

**HOW TO MORE EFFECTIVELY PASS FEDERAL CLIMATE CHANGE AND  
RENEWABLE ENERGY LEGISLATION IN THE U.S.**

by

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# Abstract

This study's purpose is to broadly assess and interpret the literature to reach novel conclusions on recommendations for strategies on how to pass federal climate change legislation in the U.S. more successfully in the future. This research is necessary, due to a gap in existing literature on how to successfully pass climate change legislation. Literature is abundant and there is a common understanding amongst the public on the factors and actors blocking climate change legislation in the U.S., but there is far less of a public and academic consensus on how to combat these anti-climate change actors and factors successfully. This study examines 25 peer reviewed academic journals and looks to uncover patterns revealed in the literature. The literature highlights the barriers of federalism and provides these as solutions to overcome the complexities built into the system. The study points to three prominent patterns in the literature recommending that in order for climate change legislation to pass, legislators, lobbyists, climate advocates, scientists, etc. must understand the complexity and interdisciplinary impacts of climate change and therefore the multifaceted approach needed in policymaking. Next, similarly, the literature points to the need for compromise in order for climate change legislation to pass in the U.S. at the federal level, recommending a focus on reframing issues as "energy security" or "sustainable development" so as to make them nonpartisan terms and please varying actors. Finally, and again similarly, the literature recommends that the climate change movement needs to broaden its framework in order to open up the movement to more actors to more successfully combat the strong, large, and wealthy counter-climate change movement.

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# Executive Summary

I have had a previous and instilled interest in the intersection of sociology and politics combined with energy and climate issues. Therefore, I wanted to pursue a research project that reflected these interests by researching a question that was left unanswered despite my educational focus in the area even after my masters program in Energy Policy and Climate at Johns Hopkins University. I was able to combine my past interest and undergraduate studies with my current coursework at Johns Hopkins to create a literature review that examines a holistic approach to policymaking from both sociological and policy lenses, taking into account many other factors as well.

I was able to learn new skills throughout this research study, for example I learned more about how to write a research paper, how to find reliable academic sources, and how to group sources in a methodological way that makes sense for a literature review. I learned more about the inner workings of the United States government and political system. Lastly, I learned more about the hurdles that climate change legislation faces within the U.S. federal government framework and techniques on how to best overcome these barriers. The report contributes new findings to the field on a subject area not very prevalent within this field of research.

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# Introduction

In the U.S., public support for federal climate change legislation is strong. Policy structures and programs that can guide the U.S. in how to implement these projects are prevalent in localities within the U.S. and across the globe. Moreover, the technology to support renewable energy legislation is available and oftentimes affordable. Given this, why is the U.S. not passing more climate change or renewable energy legislation? Given the public and academic consensus that fossil fuel and utility actors are influencing Congress such as through organizations like American Petroleum Institute, then why is there not more research on how to successfully combat these political barriers in order to pass climate change legislation more successfully?

*Statement of Purpose:* We know well what must be done and where we need to limit our emissions. The technology development is almost there and the cost effectiveness of this technology is almost there as well, but climate change and renewable energy legislation is consistently being blocked at the federal level.

*Research Statement:* What can be done to help climate change legislation pass at the federal level in the U.S.? This research paper will leverage a literature review that analyzes and recommends strategies to pass federal climate change legislation more successfully in the U.S. In addition, this paper provides a high level commentary on the factors that led to the successful passing of the Inflation Reduction Act to gain further insight into how climate change legislation can successfully pass moving forward.

*Hypotheses:*

1. I hypothesize that my results will uncover that in order for the U.S. to have more success in passing climate change and renewable energy legislation at the federal level, special interest money will have to be removed from politics.
2. I also hypothesize that the climate change movement will have to become more organized, unified, and wealthy in order for climate change and renewable energy legislation to pass more consistently at the federal level in the U.S.
3. Lastly, I hypothesize that another path toward successful policy change is through compromise, as seen with the eventual passing of the Inflation Reduction Act.

## Contextual Background

### Public Consensus on Climate Change Legislation

What is apparent, is the American public's support for climate change legislation. "[Ninety-five] percent of democrats and 71% of Republicans support the transition to clean or renewable energy policies."<sup>1</sup> Another study, by the University of Chicago and the Associated Press, found that 71% of the American public understand that climate change is occurring and 41% think that it is mainly caused by humans. Much of the support for renewable energy policies comes from broader public concern about climate change and its effects on the planet. According to a Yale University and George Mason University study, "69% of Americans are somewhat worried about climate change and 29% are very worried."<sup>2</sup> Just as importantly, these preferences

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<sup>1</sup> "Climate Change and Big Money in Politics." American Promise, April 21, 2020.

<sup>2</sup> Irfan, Umair. "Americans Are Worried about Climate Change - but Don't Want to Pay Much to Fix It." Vox. Vox, January 28, 2019.

and concerns translate into majority support for legislation, 55% of the American public would support a bill that advances clean energy sources while decreasing fossil fuel sources.<sup>3</sup>

Despite public support for climate change legislation, a majority of climate change legislation in the U.S. was heavily resisted at the Congressional level prior to the passing of the Inflation Reduction Act, and even that took about a year of compromise. Some examples of blocked climate and renewable energy policies include the American Clean Energy and Security Act of 2009 that failed to pass the Senate.<sup>4</sup> In 2019, the Senate blocked the Green New Deal resolution.<sup>5</sup> The Obama Administration's Clean Power Plan that set emission guidelines was repealed and replaced by the Trump Administration in 2019.<sup>6</sup> In 2020, the Trump Administration also repealed the Obama Administration's requirement for oil and gas companies to report on and repair methane emissions and leaks.<sup>7</sup> Why is it that there is such a strong disconnect between public opinion and policy action?

## Big Money and Big Oil Influencing Politics

A large factor is the impact that fossil fuel industries have through lobbying. From 2000-2006 fossil fuel companies spent over \$2 billion on lobbying Congress, while renewable energy advocates spent 1/10th of that. Some industry examples include Exxon, BP, Chevron, and Shell. The U.S. government has favored fossil fuel companies as can be seen through subsidies. For example, for every \$1 that fossil fuel companies spend lobbying, they receive \$119 back in

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<sup>3</sup> "Where Do Americans Stand on Climate and Energy Policy?" AP NORC. the University of Chicago, October 17, 2022.

<sup>4</sup> Roberts, David. "The Green New Deal, Explained." Vox. Vox, December 21, 2018.

<sup>5</sup> Carney, Jordain, and Miranda Green. "Senate Blocks Green New Deal." The Hill. The Hill, March 27, 2019.

<sup>6</sup> "Electric Utility Generating Units: Repealing the Clean Power Plan." EPA. Environmental Protection Agency, August 15, 2022.

<sup>7</sup> Davenport, Coral. "Trump Eliminates Major Methane Rule, Even as Leaks Are Worsening." The New York Times. The New York Times, August 13, 2020.



subsidies. The fossil fuel industry benefits from the private nature of lobbying, therefore the public cannot openly debate against what is occurring behind closed doors. “The top 100 fossil fuel companies are responsible for 71% of global emissions,” yet they are the ones receiving special treatment from legislators.<sup>8</sup>

Big Oil has its influence through lobbying organizations such as the American Petroleum Institute (API). API is a powerful trade and lobby organization which works on preventing climate change legislation from happening. API represents 600 drilling companies, refineries, and others such as plastic makers. API receives millions of dollars from oil companies. Shell’s largest donation to political lobbies last year went to API. In 2020, Shell donated over \$10 million to API and sat on their board and executive committee. Some other major funders are Exxon, Chevron, and BP.<sup>9</sup>

API started a misinformation campaign in 1998 after the Kyoto Protocol, funded by several millions of dollars in which they lied on a public scale about the climate crisis. Before 1998, API funded climate science research, but once they found evidence of the climate crisis being caused by greenhouse gas (GHG) emissions they shifted gears and created a front organization called Global Climate Coalition to gather “evidence” that the climate crisis was a hoax. From then on, they kept a close relationship with Big Oil, placed Exxon’s chief executive on their executive committee, and focused on opposing climate change legislation at the Congressional level by hiring lobbyists. In addition, they funded conservative organizations that would question climate science.

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<sup>8</sup> “Climate Change and Big Money in Politics”, 2020.

<sup>9</sup> McGreal, Chris. “How a Powerful US Lobby Group Helps Big Oil to Block Climate Action.” The Guardian. Guardian News and Media, July 19, 2021.

Some think there may be signs that API is shifting directions due to several public lawsuits, the public support of climate change legislation, moves by companies such as Shell to support a carbon tax, and companies such as Total and Shell who have resigned from supporting API, while others just view it as greenwashing, deceiving the public into thinking they are environmentally friendly, and have no hope for a change in API's direction.<sup>10</sup>

The impact that API and Big Oil has had is huge, especially in Congress. For example, in the 117th Congress, 139 elected officials deny scientific consensus of human-caused climate change. This includes "109 representatives and 30 senators," which makes up 52% of House Republicans, 60% of Senate Republicans, and over 25% of elected officials in Congress.<sup>11</sup> These Congressman have received \$61 million in contributions from fossil fuel companies.<sup>12</sup>

One reason that Big Money fossil fuel interests continue to wield such influence is that the Supreme Court has recently opened up the floodgates to large moneyed, corporate interests in politics. Senator Sheldon Whitehouse believes that corporate money in politics became a problem after the 2010 U.S. Supreme Court Citizens United decision and has damaged U.S. climate legislation. He claims that "before Citizens United, Republicans supported climate change legislation," but because it allowed for increased corporate political spending, no CO2 regulation has been able to pass since then, until the Inflation Reduction Action.<sup>13</sup>

Senator Whitehouse claims Republicans, and now Democrats, who are unwilling to support climate change legislation fear the political consequences that the Koch brothers and

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<sup>10</sup> McGreal, 2021.

<sup>11</sup> Drennen, Ari, and Sally Hardin. "Climate Deniers in the 117th Congress." Center for American Progress, March 30, 2021.

<sup>12</sup> Drennen and Hardin, 2021.

<sup>13</sup> Toomey, Diane. "How Big Money in Politics Blocked U.S. Action on Climate Change." Yale Environment 360, May 10, 2017.

other fossil fuel industry leaders will cause. The Koch brothers run Koch industries which is a multi-billion dollar business conglomerate made up of chemical, oil and gas companies. They are influential in conservative politics.<sup>14</sup>

Senator Whitehouse seems to think that there is Republican support for climate change legislation. For example, he states three former Republican Treasury secretaries are pushing Republicans to support a price on carbon. He says many Republican legislators are embarrassed to support the climate denial stance. He also states that, “recently, 17 Republican members of the House signed a resolution vowing to work constructively to find ‘economically viable ways to combat climate change’ and they cited the conservative principle ‘to protect, conserve, and be good stewards of our environment.’”<sup>15</sup> This provides hope that there can be a solution to passing this type of legislation, one just has to overcome the barriers.

## Filling in research gaps

There seems to be a general consensus on how the fossil fuel industry influences Congress through lobbying organizations such as API. If we know what is causing massive hurdles for climate change legislation in the U.S., why is nothing being done to change it? What can be done to lead to a future that will allow for Americans' opinions to be represented in Congress and therefore allow climate change legislation to pass more easily at the federal level? This literature review serves as a guide on techniques for climate change legislation to overcome these aforementioned barriers. The following paper will provide an overview on the methods

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<sup>14</sup> Reiff, Nathan. “7 Companies Owned by the Koch Brothers.” Investopedia. Investopedia, November 5, 2022.

<sup>15</sup> Toomey, 2017.

used to conduct this literature review, the identified themes that are well supported in the literature, a discussion that analyzes the literature, and lastly concluding thoughts.

## Methods

For this research, I conducted a thorough literature review examining peer reviewed journals and articles from both google scholar and Academic Search Complete within the Johns Hopkins online library. I tried to maintain a lack of bias when researching using unbiased search terms, see the appendix for the search terms. I will note, it is difficult to avoid bias when using search terms that involve words such as climate change, due to the highly politicized nature of the terms. Although I had hypotheses and expectations going into the research, I tried to keep research terms unbiased so as to present an accurate summary of current literature on the proposed solutions and compiled research that answers my research question. Once I collected all of my research, I sifted through the 81 journal articles and found 25 to be relevant to the topic. I summarized these 25 articles and then identified a theme for each article and grouped the common themes. In this paper, I discuss themes that were well supported by the literature review.

## Results

The literature review found varying ideas for how to pass climate change and renewable energy legislation more effectively at the federal level in the U.S., but some common patterns did emerge in the literature. I will focus on three themes that were well supported by the literature and briefly highlight the other themes with less research support. At the beginning of my

research, the Inflation Reduction Act passed, including elements of relevance to this report. For this reason, I include a high-level summary of aspects of this law that pertain to these studies. Two of the three themes involve understanding federalism, the system of government, and how to approach it as a barrier. The first theme outlines how political actors must cross barriers and sectors and understand the complexity of climate change impacts to inform policy solutions. The second theme suggests that, to overcome the barriers from federalism, compromises have to be made. This can include reframing and adjusting policies to be nonpartisan or bipartisan. The last solution that emerged from the literature was that climate change policy mitigation advocates should take advantage of the widespread impacts that climate change has and reframe policy issues to appeal to multiple unlikely groups to build stronger larger coalitions around specific policies. There were several other themes that I identified that were not as well supported in the literature. In addition, the compromises made to pass the Inflation Reduction act point to the role that compromise plays.

## Crossing Silos and Boundaries

As mentioned, the first theme discussed the importance of understanding the far-reaching impacts of climate change legislation. Climate change has impacts that reach multiple sectors and impact different facets of American daily life. It has local, regional, national, and international impacts. As aforementioned, climate change has a strong and organized opposition that has created a difficult barrier to cross. Legislators and climate policy advocates have to understand the intersectionality of climate change, work across silos and use boundary work to successfully pass legislation. The complexity and breadth of its impact is important for government agencies, lawyers, legislators, lobbyists, advocates, etc. to understand in order to

pass these policies. The approach to solve climate change must be complex, intersectional (across sectors), and multifaceted (consisting of many different approaches).<sup>16</sup>

As mentioned, climate change impacts society in many ways. For example, it impacts cities, economies, nations, and foreign affairs. This transition to renewable energy is different from that of past energy transitions. It is important for actors to examine and understand how fuels tie into our daily lives, the function of our society, and international relations.<sup>17</sup> The transition “from wood to coal and coal to oil and natural gas” occurred due to technological innovations that made the new fuel source easier, cheaper, and more efficient.<sup>18</sup> Despite technological advances in renewable energy, that is not what is the driving force for this transition, instead, the driving force is climate change. Historically, energy systems and transitions were defined by their fuel source. Therefore, a transition usually required the focus on the old and new fuel source and the related technology.<sup>19</sup> Today energy systems, locally, regionally, nationally, and internationally are complex and do not solely consist of fuel and its technology. There are many other factors that affect energy systems, such as those factors in daily life that contribute to energy consumption. For example, “how individuals work, play, socialize, and eat, to how industries cluster, how cities and economies grow, and how nations conduct their foreign affairs.”<sup>20</sup> Looking at an energy transition holistically, would involve examining the impacts on issues such as the distribution of income, jobs, globalization, land use, etc. Therefore, in creating policies and reaching out to the correct actors, one has to understand

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<sup>16</sup> Scotford, E., & Minas, S. (2019). Probing the hidden depths of climate law: Analysing national climate change legislation. *Review of European Comparative & International Environmental Law*, 28(1), 67–81.

<sup>17</sup> Laird, Frank N. “Against Transitions? Uncovering Conflicts in Changing Energy Systems.” *Science as Culture* 22, no. 2 (May 30, 2013): 149–56.

<sup>18</sup> Laird, 2013.

<sup>19</sup> Laird, 2013.

<sup>20</sup> Laird, 2013.

the complexity of climate impacts and the widespread effects that energy system change has on communities.<sup>21</sup>

As mentioned, climate change legislation has strong opposition and in order to create a powerful front, legislators have to understand how to break apart the opposition. Let us quickly look deeper into the opposition to better understand how to overcome this barrier.

Climate denial began to spread after what was called “climategate” in 2009, when scientists’ emails were leaked, showing the manipulation of climate data and suppression of dissenting scientific papers. Eventually, no misconduct was found, but the damage had already been done. This led to a discovery of minor errors in the 4th International Panel on Climate Change (IPCC) Assessment Report and fueled climate denial that led to a deadlock in the 2009 Conference Of the Parties (COP) in Copenhagen or COP15. This ruined the public’s trust in climate scientists, having a large impact on a well-respected institution.<sup>22</sup> Before science was doubted, the IPCC was respected globally, it was even awarded the Nobel Peace prize in 2007. We have the knowledge on climate change that we do now because of science which has helped guide the IPCC and the United Nations Framework Convention on Climate Change (UNFCCC).<sup>23</sup>

Luckily, there is a way of overcoming this barrier through using the understanding of the complexity of climate change as an advantage. This solution is boundary work, which can be done at both the international and national levels. Boundary work, the work done to coordinate science and politics, is vital in the climate change and energy policy fields. The IPCC is an example of a boundary organization “that straddles the shifting divide between politics and

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<sup>21</sup> Ibid.

<sup>22</sup> Hoppe, Rob, Anna Wesselink, and Rose Cairns. “Lost in the Problem: The Role of Boundary Organisations in the Governance of Climate Change.” *WIREs Climate Change* 4, no. 4 (2013): 283–300.

<sup>23</sup> Hoppe et al., 2013.

science.”<sup>24</sup> Boundary organizations are “embedded in and shaped by contexts of policy issue politics and political cultural spheres,” while the scientists’ roles are to be neutral and to avoid conflicts of interest.<sup>25</sup> Therefore, these roles are quite contradictory. The boundary work is thus the work that bridges the gap in order for the two to collaborate. Although it is difficult, it is present in and vital to all science-policy interactions. Boundary work connects people from both the political and scientific worlds to come to agreements. This is done through boundary organizations such as the IPCC.<sup>26</sup>

Boundary organizations involve both the science and policy world and both have leadership and management responsibilities. Having balanced responsibility allows for accountability, coordination, and co-production. As seen through the IPCC and their Assessment Reports, scientists and policymakers work together to report on climate models that then drive and inform policy.<sup>27</sup> In summary, the first theme, strongly supported in the literature, suggests that renewable energy and climate change policy advocates should understand the complexity of climate change and its widespread impact in order to create appropriate policy solutions and networks across sectors and silos.

## Compromise

The system of government in the U.S. is made up of checks and balances. This was built into the decision-making bodies ie: The House, Senate, and president have to agree. The party with the majority is able to set the decision-making agenda. The House requires a majority, while

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<sup>24</sup> Hoppe et al., 2013.

<sup>25</sup> Hoppe et al., 2013.

<sup>26</sup> Ibid.

<sup>27</sup> Ibid.



the senate requires a 3/5 majority.<sup>28</sup> “The political majority has an effective veto against radical policy change due to the design and structure of the U.S. political institutions.”<sup>29</sup> Policymakers vote partially because of their interest in reelection (ie: based on who their sponsoring lobby is) and also based on their specific interests.<sup>30</sup> Despite Americans' concern for energy security, changing the status quo in energy policy is hard to do because of the structure of government within the U.S. Climate change and renewable energy legislation is fighting an uphill battle in order to change the status quo. Luckily, the literature points to a way of better understanding the inner workings of federalism to more successfully pass climate change legislation. This is through compromise.

A look at the 110th Congress' Energy Independence and Security Act of 2007 provides insight into the role that compromise plays in energy and climate policy within the US, at the federal level. Energy security has been a large concern in the U.S. especially after the oil shocks of 1973 and 1978.<sup>31</sup> Energy security is a good bipartisan or nonpartisan issue in that it pleases those looking for climate mitigation policies while also pleasing those looking for access to energy at low prices. “In a situation with increased public concerns about both energy security and climate change, energy policy is a field that potentially can include a bipartisan agenda where compromise can be found.”<sup>32</sup> This frames the issue differently, opening up the issue for a larger and wider range of support. Another group is military members who prioritize national and energy security. Including energy security could lead to policies that are more concerned with mitigating climate change, by using the rationale of increasing energy security and

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<sup>28</sup> Bang, Guri. “Energy Security and Climate Change Concerns: Triggers for Energy Policy Change in the United States?” *Energy Policy* 38, no. 4 (2010): 1645–53.

<sup>29</sup> Bang, 2010.

<sup>30</sup> Bang, 2010.

<sup>31</sup> Bang, 2010.

<sup>32</sup> Ibid.

decreasing energy costs. understanding. Using a compromise such as a focus on both energy security and climate change could result in GHG emission reductions.<sup>33</sup>

In order for this to occur the climate change policy movement needs actors within their coalition with power, money, and status. An example of a large group with influence is farmers who may have an interest in ethanol production and know the impacts that climate change can cause on their productivity. This group is therefore important and can come together to pressure their legislators. Another group that can be included is large firms that think greenhouse gas caps have an advantage internationally and for the U.S. economy. Gathering strong, large, and monied interests like these could take down prior powerful actors that influence climate and energy legislation. It is important to focus on redefining and reframing the issue so as to pull in the largest group possible.<sup>34</sup>

Another example of how to compromise with opponents is seen through a case study in South Africa. The South African climate advocates had a large opposition coming from the industrial sector.<sup>35</sup> However, the industrial sector and climate change policies complement each other, providing an opportunity for the two opposing groups to come together and compromise on legislation. For example, both sectors are interested in promoting the diversification of South Africa's economy, therefore finding a solution that achieves that can be a way for a successful compromise to occur. Finding a way for industrial development to still occur, while also passing policies that reduce greenhouse gas (GHG) emissions was the goal and was made possible through solutions such as sustainable development and development of low carbon industries

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<sup>33</sup> Ibid.

<sup>34</sup> Ibid.

<sup>35</sup> Montmasson-Clair, Gaylor. "The Two Shall Become One: Overcoming the Stalemate Between Industrial and Climate Change Policies." *SSRN Electronic Journal*, December 2015.

that contributed to economic diversification.<sup>36</sup> This makes South Africa internationally competitive, creates jobs for South Africans, and helps industries to be more sustainable and efficient, saving them money and opening them up to new opportunities.<sup>37</sup> Overlap can be found in most sectors making compromise possible in order to bring two or more commonly opposed sets of actors together to pass legislation.

## Role of Social Movements

Again, federalism as a hurdle was well supported by the literature. The final solution recommends strengthening the climate and renewable energy movement. The division and balance of power at the national level in the U.S. government makes passing legislation harder to achieve, especially when it goes against the status quo. Understanding this is helpful in finding ways to push policy change to the forefront.

Another aspect of American government and politics is the influence of large corporations. This forms an especially difficult barrier for climate change and renewable energy interests because of the money backing fossil fuel interests and corporations whose sole concern is protecting their financial interests.<sup>38</sup> In order to surpass both the government and political barriers, the literature recommends focusing on a societal approach. Suppose a community is more economically prosperous or is willing, as a society, to be open to system change. In that case, there is a greater chance that they can overcome large corporations. In order for society to influence corporations, they must form larger coalitions by opening up the climate and renewable energy movement to more groups.<sup>39</sup>

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<sup>36</sup> Montmasson-Clair, 2015.

<sup>37</sup> Montmasson-Clair, 2015.

<sup>38</sup> Scotford and Minas, 2018.

<sup>39</sup> Scotford and Minas, 2018.

Large corporations have a sway with Congress which is why climate change legislation is often blocked by Congress. They also perceive the public to be less supportive of a clean energy transition than they are, which causes gridlock. Climate change policy supporters have to form larger coalitions to sway Congress. Coalitions have to expand to traditionally non environmentally involved parties.<sup>40</sup> There needs to be long-term coalitions that support climate change legislation over long periods of time that do not change positions with each election. Strong energy transition coalitions can be used to overcome resistance from regime coalitions.<sup>41</sup>

An example from a case study in Chile shows how successful social movements can be in pushing the government to pass energy and climate legislation. Chile, in this example, can be compared to the U.S. because the U.S. faces opposition from coal, oil, and gas companies and those affiliated that serve as a barrier to climate change and renewable energy legislation. Twenty years ago, an energy transition in Chile would be out of the question. Chile, like the U.S., struggled to change the status quo. Due to Chile's strong social movement, they achieved energy policy reform. Prior to the forming of the contingent coalitions in Chile, Chile was solely focused on preservation, but after the momentum made by the contingent coalitions Chile was able to pass renewable energy legislation. Renewable energy generation grew four fold since 2010, and now they are becoming a world leader in the development of renewables. Chile also holds the second largest market for renewable energy in Latin America.<sup>42</sup> In this regard, Chile

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<sup>40</sup> Keller, Forrest. "Influencing Change: Passing Pro-Climate Policy in Democracies," n.d.

<sup>41</sup> Hess, David J. "Energy Democracy and Social Movements: A Multi-Coalition Perspective on the Politics of Sustainability Transitions." *Energy Research & Social Science* 40 (June 2018): 177–89.

<sup>42</sup> Madariaga, Aldo, and Mathilde Allain. "Contingent Coalitions in Environmental Policymaking: How Civil Society Organizations Influenced the Chilean Renewable Energy Boom." *Policy Studies Journal* 48, no. 3 (2018): 672–99.

can prove as a strong case study for what to do to pass U.S. climate change and energy legislation.<sup>43</sup>

The alliances made were from a broad range of actors such as: businesses, civil society organizations, companies, NGOs, experts, political actors, etc.<sup>44</sup> Chile's social movements were strong and made an impression because they formed numerous "contingent coalitions."

Contingent coalitions are a collection of actors that have conflicting interests but have some overlapping agendas and are able to come together to pursue their common interest. For this to happen, climate mitigation and renewable energy groups within a movement have to break out of their usual shell and gather those who would not normally identify with the group.<sup>45</sup>

The U.S. should use Chile as a model by forming contingent coalitions. These coalitions cross party lines and join together on specific shared interests over one specific policy issue. To form, these climate actors must rethink climate change and renewable energy issues as "regional development issues" or "energy security issues;" this gets rid of the politicization of the term "climate change" and turns it into a bipartisan issue. This allows actors of many different political identities to come together over this one interest. These are unlikely actors coming together to form this coalition. This has occurred between environmentalists, war veterans, and those concerned with national security. The more the scope of a policy issue is broadened, the more actors will join. These coalitions are able to exchange information and collaborate. It is important for the coalition to build alliances so that it is able to ebb and flow when different policy issues arise. The key in these coalitions is for them to be "fluid, flexible and instrumental

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<sup>43</sup> Madariaga and Allain, 2018.

<sup>44</sup> Madariaga and Allain, 2018.

<sup>45</sup> Madariaga and Allain, 2018.

associations.”<sup>46</sup> They can disperse after the policy process is over and pop up again when necessary. This gives them a larger and long-term impact.<sup>47</sup>

Strong energy transition coalitions can be used to overcome resistance from regime coalitions. The reason for resistance against climate mitigation policies in some countries is the opposition from incumbent actors such as utilities that worry about the threat that an energy transition will have on profit. Incumbents and conservative parties form alliances to prevent climate change mitigation policies from passing. This is a large issue in the U.S. and also Australia, Canada, and the Netherlands. There are factors that will influence the potential for climate change legislation to pass such as extreme weather events, concern with energy security, reduced low carbon energy source prices, and pressure to join an international climate change agreement. But this is not enough in the U.S. because of the strong organized resistance from incumbent industrial actors and political leaders. In order to overcome them there must be a strong coalition. As mentioned, this coalition cannot solely consist of renewable energy and climate change mitigation supporters but must include other groups such as civil society actors, political leaders, private sector actors, renewable energy and energy efficiency industries, and actors from the technology and finance sectors. Integrating other groups into a coalition is necessary for a successful and strong coalition. The coalition must hold a diverse group of actors. The goal is for these coalitions to move past silos and integrate into larger stronger coalitions.<sup>48</sup>

Generally, one way to combine groups is to reframe the issue as “energy democracy.” This framing brings in a broader group of supporting parties. There can be bridge organizations that also help connect coalitions with groups who may be interested. These bridge organizations

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<sup>46</sup> Ibid.

<sup>47</sup> Ibid.

<sup>48</sup> Hess, 2018.

are able to find similar previous coalitions and bring them together on an issue. By building coalitions of different groups they become a strong front in elections and in protests.<sup>49</sup> Another way to broaden and strengthen the climate change and renewable energy movements is the convergence with the social justice movement. Intertwining and convergence of social and climate justice issues along with convergence across local, national, and international levels allows for stronger larger coalitions.<sup>50</sup>

In West Africa, the climate change movement was able to gain global convergence by focusing on land and water. This opened the movement up to other actors such as those in the agriculture and fishery sectors. Locally and nationally, they were building coalitions with a firm stance against land and water grabbing. In order for convergence to happen, there has to be some sort of shared or common repertoire of contention. They were successful in stopping illegal mining in Ghana and also illegal land grabbing. They were able to engage fishermen and help train them to become involved in this process. They were also successful in Senegal through mass mobilization. Another technique these movements used was focusing on these local issues in an international sense so as to engage groups globally.<sup>51</sup>

The Navajo Nation used a similar but different framework at Standing Rock by taking this transnational environmental justice movement and focusing on one specific problem, the Dakota Access Pipeline at Standing Rock. This also was a large step in convergence of indigenous groups and the global climate and environmental justice movement. Thus convergence between the climate change and renewable energy movement and other movements

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<sup>49</sup> Hess, 2018.

<sup>50</sup> Tramel, Salena. "Convergence as Political Strategy: Social Justice Movements, Natural Resources and Climate Change." *Third World Quarterly: Converging Social Justice Issues and Movements* 39, no. 7 (May 8, 2018): 1290–1307.

<sup>51</sup> Tramel, 2018.

has the potential to broaden and strengthen the movement, leading to successful policy outcomes.<sup>52</sup>

I will conclude this section by briefly highlighting the Inflation Reduction Act as an example of success. The Inflation Reduction Act passed on August 16, 2022 as I was starting this research. This is a huge accomplishment for climate change and renewable energy policy in the U.S. Other countries such as Canada are looking at this as a model.<sup>53</sup> This is the largest spending that the US has put towards solving climate change.<sup>54</sup> The Inflation Reduction Act was first proposed in September of 2021.<sup>55</sup> The following year consisted of compromising and negotiating with Senators, such as Senator Manchin. After almost a year of discussion, compromise was made. Senator Manchin received the following benefits to his state of West Virginia: energy security, extension of the Black Lung Disability Trust Fund, and continued investments in and funding for West Virginia’s coal, oil, and gas industry.<sup>56</sup> In turn, the Inflation Reduction Act houses investments in energy production for the rest of the country, as well, and a focus on a 40% reduction on GHG emissions by 2030.<sup>57</sup> At a high level the bill will reduce emissions for the U.S. through its investments in renewable energy technology and projects, but that did come with some compromises that will allow the coal, oil, and gas industry to continue in West Virginia.<sup>58</sup> Thus, the Inflation Reduction Act emphasizes the significance that compromise holds in passing policy in the U.S.

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<sup>52</sup> Tramel, 2018.

<sup>53</sup> Crooks, Ed, Jackie Forrest, and Robbie Orvis. “What Does a Split US Congress Mean for the Energy Transition?” Episode. *The Energy Gang*, December 2, 2022.

<sup>54</sup> Joselow, Maxine, and Vanessa Montalbano. “Analysis | Al Gore on the Inflation Reduction Act: 'It Took so Long'.” The Washington Post. WP Company, August 16, 2022.

<sup>55</sup> “H.R.5376 - Inflation Reduction Act of 2022.” Congress.gov. Congress.gov. Accessed December 19, 2022.

<sup>56</sup> “The Inflation Reduction Act Will: Invest in Energy Security, Cover Healthcare Costs, and Address Inflation and Support Job Creation.” Senate Committee on Energy and Natural Resources. Democratic News. Accessed December 19, 2022.

<sup>57</sup> “Summary: The Inflation Reduction Act of 2022.” Senate. democrats.senate.gov, 2022.

<sup>58</sup> Joselow and Montalbano, 2022.



# Discussion

My hypotheses were the following: (1) that my results will uncover that in order for the U.S. to have more success in passing climate change and renewable energy legislation at the federal level, special interest money will have to be removed from politics; (2) that the climate change movement will have to become more organized, unified, and wealthy in order for climate change and renewable energy legislation to pass more consistently at the federal level in the U.S.; (3) that another path toward successful policy change is through compromise, as seen with the eventual passing of the Inflation Reduction Act.

In order to answer my research question (What can be done to help climate change legislation pass at the federal level in the U.S.?) I conducted a thorough literature review on the existing and up-to-date literature on this topic. I then organized the literature based on common themes, and then discussed and analyzed the themes that were well supported in the literature.

The results of this study supported hypotheses numbers 2 and 3, as seen above, and did not support hypothesis number 1. The results presented three solutions that were well supported in the literature. These themes include: (1) understanding the widespread impacts of climate change to inform the climate change and renewable energy legislation process by crossing sectors and using boundary work; (2) in order to overcome barriers innate in federalism and the strong fossil fuel lobby, compromises have to be made to please different actors, which can be done by reframing policy solutions; (3) it is important for policymakers and advocates to use their understanding on the widespread impacts of climate change to reach out to different actors and reframe policy issues to build larger and stronger coalitions to combat the counter climate change movement. Each solution is related and strengthens the other, allowing for a strong guide on how to successfully pass climate change or renewable energy legislation moving forward.

Compromise is easier said than done. One way to accomplish a successful compromise is through incentives. If both sides (or all actors) have an incentive to compromise, then they will be more likely to do so, but on the contrary if there are incentives not to compromise then the compromise will not occur. An example of incentives we see today in the U.S. to not compromise include the well-funded fossil fuel lobby outspending the climate lobby tenfold. Thus, compromises have to be well thought out in order to ensure that both sides will be receiving proper incentives. An example could be market-based solutions, which could be further explored in future research. As mentioned in the research, compromise can include job creation or economic diversification, which was a successful strategy in the South Africa case study.

Federalism came up frequently in the literature, as a barrier in the U.S. Emphasizing that the challenge to passing climate change and renewable energy legislation at the federal level within the U.S. is due to the division and balance of power. This points towards why the U.S. has had more success passing this type of legislation at the local and state levels, because of the power that local and state governments have in passing legislation within the U.S. It also suggests that is why the U.S. falls behind other countries in successful, strong federal climate change and renewable energy legislation. Federalism adds strength to the already strong fossil fuel lobby through the separation of powers and the resistance to change, adding the inertia of the system, stacking up against the weaker and less monied climate change movement.

This research provides a broad, up-to-date, literature review of approaches to implement climate change legislation and renewable energy policy more successfully. Credibility stems from the breadth of my research, informed by 25 sources, and care in avoiding selection bias by my keyword based research approach. Importantly, the research also identifies three common themes that can be used as a roadmap to achieve success in climate and energy policy change.

See the appendix for **Table 1** on how the sources were sorted by theme. That such a large number of cited papers fall into three common themes adds to the credibility of these findings and of my original research sources as well. The inflation Reduction Act further supports my findings of the importance of compromise.

A study cannot be without its limitations, especially one which is time restricted for the course of this capstone project. While I covered a large body of literature, it is never possible to cover the entirety of the literature on a topic, especially with such time limitations. In addition, despite the attempts to use search terms without personal bias, the terms revolving around climate change and renewable energy have been heavily politicized and it is not possible to completely avoid bias.

I was surprised not to find any results in peer-reviewed literature on advocating for taking money out of politics. This is a solution I saw proposed in website articles and was curious as to why this was not offered as a potential solution in the peer-reviewed literature. One study did discuss the weight that climate lobbies have on national climate policy at a global level. Although, I left this out of the results because the study also mentioned that opposing lobbies do not have the power to block climate change legislation, only the power to slow it down, which has repeatedly been proven not true within the U.S. This study was focused on most countries in the world, and it seemed that the U.S. served as an outlier in this study. Thus I left it out of the research.

I came across one journal article on pushing lobbies to disclose information to the public, a theme I found in non-peer reviewed literature. But this again was not a largely represented theme in the literature.

It should be taken into consideration that the issues discussed in the South Africa case study example, bring about issues that are not as relevant to the U.S. as they are to South Africa. I provided that example, as a way of conceptualizing how compromise can work at this level and think it can be somewhat relevant to the U.S., but, as mentioned in the background and throughout the results, the industrial sector, as a whole, is not the major opponent of renewable and climate friendly legislation in the U.S.

Other proposed solutions found in the literature, that I chose not to cover because they were not as well supported in the literature, include the following: the role of lobbying and interest groups, exposing the source of climate change denial, confronting and destabilizing dominant systems of power, the role of social networks, bridging the gap between extreme red and blue states, GHG or carbon tax, green finance, framing to gain public support, national factors such as high profile flagship laws, international factors such as similar laws passed elsewhere, the privatization of energy systems, shift to positive messaging, private funding in public knowledge and politics. I disregarded the GHG or carbon tax because this has been proposed time and time again, at the federal level in the U.S., and been blocked. I also disregarded the article on exposing the source of climate change denial, because as discussed in the contextual background, it is commonly known among the public and in the literature who started the climate denial movement and why, thus I felt this solution does not solve the problem. In addition to the topics above, in order to remain focused on the three themes well supported by the literature, I do not discuss the topics of lobbying and interest groups and confronting and destabilizing dominant systems of power because of a lack of support in the literature.

This study is useful to renewable energy and climate change policymakers, advocates, lobbyists, and other related stakeholders in informing them on techniques to use moving forward

in order to have more success in passing federal level climate change or renewable energy legislation in the U.S. The results found in this study should inform future policy writing, organizing, lobbying, and legislation attempts in regards to climate change and renewable energy policy. The research could also be strengthened by future research on case studies of countries that have been through similar experiences (with large monied opposition) or with similar government structures and the techniques they used to overcome these barriers and pass the legislation. Another future research study that would add to this report, would be a more thorough analysis of the techniques used to eventually pass the Inflation Reduction Act in the U.S. This bill passed as I was starting this research, therefore I could not fully dive into the bill. Hopefully, future research can examine the conversations and decisions leading up to the passing of the bill to further inform this topic. Lastly, research could focus on the incentives that are essential in compromise and which ones are most effective, for example, the analysis of market based solutions. These are just a few examples of where research could be taken in the future to strengthen this area of research on this topic. That being said, this research still serves as a comprehensive and up-to-date literature review on this topic in the climate and renewable energy field and could be used to inform future decision making.

Ultimately, the strength and credibility of my research will be determined by whether acting on this information is successful. I look forward to taking these lessons forward and testing their generalizability, credibility, and utility myself. I hope others may also demonstrate utility with these findings as I continue to monitor the literature and work in this field.

## Conclusion

This in depth literature review found that in order to pass climate change legislation more

effectively in the U.S., policymakers must understand the widespread and cross sectoral impacts of climate and energy in order to inform and strengthen climate change and renewable energy legislation. In addition, due to the way the U.S. government is currently structured, compromises have to be made for legislation to pass. To approach this, advocates, policymakers, and lobbyists must widen the lens of policy issues to please more than just one side or one group by taking advantage of the multisectoral reaches that climate impacts and solutions have. Rethinking climate and energy issues in terms such as “energy security” can also help open up coalitions to unlikely participants. These larger nonpartisan groups that ebb and flow with policy issues are much stronger and have a larger and longer impact. Moving forward, climate change and renewable energy actors should use this research to inform the way they approach organizing around and writing climate change or renewable energy policies. In addition further research on market based solutions, the Inflation Reduction Act, or case studies of similar countries could build upon and strengthen this research on techniques for passing federal climate change legislation in the future within the U.S.

# Appendix

## Search Terms:

“influence renewable energy Congress”

“climate change legislation”

“climate change legislation United States”

“factors influencing climate change legislation United States”

“factors influencing energy legislation in the United States”

“factors influencing passage of energy legislation in the United States”

“climate change politics in the United States”

“changing the energy policy status quo”

“climate change legislation reform in the United States”

“energy legislation reform in the United States”

“defeating climate change policy”

“defeated energy policy in the United States”

“Political dimensions of sustainable transitions”

“Climate change policy stalemate”

“Climate policy stalemate United States”

“Energy democracy”

“Climate change democracy”

**Table 1: Sources and Themes**

<b>Theme:</b>	<b>Source:</b>
<b>Papers evaluated that addressed the three themes:</b>	
<b>Crossing Silos and Boundaries</b>	Scotford and Minas, 2019.
<b>Crossing Silos and Boundaries</b>	Keller, n.d.
<b>Crossing Silos and Boundaries</b>	Diarmuid Torney (2017) If at first you don't succeed: the development of climate change legislation in Ireland, <i>Irish Political Studies</i> , 32:2, 247-267, DOI: <a href="https://doi.org/10.1080/07907184.2017.1299134">10.1080/07907184.2017.1299134</a>
<b>Crossing Silos and Boundaries</b>	Hoppe et al., 2013.
<b>The role of social movements</b>	Madariaga and Allain, 2018.
<b>The role of social movements</b>	Hess, 2018.
<b>The role of social movements</b>	Mcintyre-Mills, Janet. <i>Transformation from Wall Street to Wellbeing</i> . Springer-Verlag New York, 2016.
<b>The role of social movements</b>	Tramel, 2018.
<b>Compromise</b>	Bang, 2010.
<b>Compromise</b>	Montmasson-Clair



Papers evaluated but not included in the three themes:	
Lobbying and interest groups	<p>Brulle, Robert J. “The Climate Lobby: A Sectoral Analysis of Lobbying Spending on Climate Change in the USA, 2000 to 2016.” <i>Climatic Change</i> 149, no. 3-4 (July 19, 2018): 289–303. <a href="https://doi.org/10.1007/s10584-018-2241-z">https://doi.org/10.1007/s10584-018-2241-z</a>.</p>
Lobbying and interest groups	<p>Böhler, Heike, Marcel Hanegraaff, and Kai Schulze. “Does Climate Advocacy Matter? the Importance of Competing Interest Groups for National Climate Policies.” <i>Climate Policy</i> 22, no. 8 (2022): 961–75. <a href="https://doi.org/10.1080/14693062.2022.2036089">https://doi.org/10.1080/14693062.2022.2036089</a>.</p>
Confront and destabilize dominant systems of energy	<p>Gottschamer, Lawrence, and Qiong Zhang. “The Dynamics of Political Power: The Socio-Technical Transition of California’s Electricity System to Renewable Energy.” <i>Energy Research &amp; Social Science</i> 70 (2020): 101618. <a href="https://doi.org/10.1016/j.erss.2020.101618">https://doi.org/10.1016/j.erss.2020.101618</a>.</p>
Confront and destabilize dominant systems of energy	<p>Healy, Noel, and John Barry. “Politicizing Energy Justice and Energy System Transitions: Fossil Fuel Divestment and a ‘Just Transition.’” <i>Energy Policy</i> 108 (2017): 451–59.</p>

	<p><a href="https://doi.org/10.1016/j.enpol.2017.06.014">https://doi.org/10.1016/j.enpol.2017.06.014</a>.</p>
GHG/carbon tax	<p>Lowe, Sean. “A Way through the Impasse in U.S. Climate Change Legislation: A GHG Tax That Possesses Political and Administrative Feasibility and Conforms to International Law.” <i>UCLA Journal of Environmental Law and Policy</i> 29, no. 2 (2011). <a href="https://doi.org/10.5070/15292019971">https://doi.org/10.5070/15292019971</a>.</p>
GHG/carbon tax	<p>Klenert, David, Linus Mattauch, Emmanuel Combet, Ottmar Edenhofer, Cameron Hepburn, Ryan Rafaty, and Nicholas Stern. “Making Carbon Pricing Work for Citizens.” <i>Nature Climate Change</i> 8, no. 8 (2018): 669–77. <a href="https://doi.org/10.1038/s41558-018-0201-2">https://doi.org/10.1038/s41558-018-0201-2</a>.</p>
Social networks	<p>Brulle, Robert J. “Institutionalizing Delay: Foundation Funding and the Creation of U.S. Climate Change Counter-Movement Organizations.” <i>Climatic Change</i> 122, no. 4 (2013): 681–94. <a href="https://doi.org/10.1007/s10584-013-1018-7">https://doi.org/10.1007/s10584-013-1018-7</a>.</p>
Expose the sources of climate change denial	<p>Dunlap, Riley E. “Climate Change Skepticism and Denial.” <i>American Behavioral Scientist</i> 57, no. 6 (2013): 691–98.</p>

	<p><a href="https://doi.org/10.1177/0002764213477097">https://doi.org/10.1177/0002764213477097</a>.</p>
Bridge the gap between red and blue states	<p>Sautter, John A., and Christopher A. Sautter. "Price, Carbon and Generation Profiles: How Partisan Differences Make the Future of Climate Change Uncertain." <i>The Electricity Journal</i> 23, no. 2 (2010): 71–75.  <a href="https://doi.org/10.1016/j.tej.2010.02.005">https://doi.org/10.1016/j.tej.2010.02.005</a>.</p>
Green Finance	<p>Chiapello, Ève. "Stalemate for the Financialization of Climate Policy PDF Logo." <i>Economic Sociology: The European Electronic Newsletter</i> 22, no. 1 (2020): 20–29.</p>
Framing to gain public support	<p>Stokes, Leah C., and Christopher Warshaw. "Renewable Energy Policy Design and Framing Influence Public Support in the United States." <i>Nature Energy</i> 2, no. 8 (2017).  <a href="https://doi.org/10.1038/nenergy.2017.107">https://doi.org/10.1038/nenergy.2017.107</a>.</p>
National factors- high profile flagship laws & International factors - similar laws passed elsewhere	<p>Fankhauser, Sam, Caterina Gennaioli, and Murray Collins. "Domestic Dynamics and International Influence: What Explains the Passage of Climate Change Legislation?" <i>SSRN Electronic Journal</i>, 2014.  <a href="https://doi.org/10.2139/ssrn.2430107">https://doi.org/10.2139/ssrn.2430107</a>.</p>

<p>Privatization of energy systems</p>	<p>Pollitt, Michael G. “The Role of Policy in Energy Transitions: Lessons from the Energy Liberalisation Era.” <i>Energy Policy</i> 50 (2012): 128–37.  <a href="https://doi.org/10.1016/j.enpol.2012.03.004">https://doi.org/10.1016/j.enpol.2012.03.004</a>.</p>
<p>Shift to Positive Messaging</p>	<p>Weaver, Kent. “Policy Leadership and the Blame Trap: Seven Strategies for Avoiding Policy Stalemate.” <i>Governance Studies at Brookings</i>, March 2013.</p>
<p>Private funding in public knowledge and politics</p>	<p>Farrell, Justin. “Corporate Funding and Ideological Polarization about Climate Change.” <i>Proceedings of the National Academy of Sciences</i> 113, no. 1 (2015): 92–97.  <a href="https://doi.org/10.1073/pnas.1509433112">https://doi.org/10.1073/pnas.1509433112</a>.</p>

# Bibliography

- Bang, Guri. “Energy Security and Climate Change Concerns: Triggers for Energy Policy Change in the United States?” *Energy Policy* 38, no. 4 (2010): 1645–53. <https://doi.org/10.1016/j.enpol.2009.01.045>.
- Carney, Jordain, and Miranda Green. “Senate Blocks Green New Deal.” The Hill. The Hill, March 27, 2019. <https://thehill.com/homenews/senate/435899-senate-blocks-green-new-deal/>.
- “Climate Change and Big Money in Politics.” American Promise, April 21, 2020. <https://americanpromise.net/2020/04/climate-change-and-big-money-in-politics/>.
- Crooks, Ed, Jackie Forrest, and Robbie Orvis. “What Does a Split US Congress Mean for the Energy Transition?” Episode. *The Energy Gang*, December 2, 2022.
- Davenport, Coral. “Trump Eliminates Major Methane Rule, Even as Leaks Are Worsening.” The New York Times. The New York Times, August 13, 2020. <https://www.nytimes.com/2020/08/13/climate/trump-methane.html#:~:text=WASHINGTON%20%E2%80%94%20The%20Trump%20administration%20formally,the%20atmosphere%20than%20previously%20known>.
- Drennen, Ari, and Sally Hardin. “Climate Deniers in the 117th Congress.” Center for American Progress, March 30, 2021. <https://www.americanprogress.org/article/climate-deniers-117th-congress/>.
- “Electric Utility Generating Units: Repealing the Clean Power Plan.” EPA. Environmental Protection Agency, August 15, 2022. <https://www.epa.gov/stationary-sources-air-pollution/electric-utility-generating-units-repealing-clean-power-plan>.
- “H.R.5376 - Inflation Reduction Act of 2022.” Congress.gov. Congress.gov. Accessed December 19, 2022. <https://www.congress.gov/bill/117th-congress/house-bill/5376/text>.
- Hess, David J. “Energy Democracy and Social Movements: A Multi-Coalition Perspective on the Politics of Sustainability Transitions.” *Energy Research & Social Science* 40 (June 2018): 177–89. <https://doi.org/10.1016/j.erss.2018.01.003>.
- Hoppe, Rob, Anna Wesselink, and Rose Cairns. “Lost in the Problem: The Role of Boundary Organisations in the Governance of Climate Change.” *WIREs Climate Change* 4, no. 4 (2013): 283–300. <https://doi.org/10.1002/wcc.225>.

- “The Inflation Reduction Act Will: Invest in Energy Security, Cover Healthcare Costs, and Address Inflation and Support Job Creation.” Senate Committee on Energy and Natural Resources. Democratic News. Accessed December 19, 2022.  
[https://www.manchin.senate.gov/imo/media/doc/inflation\\_reduction\\_act\\_west\\_virginia\\_wins.pdf?cb](https://www.manchin.senate.gov/imo/media/doc/inflation_reduction_act_west_virginia_wins.pdf?cb).
- Irfan, Umair. “Americans Are Worried about Climate Change - but Don't Want to Pay Much to Fix It.” Vox. Vox, January 28, 2019. <https://www.vox.com/2019/1/28/18197262/climate-change-poll-public-opinion-carbon-tax>.
- Joselow, Maxine, and Vanessa Montalbano. “Analysis | Al Gore on the Inflation Reduction Act: 'It Took so Long'.” The Washington Post. WP Company, August 16, 2022.  
<https://www.washingtonpost.com/politics/2022/08/16/al-gore-inflation-reduction-act-it-took-so-long/>.
- Keller, Forrest. “Influencing Change: Passing Pro-Climate Policy in Democracies,” n.d.  
<https://www.forrestkeller.com/documents/Influencing%20Change:%20Passing%20Pro-Climate%20Policy%20in%20Democracies.pdf>.
- Laird, Frank N. “Against Transitions? Uncovering Conflicts in Changing Energy Systems.” *Science as Culture* 22, no. 2 (May 30, 2013): 149–56.  
<https://doi.org/10.1080/09505431.2013.786992>.
- Madariaga, Aldo, and Mathilde Allain. “Contingent Coalitions in Environmental Policymaking: How Civil Society Organizations Influenced the Chilean Renewable Energy Boom.” *Policy Studies Journal* 48, no. 3 (2018): 672–99. <https://doi.org/10.1111/psj.12298>.
- McGreal, Chris. “How a Powerful US Lobby Group Helps Big Oil to Block Climate Action.” The Guardian. Guardian News and Media, July 19, 2021.  
<https://www.theguardian.com/environment/2021/jul/19/big-oil-climate-crisis-lobby-group-api>.
- Montmasson-Clair, Gaylor. “The Two Shall Become One: Overcoming the Stalemate Between Industrial and Climate Change Policies.” *SSRN Electronic Journal*, December 2015.  
<https://doi.org/10.2139/ssrn.2747935>.
- Reiff, Nathan. “7 Companies Owned by the Koch Brothers.” Investopedia. Investopedia, November 5, 2022. <https://www.investopedia.com/insights/companies-owned-koch-brothers/>.
- Roberts, David. “The Green New Deal, Explained.” Vox. Vox, December 21, 2018.  
<https://www.vox.com/energy-and-environment/2018/12/21/18144138/green-new-deal-alexandria-ocasio-cortez>.

Scotford, E., & Minas, S. (2019). Probing the hidden depths of climate law: Analysing national climate change legislation. *Review of European Comparative & International Environmental Law*, 28(1), 67–81. <https://doi.org/10.1111/reel.12259>

“Summary: The Inflation Reduction Act of 2022.” Senate. democrats.senate.gov, 2022. [https://www.democrats.senate.gov/imo/media/doc/inflation\\_reduction\\_act\\_one\\_page\\_summary.pdf](https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_one_page_summary.pdf).

Toomey, Diane. “How Big Money in Politics Blocked U.S. Action on Climate Change.” *Yale Environment 360*, May 10, 2017. <https://e360.yale.edu/features/how-big-money-in-politics-blocked-u-s-action-on-climate-change>.

Tramel, Salena. “Convergence as Political Strategy: Social Justice Movements, Natural Resources and Climate Change.” *Third World Quarterly: Converging Social Justice Issues and Movements* 39, no. 7 (May 8, 2018): 1290–1307. <https://doi.org/10.1080/01436597.2018.1460196>.

“Where Do Americans Stand on Climate and Energy Policy?” AP NORC. the University of Chicago, October 17, 2022. <https://apnorc.org/projects/where-do-americans-stand-on-climate-and-energy-policy/>.