

# **What topics and types of discussion in the Reddit group r/ClimateActionPlan have a higher success in gathering attention?**

## **Introduction**

As social media platforms have continued to grow, the rise of digital activism has become more prominent throughout the years. For example, Black Lives Matter movements or Fridays for Future movements are movements that have gathered a lot of online attention. Reddit is a popular online platform for such movements where users ask questions, share experiences, and receive feedback and criticism. The subreddit group r/ClimateActionPlan is a digital activism group focusing on “highlighting the active measures being taken to combat/mitigate and or adapt to climate change” (Climate Action Plan, n.d.). As of May 2024, the subreddit has ninety-one thousand members and discusses topics including “emissions, reduction activities, carbon capture technology, research and development, renewable and nuclear power plants coming online, fossil plants being demolished, laws being passed, and any other actions that are currently happening to preserve our livable climate” (Climate Action Plan, n.d.) which is on the subreddit’s ‘about community’ page. This subreddit was specifically chosen due to its large group size (top 2% of all Reddit groups in size), and due to the rising demand of climate action from governments and rise in popularity of climate change activist groups.

Certain topics of discussion gather more attention than others due to the Reddit group’s attention economy, which displays which topics are paid attention to whilst others are ignored and scrolled past. This essay aims to uncover which topics and types of posts succeed more in the subreddit’s attention economy through a post’s score and answer the question “What topics and types of discussion in the Reddit group r/ClimateActionPlan have a higher success in gathering attention?”

## Theoretical framework

Reddit is a popular website that has a majority of subreddits fairly accessible.

Anonymity on Reddit allows users to be able to freely express opinions and ideas, allowing a wide range of personal data to be collected (Amaya, Bach, Keusch, & Kreuter, 2019, p. 944).

Reddit is a valuable source for studying as Reddit can provide sufficient data for multiple different types of research (Amaya, Bach, Keusch, & Kreuter, 2019, p. 946). Reddit has also become a platform popular for digital social movements. Social movements are defined as “collective challenges [to elites, authorities, other groups or cultural codes] by people with common purposes and solidarity in sustained interactions with elites, opponents and authorities” (Tarrow, 1994). Digital platforms have become a popular medium to respond to and transform social movements (Devex Partnerships, 2023), leading to the rise of digital activism as a form of social movements.

A popular topic in digital activist groups is climate change, leading to climate activist groups. Climate activism focuses on movements against “energy infrastructures [...], fossil fuel plants, and even renewable energy projects” (Martiskainen, et al., 2020, p. 2). However, climate social movements depend on the surrounding environment: for example, protesters in Brazil and Borneo protest against illegal rainforest logging and intensive farming whilst climate activists in the United Kingdom protest for keeping fossil fuels in the ground and going against fossil fuel infrastructure constructions (Martiskainen, et al., 2020, p. 2).

Attention to the climate crisis has been increasing over the recent years and this attention is influenced by media and social movements (Crispino & Loberto, 2024). The concept of the ‘Attention Economy’ became popular due to the increasingly large amounts of content available online leading to attention becoming limited in consumption of content (Carpentier, et al., 2023, p. 1). The “economics of attention” is defined as “an approach to

management of information that treats human attention as a scarce commodity” (Carpentier, et al., 2023, p. 1).

## Methodology

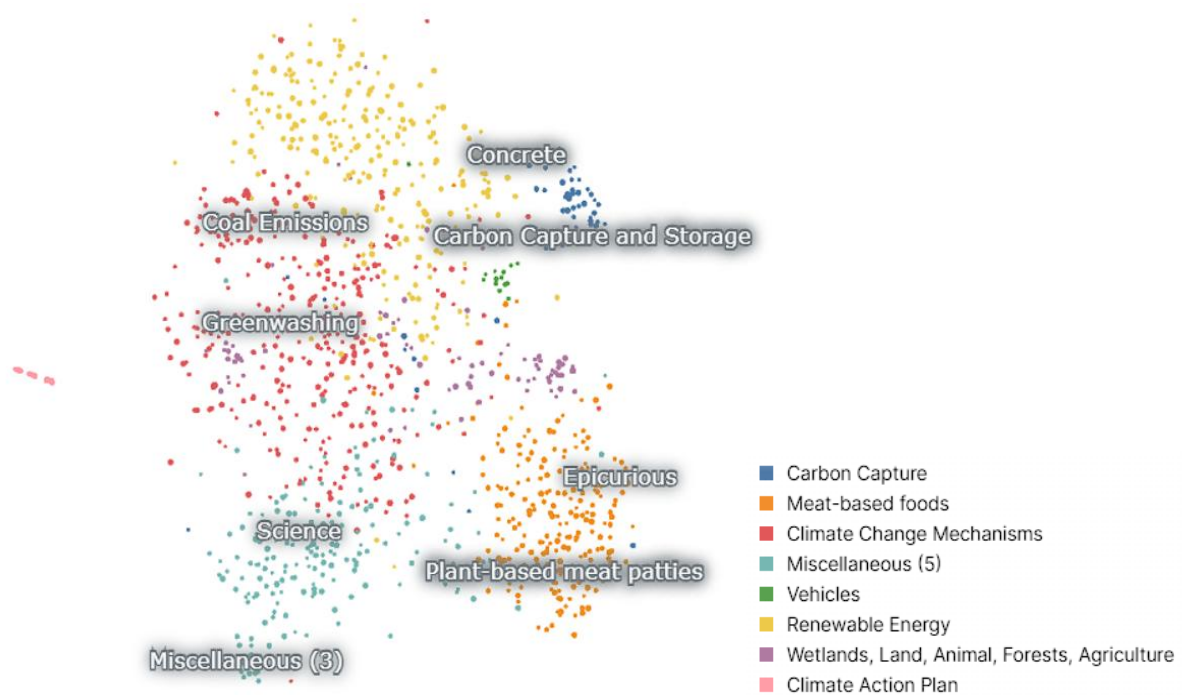
Communalytic.org was used to gather two hundred recent submissions from the subreddit along with corresponding comments and replies. A topic analysis was conducted using the NOMIC Atlas programs offered by Communalytic. The topic analysis was used as a preliminary collection of dominant themes, such as coal emissions and greenwashing, in the subreddit. This was used to have a general idea of topics of discussions in the subreddit. Furthermore, Excel sheets was then used to analyse the top twenty posts and bottom twenty posts according to the submission’s or comment’s score, the number of upvotes minus the number of downvotes, which was also graphed. The topics of the top twenty and bottom twenty were then compared by topics and type of post to conclude which topics were more successful in getting attention.

A distinction between the top twenty and bottom twenty posts must be made. The top twenty posts gather positive attention leading to a higher score. On the other hand, the bottom twenty posts gather negative attention leading to a negative score. In this essay, the bottom twenty will be referred as unsuccessful posts due to their low score and a post is considered successful in gathering attention if it has a higher score: the score a post receives helps determine how successful it was in gathering attention.

## Data results

Data was collected on Communalytic on May 7th, 2024, with a maximum of two hundred submissions. A total of 1211 records was collected dating from November 11th, 2023, to May 6th, 2024.

The topic analysis was conducted twice with two different parameters: one parameter consisted of broad categorization (Figure 1), whilst the other consisted of precise categorization (Figure 2). Topic analysis groups similar datapoints, and clusters datapoints with similar labels together. Figure 1 depicts broad generalizations of the topics discussed in the data collected from the subreddit which creates eight different categories of posts. Most of these data points overlap with each other and into high level topics such as science, greenwashing, coal emissions, etc. Figure 2 depicts the same data in sixty-four categories of topics posted in the subreddit.



*Figure 1 Topic analysis model with broad categorization*

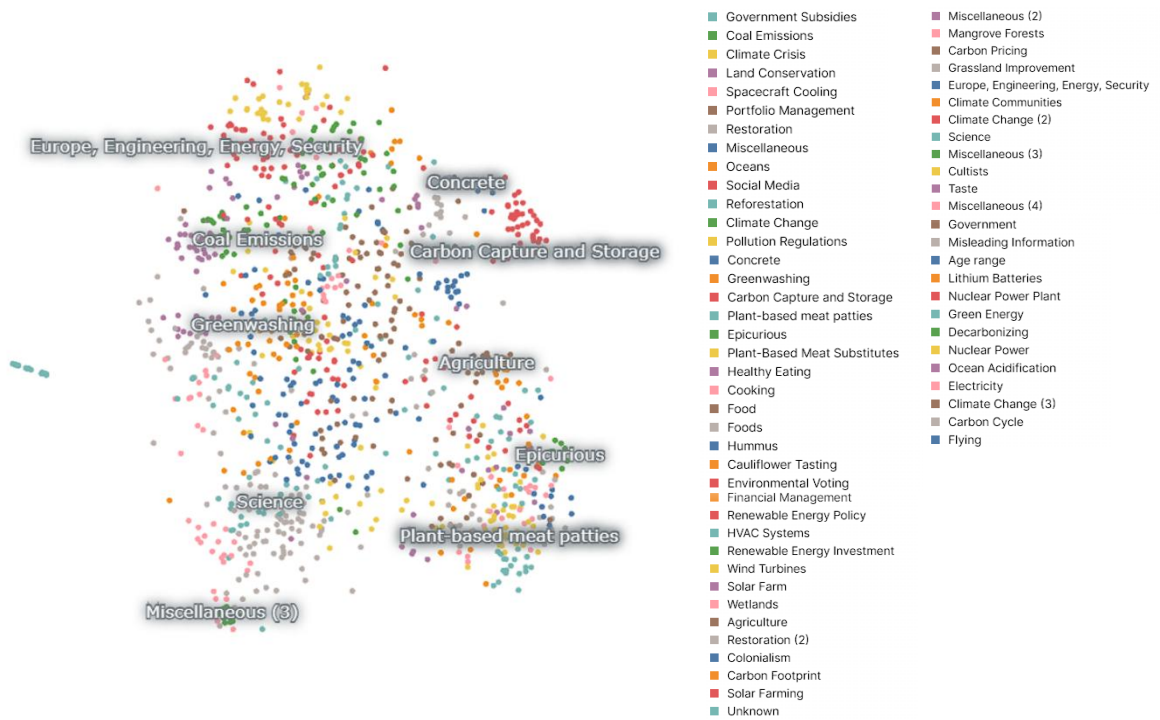


Figure 2 Topic analysis model with precise categorization

All posts from the subreddit were ranked according to their score (Figure 3). From these posts, the top twenty posts were also graphed according to their score (Figure 4) and the bottom twenty (Figure 5).

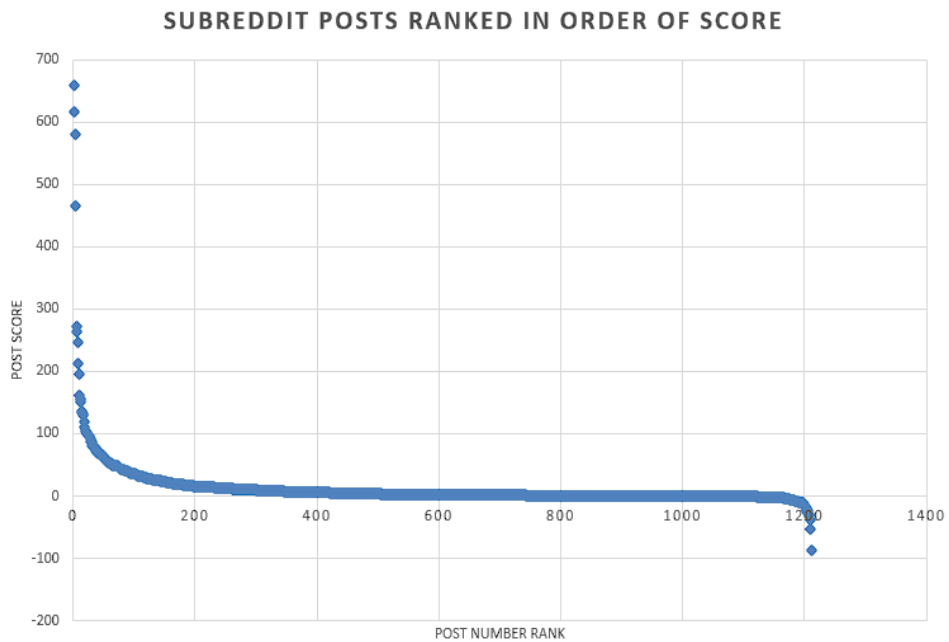


Figure 3 Subreddit Posts Ranked in Order of Score

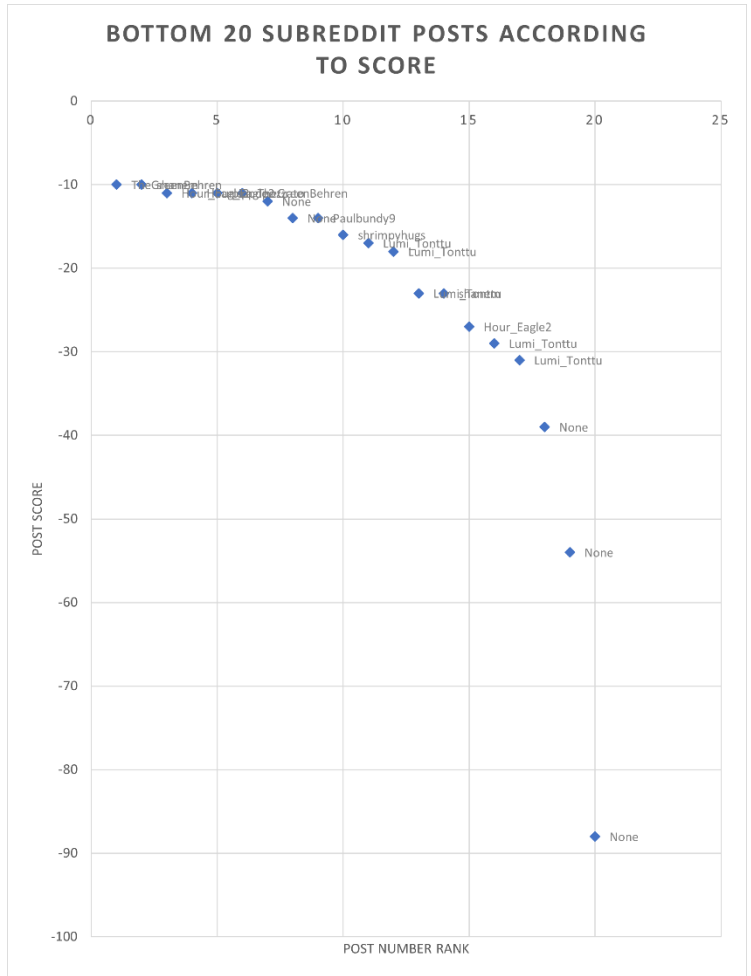
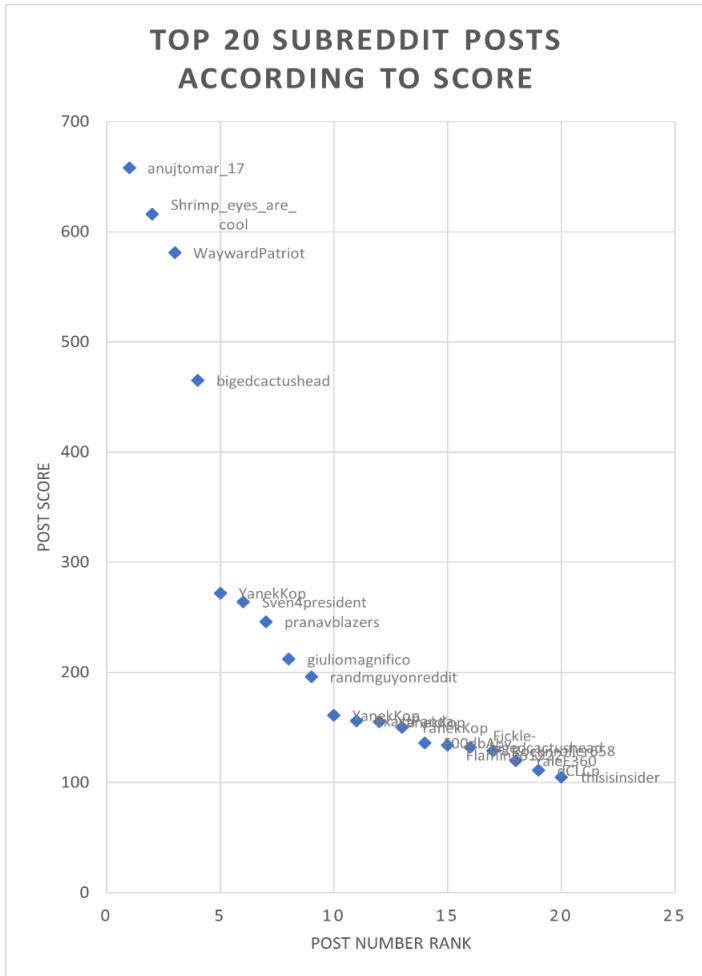


Figure 4 Top 20 Subreddit Posts According to Score

Figure 5 Bottom 20 Subreddit Posts According to Score

## Data analysis

The top twenty posts in the subreddit have a very high success: whilst the bottom twenty posts have a score between negative ten and negative eighty-eight, the top twenty posts range between a score of one to seven hundred. Seen in Figure 3, very few posts are very successful as a majority of the posts in the subreddit range between a score of zero and one hundred: the average score for the 1211 records is 12.18.

Compared to the bottom twenty posts, the top twenty posts have a higher range of topics discussing climate change topics, depicted in Figure 6. The bottom twenty posts, however, are more miscellaneous and focus less on climate change topics. This proves that

the attention economy in the subreddit group is focused mainly on climate change topics, especially solar farming, nuclear power, carbon capture, and food. Topics both the top and bottom twenty posts had in common were miscellaneous, carbon capture, and food topics.

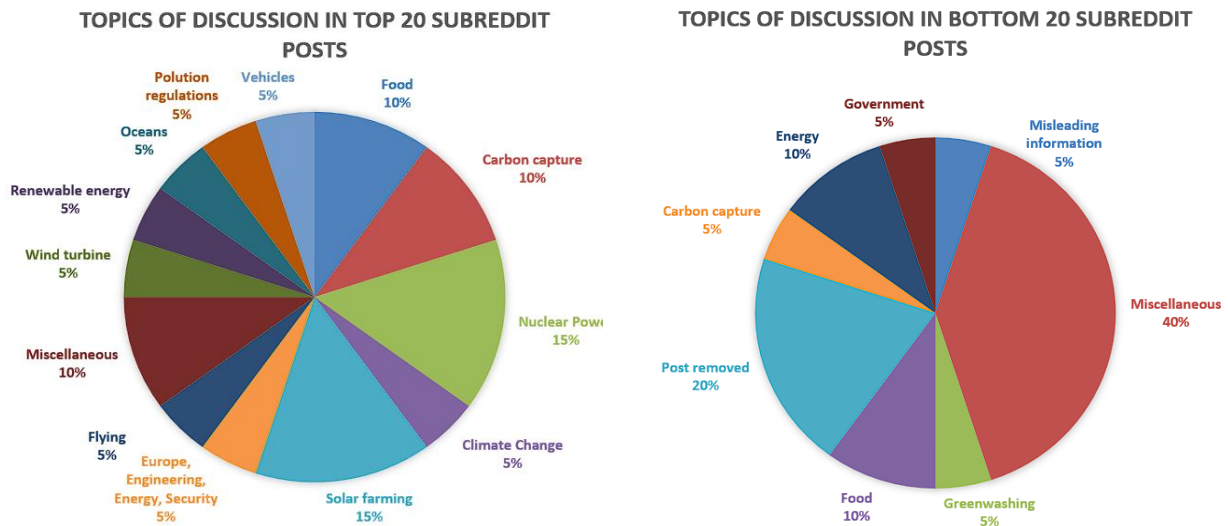


Figure 6 Topics of Discussion in Top and Bottom 20 Subreddit Posts

The most successful types of posts in the subreddit were submissions whilst the least successful were replies, depicted in Figure 7. Submissions, hence are more likely to receive positive attention, hence a higher score, whilst replies and comments are less likely to be successful but instead gather negative attention.

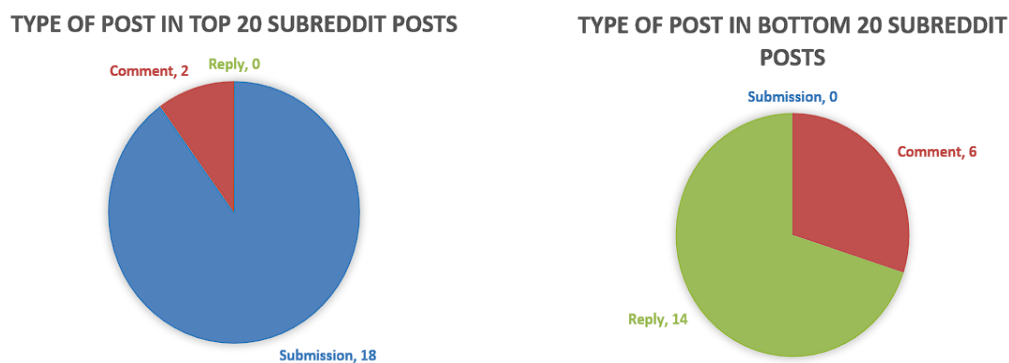


Figure 7 Type of Post in Top and Bottom 20 Subreddit Posts

Therefore, the topics of discussions that are more successful at gathering attention in the subreddit are submissions about carbon capture, solar farming, nuclear power, and food. These topics are more successful due to their popularity as topics in climate activist groups and they fit within the guidelines of the “about community” of the subreddit group. Other successful topics are closely related to climate activist topics defined by Martiskainen et al. and also fit within the guidelines. This displays that users in the subreddit pay more attention to climate activist topics, and that the attention economy of the subreddit is appropriately centred around the purpose of the subreddit. The top twenty posts were also positive topics of climate activism, displaying that users pay more attention to hopeful and positive development posts.

Unsuccessful discussions focus more on miscellaneous replies. Most of these replies contain negative or demeaning language which is most likely the cause leading to a negative score. These unsuccessful discussions have very vague and abstract topics, categorized as miscellaneous, and do not fit within the community guidelines or “about community” promoted discussions. Twenty percent of the bottom twenty posts were “removed”, either deleted by the user or by moderators on the subreddit as they did not follow the guidelines. Hence, the subreddit’s attention economy pay less attention to replies that don’t focus on climate change activist topics.

## Conclusion

To conclude, to answer the research question of “What topics and types of discussion in the Reddit group r/ClimateActionPlan have a higher success in gathering attention?”, the most successful topics of discussion for gathering attention were submissions on topics surrounding climate activism, more specifically the following four: carbon capture, solar farming, nuclear power, and food. The least successful were miscellaneous replies by users



that were mostly unrelated to topics of discussion promoted by the subreddit in their “about community” page. Therefore, a user has a high chance of success in the subreddit’s attention economy by posting a submission focusing on popular and positive developments in climate change activist topics. This is also supported by Crispino & Loberto (2024) who stated that social movements and media activity increase attention to topics on climate change.

## Bibliography

Amaya, A., Bach, R., Keusch, F., & Kreuter, F. (2019, December 18). New Data Sources in Social Science Research: Things to Know Before Working With Reddit Data. *Social Science Computer Review*, 39(5), pp. 943-960. From <https://doi.org/10.1177/0894439319893305>

Carpentier, C. L., Cheng, H. W., Jackobs, A., Roehrl, R., Klauer, P., & Doerfler, K. (2023, March 23). *New Economics for Sustainable Development: Attention Economy*. From United Nations Economist Network: [https://www.un.org/sites/un2.un.org/files/attention\\_economy\\_feb.pdf](https://www.un.org/sites/un2.un.org/files/attention_economy_feb.pdf)

Climate Action Plan. (n.d.). *About Community*. From Reddit: <https://www.reddit.com/r/ClimateActionPlan/about/>

Crispino, M., & Loberto, M. (2024, February 8). Do people pay attention to climate change? Evidence from Italy. *Journal of Economic Behavior & Organization*, 219, pp. 434-449. doi:10.1016/j.jebo.2024.01.028

Devex Partnerships. (2023, December 18). *Digital activism: transforming social movements and humanitarianism*. From Devex: <https://www.devex.com/news/sponsored/digital-activism-transforming-social-movements-and-humanitarianism-106794>

Martiskainen, M., Axon, S., Sovacool, B. K., Sareen, S., Furszyfer Del Rio, D., & Axon, K. (2020, November). Contextualizing climate justice activism: Knowledge, emotions,. *Global Environmental Change*, 65. doi:10.1016/j.gloenvcha.2020.102180

Tarrow, S. (1994). *Social movement*. From Wikipedia: The Free Encyclopedia: [https://en.wikipedia.org/wiki/Social\\_movement#cite\\_note-17](https://en.wikipedia.org/wiki/Social_movement#cite_note-17)