Embracing Compassion in a Renewable Transition by Eliminating Aggressive Language in Energy Discussions:

A Recommendation Report

Prepared for: Policy Makers, Political Leaders, Energy Industry Pioneers, and Media Influencers

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Abstract

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In this cultural moment, our global society is facing a climate crisis which is being addressed in part by a transition from traditional energy sources to renewable and sustainable practices. During this necessary transition, there are many communities which will be affected economically and socially. We need collaboration and unity during this transition in order to maintain justice. The purpose of this report was to assess the attitude of the United States' bipartisan media, including quoted material from political leaders, academics, community members, and industry representatives, by analyzing the utilization of aggressive language. This language was defined by developing categories and identifying trigger words commonly used by extreme opinion writers. A media partisan alignment chart was used to identify media providers from liberal and conservative perspectives of varying quality, representing renewable energy supporters and resistors. This same chart was used to identify a moderate control media provider. The study revealed aggressive language was present at a statistically significant level in both liberal and conservative media platforms in comparison to the control. Conservative media platforms used more aggressive language then liberal platforms at a statistically significant level. Both partisan media outlets tended to rely on similar categories of aggression. The presence of this aggression is harmful in constructing bipartisan plans to develop a just transition to renewable energy. It is crucial that all influential speakers present an attitude of compassion and cooperation as to not fuel the tendency of the media to polarize opinions. This way our society can focus on prioritizing the needs of disadvantaged communities and maintain economic stability throughout the transition of the energy sector.

Keywords: Renewable Energy, Fossil Fuels, Energy Industry, Energy Transition, Aggressive Language, Partisanship

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Executive Summary

To understand and improve the atmosphere of the energy industry discourse, I was tasked with reviewing the current state of the renewable transition, assessing the consequences of reckless progress, gauging how public opinion can influence policy and the market, devising a method to evaluate the attitudes which surround the current trajectory, and recommending corrective action.

Fake news is hardly a new subject, especially with the Trump administration popularizing the phrase. Unfortunately, this issue has only gained momentum as a nation-wide joke despite dramatic media accelerating party polarization. The evaluation focused on examining media articles surrounding the energy industry and climate crisis. This included analyzing quoted material from political leaders, academics, community members, and industry representatives.

The chosen assessment method was quantifying the utilization of aggressive language. Aggressive language was categorized into four groups and identified with words which suggest extremism. These numbers were then compared to the word counts of their respective articles to assess the concentration of aggressive language. A higher concentration indicated polarization. Proving that this negative attitude exists is the first step to addressing it.

The assessment revealed there is an aggressive tone tainting the discussion of the renewable energy transition. Aggression is present at a statistically significant level in both liberal and conservative media platforms in comparison to the control, though conservatives used significantly more aggressive language then liberal platforms. Both partisan media outlets tended to rely on similar categories of aggression including belittling ideas (examples: referring to methods as "so called", "dirty", "absurdity", or putting normal phrases in quotes), slippery-slope logic, fear mongering by false comparisons, suggestions/accusations of immediate extreme action (with words like overhaul, execute, eliminate), accusations of ignorance, and name calling.

I recommend cleansing our media of aggressive rhetoric. Aggression is harmful, especially in constructing bipartisan plans to develop a just transition to renewable energy. Influential speakers have a responsibility to monitor their wording and frame their presentations with compassion and cooperation. Fueling the tendency of the media to polarize opinions is counterproductive. Prioritizing each other's needs during this uncertain time will help improve the needs of disadvantaged communities and maintain economic stability.

Introduction

The world is barreling towards a sustainability crisis and there are many components of the final destination. Transitioning to renewable energy sources will help reduce greenhouse gas emissions, propel innovation, inspire clean energy independence, and stimulate economic growth (Carley). While energy production is the primary focus in the climate crisis, biofuels play a key role in replacing, or supplementing, diesel oil to fuel vehicles incapable of converting to electric (Perona). In fact, the US is using policy to promise this possibility. In 2007, the Energy Independence and Security Act mandated that US transportation fuel must contain 36 billion gallons of biofuels by 2022. Unfortunately, given the coronavirus economic crisis, the Trump administration has increase exemption approvals. This may impact the farmer, as many current biofuels rely on corn yields. Although, relying on corn for biofuel may be inefficient in the face of the food crises anyway. Many biofuel developers are considering algae as a sustainable alternative which also assists with capturing atmospheric carbon and treating wastewater (Perona). The innovative approach to environmentally friendly liquid fuel would provide job opportunities. Biofuels is an option for fuel production but will not be discussed in further detail since this section of sustainability has many challenges and is less straightforward than renewable energy sources such as wind, solar, and water.

An Economic Effect

Job availability is one of the primary discussions surrounding climate policy. However, this discussion is much more complex than the straightforward assertion that "renewable energy creates jobs" or "closing power plants costs jobs". Samuel Fankhauser, the director of the Centre for Climate Change Economics and Policy, discusses the many effects on employment elicited by climate policy. He asserts that each effect contains a complex array of advantages and disadvantages in his article "Climate Change, Innovation and Jobs". He divides economic effects into long, medium, and short-term impacts. The short-term contains job loss due to high-carbon powerplant closures, but ultimately a net gain in job availability due to the mass job creation that will result from low-carbon plants' labor demand. After this effect, he claims there will be a fluctuating economic result seen in the value and availability of energy production. Fankhauser concedes that climate policy, trade, and other market factors make this trend unpredictable. He concludes that the long-term effect is a national adjustment to the structure of the energy sector. Considering the climate emergency and the almost guaranteed net positive, the disadvantages along the way are necessary to confront. However, it is also necessary to prepare for and handle challenges as they come.

In more specific terms, Sanya Carla, Director of MPA Programs at the O'Neill School of Public and Environmental Affairs, studies how the short-term pricing spikes and job displacements will disproportionally affect certain marginalized communities within the US population. Due to the oil availability and energy grid, it is also plausible to claim geographical disparities as well (Carley). Deeper investigation into these disparities is crucial in facilitating a just transition to clean energy sources.

Not only is this consideration crucial in ensuring all people, especial marginalized communities, benefit from the renewable energy transition, but considering these effects will also help facilitate cooperation and unity. The media tends to shine a spotlight on the inconsideration

which extremists exhibit. Since the opposition receives these messages from the media, it only continues to fuel opposition in a positive feedback loop. Strong opposition to the closure of a Kentucky plant, Big Sandy, made headlines in a 2012 New York Times newspaper. The article was written from the perspective of the Kentucky community and villainizes "Washington Environmentalists" and monetary supporters like "Michael R. Bloomber, the billionaire mayor of New York City" (Lipton). This view frames the transition from coal as a "victory" only for environmentalists, not citizens of "coal country" (Lipton). There is clear partisan blame which is placed on democratic spearheads like Obama. The closures are taken personally by these communities in many cases because it seems their financial livelihood (in terms of layoffs and electric price increases) is not prioritized. This is especially valid when plans are not put in place to offset those short-term side effects and there is no clear long-term replacement. Especially in Appalachia, there should be other incentives to closing coal plants since coal plant operation has resulted in direct (black lung) and indirect (air pollution) health problems for the local community. However, the aggressive action and language of partisans and environmentalists highlighted by the media leads to extreme opposition rather than cooperation in building a successful infrastructure.

On a national scale, this was exemplified when Trump built much of his campaign on the promise to return the U.S. coal industry to its former glory. This promise has manifested in his presidency by revoking Obama's Clean Power Plan, withdrawing from the Paris Agreement, facilitating access to the Asian market, and prioritizing Carbon Capture, Transportation, and Storage technologies. Roman Mendelevitch, a Post-Doc in Resource Economics, and his co-authors found that even revoking the CPP in conjunction with allowing exportation would not elevate the coal industry to its 2000s levels in the current energy market with natural gas and renewables playing in the field. The decline of coal is also a response from American capitalism and consumerism, not solely the result of environmental policy. Ironically, this very concept is a core value of the Trump administration. Transitioning back to coal is an unattainable goal. Pursuing that empty goal would be a disruption to the free market as well as active destruction of the environment and the economics of other geographic areas which now rely on renewable energy and natural gas.

A Dynamic Pathway

China is experiencing a similar conflict, although the government plays a more unrestricted role in the transition. Sung and Sang-Do, Chinese researchers at Woosung University, study the influence which actors have on the transition to renewable energy. They utilized an algorithm which analyzes available literature and text media from 1990 to 2014 to test the relationship between the government, the public, and the market on the traditional and renewable energy sectors. The government and the market were found to cause the primary developments in the transition from traditional to renewable energy in China (Sung and Sang-Do). The public was not found to influence the transition directly, but, in addition to the government, was shown to indirectly promote the transition via market interaction (Sung and Sang-Do). The energy sectors are affected by the dynamic path which is government, public and market interactions. The representative-based government in the United States increases the complexity in the dynamic relationship between the market, public, and government considering the influence constituents have in how policy makers approach decisions in the energy sector.

Although legislative voting to pass a bill is primarily based on the appearance of the bill to their party and constituents, Lynda Powell discusses in her book <u>The Influence of Campaign Contributions in State Legislature</u> how monetary supporters to campaigns influences the wording of policy. By this, she is referencing how the support of special interest groups to legislative campaigns leads to special favors in wording and clauses in policy. This phenomenon also contributes to the complexity of the relationship between policy, the public, and the market. The industries within the market, and the POC's to which they contribute support, also play a role in the decisions in renewable energy policy. This means that they have influence through marketing and publicity on the public and through monetary support on policy wording.

A Global Effort

Industry influence is an important aspect of the dynamic pathway leading to renewable energy policy since industries in countries which maintain extensive fossil fuel reserves are reluctant to leave them due to the economic benefits (Johnsson). This viewpoint on an international scale threatens to inhibit climate change initiatives. Therefore, the Paris Agreement was concluded with the goals of abandoning fossil fuel and applying carbon capture technologies regardless of this benefit. It is a demanding environmental and safety responsibility to leave fossil fuel assets stranded and create new renewable energy plants. Since low-carbon energy production requires innovative technologies, it is harder for developing countries to commit (Miller). The Paris Agreement lends itself to a helpful environment towards developing countries and countries which would be harmed economically by this transition (Johnsson). Climate reports and initiatives in the United Kingdom, such as the Bali Action Plan, address the expectation that international financing will be necessary in order to meet the global agreement to address climate change (Miller). It is feasible for wealthier areas in the globe and those which already maintain renewable energy practices to support developing countries and those which would be disadvantaged by this necessary transition. Similarly, it should be reasonable to plan for a supportive infrastructure in the national government (should that be through state or federal initiatives) to support disadvantaged local communities.

The primary challenge is meeting a financially unstable country's energy and economic demands by the rapidly approaching climate change deadline. Alan Miller, a Climate Change Specialist, believes that "policy makers need to focus on creating adequate signals that climate change will be an important and continuing factor in government policies for the foreseeable future… If this is done, financing will follow." Although it is helpful for public and government priorities to align due to the importance of climate change, simply stating that "financing will follow" is an inconsiderate view which does not prioritize the intermediaries in the transition. He asserts that global superpowers should develop policy demands and enforce them, leaving developing countries to fend for themselves. This can not be the approach we take in our international or local communities. It is important that policy is formed with all considerations in mind. Our world needs to understand how to maintain social and international justice as we transition to a sustainable system. Our nation must consider the economic benefits and drawback at all timepoints within the transition as well as the social consequences which will impact everyone, but especially marginalized communities. There needs to be transparency and public awareness of the interactions between the government and industry monetary transactions which impact energy policy. And lastly, we need the media to inspire unity, not partisanship, by covering government

officials, industry spearheads, academics, and public advocates who also use compassionate and considerate wording, not aggression, when discussing the renewable energy transition.

Methods: Identifying Aggression

Task 1: Identify News Sources

The primary research was conducted via word counting of targeted language from articles devoted to energy debate in terms of coal, renewable energy, and fossil fuel/coal. These words were placed in four categories, totaled, and then compared to the word count. The total targeted language count was divided by every 100 words in the article, which represents how many aggressive ideas were included per paragraph. Three articles were observed from seven different news providers all written since January 2020. Liberal sources NPR, CNN, and NBC were chosen to represent a high quality and nearly neutral source, a lower quality and a partisan source, and a mixed quality and partisan source respectively. The conservative sources The Examiner, Fox News, and New York Post were chosen as respective compliments. USA Today was used as a control since it is considered neutral. These judgements were determined using the 2016 viral partisanship media alignment chart (*Fig. 1*).
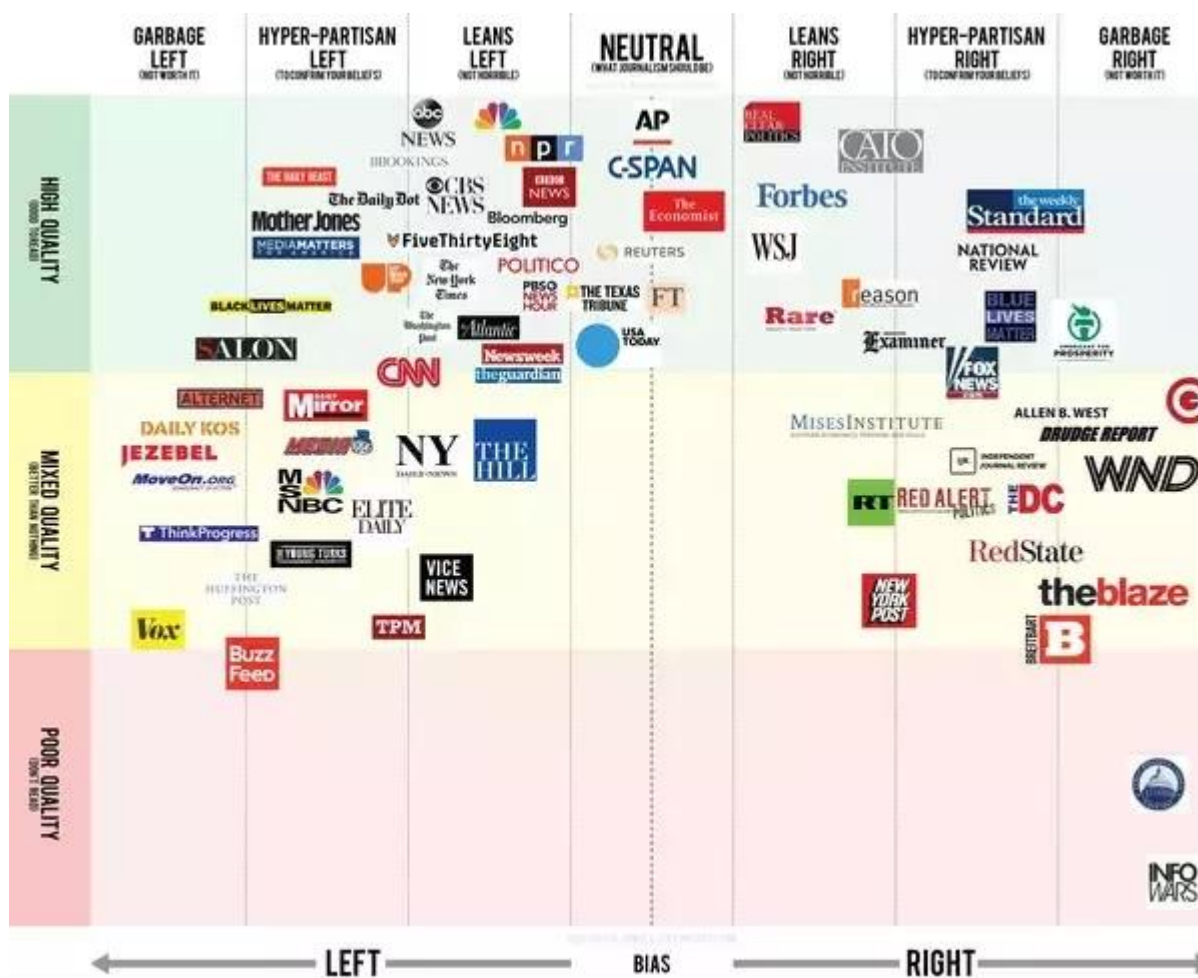
Figure 1: The Chart, Version 1.0: Original Reasoning and Methodology from Ad Fontes Media; adfontesmedia.com, 2016, http://www.allgeneralizationsarefalse.com/?p=65

Task 2: Identify Categories and Trigger Words

Targeted language was divided into four categories. The first was Aggressive Phrasing which was defined by the following ideas: belittling ideas (examples: referring to methods as "so called", "dirty", "absurdity", or putting normal phrases in quotes), slippery-slope logic, fear mongering by false comparisons, suggestions/accusations of immediate extreme action (with words like overhaul, execute, eliminate), accusations of ignorance, and name calling. The second category was Partisan Blame/Bandwagon which was identified with emphasis on party views in conjunction with the following specific trigger words: Democrats, Lefts, Liberals, Republicans, GOP, and Conservatives. The third category, Economic Benefit/Blame, refers to when one group claims an opposing view is only held because of home state economy or industry investments and when blaming the opposition for purposeful financial strain of opponents. The final Other category holds the following two cases: claiming opposition has no credible basis (without credible basis) and making exaggerations without data support. I will conclude by acknowledging that I do identify liberal which may skew the subjective analysis. Therefore, I identified trigger words and ideas to avoid strong bias in the data. While combing the articles for aggressive language, the categories were continually modified and specified.

Results of Targeted Language Analysis

There was a statistical significance between the total conservative (1.24±0.61) and liberal (0.41±0.15) use of targeted language per paragraph, considering the standard deviation obtained in the conservative and liberal triplicates (*Fig. 2*). The two were also statistically greater than the moderate control (0.05±0.07) (*Fig. 2*).
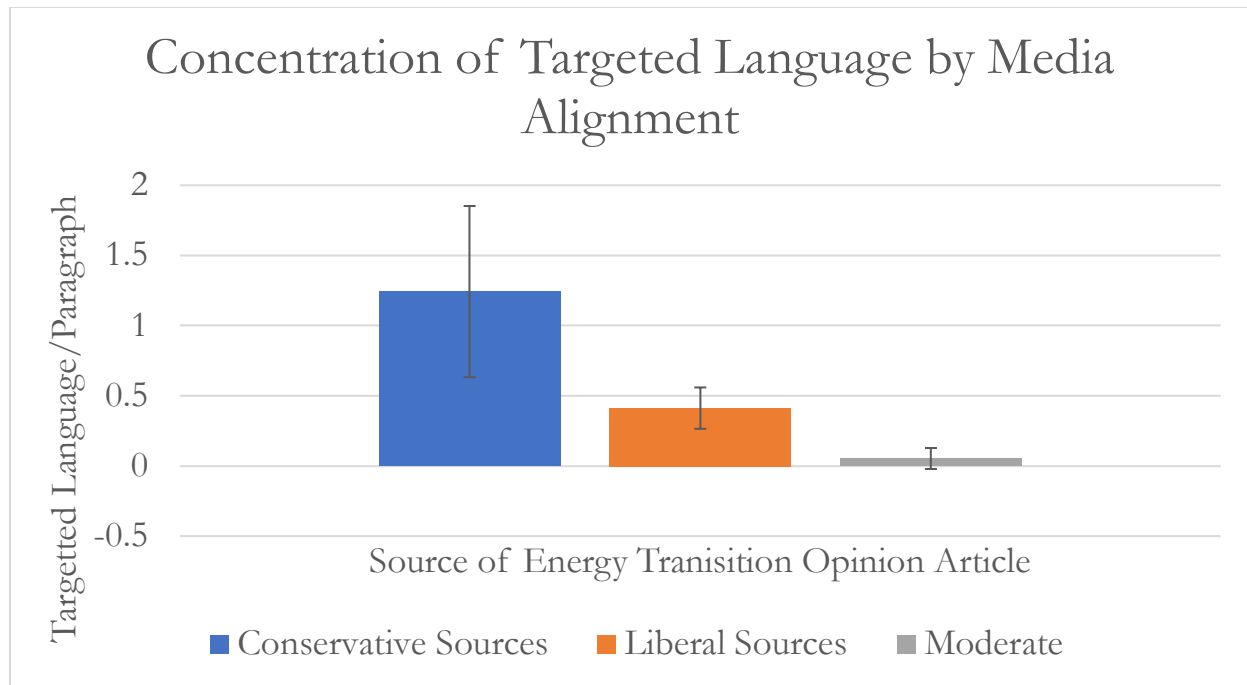
Fig. 2. Concentration of Targeted Language by Media Alignment.

The breakdown of the usage of each classification of targeted language for liberal and conservative media sources is exemplified in the two charts below. The moderate source graphic is not listed since of all three articles, targeted language was only utilized once. This was using "dirty" as a descriptor for traditional energy imports which was placed in the Aggressive Phrasing category. The results show that both partisan media rely on Aggressive Phrasing in their articles (*Fig. 3* and *Fig. 4*). In fact, the liberal media used 0.21 aggressive phrases per paragraph while conservative media used 0.57. Both media sources followed the trend of favoring Partisan Blame/Bandwagon, Economic Benefit/Blame, and Other consequentially.
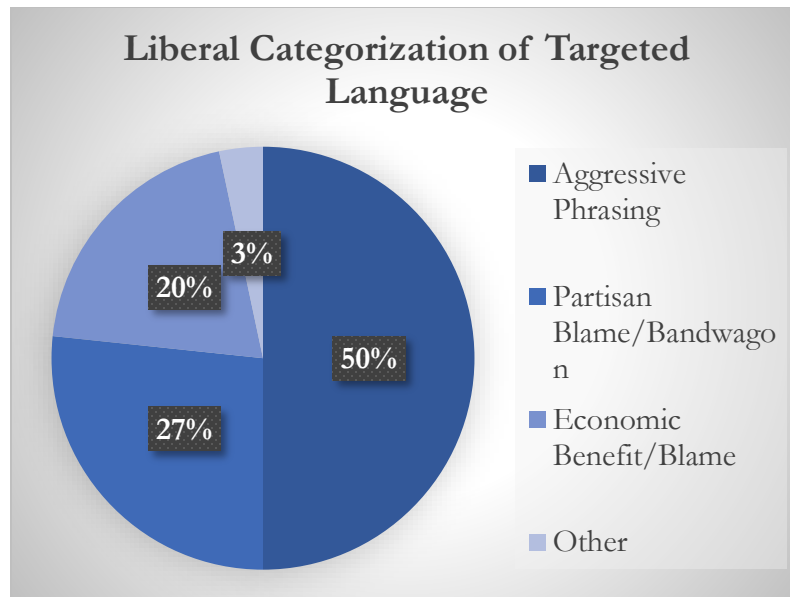
Fig. 3. Liberal Categorization of Targeted Language.
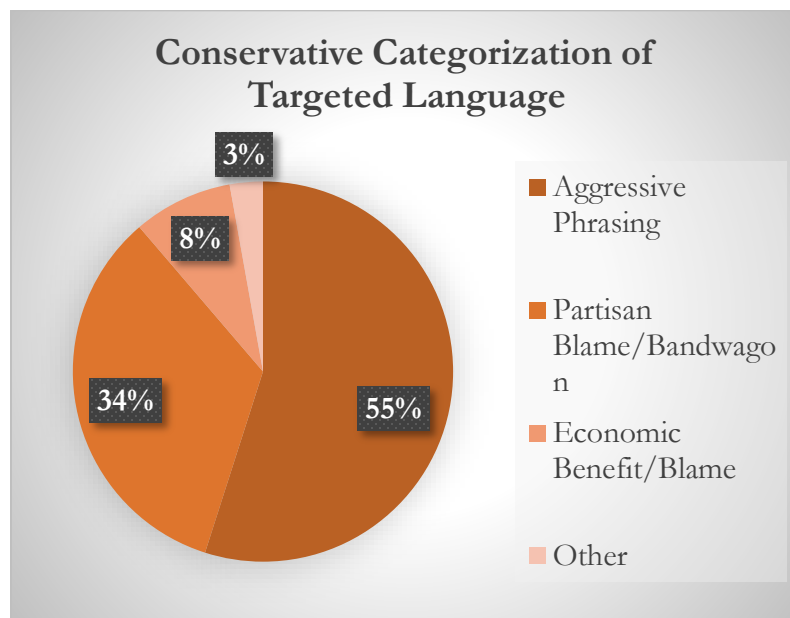
Fig 4. Conservative Categorization of Targeted Language.

Conclusions from Attitude Assessment

Based on the results, it is evident that aggressive language is present in both party's media providers at different levels of quality. They tend to rely on strong wording and extreme language, though partisanship and economic blame is also relevant from both sides. Qualitatively, there was a clear difference between the conservative paper the New York Post and every other source. They had

the highest count of aggressive language, and the most references to partisan blame of all sources. The extreme nature of the New York Post may have led to the conclusion that the Conservative party uses significantly more aggressive language. The republican party has also had prominent members deny climate change and fight for the coal industry. Fighting a losing battle may also cause the reliance on aggression and blame. In order to encourage unity and claim an adequate place for every concern in the renewable energy revolution, there needs to be a reasonable and cooperative tone from both parties.

Recommending Avoiding Aggression and Embracing Compassion

As a Montessori student, I was raised to value peace, unity, and environmental improvement above all else. In the climate crisis, it is integral that all three of these values be equally emphasized. I recommend that all policy makers, political leaders, industry pioneers, and media influencers strive to avoid aggressive language. By straying away from blame and anger and towards compassion for opponents and everyone in between, there will be a series of compromises and considerations.

Implications

Competition versus Cooperation

The negative attitude currently surrounding the energy discussion discourages cooperation and relies heavily on demonization and party polarization. It is crucial that we maintain our values and strive for representation for every community on the spectrum from environmentalists to citizens of coal country. This justice will not be implemented well while there exists an us/them mentality encouraged by aggressive language. It is a natural tendency to think in binary and pick a side, but this neglects the actual subtleties and nuances of our society. It is important that we aim for an open mind and heart in all areas of life, especially pressing issues like climate change.

Forward from a Pandemic

The COVID-19 pandemic has caused strain on every faucet of society. While the US is developing stimulus plans, the energy crisis remains relevant in political discussions. There is debate over whether or not the government should provide relief to either, both, or neither sectors of the energy industry. It is crucial to consider the social impacts that these choices could cause, especially given the circumstances of the pandemic-induced economy and struggles of marginalized communities.

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Appendix

The raw data collected is included in the table below:

Fox News			
Aggressive Phrasing	5	1	7
Partisan Blame/Bandwagon	7	3	1
Economic Benefit/Blame	1	1	0
Other	2	0	0
Total	15	5	8
Word Count	850	715	360
Word Count by 100	8.5	7.15	3.6
Targeted Ideas per hundred Words (about a paragraph length)	1.764705882	0.699300699	2.222222222
New York Post			
Aggressive Phrasing	12	7	4
Partisan Blame/Bandwagon	2	8	1
Economic Benefit/Blame	2	1	1
Other	0	0	0
Total	16	16	6
Word Count	750	675	725
Word Count by 100	7.5	6.75	7.25
Targeted Ideas per hundred Words (about a paragraph length)	2.133333333	2.37037037	0.827586207
Examiner			
Aggressive Phrasing	0	2	1
Partisan Blame/Bandwagon	1	0	1
Economic Benefit/Blame	0	0	0
Other	0	0	0
Total	1	2	2
Word Count	2000	368	350
Word Count by 100	20	3.68	3.5
Targeted Ideas per hundred Words (about a paragraph length)	0.05	0.543478261	0.571428571
CNN			
Aggressive Phrasing	0	7	3
Partisan Blame/Bandwagon	0	2	2
Economic Benefit/Blame	1	1	2
Other	0	0	1
Total	1	10	8

Word Count	710	847	1700
Word Count by 100	7.1	8.47	17
Targeted Ideas per hundred Words (about a paragraph length)	0.14084507	1.180637544	0.470588235
NPR			
Aggressive Phrasing	0	1	0
Partisan Blame/Bandwagon	1	2	0
Economic Benefit/Blame	0	0	1
Other	0	0	0
Total	1	3	1
Word Count	430	1045	1000
Word Count by 100	4.3	10.45	10
Targeted Ideas per hundred Words (about a paragraph length)	0.23255814	0.28708134	0.1
NBC			
Aggressive Phrasing	1	2	1
Partisan Blame/Bandwagon	0	1	0
Economic Benefit/Blame	1	0	0
Other	0	0	0
Total	2	3	1
Word Count	310	615	610
Word Count by 100	3.1	6.15	6.1
Targeted Ideas per hundred Words (about a paragraph length)	0.64516129	0.487804878	0.163934426
USA Today			
Aggressive Phrasing	0	0	1
Partisan Blame/Bandwagon	0	0	0
Economic Benefit/Blame	0	0	0
Other	0	0	0
Total	0	0	1
Word Count	368	436	630
Word Count by 100	3.68	4.36	6.3
Targeted Ideas per hundred Words (about a paragraph length)	0	0	0.158730159

The links to each article in the study are listed below:

https://www.foxnews.com/opinion/coronavirus-china-deceptions-democrat-energy-policies-justini-haskins
https://www.foxnews.com/politics/bipartisan-energy-bill-at-a-standstill-over-coolant-amendment
https://www.foxnews.com/media/green-new-deal-cost-households-joel-griffith

https://nypost.com/2020/03/30/andrew-cuomos-bid-to-ram-industrial-wind-solar-plants-down-locals-throats/

https://nypost.com/2020/03/27/why-dems-are-so-bent-on-passing-wind-amid-corona-crisis/

https://nypost.com/2020/03/07/angry-us-landowners-are-killing-off-renewable-energy-projects/

https://www.washingtonexaminer.com/policy/energy/daily-on-energy-clean-energy-boosters-getting-nervous-about-stimulus-timeline

https://www.washingtonexaminer.com/policy/energy/daily-on-energy-red-states-lead-the-switch-to-renewables

https://www.washingtonexaminer.com/policy/energy/trump-doe-chief-suggests-100-renewable-energy-is-possible

https://www.cnn.com/2020/01/23/perspectives/climate-crisis-carbon-emissions-energy-iea/index.html

https://www.cnn.com/2020/04/10/opinions/trump-rushing-to-rollback-environmental-protections-during-pandemic-garbow/index.html

https://www.cnn.com/2020/03/18/world/coronavirus-and-climate-crisis-response-intl-hnk/index.html

https://www.npr.org/2020/01/17/797416530/kids-climate-case-reluctantly-dismissed-by-appeals-court

https://www.npr.org/2020/03/24/820268157/climate-change-push-fuels-split-on-coronavirus-stimulus

https://www.npr.org/2020/02/27/806011419/better-late-than-never-big-companies-scramble-to-make-lofty-climate-promises

https://www.nbcnewyork.com/news/politics/murphy-announces-plan-for-100-clean-energy-by-2050/2268869/

https://www.nbc12.com/2020/03/06/virginia-lawmakers-send-historic-energy-bill-governor/

https://www.usatoday.com/story/opinion/2020/01/27/energy-efficiency-common-sense-way-slow-climate-change-column/2821219001/

https://www.usatoday.com/story/opinion/2020/01/30/how-fight-climate-change-congress-needs-fuel-innovation-column/4601332002/

https://www.usatoday.com/story/opinion/todaysdebate/2020/02/19/climate-change-carbon-tax-refund-consumers-editorials-debate/4788587002/