WHY DID ENVIRONMENTALISM BECOME PARTISAN?

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Abstract

This report investigates how environmentalism, and support for policies to combat climate change in particular, became partisan issues in the United States. This was not inevitable. The partisanship we see today is unusual, compared to other issues, other countries, or even the US in the 1980s. Environmentalism became popular before it became partisan. The explanation of the partisanship centers on the choices of individual decision makers, not on broad structural or ideological factors. Climate scientists and environmentalists pursued alliances with Democratic politicians in the 1980s and early 1990s, while not pursuing alliances with Republican politicians, who were still receptive at the time. This neglect, along with several flawed attempts at legislation in the 1990s, gave fossil fuel companies an opportunity to ally with Republican politicians. The resulting increase in partisanship did not increase public support for environmentalism and made it less politically effective.

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1 Introduction

Why is environmentalism a partisan issue, at least in the United States? Was this partisanship inevitable? If not, what made it become partisan?

Environmentalism is one of the most partisan issues in the country. The partisan divide on this issue in the United States is almost twice as large as that in any other country – and some similar countries have no partisan divide. As recently as the 1980s, environmentalism enjoyed broad bipartisan support in the US.

Rising partisanship for environmentalism in the 1990s and early 2000s was associated with flat or falling overall support. Legislation and treaties which had enjoyed broad support, sometimes even unanimity, became difficult to pass. Executive actions fluctuated with broader political winds. It would have been better for environmentalism if it had stayed bipartisan.

The history of the partisanship of environmentalism is a story of particular alliances between individual people and institutions. Climate scientists and environmentalists allied with Democratic members of Congress, especially Al Gore, during budgetary debates in the 1980s. Fossil fuel companies and climate skeptics allied with conservative think tanks and congressional Republicans. There were several years in the early 1990s when it appears that environmentalists could have built relationships with congressional Republicans and conservative think tanks (who were still receptive at the time), but instead focused exclusively on one side of the aisle.

Several other choices made by the environmental movement in the 1990s could have contributed to rising partisanship. When environmentalist-allied Democrats were in power, they proposed flawed policies that were easy for Republicans to oppose: a tax focusing on energy rather than greenhouse gasses and a treaty that had previously been unanimously rejected by the Senate. Many environmental organizations did not manage mission creep well, and were willing to add other priorities of the left to their core goals. The environmental movement also shifted its focus from many local issues, where local peculiarities can be as politically important as national coalitions, to a single global issue: climate change.

Environmentalists are not the only relevant actors in this history. Choices made by fossil fuel companies and conservative think tanks, and politicians of all stripes, are also important – and some were far more blameworthy than the choices of environmentalists. But there are actions that environmentalists could have taken in the 1980s and 1990s to make the subsequent partisan gap less likely or less severe.

Environmentalism does seem to lean left as an issue. There are countries where it is only an issue for the left and countries where it is bipartisan, but I know of no countries where it is only an issue for the right. This is not the main focus of this report – it seems more important for movements attempting to navigate US politics to learn the causes and effects of strong partisanship, rather than which side of the aisle an issue ends up on.

2 Context

2.1 The Modern Environmental Movement

The modern environmental movement began in the 1960s and 70s. While there had been environmental organizations before this, like the Sierra Club and the Nature Conservatory,[1, 2] the number of advocacy groups grew dramatically in the 1960s and early 1970s (Table 1). The movement successfully reached the public with books like Rachel Carson's *Silent Spring* in 1962 and public events like the first Earth Day in 1970. [3, 4] Environmentalists were not all working on the same issues, but they formed a mutually supporting community.

Organization	Date Founded
World Wildlife Fund	1961 [5]
Environmental Defense Fund	1967 [6]
Friends of the Earth	1969 [7]
Greenpeace	1969 [8]
Earthjustice	1971 [9]
Ocean Conservatory	1972 [10]

Table 1: New environmental organizations in the 1960s and early 1970s.

This movement was able to enact many of its policy goals. Multiple environmental laws were passed in the US (Table 2, see also Figure 18). President Nixon created the Environmental Protection Agency by executive order in 1970.[11]

Legislation	Date Passed
Clean Air Act	1961
Solid Waste Disposal Act	1965
National Environmental Policy Act	1970
Clean Water Act	1972
Endangered Species Act	1973
Toxic Substances Control Act	1976

Table 2: Major environmental laws passed in the 1960s and 1970s.

The efforts of the environmental movement have mostly shifted towards combating climate change.

2.2 The Discovery of Global Warming

The discovery of global warming occurred in two stages, as described by Spencer Weart in his book and website, *The Discovery of Global Warming*.[12]

It was not initially obvious that human activities could have a significant impact on the global climate. Prior to the 1930s, most scientists believed that the global climate was controlled by forces far stronger than anything humans had done. During the first stage, individual researchers would propose various mechanisms by which human activities might affect the climate, but it was unclear what the magnitude of the effects would be or which would be dominant.¹

In the second stage, climate scientists became convinced that global warming due to greenhouse gas emissions was the dominant effect that humans were having on the global climate. Weart claims that this had become the predominant view by the late 1970s,[14] while other sources claim this occurred somewhat later. It was definitely the belief of a large majority of climate scientists by the IPCC report of 1995.[15] The environmental movement began including climate change among their main concerns starting in the late 1980s.[16]

¹The greenhouse effect involving carbon dioxide emissions was first proposed by Arrhenius in 1896, although it would take decades for this to be widely accepted.[13]

3 Public Opinion

What We Want To Explain

The fact that environmentalism in the United States is a partisan issue needs no citation. However, understanding partisan environmentalism in the US compares to other issues, countries, or times, requires public opinion polling.

Not all polls that ask about a given topic use identical language, so framing effects can impact people's responses. However, polls that ask the same question can be used to compare different places and times. The level of partisan polarization on different issues can be compared when a reputable pollster uses a similar methodology to ask about multiple issues, even though the wordings are necessarily different. The results of the various polls tell a consistent story.

3.1 In the United States

The best available data for US public opinion on environmentalism since the 1970s come from the General Social Survey, which has been administered to thousands of Americans for most years between 1974 and 2012. Data comparing the support for more spending on the environment by members of both parties can be seen in Figure 1.[17]

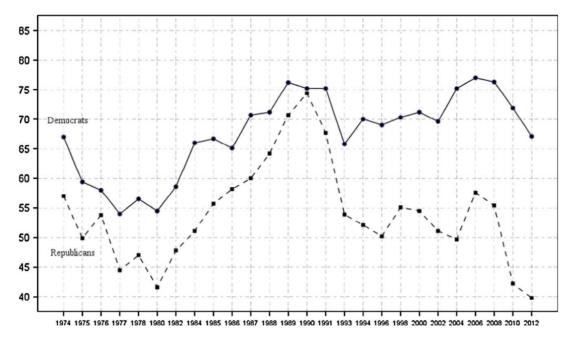


Figure 1: Percentages of Democrats and Republicans reporting that national spending on the environment is "Too Little," 1974-2012. Reprinted from McCright et al. (2014).

During the mid-to-late 1970s, support for environmentalism was declining in both parties. Democrats were consistently about 10 percentage points (p.p.) more likely than Republicans to say that there was too little environmental spending.

During the 1980s, support for environmentalism surged. This increase was even stronger among Republicans than among Democrats, with the partisan gap closing by the end of the decade.

In the 1990s and 2000s, Democrats' support for environmentalism remained roughly constant, while Republicans' support fell dramatically. A large partisan gap opened. The overall support for environmentalism declined, although this might be because support for overall government spending also fell in the early 1990s.[18]

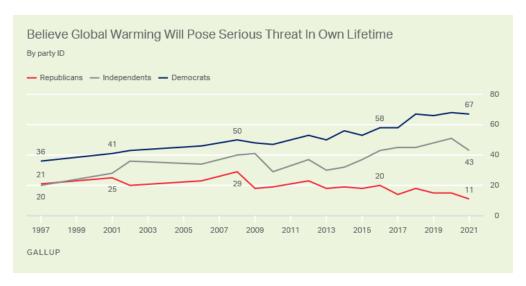


Figure 2: Percentages of Republicans, Independents, and Democrats who believe that global warming will pose a serious threat to themselves or their way of life, 1997-2021. Reprinted from Gallup (2021).

Gallup polling on similar questions only goes back to 1997 (Figure 2). It shows a similar pattern: an initially modest partisan gap of 15 p.p. in 1997 grew to an over 50 p.p. gap in 2021.²[19]

Republicans' opposition to climate change does not seem to be a result of a lack of information. Two polls in swing states in 2011 indicated that Republicans and Democrats with less education, or who said they knew little about climate change, had similar views. As education and knowledge increase, Democrats became more concerned about climate change, while Republicans became less concerned.[20] This result is consistent with the overall trends: as people became more familiar with climate change as time went on, the partisan divide increased.

3.2 Compared to Other Countries

The large partisan gap on environmentalism in the US is unusual. A Pew survey of "17 advanced economies" found that 7 of them had no significant partisan gap, and that the US had a partisan gap that was almost twice as large as any other country (Figure 3).[21]

This survey does provide evidence that environmentalism is more likely to be left-leaning. The explanation for this might involve something intrinsic to environmentalism itself, or it might involve interactions between countries and shared media environments. But it clearly is possible for environmentalism to remain bipartisan, which has happened in the UK, France, Spain, Japan, South Korea, Taiwan, and Singapore.

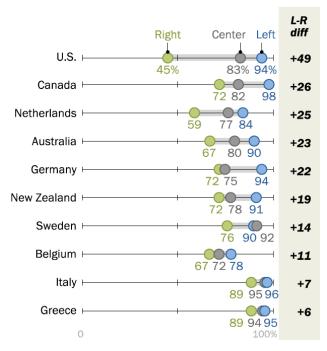
The United States is more partisan overall than most other countries, but it is not an outlier.[22] There are other countries with similar levels of overall partisanship, but almost no partisanship in their support for environmentalism: France and South Korea.[23, 24] There is no correlation between overall partisanship and partisanship in environmentalism.³

²Gallup asks several similar questions, all of which show a small or zero partisan gap when the data starts, which grows dramatically over time. I am showing the results for one of these questions.

³There are 14 countries in both the Pew survey on environmentalism and the Pew survey on overall partisanship. There is no correlation between the fraction of people who say that there are strong or very strong conflicts between people who support different parties in their country vs. the left-right difference between people who say that they are willing to make a lot of or some changes to how they live and work to help reduce the effects of global climate change. https://docs.google.com/spreadsheets/d/lh14Jsez0loAUqy78MBo_JPpwiAjUcwQ-z8V5wuihUk8/edit?usp=sharing.

Ideological left is more willing to adjust lifestyle in response to climate change

% who would be willing to make <u>a lot of/some</u> changes to how they live and work to help reduce the effects of global climate change, among those on the ideological ...



Note: Only statistically significant differences shown. In the U.S., ideology is defined as conservative (right), moderate (center) and liberal (left).

Source: Spring 2021 Global Attitudes Survey. Q32.

"In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work"

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Figure 3: Percentages of people with different ideologies who would be willing to make a lot of or some changes to how they live and work to help reduce the effects of global climate change, in 17 different countries. Only statistically significant differences are shown. Reprinted from Pew (2021).

3.3 Compared to Other Issues

Environmentalism is one of the, if not the, most partisan issue in the US.

The most recent data demonstrating this comes from a Gallup poll from 2023 (Figure 4).[25, 26] Of the 24 issues surveyed, "Protecting the Environment Has Priority Over Energy Development" was tied for the largest partisan gap with "Government Should Ensure That Everyone Has Healthcare." Of the top 5 most partisan issues, 3 were related to environmentalism. The amount this gap has widened since 2003 is also above average for these environmental issues.

Pew also has some recent relevant data (Figure 5).[27, 28] They ask whether 21 particular policies "should be a top priority for the president and Congress to address this year." The largest partisan gap is for "protecting the environment" (47 p.p.), followed by "dealing with global climate change" (46 p.p.). These are ten percentage points higher than the next most partisan priority. These issues are less specific than



Figure 4: The percentages of Republicans and Democrats who agree with each statement shown, 2003-2023. Reprinted from Gallup (2023).

Widest partisan gaps are on whether the environment and climate change should be top policy priorities

% who say ____ should be a top priority for the president and Congress to address this year

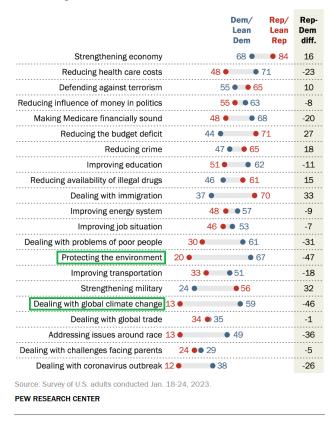


Figure 5: The percentages of Republicans and Democrats who believe that each issue should be a top priority. Reprinted from Pew (2023).

the ones Gallup asked about, and so might not reveal as much of the underlying partisanship. For example, most Democrats and most Republicans agree that strengthening the economy is important, but they might disagree about how this should be done.

Guber's analysis of Gallup polls from 1990, 2000, & 2010 also shows that environmentalism is unusually partisan. [29] Concern about "the quality of the environment" has a similar partisan gap as concern about "illegal immigration," and larger than concern about any other political issue (Figure 6). If we hone in on concern about "global warming" within overall environmental concern, the partisan gap doubles, making it a clear outlier.

Guber also looks at how the partisan gap has changed for concern about 6 particular environmental issues (Figure 7). None of the issues had a partisan gap in 1990, while all did by 2010. The partisan gaps for 5 of these issues were similar, and global warming had twice the partisan gap as any other issue.

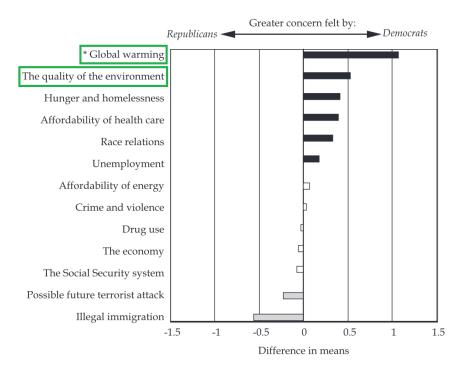


Figure 6: Difference between the mean response on a four point scale for party identifiers on concern for various national problems in 2010. "I'm going to read you a list of problems facing the country. For each one, please tell me if you personally worry about this problem a great deal, a fair amount, only a little, or not at all." Reprinted from Guber (2013).

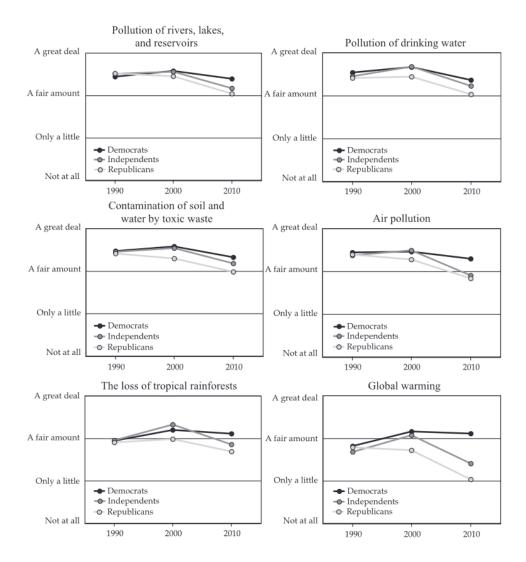


Figure 7: Environmental concern by partisan identification. "I'm going to read you a list of environmental problems. As I read each one, please tell me if you personally worry about this problem a great deal, a fair amount, only a little, or not at all." Reprinted from Guber (2013).

4 General Theories of Right & Left Wing Politics Potential Explanations That Do Not Hold Up Under Scrutiny

There are some explanations for the partisanship of environmentalism that I have seen proposed several times, and which initially seem reasonable, but which seem much less plausible when investigated further.

4.1 Reagan-Era Republicans Dislike Regulation

In the wake of the New Deal, the Republican Party acquiesced to the government having a larger role in society than it had had before the Great Depression.⁴ Republican presidents would sometimes support increased government spending and regulation. This is apparent in environmental policy: Nixon was involved in several of the pieces of legislation listed in Table 2, and created the EPA in the executive branch.

The election of Ronald Reagan in 1980 reoriented the Republican Party. It would now advocate for a smaller government: less (non-military) spending, lower taxes, and less regulation. The free market would provide many of the services that had previously been provided by the government. Margaret Thatcher's election as Prime Minister had similar results for the Conservative Party in the UK.

One explanation sometimes given is that this shift in the Republican Party is what caused environmentalism to become partisan. Environmentalists advocated for regulation of private enterprises, and international cooperation on policy, while the Republican Party preferred private and local action. There seems to be a fundamental disagreement between environmentalist policies and the ideology of Reagan-era Republicanism.

This explanation sounds like it could be true, but it does not match the history.

The 1980s saw increasing concern about the environment and a decreasing partial gap (Figure 1). Republicans only became anti-environmentalist after 1990.

Conservative leaders in the US and UK, including Reagan and Thatcher, supported environmentalism, even when it involved international regulations. The clearest example of this is the Montreal Protocol on Substances That Deplete the Ozone Layer in 1988. Reagan described the protocol:

The Montreal protocol is a model of cooperation. It is a product of the recognition and international consensus that ozone depletion is a global problem, both in terms of its causes and its effects. The protocol is the result of an extraordinary process of scientific study, negotiations among representatives of the business and environmental communities, and international diplomacy. It is a monumental achievement.[30]

The US Senate ratified the Montreal Protocol unanimously.[31]

Reagan and Thatcher also specifically supported international regulation to combat climate change. Thatcher was the first head of government to talk about climate change at the UN, in 1989, and called for an international conference on climate change in 1992 (The Earth Summit in Rio de Janeiro).[32] The International Panel on Climate Change (IPCC) creates the reports summarizing the scientific consensus about climate change, and its "principal architect was the conservative Reagan administration."[33] In 1992, the U.N. Framework Convention on Climate Change (UNFCCC), the result of the Rio Summit, had the support of the Bush Sr. administration. The U.S. Senate decided that it was popular enough to forgo a roll-call vote. ⁵[35]

Anti-environmentalism is not the natural consequence of the small government ideology of Reagan and Thatcher. It only entered the US Republican Party a decade later, and the UK Conservative Party has continued to support environmentalism.

⁴Prior to the Great Depression, there was less disagreement between the two parties about what the size of the government should be. The New Deal saw Democrats dramatically increase the size and role of the governments, which Republicans initially opposed.

⁵The UNFCCC was ratified using a division vote, in which Senators stand for "yea" and "nay" and the presiding officer counts the number of Senators standing for each. The result of the vote is not recorded other than whether it passed. Treaties require 2/3 support of the Senate to be ratified, so it had to have had significant bipartisan support. Typically, division votes and voice votes are used when the result of the vote is not in doubt beforehand.[34]

4.2 Other Explanations of Right & Left Wing Politics

The history described in the previous section also undermines other arguments connecting the foundational ideology of the Republican Party to its anti-environmentalism.

It is not enough to show that the Republican Party presents itself as more masculine or that it has different moral foundations (loyalty, authority, & sanctity vs. care & fairness).[36, 37] To explain why environmentalism became partisan, it is necessary to establish that there is a significant difference on this axis between the Republican Party of the 2000s and the Republican Party of the 1980s – or the Conservative Party of the UK.

The Republican Party did not significantly change its ideology, or its positions on most individual issues, between the 1980s and 2000s. It is hard to see how any explanation involving the foundational ideological differences between Democrats and Republicans can explain this increase in partial parti

4.3 Red Scare \rightarrow Green Scare

Another explanation involves the international environmental movement replacing the Soviet Union as an external enemy for Republicans:

These conditions suggest why the conservative movement launched a major counter-movement against the environmental movement in the 1990s. First, environmentalism evolved into a strong global movement in the 1990s, highlighted by the 1992 Earth Summit in Rio. Second, the spread of global capitalism via market economies, the privatisation of common property and free trade was jeopardised by this global movement. This threat, combined with the fall of the Soviet Union, prompted the conservative movement to substitute the 'green scare' for the 'red scare.'[38]

This explanation does get the timing right, but otherwise seems implausible. Consensus-based international organizations which had been created a few years earlier by Reagan & Thatcher are not the same sort of threat as a nuclear-armed superpower dedicated to the global spread of communism.

More importantly, foreign policy is not that important to American politics. Most elections are not decided by foreign policy issues, and most Americans' foreign policy opinions are reflections of elite cues rather than something where the elites respond to public opinion. [39] Bill Clinton's 1992 presidential campaign had as its unofficial slogan what US politics is centered on: "It's the economy, stupid." [40]

5 Structural Factors

Non-Explanations That Environmentalists Do Not Control

There are several structural factors that are important in understanding the history, but are not themselves sufficient explanations.

These factors could have been part of a feedback cycle that contributed to rising partisanship. They did not provide the initial cause of the partisan asymmetry, nor do they fully explain the subsequent dynamics.

One might also expect that these issues could amplify a small initial partisan difference. But structural factors not directly related to environmentalism cannot explain why environmentalism in the U.S. became more partisan than other issues.

Since these structural factors can neither explain the initial partisan asymmetry nor why environmentalism became unusually partisan, they are not explanations for the questions I am trying to answer.

This section focuses on things that the environmental movement did not have control over: the overall rise in partianship, the behavior of the media, and funding from fossil fuel companies.

5.1 Overall Rise In Partisanship

Partisanship for many issues has increased in the United States (Figure 4). Two of the most common explanations for rising partisanship in the U.S. are partisan sorting and changes to the media landscape.⁶ Both of these seem like bad explanations for environmentalism's partisanship.

5.1.1 Partisan Sorting

This theory posits that there always were deep divides in American public opinion. Even during times of low partisanship, there were significant differences in opinion between people who subscribed to different ideologies, like conservatives vs. liberals. Each party was a coalition between different groups with different ideologies, so the average of each party was moderate. Since then, the parties have become more internally ideologically consistent. Conservative Democrats and liberal Republicans switched parties, increasing the partisan gap without changing the ideological makeup of the country.

McCright et al. looks at the support for environmentalism by ideology in addition to support by party (Figure 8).[17] In the 1970s, we see a larger ideological gap than a partisan gap (compare to Figure 1), as expected by this theory. However, during the 1980s, support for spending on the environment grew more quickly among conservatives than among liberals, dramatically reducing (but not completely eliminating) the ideological gap. During the 1990s and 2000s, support for environmentalism fell a similar amount among Republicans and conservatives.

This is not what is expected under the partisan sorting theory. This theory would predict that the ideological gap would remain roughly constant, while the partisan gap increased. Instead, the conservative movement became convinced that environmentalism is a real issue, then became unconvinced again. [41, 42]

5.1.2 Changes in the Media Landscape

The rise in partisanship in the United States occurred during a time of dramatic changes in the country's media.

It has become increasingly easy for more people to communicate over longer distances and to larger numbers of people. This helps to nationalize most political issues. Previously, people thought more about local politics, and national politics was an outgrowth of local politics. Now, people think more about national politics, and local political decisions are often made by people voting the party line down the rest of their

⁶Note that these are not mutually exclusive.

 $^{^{7}}$ "All politics is local." - Byron Price. (1932) This saying is also associated with Tip O'Neill, the Speaker of the House from 1977-1987. [43]

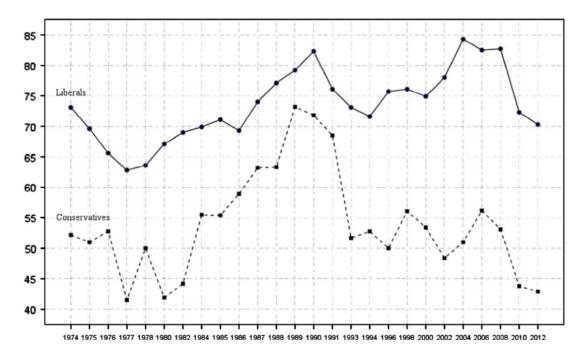


Figure 8: Percentages of liberals and conservatives reporting that national spending on the environment is "Too Little," 1974-2012. Reprinted from McCright et al. (2014).

ballot.[44, 45] Politics has trended towards more people arguing about fewer issues, and developing national-scale identity groups around them.[46]

The other major change is the expansion of ideologically-motivated media. A media market that was previously divided by geography became divided by ideology instead. When most people mostly consume media created by people with similar views to their own, it reduces dialogue between people who disagree with each other and hardens the partisan divide.

The environmental movement shifted from more local issues, like air or water pollution, to more global issues, like climate change – or ozone depletion or saving the tropical rainforests. This will be discussed more in §6.5, but for now I will note that this shift in emphasis occurred in the late 1980s, just before partisanship began to rise.

Treating the rise of separate conservative media outlets as the explanation for increasing partisanship for environmentalism begs the question: In 1990, when a majority of Republicans and conservatives supported increased government action on environmental issues, why would conservative media outlets become anti-environmental? These media outlets are part of the story, but they seem more like an effect, or at most part of a feedback loop, rather than a cause.

It is more common for people to attribute rising skepticism about climate change to choices made by the mainstream media, rather than new conservative media.

5.2 Journalists Presenting Both Sides

When dealing with controversial topics, the media would often uphold fairness norms. They would try to neutrally present both sides of a debate, to avoid giving a biased report.

Neutral reporting can create a different kind of bias when the underlying evidence is asymmetric. When the overwhelming majority of climate scientists believe that humanity is causing climate change, then presenting

⁸Habitat protection is often a local environmental issue. But when people in developed countries work to protect tropical rainforests, it functions as an international issue.

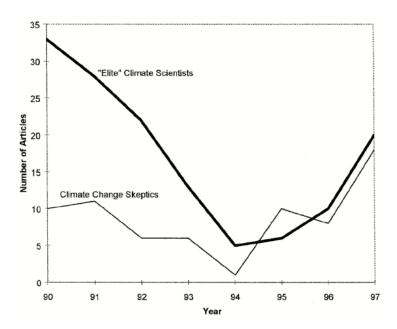


Figure 9: Number of Global Warming-Related Articles Citing an "Elite" Climate Scientist and/or a Climate Change Skeptic as an Information Source. Reprinted from McCright & Dunlap (2003).

this belief and the beliefs of a handful of skeptical climate scientists on equal footing gives a false impression of the evidence available.

Mainstream newspapers in the United States would present both sides of the climate change debate. However, the timing of this practice (1995-2004) indicates that this was neither the cause of increasing skepticism nor was it necessary for skepticism to continue to spread.

McCright & Dunlap investigated the media coverage of climate change in the U.S. from 1990-1997.[42] In the early part of this period, 7 of the most widely circulating newspapers cited elite climate scientists much more than climate skeptics. Starting in 1995, after a lull in climate science coverage, these same newspapers began citing elite climate scientists and climate skeptics more equally (Figure 9). I think that the methodology this paper uses underestimates the number of conventional climate science articles more than the number of skeptical / balanced climate science articles. It picks 5 individuals in each category (skeptics and "elites") and counts how many times they are cited in these newspapers. Since there are more conventional climate scientists than climate skeptics, the fraction of total citations directed to the top 5 individuals is probably smaller for conventional climate science than climate skepticism. Nevertheless, it is clear that these newspapers began reporting climate skeptics much more frequently starting in 1995 – after Republicans began to invite them to testify in Congress. The newspapers only felt the need to present both sides once the issue was already becoming partisan.

This journalistic practice ended in 2003-2004. Boykoff investigated the reporting about "climate change" and "global warming" in 5 major U.S. newspapers from 2003-2006. ¹⁰[47] He found 2543 relevant articles and read a random 1/6th of them, coding them as depicting anthropogenic contributions to climate change as "significant," "negligible," or having a "balanced account." In 2003, 61% of articles accepted anthropogenic contributions as significant, while 37% gave balanced accounts. The fraction of articles with balanced reporting fell dramatically over the next few years, and was low enough from 2005-2006 to be statistically indistinguishable from the scientific consensus (Figure 10). Partisanship on environmental issues continued to increase after 2004, so balanced reporting in the mainstream media is not necessary for increasing

⁹The newspapers included were: USA Today, Wall Street Journal, New York Times, Los Angeles Times, Washington Post, Chicago Tribune, and Newsday.

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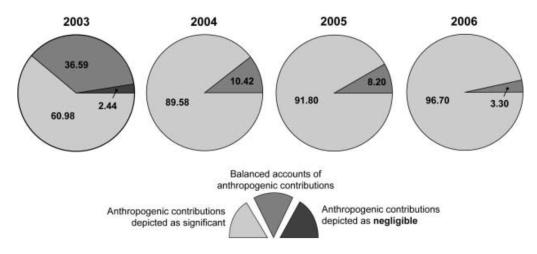


Figure 10: US newspaper coverage of anthropogenic climate change by year, 2003–2006, n=421. Reprinted from Boykoff (2007).

partisanship.

Even if the timing of the practice of balanced reporting on climate change did line up better with the chronology of the shifts in public opinion, it is not an explanation for increasing partisanship. It might explain increasing skepticism by normalizing skepticism toward climate change, but not why there is a partisan asymmetry. These are the newspapers with the largest reach, and only one of them (*The Wall Street Journal*) leans to the right.

5.3 Funding from Fossil Fuel Companies

Fossil fuel companies funded research by scientists skeptical that human activities are causing climate change, outreach campaigns directed at the public, and lobbying directed at politicians. Their efforts were organized by the Global Climate Coalition, an alliance between companies to promote climate skepticism which lasted from 1989-2001.

The cooperation which would develop between fossil fuel companies and Republican politicians could be because there are intrinsic reasons why fossil fuel companies would lean Republican or it could be because of contingent decisions made by a few individuals. I will discuss the first possibility here and the second possibility in §7.2. As discussed in §4.1 & §4.2, there is reason to be skeptical of intrinsic reasons related to the foundational ideology of the Republican Party.

Open Secrets maintains a database of campaign contributions by companies since 1990, organized by industry. [48, 49, 50, 51] Using this database, we can look at how fossil fuel contributions to politicians in the two major parties have changed. In most cases, the partisan gap in contributions from each section of the fossil fuel industry was small in the early 1990s, but has grown significantly since then. The oil & gas industry favored Republicans by a ratio of 1.8:1 from 1990-1995, and a ratio of 5:1 since 2020 (Figure 11). The coal mining industry favored Republicans by a ratio of 1.7:1 from 1990-1995, which has since grown to 27:1 since 2020. Unlike in the oil industry, whose contributions to Democrats have remained roughly constant while contributions to Republicans have increased, in the coal industry, contributions to Democrats decreased while contributions to Republicans increased. The natural gas pipeline industry favored Democrats slightly in the early 1990s, with a ratio of 0.8:1, which has since changed to a ratio of 4:1 favoring Republicans. Auto manufacturers contributed to both parties about equally from 1990-1995 (ratio 1.07:1), then shifted to supporting Republicans by a ratio of about 2:1 in the late 1990s and 2000s. In 2008, auto manufacturers returned to having balanced contributions, and since 2020, they have favored Democrats by a ratio of 0.7:1. The oil & gas industry consistently contributes more to political candidates than the rest of the fossil fuel industry combined.

Party Split of Recipients, by Election Cycle, 1990-2024

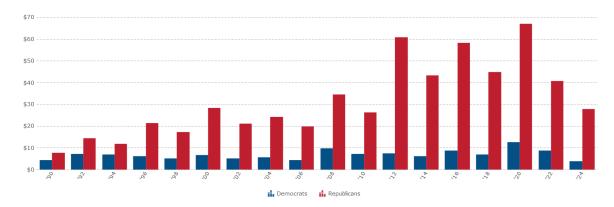


Figure 11: Contributions to Democrats and Republicans from the oil & gas industry by election cycle in millions of US dollars (nominal), 1990-2024. Reprinted from Open Secrets.

If funding from fossil fuel companies is an important part of the explanation for why the United States' environmental movement became partisan, then we also need an explanation for why fossil fuel lobbying itself became partisan.

One possible explanation for the asymmetry between parties is if oil is located in Republican-leaning states. Of the ten states with the highest oil production per capita, ¹¹ seven have consistently voted for Republicans in presidential elections since 1990 (AK, WY, ND, TX, OK, KS, UT), two voted for Bill Clinton but have trended towards Republicans since (LA, MT), and one has leaned Democratic over this period (NM).[52, 53] Also notable is California, which was 11th in per capita oil production and 3rd in overall oil production. California was Republican leaning in the 1980s but has since moved decisively to the left. If oil companies preferentially lobby in the states where there is more per capita oil production, then this would explain some asymmetry – like what we observe in 1990. I do not think that this is a sufficient explanation for how the asymmetry has grown since then.

5.4 Partisanship of Academia

Another possible factor contributing to partisan asymmetry is the political views of climate scientists. Personal partisan preference does not have to determine which politicians a movement makes alliances with: it is possible to work together on one issue while disagreeing on most other issues. That said, if most climate scientists leaned to the left, they might be more prone to allying with Democratic politicians.

I do not know of any surveys of the political views of climate scientists in particular from the 1980s or 1990s. The earliest survey of climate scientists I have found is from 2005, after environmentalism had already become partisan. It found that climate scientists are 67.5% liberal, 19.5% middle, and 13.0% conservative, which is about 5 percentage points more liberal than academics overall. [54]

Surveys of academics' self-reported political ideology can be used as a proxy. Repeated surveys have been conducted by the Carnegie Commission (1969, 1975, 1984, 1989, & 1997)[55, 56, 57, 58] and the Higher Education Research Institute (every three years from 1989-2017).[59]

There are more liberals and leftists than conservatives in each of the surveys (Figure 12 for data from HERI). This partisan lean declined from 1969-1984 and then increased again. Academia was much less left leaning when environmentalism started becoming partisan in the 1990s than it is today.

Academics in the physical sciences are similar to or slightly more conservative than academics overall.[57, 58] On the other hand, the most politically influential academics are likely at elite universities, while these surveys include academics at community colleges, who tend to be more conservative than academics at

 $^{^{11}}$ I am using oil production per capita as a proxy for how important the fossil fuel industries are for the state's economy.

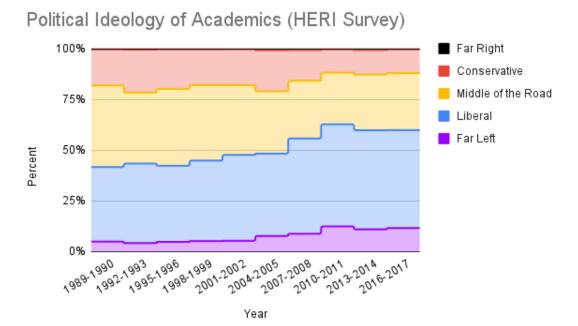


Figure 12: Political ideology of academics from 1989 to 2017, as measured by the Higher Education Research Institute (HERI).

universities.[57, 58] Overall, it is unclear whether elite climate scientists would have been more or less liberal than academia overall in the 1990s.

If more climate scientists were personally left-leaning, it would make it less surprising that they choose to ally with Congressional Democrats. We do not have great evidence establishing that this is the case, and the evidence we have suggests that this effect started off small.

6 Potential Missteps

Factors That Environmentalists Control

The environmental movement has had the opportunity to make many decisions that might help or harm their public support. The focus of this section is on factors that the environmental movement has direct control over, rather than on outside influences.

It seems like some of these potential missteps could feed into increasing partisanship. They could be making committed activists out of supporters, while alienating people who are already skeptical of the movement. However, they do not explain why support and opposition to the movement would break in a particular partisan way.

6.1 Infighting

Most of the academic literature on social movements treats infighting as unambiguously bad. Some of the literature pushes back against this and argues that some internal disagreement can be good, as long as it is appropriately managed. When infighting gets bad enough that organizations start to schism, it wastes resources, muddles the message to the public, and so marginalizes the movement politically. [60]

The environmental movement had some problems with infighting in the 1970s. Several of the new organizations formed were schisms from existing organizations: Friends of the Earth split from the Sierra Club and Sea Shepherd split from Greenpeace. [61]

Some of the schisms occurred as existing environmental organizations pushed out people who were interested in ecoterrorism. Ecoterrorism involves the destruction of property (sometimes risking the safety of people as well) to directly protect the environment or to force a political crisis. Examples include tree spiking, ¹² sinking whaling ships, and arson.[62, 63, 64, 65] My impression is that most of the environmental movement supports or accepts nonviolent direct action, but would prefer that ecoterrorism stop.

Infighting within the major environmental organizations seems to have been largely solved by the 1980s. I have not seen anyone attribute the difficulties of achieving environmental policy in the US to infighting. Maintaining this cooperation does require having boundaries for the community: advocates for nuclear power or geoengineering are clearly not part of the environmental movement, and ecoterrorists cannot expect support from major environmental organizations.

6.2 Scientists Underselling Arguments

One concern sometimes mentioned is that climate scientists have a tendency to express uncertainty, in line with scientific norms, even when people who are more experienced with public communication would not express uncertainty. This might make the science seem less settled than it is and undermine trust in climate scientists. One climate scientist reflecting on the public debate describes this tendency:

Our instincts are to continue to fight scientifically fair and to openly admit uncertainty, even when unscientific weapons are employed. In effect, serious scientists are trying to find the scientific truth, whereas advocates typically appeal to science to advance their personal agendas. This mismatch often leads to an amplified sense of "scientific" controversy, at least to an uninformed observer.[66]

This does not strike me as a particularly plausible argument when applied to environmentalism, or climate change in particular. While some scientists do publicly express uncertainty, activists on both sides have been effective at finding climate scientists who are willing to confidently make their case to the public.

Moreover, it is not clear that expressing uncertainty, particularly numerical uncertainty, actually decreases trust in the source of information. The concern that numerically expressing uncertainty will undermine your position among the public is not supported by empirical evidence. [67]

¹²Tree spiking involves pounding metal spikes into trees that are slated to be cut. When a chainsaw or mill strikes the spike, it can break the saw – and perhaps injure the logger.

6.3 Scientists Overselling Arguments

The opposite concern is also discussed: sometimes, climate scientists have expressed too much confidence, even when the scientific evidence was not (yet) clear.

One potential example occurred during the summer of 1988. This summer saw severe drought across most of the US, low enough water in the Mississippi River to hinder barge traffic, heat waves, major fires in Yellowstone, and a Category 5 hurricane in the fall. In and after a Congressional hearing on the climate, James Hansen of NASA claimed that he was "99 percent certain" that "the greenhouse effect is here." [68] Many other climate scientists did not believe that the evidence was that strong yet and disliked his combative tone. A few publicly rebuked him. [69]

It is not entirely clear how overselling an argument would lead to partisanship. It can cause public debate between scientists, but then the two sides of the debate have to be picked up by advocates from different parties and presented to the public in a partisan way. This part of the process also needs an explanation.

6.4 Distinguishing Empirical and Normative Claims

Empirical claims about what human activity is doing to the environment are distinct from claims about what policies should be enacted in response.

This distinction is not always made clear in environmentalism. Many of the same people and organizations promote both empirical and policy positions. Institutionally, it has been unclear whether some government agencies working on climate change were supposed to focus on empirical work or making policy proposals.[70]

There is some literature about the relationship between empirical and normative claims for other issues, including immigration and COVID-19.[71, 72, 73] It is not clear whether this is good for achieving policy goals. It could allow your movement to achieve its goals faster: if people accept the validity of the empirical claims, conflating them with policy proposals can make it easier to get these policies enacted. However, if people do not accept your policy goals, it can also make them more dismissive of the empirical claims. This seems particularly likely if the policy goals are already aligned with a particular political party.

6.5 Global and Local Concerns

In its first few decades, the modern environmental movement focused primarily on local concerns: air pollution in Los Angeles, the Cuyahoga River fire, the proposed Bodega Bay nuclear power plant, and proposed dams in the Grand Canyon. In the late 1980s, much of the attention of the environmental movement shifted towards climate change, an inherently global phenomenon. This does not reflect public opinion, which seems to be more concerned with local environmental issues than climate change (Figure 7).[29]

The historian of science Spencer Weart describes this shift:

The environmental movement, which had found only occasional interest in global warming, now took it up as a main cause. Groups that had other reasons for preserving tropical forests, promoting energy conservation, slowing population growth, or reducing air pollution could make common cause as they offered their various ways to reduce emissions of CO_2 .¹³[16]

An unusually explicit statement of this strategy comes from Senator Timothy Wirth (D-CO):

What we've got to do in energy conservation is try to ride the global warming issue. Even if the theory of global warming is wrong, to have approached global warming as if it is real means energy conservation, so we will be doing the right thing anyway in terms of economic policy and environmental policy. [75]

¹³Scott Alexander has also noticed this transition and described it as:

It feels almost like some primitive barter system has been converted to a modern economy, with tons of CO_2 emission as the universal interchangeable currency that can be used to put a number value on all environmental issues. [74]

Local issues are less partisan than national issues. [76] It is often not obvious how the national parties would respond to specific local questions, so there are fewer elite cues to divide people into partisan camps. Different localities compete with each other for population and economic activity, and so respond to where people are choosing to live in addition to how people vote. For these reasons, local issues often involve idiosyncratic partnerships cutting across party lines.

For a specific environmental example, suppose you wanted to oppose oil extraction in the Louisiana wetlands.[77] You could focus on the climate effects of the carbon emitted by that oil, tying the issue into national and international debates. Or you could focus on the damage to local wetlands caused by canals built by oil companies. The former strategy makes the issue more likely to get endorsements from national political figures, while the latter strategy makes it easier to get support from rural Republicans living in those wetlands. The local strategy would be more bipartisan.¹⁴

The environmental movement's shift from local issues to an international issue made it easier for it to become consistently tied to one political party.

6.6 Mission Creep

Mission creep is the gradual expansion of an institution's or a movement's goals beyond their original intention. For an advocacy group focusing on a complex issue, like the environment, some mission creep is inevitable: as your understanding of the problems grows, there should be some changes to the goals you are pursuing to address these problems.

In order to prevent mission creep from derailing an institution or drawing a movement into unnecessary partisan debates, it seems important to be intentional about what sorts of mission creep you allow and to avoid mission creep into highly partisan areas not directly related to your goals.[78]

Two of the largest environmental organizations in the United States are the World Wildlife Fund and the Sierra Club. Both organizations have seen substantial mission creep, and are now much more involved in social issues than they were originally. I would argue that the World Wildlife Fund has managed this mission creep better. The World Wildlife Fund's "People and Communities" initiative seems directly connected to specific environmental issues, while the Sierra Club's "People and Justice" issues read like a list of progressive social policy requests.[79, 80] For example, here is the first paragraph from their respective pages on womens' issues:

In many parts of the developing world, women of all ages play a critical role in managing natural resources, which they rely on for food, water, medicine, and fuel wood for their families. Yet they often are excluded from participating in decisions about resource use.[81]

The Sierra Club is a pro-choice organization that endorses comprehensive, voluntary reproductive health care for all. Sexual and reproductive health and rights are inalienable human rights that should be guaranteed for all people with no ulterior motive. A human rights-based approach to climate justice centers a person's bodily autonomy and individual choice. ¹⁵[82]

One of these promotes highly partisan opinions much more than the other, even when they are not directly related to environmentalism.

The Sierra Club first endorsed a candidate for president in 1984, then did not make an endorsement in 1988, and has endorsed presidential candidates in every election since 1992.[83, 84] While all of the endorsed candidates have been Democrats, in the 1980s and early 1990s, the Sierra Club presented itself as a mostly nonpartisan organization, and the candidates would have to work to gain their support. Now, their support for the Democratic candidate is completely unsurprising. The World Wildlife Fund does not make endorsements for individual candidates.[85]

¹⁴Which strategy would be more effective is less clear, and likely depends on the places and the issue. Sometimes, support from national party leaders is more useful, while other times, bipartisan local support is more useful.

¹⁵The title for this page is not explicitly about gender, but to get to this page from the "People & Justice" page, you click on "Read more" in the section: "And our future depends on gender equity."

Environmental justice deserves particular mention as the intersection between environmentalism and other left-leaning movements. Environmental justice became a national movement in the 1980s, growing out of the Civil Rights movement. [86, 87] In the early 1990s, the EPA created an office to address environmental inequalities at the request of the Congressional Black Caucus. It is unclear how major organizations in the environmental movement initially reacted to it. Greenpeace claims to have embraced social justice in the 1990s, then lost its focus on the issue in the 2000s, then returned to it in 2011. [88] The Sierra Club formed its Environmental Justice program in 2000. [1] While social justice is something that all major environmental organizations embrace now, it is unclear how associated they were as environmentalism began becoming partisan.

If many of the organizations in a movement endorse controversial positions aligned with one party, it should not be surprising if many people associate them with that party. Sometimes, these partisan positions are central to that movement's goals, but sometimes they are not. Allowing mission creep into controversial positions that are not directly related to the movement's core goals makes it harder to build bipartisan coalitions.

7 Particular Alliances

The Best Explanation That I Have Found

The development of a large partisan gap about environmentalism in the United States was contingent. It is smaller or non-existent in other countries (Figure 3) and in the U.S. as recently as 1990 (Figure 1). This suggests that the explanation does not lie in broad structural or ideological factors that are consistent across many countries and times.

Instead, the explanation more likely centers on the choices of individual decision makers. These choices were afterwards amplified by structural feedback mechanisms, and later choices which reinforced the existing trend.

7.1 Environmentalists, Climate Scientists, & Democratic Politicians

The earliest partisan alliances involving climate change began in Congressional hearings in the 1980s.

The Reagan administration entered office promising to reverse most of the energy policies of the Carter administration and dramatically shrink the Department of Energy, which had just been created in 1977.[89] One of the programs cut was a newly established center for climate research.[90, 33] As an undergraduate student, Al Gore had taken classes in climate science from Roger Revelle, one of the first people to study global warming. In the House of Representatives, Gore led Congressional hearings against these particular cuts (which were partially reversed), and continued to be very involved whenever climate was an issue in Washington.[91] As discussed in §4.1, climate policy was still bipartisan, and the Reagan administration was open to government action on climate, including through international treaties.

The environmental movement also became increasingly interested in climate change in the late 1980s, as described in §6.5. Climate provided a way to unify their disparate concerns, including air & water pollution, habitat conservation, recycling, and energy production. During and after the summer of 1988, focusing on climate change also seemed like a good way to increase the environmental movement's profile nationally.

In 1992, Bill Clinton selected Al Gore as his vice presidential candidate and secured the endorsements of environmental organizations like the Sierra Club that had mostly stayed above the partisan fray.

One of the Clinton administration's early legislative goals was a tax on energy, measured in British thermal units (BTUs).[92] While this is sometimes remembered as an attempt at a carbon tax, it taxed energy rather than carbon dioxide. Solar, wind, and geothermal power production were exempted, but nuclear and hydroelectricity were not. This tax proved extremely unpopular. To shore up support, the Clinton administration agreed to more exemptions for particular industries, but this diminished what the bill hoped to accomplish, did not improve its popularity in Congress, and encouraged even more groups to request exemptions.[93] The broad-based BTU tax was abandoned, and replaced with a much weaker tax on gasoline. Members of Congress who had supported the BTU tax suffered politically in the midterms.

In 1994, Republicans won control of the House of Representatives for the first time in 40 years. The BTU tax was not the only significant issue: the NRA organized against an assault rifle ban and Newt Gingrich innovated by using a unified national strategy instead of focusing on individual races. Opposing a climate policy was one thing that helped propel Republicans into power in Congress.

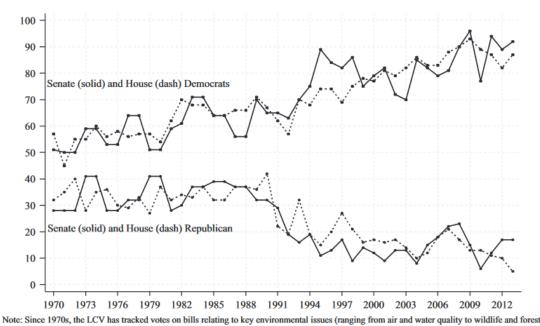
7.2 Fossil Fuel Companies, Climate Skeptics, & Conservative Think Tanks

The fossil fuel industry opposed government action on climate change. Significant reductions in greenhouse gas emissions would completely undermine their business model, forcing them to transition to a different industry (renewable energy) or dramatically lose market share. In 1989, a group of fossil fuel and manufacturing companies founded the Global Climate Coalition to oppose climate policy that they claimed would disrupt the American economy. [94, 95] The Global Climate Coalition spent tens of millions of dollars in ad campaigns and contributions to politicians before it disbanded in 2001.

At the time, it was not obvious that the industry lobbying would overwhelmingly favor Republicans. As we saw in §5.3, there was not a consistent tendency for fossil fuel companies to support Republicans.

However, it is not too surprising that the industry lobby ended up favoring Republicans. Republicans were the more business-friendly party. There was already a small bias for campaign contributions in that direction and oil is more concentrated in Republican-leaning states. The Gulf War in 1990 might have associated the oil industry with the Republican Party, although the war proved broadly popular. [96]

Congressional Republicans had been somewhat more likely to oppose environmental legislation than Congressional Democrats for several decades.[17] But then there was an abrupt change in the early 1990s, and this difference dramatically increased (Figure 13).



conservation to climate change) and has calculated an environmental voting score for each member of the House and the Senate. Briefly, a member's score, which can range from 0 to 100, is the number of pro-environment votes cast divided by the total number of votes on key environmental issues.

Figure 13: Average League of Conservation Voters environmental voting score for Democrats and Republicans in congress, 1970–2013. Reprinted from McCright et al. (2014).

The Global Climate Coalition found willing allies among conservative think tanks. These think tanks would accept funding from the fossil fuel industry to hire skeptical climate scientists or experts from other fields who were skeptical of climate change. They would publish policy studies, newsletter articles, and press releases that cast doubt on conventional climate science and opposed climate policy proposals. These think tanks and skeptics were successful at reframing the climate debate and creating the "non-problematicity" of global warming among conservatives. The most common claims by conservative think tanks were that "the scientific evidence for global warming is highly uncertain" and "proposed action would harm the national economy." [41]

It is not clear to me whether the causal relationship mostly points from conservative think tanks to Republican members of Congress or vice versa. The first climate skeptic publication by a major conservative think tank was in 1991, before Clinton & Gore were elected or Gingrich became Speaker of the House. However, there were initially fewer than ten such publications per year, mostly by a single think tank: the Marshall Institute. The publications did not become common or widespread until 1996-1997 (Figure 14).[41, 38] Between 1991 and 1996, most conservative think tanks did not yet have a public position on climate change.

After the Republican Party led by Gingrich won the Midterm elections in 1994, the number of Congressional hearings about climate change decreased. When there were hearings, Congress would invite similar numbers of conventional climate scientists and climate change skeptics (Figure 15).[42] Congress began to treat this as

an active scientific debate and the media followed suit (§5.2), even though both had previously predominantly presented the scientific consensus.

Type of Document	1990	1991	1992	1993	1994	1995	1996	1997	Total
Book or section in book		0	2	3	2	2	3	0	12
Op-ed essay in popular media	0	0	0	0	1	1	4	19	25
Think tank magazine or newsletter article	0	0	1	0	0	0	7	36	44
Article in World Climate Report	0	0	0	0	0	0	7	7	14
Policy study or policy analysis	0	1	6	0	4	3	9	30	53
Speech transcript	0	0	0	0	0	1	1	22	24
Press release	0	0	0	0	0	0	0	52	52
Total	0	1	9	3	7	7	31	166	224

Figure 14: Type and Year of Publication of Documents on Global Warming Circulated by Major Conservative Think Tanks. Reprinted from McCright & Dunlap (2000).

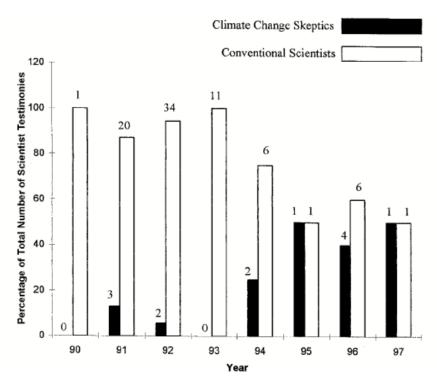


Figure 15: Natural Scientists' Testimonies Delivered Each Year by Climate Change Skeptics and Conventional Scientists in Congressional Hearings About Global Warming. The vertical axis is the percentage of testimonies and the number of testimonies is printed above each column. Reprinted from McCright & Dunlap (2003).

7.3 Debates Over the Kyoto Protocol

The Earth Summit in Rio de Janeiro in 1992 which had produced the UN Framework Convention on Climate Change (UNFCCC) also called for a future summit, in Kyoto, that would impose limits on countries' greenhouse gas emissions.

While the UNFCCC had gotten broad bipartisan support under the Bush Sr. administration, the politics of

climate change had changed dramatically since then. The debate over the Kyoto Protocol would see the last major bipartisan actions on climate change and the beginning of substantial partisanship among the public.

Before the summit, the U.S. Senate unanimously passed the Byrd-Hagel Resolution, which declared that it would not support any treaty that imposed restrictions on developed countries (like the U.S.) but not developing countries.[97]

The summit was very contentious and the negotiations almost collapsed. On the last day, Vice President Gore flew to Kyoto to save the agreement. The resulting Kyoto Protocol did not impose any restrictions on the greenhouse gas emissions of developing countries. President Clinton signed the treaty, but did not even submit it to the Senate for consideration. [98] To win, it would need 2/3 of the Senate, who had just unanimously opposed it.

I am uncertain whether this should be thought of more as a case where the Senate overconstrained the international negotiating position of the presidential administration or more as a case of the administration ignoring the advice of the Senate.

Before and during the summit, the Clinton administration ran a media campaign to build public support for the resulting treaty. There was a massive increase in media coverage, most of which was aligned with conventional climate science. Conservative think tanks also dramatically increased their production of skeptical media. A pair of surveys conducted before and after this debate found that it did make people more aware of climate change as an issue. A majority of people believed that climate change was going to happen, was going to be bad, and that the government should limit air pollution to address this. The overall percentages of people who supported these positions did not change as a result of the debate. There were underlying shifts as strong Democrats came to increasingly support the administration's policy and strong Republicans came to oppose it.[99, 100]

The Kyoto Protocol was a failed attempt at climate policy in the United States that directly increased partisanship.

7.4 Continued Increases in Partisanship

Partisanship continued to increase after the debate over the Kyoto Protocol.

Al Gore ran for president in 2000. Although he was strongly associated with climate change by this point, multiple sources claimed that environmentalism was not a major issue in this election.[33, 101, 102] George W. Bush became president instead, declared that the U.S. would not fulfill its obligations under the Kyoto Protocol, and reduced funding to climate science.[103]

During this time, some of the structural factors that might have been contributing to rising partisanship ended. The Global Climate Coalition disbanded in 2001. Some of the companies which had been involved accepted climate change, while others continued to promote skepticism. The mainstream media stopped presenting both sides of the debate in 2003-2004. Nevertheless, the partisan gap continued to grow.

In 2006, Gore released a climate change documentary titled *An Inconvenient Truth*. This did not change overall public opinion.[29] Instead, partisanship continued to increase: more Democrats were becoming climate activists, while Republicans were becoming increasingly skeptical.

There were still prominent Republicans who supported policies to counteract climate change. Governor Arnold Schwarzenegger introduced a cap-and-trade system for California, while Senator John McCain cosponsored a bill that would create a similar system for the country.[104, 105, 106] However, an increasing number of Republicans became increasingly opposed to environmentalism, and the environmental movement became increasingly tied to the Democratic Party.

Subsequent decisions by both parties, and the environmental movement itself, continued to contribute to rising partisanship on environmental issues in the United States.

8 Partisanship Was Bad for the Environmental Movement

Rising partisanship did not make environmentalism more popular or politically effective. Instead, it saw flat or falling overall public opinion, fewer major legislative achievements, and fluctuating executive actions.

8.1 Public Opinion

One hypothesis is that partisanship was useful, or even necessary, for an issue to become popular. Maybe journalists never would have covered the story if it did not involve an exciting partisan contest. The public then might have never realized that this is a thing they could care about.

The polling data do not support this hypothesis.

The clearest data are from McCright et al. (Figures 1 & 8).[17] Over 70% of both parties, and both ideologies, supported more government spending on the environment in 1990. Then, over the next 20 years, Republicans' support for environmental spending fell dramatically while Democrats' support remained roughly constant. These polls show declining overall support as partisanship increased, although this might just be because support for all forms of government spending fell during the early 1990s.

Gallup data for four different questions about global warming shows roughly flat support from 2001-2021 (Figure 16), although there have been fluctuations in the level of support. [19] Other Gallup polls show similar patterns. [107]

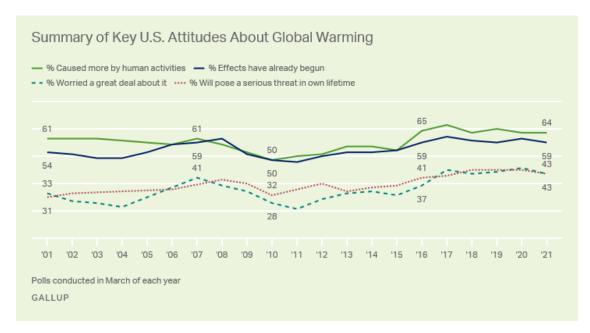


Figure 16: Percentage of Americans who agree with four different statements about global warming. Reprinted from Gallup (2021).

Public opinion is not quite the same thing as public attention. Maybe partisanship increases how much people are talking about an issue, even if it has little impact on the support as measured in polls. As a proxy for public attention, I will use the Google Books Ngram Viewer, which shows how frequently phrases appear in a corpus of English language books published each year.

For many environmental issues, there was a peak in the early 1990s (Figure 17a). Public attention was growing prior to the issue becoming partisan and declining once the issue had become partisan. This might be because the environmental movement itself shifted focus away from these issues. 'Pollution' shows a similar peak around 1990, but also a larger peak in the early 1970s (Figure 17b). 'Climate change' shows a somewhat different pattern: rapid growth before 1990, which then levels off until the mid-2000s, followed

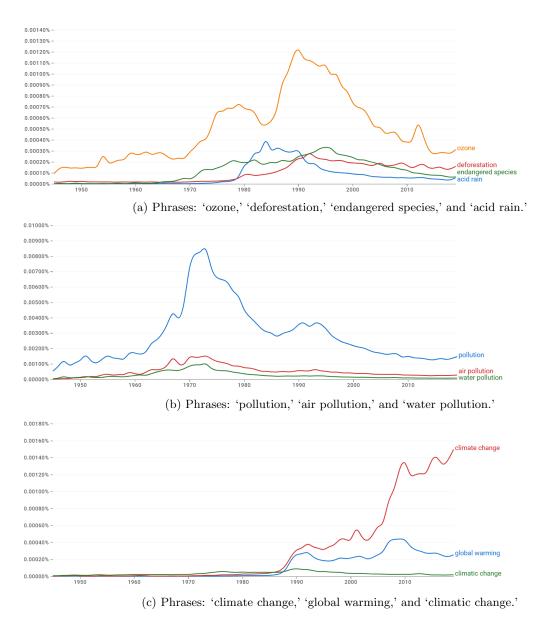


Figure 17: Frequency of phrases related to environmentalism in books each year from 1945-2019. From Google Books Ngram Viewer.[108]

by resumed growth (Figure 17c). It is possible to have increasing public attention while a topic is highly partisan, but for all of these environmental issues, public attention was flat or falling while partisanship was becoming established in the 1990s and early 2000s. Increasing partisanship does not seem to be a reliable way to attract public attention.

8.2 Legislation

Many of the goals of environmentalism cannot be directly achieved by public opinion: they require new legislation.

To determine if partisanship has made it easier or harder to pass legislation, I investigated when pieces of major environmental legislation were passed.

What counts as 'major' environmental legislation?

The Congressional Research Service produced a summary of the "major statutes administered by the EPA" in 2013 and the Library of Congress has a research guide about "significant legislation governing environmental law and policy." [109, 110] Any law mentioned in either of these is included. ¹⁶ I categorize these laws as dealing with environmental impact statements, air pollution, water pollution, solid waste, toxic substances, or endangered species. All of these are domestic laws – treaties will be discussed below.

These laws often create the framework of U.S. environmental policy. Newer legislation might not need to create a new framework, and instead could be an amendment to the existing framework. In addition, some of these laws superseded earlier environmental legislation. To account for both of these possibilities, I turned to Wikipedia. The sidebar of the Wikipedia article for each of these laws has a list of "major amendments." I include each of these as a piece of major environmental legislation, checking to make sure there is no double counting.¹⁷ I also read the History section to check for any major precursors. Each law has a welldeveloped article. I trust the Wikipedia editors' judgment for what counts as a "major amendment" and what precursors should be mentioned, more than a search and categorization I might do specifically for this report.

A graph of the number of pieces of major environmental legislation and amendments since 1945 is shown in Figure 18, binned into 4 year intervals corresponding to presidential terms.

There was clearly more environmental legislation passed in the 1960s-80s than in earlier or later decades. The modern environmental movement began in the 1960s and became legislatively successful within the decade. The environmental movement became partisan in the 1990s, and stopped being as capable of passing major legislation.

Treaties show a similar, if sparser, pattern. During the 1970s and 1980s, the Senate ratified four international environmental treaties unanimously. 18 The U.N. Framework Convention on Climate Change was also ratified using a division vote in 1992, as described in §4.1. Between 1989 and 2001, the United States signed four environmental treaties which the Senate refused to ratify, including the Kyoto Protocol. ¹⁹ More recently, international environmental agreements have been structured so they do not require ratification from the Senate – like the Paris Climate Accords.[111]

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^{16}Here is the list of laws mentioned, arranged by category:
  • Impact Statements:
            National Environmental Policy Act
    Air Pollution:

- Clean Air Act
     Water Pollution:
            Clean Water Act
            Marine Protection, Research, and Sanctuaries Act
Safe Drinking Water Act
Oil Pollution Act
  • Solid Waste:
- Solid Waste Disposal Act
            Resource Conservation and Recovery Act
             Comprehensive Environmental Response, Compensation, and Liability Act

    Toxic <u>Substances</u>:

             Toxic Substances Control Act
            Federal Insecticide, Fungicide, and Rodenticide Act
            Pollution Prevention Act

    Emergency Planning and Community Right-to-Know Act
    Endangered Species:

            Endangered Species Act
```

¹⁷For example, the Resource Conservation and Recovery Act also is a major amendment to the Solid Waste Disposal Act. 18 The treaties are:

- Convention on International Trade in Endangered Species of Wild Fauna and Flora International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
- Convention on Long-Range Transboundary Air Pollution
- Montreal Protocol on Substances That Deplete the Ozone Layer

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
- Convention on Biological Diversity Kyoto Protocol to the UNFCCC
- Stockholm Convention on Persistent Organic Pollutants

¹⁹The treaties are:

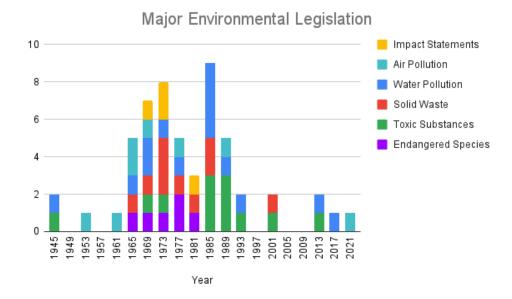


Figure 18: The number of major pieces of domestic environmental legislation, including amendments and precursors to existing legislation, since 1945. Each four year bin corresponds to a presidential term.

Increasing partisanship has made it more difficult for the environmental movement to pass its legislative agenda.

8.3 Executive Actions

Environmental policy can also be enacted by the executive branch. When environmentalism is partisan, executive action fluctuates with broader political winds.[112] Over the medium- to long-term, it is unlikely that one political party will consistently win elections. Having bipartisan support for an issue results in more stable and reliable executive policies.[113]

This can be most clearly seen in international agreements. The Clinton administration negotiated the Kyoto Protocol, the Bush administration declared that they would not implement it, the Obama administration negotiated the Paris Accords, the Trump administration withdrew from them, and the Biden administration rejoined them. [114, 103, 115, 116, 117]

Much of the implementation of environmental policy occurs in the executive branch, especially the EPA. While Republican administrations have not been effective at reducing the size or budget of the EPA, they have chosen leaders who have closer ties to fossil fuel companies than to the environmental movement.[118] Many of the details of how to enact policy are small enough to not be widely reported, but some are. Examples include changing rules for air pollution or removing 'climate change' from the EPA's website.[119, 120, 121] These changes can be reversed by future Democratic administrations, but the result is that environmental protections are not consistently applied.

9 Lessons for Other Activists

The environmental movement became increasingly partisan starting in the 1990s. This was bad for the movement. Its popularity fell, legislation became more difficult to pass, and executive action became less consistent. Activists for other movements can learn how to avoid becoming this partisan from this history.

Partisanship was not inevitable. It occurred as the result of choices and alliances made by individual decision makers. If they had made different choices, environmentalism could have ended up being a bipartisan issue, like it was in the 1980s and is in some countries in Europe and democratic East Asia.

Environmentalists were not the only people making significant decisions here. Fossil fuel companies and conservative think tanks also had agency in the debate. Politicians choose who they do and do not want to ally with. My focus is on the environmental movement itself, because that is similar to what other activist groups are able to control.

The key mistake was making alliances with only one political party.

This might have seemed like a reasonable choice at the time. Climate scientists might have already leaned left, and so found allying with Democrats to be more natural – although the evidence for this is weak. Al Gore was committed to their cause, and was rapidly building political influence: from Representative to Senator to Vice President, and almost to President.

The mistake was not simultaneously pursuing alliances with rising Republicans as well. At the time, it would not have been too difficult to find some who were interested. Building relationships with both parties would have involved recruiting or persuading staffers for both Democratic and Republican members of Congress and analysts for both conservative and liberal think tanks.

The window of opportunity for building bipartisan relationships remained open for quite a while. As late as 1995, after Newt Gingrich had won control of the House of Representatives opposing the BTU tax, there was still only one conservative think tank that regularly promoted climate skepticism. Environmentalists might have been able to gain influence at other conservative think tanks to weaken the reframing efforts of fossil fuel companies.

Two key moments in the history involve legislative defeats: the BTU tax in 1993 and the Kyoto Protocol in 1997. In both cases, the legislation seems poorly designed. The BTU tax focused on energy, not greenhouse gasses, with exemptions for favored industries. The Kyoto Protocol had already been rejected by the entire Senate. Unpopular legislation proposed by environmentalists and their allies made it easier for other politicians to rally against environmentalism. Drafting good legislation is important both to get what you actually want enacted and to not offer as many opportunities for political attacks.

The process by which environmentalism became allied with the Democratic Party involved mission creep in some environmental organizations. They began promoting liberal positions on other policy issues and reliably endorsing one political party. This mission creep made it harder to persuade people whose views do not fully follow the party line.

Shortly before becoming partisan, the environmental movement shifted its focus from many local issues to a single global issue: climate change. This made it easier to resolve internal disagreements, but also made it harder to build idiosyncratic local partnerships for particular issues that cut across party lines.

There are several concerns about messaging that might have been important. Some environmental activists would undersell their arguments, some would oversell their arguments, and some would fail to distinguish between empirical and normative claims. This could have undermined public trust in climate scientists, and led people who opposed their preferred policies to also reject the underlying science. It is unclear whether any one actor could have dramatically improved the messaging, or if that would have required an unrealistic amount of discipline within the movement. It was not hard for activists on either side to find climate scientists who were willing to confidently argue their position to the public.

Once partisanship became established, later decisions continued to reinforce it. For example, Al Gore's documentary An Inconvenient Truth did not change the opinions of the public overall, but did encourage a new generation of activists. Gore might have been able to reduce the partisan effect of the documentary by

collaborating with a prominent Republican who supported climate policies, like Schwarzenegger or McCain. Instead, ongoing decisions by environmentalists continued to reinforce the partisan divide.

I am more familiar with the history of the environmental movement than with most other social movements. The environmental movement is particularly interesting because it involves an important global issue that used to be broadly popular, but has since become very partisan and less effective at enacting policy in the United States. It nevertheless can be risky to over-update on a single case study. Many of the lessons here have support in the broader social movements literature, but the particulars are based on the history of one movement.

10 Conclusion

Environmentalism in the United States is extremely partisan, compared to other countries or issues. This dramatic national disagreement might feel like it should have some deep ideological or structural explanation. I do not think that it does. Instead, the partisan divide originated with decisions made by individual people and institutions in the 1980s and 1990s.

The most plausible ideological and structural explanations do not hold up under scrutiny.

It might seem like small-government conservatives would inevitably oppose international regulations that would limit greenhouse gas emissions. Empirically, this has not always been the case. The Reagan administration in the U.S. and the Thatcher government in the U.K. supported international environmental regulation, including the Montreal Protocol, IPCC, and UNFCCC. Republicans came to oppose environmentalism more than a decade after they came to oppose big government. Environmentalism became partisan after it became popular.

Some structural factors were involved, but do not provide a sufficient explanation themselves. The country was becoming more partisan overall, the media landscape was changing dramatically, mainstream newspapers were willing to present both sides of an existing debate, and fossil fuel companies were looking to lobby to oppose changes to their industries. These factors do not explain why the partisan asymmetry started. Partisanship continued to rise even after some of these structural factors ended. Structural factors not specific to environmentalism also cannot explain why environmentalism became more partisan than other issues.

There were some decisions made by the environmental movement itself that could have hindered their growing popularity, but not in an obviously partisanly asymmetrical way. There were some aspects of their messaging that could have been improved, although it is not obvious if there was any one actor who could have coordinated this decision. The movement shifted its emphasis from many local concerns to a single global concern. Some environmental organizations were worse at managing mission creep than others, and got involved in less relevant controversial issues.

Since broader structural and ideological differences were less important, the explanation should involve a history of particular decision makers.

The first alliance made was between environmentalists, climate scientists, and Congressional Democrats during budgetary debates in the 1980s. The key figure here was Al Gore. Environmentalists seemed to accept the usefulness of this alliance and did not seriously try to find a similarly prominent or rising Republican politician to ally with as well.

The second alliance made was between fossil fuel companies, climate skeptics, and conservative think tanks, starting around 1990. The industry organized into the Global Climate Coalition in 1989 and convinced the Marshall Institute to begin publishing climate skepticism in 1991. For a few more years, this alliance was not complete: most conservative think tanks were still neutral on climate change, and environmentalists might have been able to convince some of them to support their cause.

When environmentalist-aligned Democrats were in political power in the 1990s, they made several policy proposals that were deeply flawed. A tax proposed in 1993 taxed energy produced, not carbon dioxide emitted, and included somewhat arbitrary exemptions. The Kyoto Protocol in 1997 contained terms that the Senate had previously rejected unanimously. These flawed policy proposals made it easier for Republicans like Gingrich or Bush Jr. to rally the public against them – and environmentalism more broadly. Subsequent decisions, on both sides of the aisle, continued to reinforce the trend towards increasing partisanship.

Other activist movements can learn from this history. It is important to build relationships with both Democratic and Republican members of Congress and both conservative and liberal think tanks. Even if your issue starts out with broad support, alliances with particular politicians can make it become extremely partisan and limit the country's ability and desire to work towards your policy goals.

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References

- [1] "History of accomplishments," Sierra Club, 2011. https://www.sierraclub.org/sites/www.sierraclub.org/files/sce/north-star-chapter/SierraClub_Timeline_webversion.pdf.
- [2] "Our history," Nature Conservatory, Accessed: May 6, 2024. https://www.nature.org/en-us/about-us/who-we-are/our-history/.
- [3] R. Carson, Silent Spring. Houghton Mifflin, 1962.
- [4] "Earth day," <u>Library of Congress</u>, Accessed: May 6, 2024. https://www.loc.gov/item/today-in-history/april-22/#earth-day.
- [5] "History," World Wildlife Fund, Accessed: March 28, 2024. https://www.worldwildlife.org/about/history.
- [6] "About us: Building a better future together," Environmental Defense Fund, Accessed: March 28, 2024. https://www.edf.org/about.
- [7] "Who we are: Member groups: United States of America," Friends of the Earth International, Accessed: March 28, 2024. https://www.foei.org/member-groups/united-states-of-america/.
- [8] R. Weyler, "The roots of greenpeace," <u>Greenpeace</u>, 2021. https://www.greenpeace.org/international/story/48361/greenpeace-history-anniversary-founders-1971/.
- [9] "Our history," Earthjustice, Accessed: March 28, 2024. https://earthjustice.org/about/our_history.
- [10] "History," Ocean Conservancy, Accessed: March 28, 2024. https://oceanconservancy.org/about/history/.
- [11] "The origins of the EPA," <u>United States Environmental Protection Agency</u>, Accessed: May 6, 2024. https://www.epa.gov/history/origins-epa.
- [12] S. Weart, <u>The Discovery of Global Warming</u>. Accessed: Feb 2024. https://history.aip.org/climate/index.htm.
- [13] S. Arrhenius, "On the influence of carbonic acid in the air upon the temperature of the ground,"

 The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science, vol. 41, no. 251,
 pp. 237-276, 1896. http://geosci.uchicago.edu/~archer/warming_papers/archer_galleys/97
 81405196178_4_003a.pdf.
- [14] S. Weart, <u>The Discovery of Global Warming</u>, ch. The Public and Climate Change Part 1. Accessed: Feb 2024. https://history.aip.org/climate/public.htm.
- [15] "IPCC second assessment: Climate change 1995," Intergovernmenal Panel on Climate Change, 1995. https://archive.ipcc.ch/pdf/climate-changes-1995/ipcc-2nd-assessment/2nd-assessment-en.pdf.
- [16] S. Weart, <u>The Discovery of Global Warming</u>, ch. The Public and Climate Change Part 2: Since 1980. Accessed: Feb 2024. https://history.aip.org/climate/public2.htm.
- [17] A. M. McCright, C. Xiao, and R. E. Dunlap, "Political polarization on support for government spending on environmental protection in the usa, 1974-2012," <u>Social Science Research</u>, vol. 48, pp. 251-260, 2014. https://www.sciencedirect.com/science/article/abs/pii/S0049089X1400132X.

- [18] "Little public support for reductions in federal spending," Pew Research, 2019. https://www.pewresearch.org/politics/2019/04/11/little-public-support-for-reductions-in-federal-spending/.
- [19] L. Saad, "Global warming attitudes frozen since 2016," Gallup, 2021. https://news.gallup.com/po 11/343025/global-warming-attitudes-frozen-2016.aspx.
- [20] L. C. Hamilton, "Education, politics and opinions about climate change: Evidence for interaction effects," Climatic Change, vol. 104, p. 231-242, 2011. https://scholars.unh.edu/cgi/viewcontent.cgi?article=1388&context=soc_facpub.
- [21] J. Bell, J. Poushter, M. Fagan, and C. Huang, "In response to climate change, citizens in advanced economies are willing to alter how they live and work," Pew Research, 2021. Pew Research, 2021. Pew Research, 2021. Pew Research, 2021. <a href="https://www.pewresearch.org/global/2021/09/in-response-to-climate-change-citizens-in-advanced-economies-are-will-are-will-are-will-are-will-are-will-are-will-are-
- [22] L. Silver, "Most across 19 countries see strong partisan conflict in their society," Pew Research, 2022. https://www.pewresearch.org/short-reads/2022/11/16/most-across-19-countries-see-strong-partisan-conflicts-in-their-society-especially-in-south-korea-and-the-u-s/.
- [23] K. Aronoff, "Marine Le Pen's climate policy leans ecofascist," The New Republic, 2022. https://newrepublic.com/article/166097/marine-le-pens-climate-policy-whiff-ecofascism.
- [24] H. Lee, "Climate is the new 'must-have' in South Korean election gameplan," <u>Bloomberg</u>, 2024. https://www.bloomberg.com/news/articles/2024-04-04/climate-is-the-new-must-have-in-south-korean-election-gameplan.
- [25] F. Newport, "Update: Partisan gaps expand most of government power, climate," <u>Gallup</u>, 2023. https://news.gallup.com/poll/509129/update-partisan-gaps-expand-government-power-climate.aspx.
- [26] F. Newport and A. Dugan, "Partisan differences growing on a number of issues," <u>Gallup</u>, 2017. https://news.gallup.com/opinion/polling-matters/215210/partisan-differences-growing-number-issues.aspx.
- [27] "Economy remains the public's top policy priority; COVID-19 concerns decline again," Pew Research, 2023. https://www.pewresearch.org/politics/2023/02/06/economy-remains-the-publics-top-policy-priority-covid-19-concerns-decline-again/.
- [28] "As economic concerns recede, environmental protection rises on the public's policy agenda," Pew Research, 2020. https://www.pewresearch.org/politics/2020/02/13/as-economic-concerns-recede-environmental-protection-rises-on-the-publics-policy-agenda/.
- [29] D. L. Guber, "A cooling climate for change? Party polarization and the politics of global warming,"

 American Behavioral Scientist, vol. 57, no. 1, p. 93-115, 2013. https://cssn.org/wp-content/uploads/2020/12/A-Cooling-Climate-for-Change-Party-Polarization-and-the-Politics-of-Global-Warming-Deborah-Guber.pdf.
- [30] R. Reagan, "Montreal Protocol on Substances that Deplete the Ozone Layer." U.S. Department of State, Accessed: April 17, 2024. https://www.state.gov/key-topics-office-of-environmental-quality-and-transboundary-issues/the-montreal-protocol-on-substances-that-deplete-the-ozone-layer.
- [31] "Montreal Protocol on Substances that Deplete the Ozone Layer." Senate Consideration of Treaty Document 100-10, 1988. https://www.congress.gov/treaty-document/100th-congress/10.
- [32] M. Thatcher, "Speech to United Nations General Assembly (Global Environment)," 1989. https://www.margaretthatcher.org/document/107817.
- [33] S. Weart, <u>The Discovery of Global Warming</u>, ch. Government: The View from Washington. Accessed: Feb 2024. https://history.aip.org/climate/Govt.htm.

- [34] "About voting," <u>U.S. Senate</u>, Accessed: March 22, 2024. https://www.senate.gov/about/powers-procedures/voting.htm.
- [35] "United Nations Framework Convention on Climate Change." Senate Consideration of Treaty Document 102-38, 1992. https://www.congress.gov/treaty-document/102nd-congress/38.
- [36] N. J. G. Winter, "Masculine Republicans and feminine Democrats: Gender and Americans' explicit and implicit images of the political parties," <u>Political Behavior</u>, vol. 32, pp. 587–618, 2010. https://uva.theopenscholar.com/files/nicholas-winter/files/masculine_republicans_and_8.pdf.
- [37] J. M. Kivikangas, B. Fernández-Castilla, S. Järvelä, N. Ravaja, and J.-E. Lönnqvist, "Moral foundations and political orientation: Systematic review and meta-analysis," Psychological Bulletin, vol. 147, no. 1, p. 55, 2021. <a href="https://imec-publications.be/bitstream/handle/20.500.12860/39086/Moral_Foundations_and_Political_Orientation__Systematic_Review_an_Meta-Analysis.pdf?sequence=5&isAllowed=y.
- [38] P. J. Jacques, R. E. Dunlap, and M. Freeman, "The organisation of denial: Conservative think tanks and environmental scepticism," Environmental Politics, vol. 17, no. 3, pp. 349–385, 2008. https://www.tandfonline.com/doi/full/10.1080/09644010802055576.
- [39] N. Rakich, "Foreign policy doesn't usually affect elections. Could Iran be different?," FiveThirtyEight, 2020. https://fivethirtyeight.com/features/foreign-policy-doesnt-usually-affect-elections-could-iran-be-different/.
- [40] M. Kelly, "The 1992 campaign: The Democrats Clinton and Bush compete to be champion of change; Democrat fights perceptions of Bush gain," New York Times, 1992.
- [41] A. M. McCright and R. E. Dunlap, "Challenging global warming as a social problem: An analysis of the conservative movement's counter-claims," <u>Social Problems</u>, vol. 47, no. 4, pp. 499–522, 2000. https://www.researchgate.net/publication/237371278.
- [42] A. M. McCright and R. E. Dunlap, "Defeating Kyoto: The conservative movement's impact on U.S. climate change policy," <u>Social Problems</u>, vol. 50, no. 3, pp. 348-373, 2003. https://www.researchgate.net/publication/228594257_Defeating_Kyoto_The_Conservative_Movement%27s_Impact_on_US_Climate_Change_Policy.
- [43] B. Popik, ""All politics is local"," 2009. https://www.barrypopik.com/new_york_city/entry/all_politics_is_local/.
- [44] A. Gelman, "State-by-state swings are more uniform than they used to be," <u>Statistical Modeling</u>, <u>Causal Inference</u>, and <u>Social Science</u>, 2009. https://statmodeling.stat.columbia.edu/2009/01/1 <u>4/state-by-state/</u>.
- [45] G. Skelley, "Few midterm voters backed different parties for Senate and Governor," FiveThirtyEight, 2022. https://fivethirtyeight.com/features/few-midterm-voters-backed-different-parties-for-senate-and-governor/.
- [46] W. Wang, "Marriages between Democrats and Republicans are extremely rare," <u>Institute for Family Studies</u>, 2020. https://ifstudies.org/blog/marriages-between-democrats-and-republicans-are-extremely-rare.
- [47] M. T. Boykoff, "Flogging a dead norm? newspaper coverage of anthropogenic climate change in the United States and United Kingdom from 2003 to 2006," Area, vol. 39, no. 2, 2007. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=0e711a0888d96afba8c43b99e52 2cacf98da1431.
- [48] "Oil & gas summary," Open Secrets, Accessed: March 22, 2024. https://www.opensecrets.org/industries/indus?ind=E01.
- [49] "Coal mining summary," Open Secrets, Accessed: March 22, 2024. https://www.opensecrets.org/industries/indus?ind=E1210.

- [50] "Natural gas pipelines summary," Open Secrets, Accessed: March 22, 2024. https://www.opensecrets.org/industries/indus?ind=E1140.
- [51] "Auto manufacturers summary," Open Secrets, Accessed: March 22, 2024. https://www.opensecrets.org/industries/indus?ind=T2100.
- [52] "U.S. crude oil production by state," <u>Bureau of Transportation Statistics</u>, Accessed: March 22, 2024. https://www.bts.gov/browse-statistical-products-and-data/freight-facts-and-figures/us-crude-oil-production-state.
- [53] "State population estimates and demographic components of population change: April 1, 1990 to july 1, 1999," <u>U.S. Census</u>, Accessed: March 22, 2024. https://www2.census.gov/programs-surveys/popest/tables/1990-2000/state/totals/st-99-02.txt.
- [54] S. Rosenberg, A. Vedlitz, D. F. Cowman, and S. Zahran, "Climate change: a profile of us climate scientists' perspectives," <u>Climatic Change</u>, 2009. https://www.researchgate.net/publication/2 25341510_Climate_change_A_profile_of_US_climate_scientists%27_perspectives.
- [55] A. E. Beyer, "College and university faculty: A statistical description," <u>ACE Research Reports</u>, vol. 5, no. 5, 1970. https://files.eric.ed.gov/fulltext/ED042425.pdf.
- [56] R. F. Hamilton and L. L. Hargens, "The politics of the professors: Self-identifications, 1969–1984," <u>Social Problems</u>, vol. 71, no. 3, pp. 603–627, 1993. https://academic.oup.com/sf/article-abstract/71/3/603/2232523.
- [57] J. F. Zipp and R. Fenwick, "Is the academy a liberal hegemony? The political orientations and educational values of professors," <u>Public Opinion Quarterly</u>, vol. 70, no. 3, p. 304–326, 2006. https://academic.oup.com/poq/article-abstract/70/3/304/1831572.
- [58] N. Gross and S. Simmons, "The social and political views of American professors," 2007. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=bb515236a3a001d4f90f6060888 88651f2536414.
- [59] "Publications The Faculty Survey," <u>Higher Education Research Institute</u>, Accessed: April 18, 2024. https://heri.ucla.edu/publications-fac/.
- [60] A. Ghaziani and K. Kretschmer, "Infighting and insurrection," The Wiley Blackwell companion to social movements, pp. 220-235, 2018. https://www.researchgate.net/profile/Amin-Ghaziani/ publication/328121029_Infighting_and_Insurrection/links/603fad984585154e8c74f230/Infighting-and-Insurrection.pdf.
- [61] "Who we are: History," Sea Shepherd Global, Accessed: March 28, 2024. https://www.seashepherdglobal.org/who-we-are/history/.
- [62] C. Nilson and T. Burke, "Environmental extremists and the eco-terrorism movement," <u>Academy of Criminal Justice Sciences Today</u>, 2002. https://www.unl.edu/eskridge/ecoterrorism.html.
- [63] "An overview of bombing and arson attacks by environmental and animal rights extremists in the United States, 1995-2010," National Consortium for the Study of Terrorism and Responses to Terrorism, 2013. https://www.dhs.gov/sites/default/files/publications/OPSR_TP_TEVUS_Bombing-Arson-Attacks_Environmental-Animal%20Rights-Extremists_1309-508.pdf.
- [64] "That sinking feeling," <u>Time</u>, 1986. https://content.time.com/time/subscriber/article/0,330 09,962931,00.html.
- [65] L. Watson, "Spikin'," Earth First! Newsletter, p. 6, 1981. https://www.environmentandsociety.org/sites/default/files/key_docs/ef_2_2_sm_0.pdf.
- [66] J. D. Mahlman, "Science and nonscience concerning human-caused climate warming," Annual Review of Energy and the Environment, vol. 23, no. 1, pp. 83–105, 1998. https://corpora.tika.apache.org/base/docs/govdocs1/255/255593.pdf.

- [67] A. M. van der Blesa, S. van der Lindena, A. L. J. Freemana, and D. J. Spiegelhalter, "The effects of communicating uncertainty on public trust in facts and numbers," <u>Proceedings of the National Academy of Sciences</u>, vol. 117, no. 14, pp. 7672–7683, 2020. https://www.pnas.org/doi/pdf/10.1073/pnas.1913678117.
- [68] P. Shabecoff, "Global warming has begun, expert tells Senate," New York Times, 1988. https://www.nytimes.com/1988/06/24/us/global-warming-has-begun-expert-tells-senate.html.
- [69] R. A. Kerr, "Hansen vs. the world on the greenhouse threat," Science, vol. 244, 1989. https://www.science.org/doi/abs/10.1126/science.244.4908.1041.
- [70] R. A. P. Jr, "Policy history of the us global change research program: Part ii. legislative process," Global Environmental Change, vol. 10, pp. 133-144, 2000. https://sciencepolicy.colorado.edu/admin/publication_files/resource-56-2000.10.pdf.
- [71] J. Carens, "On the relationship between normative claims and empirical reality in immigration," Proceedings of the 2018 ZiF Workshop, 2018. https://philarchive.org/archive/CAROTR-5.
- [72] S. M. C. R. A. S. James Price Dillard, Xi Tian and L. Shen, "Persuasive messages, social norms, and reactance: A study of masking behavior during a COVID-19 campus health campaign," Health Communication, 2021. Persuasi-ve-Messages-Social-Norms-and-Reactance-A-Study-of-Masking-Behavior-during-a-COVID-19-Campus-Health-Campaign.pdf.
- [73] K. G. M. A. R. S. A. Alex Moehring, Avinash Collis and D. Eckles, "Providing normative information increases intentions to accept a COVID-19 vaccine," <u>Nature Communications</u>, vol. 14, 2023. https://www.nature.com/articles/s41467-022-35052-4.pdf.
- [74] S. Alexander, "What happened to 90s environmentalism?," <u>Slate Star Codex</u>, 2019. https://slatestarcodex.com/2019/01/01/what-happened-to-90s-environmentalism/.
- [75] R. A. P. Jr., R. Klein, and D. Sarewitz, "Turning the big knob: An evaluation of the use of energy policy to modulate future climate impacts," Energy and Environment, vol. 11, pp. 255-276, 2000. https://sciencepolicy.colorado.edu/about_us/meet_us/roger_pielke/knob/text.html.
- [76] A. Jensen, W. Marble, K. Scheve, and M. J. Slaughter, "City limits to partisan polarization in the American public," <u>Political Science Research and Methods</u>, vol. 9, p. 223-241, 2021. https://static 1.squarespace.com/static/5b74a2ebfcf7fda680a56b29/t/63bdb31d5fbd7153248b5f47/1673376 544024/JensenEtAl_PSRM_2021.pdf.
- [77] J. Carey, "Louisiana wetlands tattered by industrial canals, not just river levees," <u>Scientific American</u>, 2013. https://www.scientificamerican.com/article/carey-louisiana-wetlands-tattered-by-industrial-canals/.
- [78] "What is mission creep and why does it matter?," <u>Funding for Good</u>, 2023. https://fundingforgood.org/what-is-mission-creep/.
- [79] "People & communities," World Wildlife Fund, Accessed: March 28, 2024. https://www.worldwildlife.org/people.
- [80] "People & justice," Sierra Club, Accessed: March 28, 2024. https://www.sierraclub.org/people-and-justice.
- [81] "Women and girls," World Wildlife Fund, Accessed: March 28, 2024. https://www.worldwildlife.org/initiatives/women-and-girls.
- [82] "The Sierra Club and population issues," <u>Sierra Club</u>, Accessed: March 28, 2024. https://www.sierraclub.org/sierra-club-and-population-issues.
- [83] F. S. Joyce, "Sierra Club breaks its tradition and backs a candidate: Mondale," New York Times, 1984. https://www.nytimes.com/1984/09/20/us/sierra-club-breaks-its-tradition-and-backs-a-candidate-mondale.html.

- [84] D. Samuelsohn and D. Goode, "Big green groups to back Obama," Politico, 2012. https://www.politico.com/story/2012/04/exclusive-sierra-club-big-green-groups-to-endorse-obama-075274.
- [85] "Does WWF endorse any political candidates?," World Wildlife Fund, Accessed: April 26, 2024. https://help.worldwildlife.org/hc/en-us/articles/360007906474-Does-WWF-endorse-any-political-candidates.
- [86] "Environmental justice history," <u>Department of Energy: Office of Legacy Management</u>, Accessed: May 1, 2024. https://www.energy.gov/lm/environmental-justice-history.
- [87] "History," Congressional Black Caucus: Avoice, Accessed: May 1, 2024. https://avoice.cbcfinc.org/exhibits/environmental-justice/history/.
- [88] "Embedding justice," <u>Greenpeace</u>, 2021. https://www.greenpeace.org/usa/wp-content/uploads/2022/10/Greenpeace-USA-Embedding-Justice-2022.pdf.
- [89] Republican Party Platform of 1980, ch. Energy. https://www.presidency.ucsb.edu/documents/republican-party-platform-1980.
- [90] "Climate change in the 1970s," American Institute of Physics, Accessed: March 29, 2024. https://history.aip.org/history/exhibits/climate-change-in-the-70s/.
- [91] R. A. P. Jr, "Policy history of the US global change research program: Part i. administrative development," Global Environmental Change, vol. 10, pp. 9-25, 2000. https://sciencepolicy.colorado.edu/admin/publication_files/2000.09.pdf.
- [92] "Some history," Carbon Tax Center.
- [93] D. Erlandson, "The BTU tax experience: What happened and why it happened," <u>Pace Environmental Law Review</u>, vol. 12, no. 1, 1994. https://digitalcommons.pace.edu/cgi/viewcontent.cgi?article=1528&context=pelr.
- [94] "Global Climate Coalition," Source Watch, Accessed: March 29, 2024. https://www.sourcewatch.org/index.php/Global_Climate_Coalition.
- [95] "GCC's position on the climate issue," Global Climate Coalition, Archive: Feb 9, 1999. http://web.archive.org/web/19990209102342/http://www.globalclimate.org/MISSION.htm.
- [96] D. W. Moore, "Americans believe U.S. participation in Gulf War a decade ago worthwhile," Gallup, 2001. https://news.gallup.com/poll/1963/americans-believe-us-participation-gulf-war-decade-ago-worthwhile.aspx.
- [97] "A resolution expressing the sense of the Senate regarding the conditions for the United States becoming a signatory to any international agreement on greenhouse gas emissions under the United Nations Framework Convention on Climate Change." Senate Resolution 98, 1997. https://www.congress.gov/bill/105th-congress/senate-resolution/98.
- [98] "United States signs the Kyoto Protocol," <u>Bureau of Oceans and International Environmental and Scientific Affairs</u>, 1998. https://1997-2001.state.gov/global/global_issues/climate/fs-us_sign_kyoto_981112.html.
- [99] J. A. Krosnick, A. L. Holbrook, and P. S. Visser, "The impact of the fall 1997 debate about global warming on American public opinion," Public Understanding of Science, vol. 9, pp. 239–260, 2000. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=1ecba8f2535dd16fe8551 68cfeb35592e36259be.
- [100] S. Kull, "Americans on global warming: A study of U.S. public attitudes," Program on International Policy Attitudes, 1998. https://publicconsultation.org/wp-content/uploads/2020/09/GlobalWarming_1998.pdf.
- [101] G. M. Pomper, "The 2000 presidential election: Why Gore lost," Political Science Quarterly, vol. 116, no. 2, p. 201, 2001. https://www.uvm.edu/~dguber/POLS125/articles/pomper.htm.

- [102] T. E. Mann, "Reflections on the 2000 U.S. presidential election," <u>Brookings</u>, 2001. https://www.brookings.edu/articles/reflections-on-the-2000-u-s-presidential-election/.
- [103] "Text of a letter from the President to Senators Hagel, Helms, Craig, and Roberts," George W. Bush White House Archives, 2001. https://georgewbush-whitehouse.archives.gov/news/releases/2001/03/20010314.html.
- [104] "California's cap-and-trade program: Frequently asked questions," <u>Legislative Analyst's Office: The California Legislature's Nonpartisan Fiscal and Policy Advisor</u>, 2023. https://lao.ca.gov/Publications/Report/4811.
- [105] "Climate stewardship act." 108th Congress (2003-2004), 2003. https://www.congress.gov/bill/108th-congress/senate-bill/139/all-info.
- [106] M. Lavelle, "John McCain's climate change legacy," <u>Inside Climate News</u>, 2018. https://insideclimatenews.org/news/26082018/john-mccain-climate-change-leadership-senate-cap-trade-bipartisan-lieberman-republican-campaign/.
- [107] "Environment," Gallup, Accessed: May 2, 2024. https://news.gallup.com/poll/1615/environment.aspx.
- [108] "Google Books Ngram Viewer," Accessed: May 10, 2024. Specific links for figure parts (a), (b), and (c).
- [109] "Environmental laws: Summaries of major statutes administered by the Environmental Protection Agency," Congressional Research Service, 2013. https://crsreports.congress.gov/product/pdf/RL/RL30798.
- [110] "Environmental law: A beginner's guide," <u>Library of Congress: Research Guides</u>, Accessed: April 29, 2024. https://guides.loc.gov/environmental-law/federal-laws.
- [111] E. King, "Paris Agreement 'does not need Senate approval' say officials," Climate Home News, 2015. https://www.climatechangenews.com/2015/12/15/paris-agreement-does-not-need-senate-approval-say-officials/.
- [112] R. A. Wampler, "The U.S. and climate change: Washington's see-saw on global leadership," National Security Archive, 2018. https://nsarchive.gwu.edu/briefing-book/environmental-diplomacy/2018-09-24/us-climate-change-washingtons-see-saw-global-leadership.
- [113] R. A. Wampler, "U.S. climate change policy in the 1980s," George Washington University: The National Security Archive, 2015. https://nsarchive2.gwu.edu/NSAEBB/NSAEBB536-Reagan-Bush-Recognized-Need-for-US-Leadership-on-Climate-Change-in-1980s/.
- [114] "Signing the Kyoto Protocol," <u>Clinton Presidential Library</u>, 1997. https://clinton.presidential libraries.us/exhibits/show/green-building/kyoto-protocol.
- [115] T. Somanader, "President Obama: The United States formally enters the Paris Agreement," Obama White House Archives, 2016. https://obamawhitehouse.archives.gov/blog/2016/09/03/president-Obama-United-states-formally-enters-Paris-agreement.
- [116] M. R. Pompeo, "On the U.S. withdrawal from the Paris Agreement," <u>United States Department of State Archives</u>, 2019. https://2017-2021.state.gov/on-the-u-s-withdrawal-from-the-paris-agreement/.
- [117] A. J. Blinken, "The United States officially rejoins the Paris Agreement," <u>United States Department of State</u>, 2021. https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/.
- [118] "EPA's budget and spending," <u>United States Environmental Protection Agency</u>, Accessed: April 29, 2024. https://www.epa.gov/planandbudget/budget.

- [119] M. L. Wald, "E.P.A. says it will change rules governing industrial pollution," New York Times, 2002. https://www.nytimes.com/2002/11/23/us/epa-says-it-will-change-rules-governing-industrial-pollution.html.
- [120] G. Bade, "EPA loosens clean air act rules for major pollution sources," <u>Utility Dive</u>, 2018. https://www.utilitydive.com/news/epa-loosens-clean-air-act-rules-for-major-pollution-sources/515661/.
- [121] L. Barron, "Here's what the EPA's website looks like after a year of climate change censorship," <u>Time</u>, 2018. https://time.com/5075265/epa-website-climate-change-censorship/.