

# Climate change countermovements and adaptive strategies: insights from Heartland Institute annual conferences a decade apart

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## Abstract

What kind of ancestors will those involved in climate change countermovements (CCMs) be? Among CCMs, the Heartland Institute has been an adaptive conservative think tank in the United States (USA) over the past decades, with funding from carbonbased industry-linked groups that has amplified the reach of their claims while shaping their power and influence in the USA public sphere. Through inductive qualitative methods and grounded theory, this study appraises their ongoing clout as garnered through interviews and participant observations from the 14th International Conference on Climate Change hosted by the Heartland Institute in 2021. Thematic findings are compared and contrasted with previous interview data and participant observations at the 2011 Heartland Institute conference. This research finds ten key themes—five comparisons and five contrasts—that point to adaptive strategies deployed in ongoing and wider CCM efforts that effectively shape sustainability technology and climate policy. Similarities over time are (1) freedom and liberty; (2) attacks on relevantexpert scientists, science, and "alarmism"; (3) rhetoric of embattled underdogs fighting orthodoxies; (4) evidence of righteousness and confidence; and (5) adversarial mentalities. Differences are (1) waning attention, (2) diminished influence, (3) an increased appetite for "culture wars," (4) more personal reflection on legacy, and (5) increased entrenchment in state-level activities such as anti-environmental, social, and governance (ESG) principles initiatives. Spanning a decade, this work assesses how these Heartland Institute climate contrarians' claims provide insights into ongoing adaptive CCM activities with critical attention paid to how they politicize and polarize decision-making at multiple scales in contemporary society.

**Keywords** Contrarian  $\cdot$  Communication  $\cdot$  Polarization  $\cdot$  Heartland  $\cdot$  Think tank  $\cdot$  Climate countermovement  $\cdot$  Culture  $\cdot$  ESG  $\cdot$  Politicization  $\cdot$  Climate change  $\cdot$  Adaptation



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## 1 Introduction

The United States (USA) has been known as a global center of carbon-based industry power. Yet, there have been many indications that decarbonization of global industry and society as well as climate policy action is critically needed now.

Among the signs, there have been record-breaking temperatures year upon year where the ten warmest years on record have occurred since 2010 (NOAA 2023), and convergent predictions are that the next years are the warmest yet to come (Hermanson et al. 2022). In 2023, the Northern Hemisphere's summer months of June, July, and August were the warmest three months in the history of record keeping (Carrington 2023). Additional indications provide further evidence that the climate change crisis is impacting daily life across the globe.

While these point to collective action problems at their core, in fact nearly two-thirds of industrial greenhouse gas emissions (from fossil fuel use, methane leaks, and cement manufacturing) have come from 90 companies around the world since the dawn of the industrial revolution in the 1700s (Heede 2014) Pictures 1 and 2.

These polluters' resistance to change has been attributed to multifarious political, economic, socio-economic, and cultural factors (Dunlap 2013). Among them, Kari Marie Norgaard (2006) outlined three types of "denial," as she described motivations undergirding status quo (in)action:

# (1) Literal (rejection of evidence)

**Picture 1** Marc Morano speaking with Channel Four (UK) in the conference hall





Picture 2 a snapshot of some audience members eating and listening to keynote speakers in the main hall of the conference



- (2) Interpretative (divergent interpretation of evidence)
- (3) Implicatory (resistance to what behavioral change that accepted evidence may necessitate)

Over time, resistance and refutation in the face of a changing climate across these three types has earned those voices names like "contrarians," "skeptics," "doubters," "deniers," or "denialists." Together, they have been identified as climate change countermovement organizations (CCMs), or nearby derivatives like "contrarian countermovement organizations" (Boykoff and Olson 2013). These CCMs gained traction in the USA public sphere beginning in the late 1980s prominently noted by the founding of the Global Climate Coalition (GCC) in 1992 (Brulle 2023). Over the subsequent four decades—propped up by carbon-based industry interest group activities (Supran and Oreskes 2021) as well as associated movements from the ideological right (Farrell 2016a)—their influence has created space for decision-makers at many levels to deny, delay, and distract from climate policy responsibilities to alleviate the negative impacts of ongoing GHG emissions into the atmosphere. Through heavy funding and carefully constructed strategies, many outlier perspectives in CCMs have earned outsized attention by media and other actors shaping

<sup>&</sup>lt;sup>1</sup> In this research and in other related scholarship, these terms are used interchangeably with other terms such as "climate countermovement organizations," "climate change countermovement groups," and "contrarian countermovement groups."



climate governance in the public sphere. By extension, in many country contexts, CCMs have then shaped governance of associated issues such as sustainability technology policy and their implications for society (Lockwood and Lockwood 2022).

## 2 Literature review

In the USA, influential conservative think tanks have emerged as an identifiable set of CCMs that—while heterogeneous in several ways—share characteristics of anti-regulatory, anti-environmental, and neoliberal stances (Oreskes and Conway 2011). It has been documented extensively that contrarian actors have found their voices within CCM activities through disagreement with a perceived orthodoxy of evidence (Lamb et al. 2020). Examining these CCMs with carbon-based industry benefactors, a complex web of connections has been woven between industry board members, politicians, foundations, public relations firms, trade associations, ad hoc groups and think tanks, revealing how political actors and multi-national oil and gas corporations have exerted influence over climate change policy inaction over the past several decades (Farrell 2016b).

A lot of money, power, and influence has been at stake. For example, according to the World Bank, oil and gas industries took in \$3bn-a-day inflation-adjusted profits for the last 50 years (Carrington 2022). As one route to protect these profits, it was revealed that Saudi state-owned petroleum company Saudi Aramco financed "almost 500 studies over the past five years, including research aimed at keeping gasoline cars competitive or casting doubt on electric vehicles" (Tabuchi 2022). Furthermore, in recent years, the political economy of carbon-based industry has blended with dimensions of cultural politics, linking into anti-ESG (environmental, social, governance) principles in investing (Atkin 2022). Over time, contrarian CCM organizations in the USA have been largely successful in blocking efforts seeking to act on climate change in this high-stakes, high-profile, and highly charged public arena (Boykoff and Farrell 2019). CCM voices have been found to successfully stymie efforts to mobilize decision-makers and public citizens to address ongoing climate challenges at the scale that is needed. As such, examinations of how these anti-environmental and anti-regulatory stances map onto climate and sustainability technology policy influences are warranted.

The United Nations (UN) Intergovernmental Panel on Climate Change (IPCC), Sixth Assessment Report (AR6) Third Working Group (WGIII) captured peer-reviewed research about climate change countermovement (CCM) activity in the technical summary with more specifics accompanying peer-reviewed citations in the full report (IPCC 2022). In particular, the technical summary documented that "accurate transference of the climate sciences has been undermined significantly by climate change countermovements, in both legacy and new/social media environmental through misinformation" (Pathak et al. 2022, TS 6.2, 58). The technical summary also registered that, "on occasion, the propagation of scientifically misleading information by organised countermovements has fuelled polarisation, with negative implications for climate policy" (Pathak et al. 2022, 13.4, 127).

In particular, passages from UN IPCC AR6 WGIII noted "Karlsson and Gilek (2020) identify science denialism and 'decision thresholds' as key mechanisms of delay" (Grubb et al. 2022, 185), and documentation that "climate narratives can also be used to justify scepticism of science, drawing together coalitions of diverse actors into social movements that aim to prevent climate action (Lejano and Nero 2020)" (Creutzig et al. 2022, 555). Moreover, the assessment noted, "Fossil fuel industries have been important agenda-setters



in many countries, including the USA (Dunlap and McCright 2013; Supran and Oreskes 2017; Downie 2018), the EU (Skjærseth and Skodvin 2010; Boasson and Wettestad 2013), Australia (Ayling 2017), China (Shen and Xie 2018; Tan et al. 2021), India (Schmitz 2017; Blondeel and Van de Graaf 2018), and Mexico (Pulver 2007), with differing positions and impacts across countries (Kim et al. 2016; Nasiritousi 2017)." In the USA, the oil industry has underpinned emergence of climate skepticism (Dunlap and McCright 2013; Farrell 2016a; Supran and Oreskes 2017) and its spread abroad (Dunlap and Jacques 2013; Engels et al. 2013; Painter and Gavin 2016). Corporate opposition to climate policies is often facilitated by a broad coalition of firms (Cory et al. 2021). Conservative foundations, sometimes financed by business revenues, have funded a diversity of types of groups, including think tanks, philanthropic foundations, or activist networks to oppose climate policy (Brulle 2014, 2019)" (Dubash et al. 2022, 1374).

The peer-reviewed research assembled in the UN IPCC AR6 has pointed clearly to an understanding that it is much easier to muddy the waters of discourse and action on climate change than it is to keep them clean and productive (Nyhan et al. 2022). With significant carbon-based industry funding sloshing about in the USA, many conservative think tanks have accepted funding to help advance doubt about the causes and consequences of climate change, as they pollute public discussions and policy-maker deliberations through distractions, disruptions, denials, and delays that slow policy action (Lamb et al. 2020). Among prominent CCM organizations, the Heartland Institute is a prominent purveyor of climate change denialism (Waldman 2023). This study therefore seeks to better understand its approach to climate change denialism and the motivation of its members and associates. This research focuses on the 2021 Annual Conference and then draws comparisons and contrasts with rhetoric from the annual meeting a decade earlier in 2011.

## 3 Methods

This study focused on the Heartland Institute, as a representative and influential multiissue USA-based think tank. The Heartland Institute was founded in 1984 to "discover, develop, and promote free-market solutions to social and economic problems" (Heartland Institute 2023). It is an organization that has focused on various public health and science issues such as climate change, healthcare, education, taxation, and tobacco regulation over the past 40 years. Specific to this research, the Heartland Institute has a demonstrated track record of rejecting much of convergent agreement among relevant experts on various aspects of climate change (Boykoff 2013).

To better understand the approaches, tactics, and strategies deployed by the Heartland Institute as a key CCM organization, qualitative methods in the form of interviews and participant observations were conducted at the Heartland Institute's 14th International Conference on Climate Change in Las Vegas, Nevada. Twenty-one interviews (N = 21) were conducted, that was 43% of 49 scheduled speakers, and 48% of 44 speakers who appeared

<sup>&</sup>lt;sup>3</sup> Anthony Watts, Art Robinson, Ben Zycher, Bette Grande, Craig Rucker, David Legates, E. Calvin Beisner, Gregory Wrightstone, Holder Thuss, Howard Hayden, James Taylor, Kenneth Haapala, Marc Morano, Oliver Helmers, Patrick Moore, Sam Karnak, Stanley Goldenberg, Sterling Barnett, Steve Milloy, William Happer, and Wille Soon were interviewed.



<sup>&</sup>lt;sup>2</sup> This research was approved by the University of Colorado Boulder Institutional Review Board #21-0452 with permissions that the names of the interviewees could be used in research outputs.

in person at the conference. The interviews were semi-structured, with open-ended questions focusing on their contributions through their work with the Heartland Institute and wider CCM activities. All interviews were conducted in the conference venue and were approached with a request for a brief and recorded interview. In addition, participant observations of the speeches, panels, and other session were held across the two-and-ahalf-day conference program involving opening and closing remarks by Heartland Institute President James Taylor along with seven keynote presentations, 13 panels, two awards ceremonies, a movie screening (Climate Hustle 2), and three other sessions (presentations by Anthony Watts, Justin Haskins, and Naomi Seibt [virtual]). Interviews and talks were recorded and transcribed using Otter AI software.

Interview questions included the following:

- What are ways in which you are voicing dissent and/or contrarianism regarding climate change?
- How do your positions and stances relate to other science policy issues?
- How have your perspectives changed or remained the same/similar over time?
- What kind of legacy to you want to leave through your influences and what kind of legacy do you think you are leaving?

Alongside analysis from the Heartland Institute's 14th International Conference on Climate Change, this research compared and contrasted previous interview data and participant observations ten years earlier at the 2011 Heartland Institute's Sixth International Conference on Climate Change. The 2011 work consisted of eighteen interviews (N =18)—45% of the 40 scheduled speakers—and participant observations of the speeches, panels, and other sessions at the meeting. This work was undertaken using inductive reasoning, moving from the specifics of interview responses and observations to larger trends. This research relied on grounded theory to analyze the qualitative data and identify thematic assemblages (Dey 2004; Walker and Myrick 2006). Grounded theory is inductive. From this approach, themes and categories emerge from the interview responses in order to provide context-specific insights from these data. Consistent with previous qualitative research, coding was approached iteratively (e.g., Stemler 2001; Almiron et al. 2020).

# 4 Findings and analysis: emergent themes in comparisons and contrasts

While the world has changed dramatically in the ten years between the 6th and the 14th Heartland Institute Conference on Climate Change, ten themes emerged from observations in these meetings by way of interviews, speeches, panels, and informal conversations. They indicated how many elements of CCM practices have persisted or shifted as this organization and its associates developed adaptation strategies for changing circumstances.

## 4.1 Five comparisons

First, ongoing rhetoric of freedom and appeals to liberty, combined with support for freemarket capitalism (and opposition to government interventions in the forms of regulation and legislation to address climate change), were abundantly evident across multiple interviews, speeches, and panels at the 2021 conference. Moreover, they were consistent



with discourses emanating from the 2011 conference. These tropes. For example, the 2021 conference plenary panel on "The Failure of Green Energy in Europe" featuring speakers Holger Thuss and Wolfgang Muller picked up on these themes. Mr Muller made connections between regulatory interventions and anti-fascist movements (ANTIFAs) while discussing the importing of Trump Administration strategies to Europe. Moreover, in an interview with Holger Thuss—President, European Institute for Climate And Energy (EIKE)—he said, "When I started this, ANTIFA would respond but I don't care anymore." Further examples were evident in the "science track" and "policy track" panels, such as "Examining Biden's Energy and Climate Agenda" speakers Amy Oliver Cooke, Bette Grande, and Steve Milloy and in the "featured breakfast speaker" Naomi Seibt who was introduced by James Taylor as someone "grounded in individualism, liberty and freedom."

Second, attacks on science, scientists, and "alarmism" remained consistent. Yet, these consistent attacks remained riddled with internal inconsistencies between statements from speakers in the 2011 and 2021 meetings, and Heartland Institute stances themselves. For example, arguments advanced by speakers Willie Soon, Gregory Wrightstone, and Jay Lehr in the "Natural Climate Forcings" panel were at odds with claims made by Steve Milloy, H. Sterling Burnett, and Marc Morano on the "Degraded Science and the Coming Great Reset" panel, particularly regarding human contributions to climate change. The speakers and participants though did not appear deterred by contradictory arguments. Moreover, many of the claims in the 2021 meeting were repeated from 2011, despite the advancement of scientific understanding about a changing climate. For example, a keynote address by Patrick Michaels entitled "Climate Models vs Reality" contained outdated slides (with citations no more recent than 2016) and statements made a decade earlier. Speakers themselves were also recycled from a decade earlier, including Marc Morano, Patrick Moore, Anthony Watts, Willie Soon, and Will Happer among them. The Heartland Institute acknowledges that there "could be" human contributions to climate change or global warming, yet they still promote messaging from the "Oregon Petition" that states "there is no convincing scientific evidence that human release of carbon dioxide, methane, or other greenhouse gases is causing, or will in the foreseeable future, cause catastrophic heating of the Earth's atmosphere and disruption of the Earth's climate."

This research found continued offensives against what many Heartland Institute speakers and participants characterized as "alarmism." For example, interviewee David Legates—Professor of climatology at the University of Delaware—made this claim:

Climate change is something that is happening, it is real but carbon dioxide is a minor player. There's an alarmist view that it is big.

Furthermore, CO<sub>2</sub> Coalition Executive Director Gregory Wrightstone commented in an interview:

It's important to get the science out that supports the notion that there is not manmade catastrophic warming going on...we're advancing the scientists and science that does that.

And, interviewee Willie Soon-Heartland Institute Policy Advisor and an Astrophysicist and Geoscientist based in Cambridge, Massachusetts—argued:

I don't think even the thermometer temperature record that you see that it's been presented as some form of superior product that is totally consensus and no one to look into it.

Heartland Institute statements are posted on their website under "Frequently Asked Questions: Reply to Critics."



Third, the qualitative research consistently pointed to *self-perceptions of being embat-tled underdogs* fighting for greater understanding about the twenty-first-century climate change. To illustrate, interviewee Patrick Moore offered the following comment:

What I believe I have discovered is the fact that all the scare stories are based on things that people cannot observe and verify for themselves. Examples of the invisible ones is CO<sub>2</sub> and radiation...my theory is 'the unified theory of scare stories' and I believe that nobody has thought of this before. The reason it is so easy to tell lies is that it is not possible to observe and verify.

Meanwhile, interviewee Anthony Watts—Heartland Institute Senior Fellow and 'Watts Up With That' content aggregator/blogger – said:

science, lately has become almost entirely government funded. As a result, it tends to be in one direction, and it needs to be questioned and I hope that people will consider the fact that they're getting one-sided science and they need to question it more...I think that there's a lot of people that are on our side, but they're afraid to speak up because the debate has gotten so nasty.

Furthermore, in a panel presentation Scott Shepard called boldly for a "counter march through the institutions" in resistance to regulatory efforts to address climate change. And Marc Morano spoke in his panel presentation with passion about his ongoing and undeterred underdog campaign to combat "the world the progressive left has been seeing."

Fourth, *righteousness and confidence* to upend relevant expert views about climate change were consistently exhibited in 2021 conference. For example, Heartland Institute Senior Fellow and interviewee Arthur "Art" Robinson commented:

I hope that the things we've enjoyed working on will be beneficial to other people... we've had a lot of fun, but I hope that it will improve people's lives to some extent.

Also, interviewee—and Heartland Institute President—James Taylor offered the following comment:

I fought for the truth, even when it was politically inconvenient or even dangerous to do so. I always stood for the truth...I know I'm doing the right thing.

Furthermore, interviewee Ken Haapala—President of the Science and Environmental Policy Project (SEPP)—alleged:

right now, I am called a climate denier, a scoundrel, an anti-science scoundrel, on the payroll of Exxon Mobil, Texaco, oil companies in general, chemical companies, Monsanto, tobacco companies, and I never got a check from any of them...I am not out appealing to the masses, all I'm out doing is spending time to appeal to those people who spend a little time trying to think about an issue, to have the ability to ask questions.

And interviewee Sterling Barnett—Heartland Senior Fellow, and Managing Editor of *Environment & Climate News*—commented:

history will judge me...I hope history will judge me as someone who worked my hardest to leave the world as a freer place a more prosperous place...now, history may choose something differently because it's written by the winners and we may not be the winners.

As a further illustration, interviewee Benjamin Zycher – Senior Fellow at the American Enterprise Institute – made this claim:



I get a lot of commentary, most of which is favorable or highly favorable of those who agree with me. I get some, but not a great deal of criticism of those who disagree with me. I haven't seen a very convincing refutation of points I have made. Some may have pointed out a factual or data error, but I cannot remember a single specific example where my central arguments were refuted.

Meanwhile, E. Calvin Beisner challenged those in the crowd to disagree with his pronouncements in his presentation, commenting "does anyone in this room disagree with my assessment? I didn't think so". Interviewee Craig Rucker—co-founder and President of Committee for a Constructive Tomorrow (CFACT)—also said, "as these liberal, energy-sucking policies are implemented, people are starting to wake up."

Fifth, presentations and interviews echoed proud claims about "us vs them" fights, with passing nostalgia about debates that appeared to garner legitimacy for them when sparking conflict with people with notoriety. As was found in the 2011 meeting, there appeared to be feelings of pride associated with the exhilaration from "war stories" of debates and disagreement with high-profile experts on climate change. Furthermore, while they may have viewed themselves as benevolently motivated and careful, critical thinkers, in their prepared remarks, self-assurance, appearances of bold conviction, poor listening skills, sensitivity to criticism, and a lack of empathy were evident in many of the statements and comments made throughout the conference. To illustrate, interviewee E. Calvin Beisner spokesman for the Cornwall Alliance advocating for the stewardship of creation—proclaimed, "the most common attack that we get is that we are science deniers, and that is inexplicable to anyone who spends any significant time on our website that we are doing any such thing." Furthermore, Marc Morano-Executive Editor/Chief Correspondent of the "Climate Depot" blog (a project of CFACT)—boasted, "I'd like to have a geological era named after me, instead of the Anthropocene I'd rather have the Morano-pocene...I want to be known as the guy who exposed [the IPCC] as scientific lobbying, not the scientific method. It's using science to lobby for policy, we saw this in real time with vaccines... I want to be seen as somebody who was challenging this narrative and had fun doing it and was hopefully effective."

#### 4.2 Five contrasts

To begin, the 2021 meeting garnered considerably *less attention* than was attracted in and around the 2011 meeting. This assessment was made by a smaller presence of journalists covering the event, smaller registrations of non-speaking attendees as well as a much smaller contingent of policy decision-makers present in the 2021 gathering. There were also fewer media stories published from the 2021 conference. With this shrinking prestige came some expressions of paranoia. For example, upon interviewing CFACT co-founder and President Craig Rucker, he asked "are you really with the University of Colorado?" and later—as I asked about why an assistant was taking photos of me while we spoke—he said that he wanted to "make sure you're not one of those gotcha people." This kind of suspicion was evident in a hostile reception from Heartland Institute Vice President and Director of Communications Jim Lakely and initially antagonistic interactions with conference speaker E. Calvin Beisner.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> E. Calvin Beisner did apologize later for his initial belligerence when I asked him to talk with me; to his credit, he did then speak thoughtfully and sincerely to the questions posed on the consequent interview.



Second, waning influence in climate and sustainable technology policy conversations could also have been due in part to the venue, where the 2021 meeting took place in ball-room deep in the interior of a Las Vegas casino, while the 2011 meeting took place at a hotel in central Washington D.C. Despite the presence of UK *Channel Four* also conducting interviews throughout the 2021 meeting, the absence of other media outlets presented a sharp contrast from 2011 media fascination and vibrancy to 2021 disinterest. Nonetheless, interviewee Gregory Wrightstone—CO<sub>2</sub> Coalition Executive Director—contended this:

I have a large and loud voice. I do lots of interviews, I have done 400 interviews over the past nine months, sometimes as many as 5-6 per day...on *The Daily Wire*, on *Fox News*, and *Newsmax*...the mainstream news will absolutely not have me on. They will not entertain the possibility of having anyone on that falls into the so-called 97% consensus.

Third, contrasts from the past also included a penchant to *feed climate contrarianism into* "culture wars," including anti-vaccination and anti-mask movements. As this conference took place just over a year into the coronavirus (COVID-19) pandemic, how precautions and personal protective equipment (PPE) met politics were front and center. For example, panelist Anne Jordan poked fun at single-use plastics ban as she erroneously conflated it with the lack of recycling of PPE. As a second example, panelist Marc Morano repeatedly took up an anti-vaccination mandate stance as he vacillated between climate contrarianism and COVID-19 contrarianism. As another illustration, Patrick Moore made this assertion in an interview:

We're now brainwashing all the children, and using children, like Greta Thunberg who doesn't have an ounce of science in her body to scare all the other children. And I think oh, a blond girl with pig-tails, that's interesting. And I look back at the people that Stalin used, and Hitler used and they used little girls with pig tails and Mao... That is common to dictators and fascists as they will stoop to using children to appeal to innocence...and that's my theory and I'm sticking to it.

Informal conversations with conference participants included several discussions and some discomfort around COVID-19, masks and PPE. For example, in an informal discussion between sessions, former Minnesota congressman—now Heartland Institute Senior Fellow on Health Care Policy Outreach—Matt Dean spoke with delight about having been thrown out of stores for refusing to wear a mask. As a second example, the interview with independent hurricane meteorologist Stanley Goldenberg began with his repeated request for me to take off my mask, saying "I'd love to see your face."

Fourth, the Heartland Institute 14th International Conference on Climate Change featured a *more reflective view of their legacies* when asked about their contributions. For example, interviewee Benjamin Zycher—Senior Fellow at the American Enterprise Institute—commented:

I have spent my career into debunking energy requirement policy myths, to the extent that it leaves a lasting contribution, I suppose it will leave the effect of strengthening freedom from the expansion of government power.

<sup>&</sup>lt;sup>6</sup> Walking around the Caesar's Palace conference area, several times I overheard conference hosts and participants—such as those at the registration desk—referring to me as "the man with the black beard" as I sometimes placed my black mask under my chin rather than over my nose and mouth when I was not near others. Masks were not commonly worn at the conference, despite the frequency of COVID-19 transmission in October 2021.



Meanwhile, interviewee Sterling Barnett—Heartland Senior Fellow, Managing Editor of *Environment & Climate News*—speculated:

I hope that I leave the world at least as free as when I inherited it....I hope I leave for my nieces and nephews a freer world than I had, maintaining free choice, making decisions on your own. I don't believe in giving up freedom for security.

In addition, interviewee William Happer—CO<sub>2</sub> Foundation Co-founder and Chair—contemplated:

I hope I'll be remembered as someone who ah, you know, tried to stop my generation from, you know, jumping over the cliff, you know to suicide...I think I'm correct so I think in the end I'll look good.

Yet, interviewee Steve Milloy—publisher of JunkScience.com—revealed the following:

I'm not trying to save people, I'm trying to save myself and maybe my family...and so that's how, what I do. Why I do.

Fifth, possibly the most significant shift observed in the 14th International Conference on Climate Change hosted by the Heartland Institute appeared as an *entrenchment of more focused state-level sites of resistance*. During this intervening decade, the Trump Administration activities began and ended and the Biden Administration took office. Central to this shift to state-level engagement has been Bette Grande, the Heartland Institute State Government Relations Manager. In an interview at the conference, she offered this comment:

I hope I leave a legacy for my grandchildren that they have a wonderful world to live in and that they live freely in the liberties that were provided for us by the founding fathers.

A more recent development among CCM organization rhetoric including Heartland Institute speeches and actions has been one to oppose ESG principles as they are incorporated to consider climate impacts from business investments. Part of the hostile response emanated from the USA Securities and Exchange Commission's (SEC) decision—in coordination with the USA Environmental Protection Agency—to consider new rules that incorporate ESG principles for risk assessments and investment decision making. These SEC actions relate to increased awareness of risks involving "stranded assets" and "unburnable carbon" in potential investments that view certain carbonbased industry investments as riskier. These efforts have sought to block public entities from doing business with firms incorporating ESG into investing decisions, including decisions involving energy development, investments in state pensions, and rate-setting by insurance companies. With Heartland Institute involvement—a page on their website is dedicated to their many ongoing efforts—groups such as the State Financial Officers Foundation (SFOF) and the American Legislative Exchange Council (ALEC) have fueled claims in the 2021 Annual Conference meeting of the "woke left" SEC, among other disparaging and polarizing assertions.

At the Heartland Institute 14th International conference on climate change, comments were consistent with these politicized developments. For example, a panel entitled "How to Oppose Woke Capital, Activist Investors, and Financial Regulators' Efforts to Cancel Traditional Energy" featured several attacks on ESG from speakers Justin Danhof, Stephen Soukup, and Scott Shepard. This also emerged in a panel entitled "Perilous Energy Policies at Home and Abroad" with moderator Craig Rucker and panelists Benjamin Zycher, Holger Thuss, and Rob Bradley.



Together, these key thematic strategies have contributed to wider trends of mis- and dis-information in the public sphere, particularly in the USA. In contrast themes emanating from the halls of the Heartland Institute – and more widely from CCM discourses – many leading and relevant experts have stepped forward to call for urgent and significant decarbonization action in the face of twenty-first-century climate change (e.g., Ripple et al. 2022). While associated climate change is increasingly viewed as a prominent, intersectional threat multiplier in the twenty-first century, it appears that the Heartland Institute, speakers at their conference, and wider contributors to CCM movements remain encased in a twentieth-century mindset that is perseverant (Cann and Raymond 2018), yet out of step with current science and policy understanding.

# 5 Conclusion: widening the aperture

The UN IPCC AR6 WGIII documented that "accurate transference of the climate science has been undermined significantly by climate change counter-movements, particularly in the U.S. (McCright and Dunlap 2000, 2003; Jacques et al. 2008; Brulle et al. 2012; Boussalis and Coan 2016; Farrell 2016a; Carmichael et al. 2017; Carmichael and Brulle 2018; Boykoff and Farrell 2019; Almiron and Xifra 2019) in both legacy and new/social media environments through misinformation (*robust evidence, high agreement*) (van der Linden et al. 2017), including about the causes and consequences of climate change (Brulle 2014; Farrell 2016a; Farrell 2016b; Supran and Oreskes 2017)."

Yet, distrust paired with disinformation—amplified and reverberated through CCMs and conservative/right-wing media—has continued to sow doubt among those who succumb to denial in one or more of its aforementioned forms (Norgaard 2006). CCM rhetoric has persisted and grown through adaptive strategies over time in a wider political economy and society influenced significantly by capitalist-driven carbon-based industry interests (Xia 2021). As such, some members of the fossil fuel industry have harnessed the power of economic paradigms to produce quasi-legitimate reports to effectively influence sustainability technology and climate policy action (Franta 2022).

Despite that many of the climate-related claims of the Heartland Institute and other related CCM organizations often take up outlier perspectives, funding has nonetheless translated to ongoing influence at national and subnational levels. Investigations have revealed that support for CCM organizations like the Heartland Institute has continued to flow from many carbon-based industry groups as well as ideologically aligned foundations and family trusts (e.g., Brulle and Downie 2022). Rhetorical claims made by speakers at these Heartland Institute meeting, and Heartland Institute representatives themselves at times mimic communication approaches and styles of relevant expert climate research communities. For example, the "The Nongovernmental International Panel on Climate Change (NIPCC)"—whose work is funded by the Heartland Institute—deliberately "stand in contrast to those of the United Nations' Intergovernmental Panel on Climate Change (IPCC), which is government-sponsored,

<sup>&</sup>lt;sup>7</sup> In 2022, Robert Brulle and Christian Downie found that "trade associations engaged on climate change spent \$3.4 billion in 10 years on political activities, with the largest expenditure on advertising and promotion, followed by lobbying, grants and political contributions...scholars have for too long failed to account for the political activities of trade associations, which are also one of the most important opponents of climate policies" (2022, 202).



politically motivated, and predisposed to believing that climate change is a problem in need of a U.N. solution."8

While the Heartland Institute no longer discloses its funding sources, inquiries have revealed that they have received funds from groups including the Adolph Coors Foundation, the American Petroleum Institute, the Charles G. Koch Foundation, Donor's Trust, ExxonMobil, the Mercer Family Foundation, Philip Morris International, and the Walton Family Foundation. With approximately a \$6 million budget each year, the Heartland Institute has continued to work over the past decade as a leading USA-based CCM.

The lack of disclosures by Heartland Institute and other CCM organization has been a concern identified as "dark money," influencing policy decision-making at multiple scales (Boykoff and Farrell 2019; Basseches et al. 2022). This has contributed to situations, for instance, where large asset managers such as BlackRock, Vanguard, State Street, and JP Morgan Chase have been threatened by Republican lawmakers at the USA federal level regarding their incorporation of ESG principles to investment decisions (Mufson 2022). At the subnational level, in 2023, USA state lawmakers passed 19 new laws that target ESG investing, among 165 bills that were introduced across the country (Aton and Ellfeldt 2023). In one case, Heartland Institute speaker Bette Grande—former chair of ALEC's energy division and current Heartland Institute State Government Relations Manager—provided anti-ESG testimony before Kansas, Wyoming, West Virginia, and New Hampshire lawmakers regarding pending bills at the time that sought to bar banks form using these ESG considerations (Mufson 2023). Furthermore, invoking "woke capitalism" assertions, the Heartland Institute—David Hoyt, Heartland Institute's Executive Director for Development, in particular—worked with ALEC and the Texas Public Policy Foundation to move forward with state-level legislation in Texas, and Oklahoma to bar public officials from working with businesses that are considering climate change or fossil fuels in their investments (Colman and Wolman 2022). Heartland Institute and wider CCM activities have also supported Republican state treasurers to fight back regulatory and legislative progress on climate-related financial risk, in partnership with the Heritage Foundation, and the American Petroleum Institute to help the State Financial Officers Foundation coordinate state-level efforts (Gelles 2022).

Elsewhere, researchers have documented how advertising by oil and gas sectors has impacted reputation, congressional attention, and media attention (Brulle et al. 2019). Mapping these dynamics onto wider politics, research has revealed that understanding the USA partisan gap "requires extending our view beyond the climate change countermovement and toward a broader examination of anti-scientific dimensions of the US conservative movement" (Budgen, 2022, 34). These trends are exacerbated by the realities that "consequence culture" is ebbing, where accuracy has a short half-life, where mis- and disinformation can be toxic and where "accuracy gains that factual information creates do not last" (Nyhan et al. 2022, 6).

This research adds value to examinations of sustainability technologies because discursive and material elements comprise the cultural politics of climate change (Newell et al. 2012). Moreover, discourses are tethered to material realities, perspectives, and social practices (Hall 1997). Therefore, considerations of possible technological advances to decouple human material well-being from environmental impacts is critically shaped by how these discourses of

<sup>&</sup>lt;sup>9</sup> Of note, the State Financial Officers Foundation also hired a conservative strategy firm—CRC Advisors (founded by Leonard Leo)—to help coordinate media engagement with these treasurers.



<sup>&</sup>lt;sup>8</sup> Information about the NIPCC and its various reports produced since its formation in 2003 – through funding by the Heartland Institute and the Science and Environmental Policy Project (SEPP) – can be found here.

contrarianism influence development and deployment decisions and actions at the scales that are warranted. Together, multi-faceted CCM tactics and approaches have continued to fuel polarization: at times this is observed to be one of the objectives of Heartland Institute speakers. Together, the many tactics and approaches appraised here manifest in intensely divergent interpretations of scientific evidence of a changing climate and whether urgency in sustainability technology and climate policy action is justified. While this research finds persistent animosity and division fed by Heartland Institute speakers and participants, there are emergent signals that these rhetorical strategies are increasingly being viewed as ossified and fossilized in a decarbonizing world.

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Data availability All data and other materials can be made available upon request.

# **Declarations**

**Ethics approval and consent to participate** This research was approved by the University of Colorado Boulder Institutional Review Board #21-0452 with permissions that the names of the interviewees could be used in research outputs.

Consent for publication Yes.

**Competing interests** The author declares no competing interests.

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