that adaptation coverage is more prominent as the climate crisis has worsened, other research has shown that many journalists themselves believe they focus on mitigation. News about both adaptation and mitigation is needed. But it's possible that the emphasis on adaptation leads people to believe that stopping climate change from worsening is no longer

possible or that it isn't necessary. Journalists should consider telling more mitigation stories or even mentioning that mitigating climate change is still needed within stories about adaptive efforts.

What's Missing?

A low percentage of stories in the most prevalent frame mentioned the health impacts of climate change, even as the health risks of climate change – and their unequal distribution – are increasing. This may be a missed opportunity to educate and reach audiences as climate health information has been shown to increase issue engagement, particularly for conservatives. Furthermore, few stories overall mentioned the causes of climate change. When mentioned, the causes were not often explicitly connected to the problem. Journalists may assume that mentioning fossil fuels or deforestation in a story is enough, but surveys show many Americans still don't understand climate science. By linking the causes of climate change explicitly to the problem, journalists can help educate their audiences and potentially drive climate action or policy support.

A Moral Issue?

The second and third most prevalent frames were more likely to mention moral aspects of climate change than the most prevalent frame. While it is unclear exactly how this might impact audiences, other research about moral aspects of news stories shows such elements may influence people's policy support for the issue described. In depicting people working together beyond partisanship to address climate change based on values related to place, identity, and cooperation, the *Undeterred Stewards* frame may help depolarize partisan reaction to climate news. It's possible that more climate solutions news in this vein could help news outlets build trust with and attract conservatives in their audiences.

Conclusion

This is the first research to explore how climate solutions news is framed across a broad range of U.S. news outlets, rather than just a few prominent flagship or niche, solutions-focused publications. We found that climate solutions news is framed differently than problem-oriented solutions news and that one type of climate solutions news predominates. While we don't yet know the precise effects on audiences of the three frames we identified, our research suggests that journalists should expand their climate solutions repertoires to better educate and engage audiences on what can be done about climate change.