

Green Rage Against the Machine: Climate Threat and Support for Eco Direct Actions

****PRELIMINARY DRAFT****

Thomas Zeitzoff
AMERICAN UNIVERSITY

Grace Gold
AMERICAN UNIVERSITY

DATE: July 2022

Abstract

How supportive is the American public of various contentious eco tactics known as direct actions? How does the threat from climate change influence support for different tactics? To answer these questions, we conduct a series of surveys and survey experiments on a nationally diverse sample of Americans. We find that Americans are less supportive of certain tactics, particularly those that involve property destruction or sabotage. We further show that support for eco direct actions is moderated by perceived threat from climate change. Across several survey experiments we find that perception of climate threat, and the framing of eco direct action tactics influences the level of acceptability of tactics, support for their actions, and willingness to punish people who engage in them.

Motivation

From November 2016 until May 2017 a spate of sabotage attacks occurred along the nearly 1,200-mile Dakota Access Pipeline. A bulldozer was set on fire, and blow torches and rags doused in gasoline were used in more than eleven arson attacks to damage various valve sections of the pipeline. In a press conference in July of 2017 in front of the Iowa Utilities Board two women affiliated with the Catholic Workers Movement—Jessica Reznicek and Ruby Montoya—announced that they were responsible for the sabotage actions. Reznicek and Montoya said in a statement that:

“After having explored and exhausted all avenues of process, including attending public commentary hearings, gathering signatures for valid requests for environmental impact statements, participating in civil disobedience, hunger strikes, marches and rallies, boycotts and encampments, we saw the clear deficiencies of our government to hear the people’s demands....Our conclusion is that the system is broken and it is up to us as individuals to take peaceful action and remedy it.”¹

¹ See <https://www.radioiowa.com/2017/07/24/two-woman-take-credit-for-vandalism-along-the-dakota-access-pipeline-audio/>

Reznicek eventually pleaded guilty and was sentenced to eight years in prison with a terrorism enhancement charge.² The motivations for Reznicek and Montoya's actions become clearer when put into context of the threat posed by climate change and continued fossil fuel usage. A 2021 U.N. Framework Convention on Climate Change said that the world is on a "catastrophic" path to global warming.³ The report forecasts a 2.7 degrees Celsius increase in temperature (above pre-industrial levels) without drastic action being taken. The report notes that anything over 1.5 degree Celsius would have devastating consequences for the planet including worse heatwaves, droughts, forest fires, and stronger storms and floods. Polling shows that Americans, and in particular younger Generation Z (18-25 years old) and Millennials (26-41 years old), are increasingly concerned about and likely to be active in climate-related protests.⁴

One might think that given the increasing threat and salience of climate change, eco-related sabotage, and contentious tactics like those carried out by Reznicek and Montoya would be on the rise in the U.S. Yet, that's not the case. From 1996-2009 individuals associated with the Earth Liberation Front (ELF) and the related Animal Liberation Front (ALF) conducted more than 700 attacks, including vandalism, arson, and other forms of sabotage against targets (Loadenthal 2014). They referred to these types of direct actions as "monkeywrenching." At its peak in 2002, so-called "ecoterrorism" and individuals associated with ELF and ALF were considered the number one domestic terror threat by the FBI (Potter 2011). But since its peak in 1999-2001, eco-related attacks have declined precipitously (Spadaro 2020).

Given the threat from climate change, why haven't we seen more aggressive eco direct actions and tactics? Swedish academic and author of *How to Blow Up a Pipeline*, Andreas Malm refers to this as "Lanchester's Paradox" (Malm 2021). The paradox is named after the British novelist John Lanchester who observed that given the scale and threat to humans of climate change: "It is strange and striking that climate change activists have not committed any acts of terrorism," and largely adhered to the principles of non-violence" (Lanchester 2007). As one former activist involved in the eco direct action movement said, "I'm surprised there hasn't been more (direct actions) like Jessica Reznicek, I'm not sure why, and I have to presume there is some cycle, and there will be more intense actions (coming in the future)."⁵

Along with the rising salience of climate change, there's also been a pronounced backlash against technology and technology companies. A July 2021 Pew study found that 68% of Americans believe tech companies "have too much power."⁶ Experts are also concerned that new

² See <https://www.desmoinesregister.com/story/news/crime-and-courts/2022/06/06/dakota-access-pipeline-dapl-protestor-sentence-jessica-reznicek/7535555001/> Reznicek's co-defendant, Montoya would later seek to withdrawal her plea agreement., and there's evidence that she is cooperating with the government against Reznicek.

³ See <https://www.cnn.com/2021/09/17/us/catastrophic-climate-change-un-report/index.html>

⁴ See <https://www.pewresearch.org/science/2021/05/26/gen-z-millennials-stand-out-for-climate-change-activism-social-media-engagement-with-issue/>

⁵ Interview #EA_EN_0622

⁶ See https://www.pewresearch.org/fact-tank/2021/07/20/56-of-americans-support-more-regulation-of-major-technology-companies/?fbclid=IwAR2E_Bw6k_pCusLD1CuU02g_G7XHQaSYRLSLzArEFkJXS8Hxro15RNKvufg

technologies will sow distrust, increase state surveillance, and thus weaken democracy.⁷ Others are also worried that increasing use of artificial intelligence presents unforeseen economic and security risks to society.⁸

These anti-tech impulses are not isolated from the eco direct action movement. For instance, the basis for Theodore Kaczynski's bombing campaign from 1978-1995 that killed 3 people and wounded more than 20, was laid out in his anti-technology manifesto: "The Industrial Revolution and its consequences have been a disaster for the human race...the continued development of technology will worsen the situation. It will certainly subject human beings to greater indignities and inflict greater damage on the natural world, it will probably lead to greater social disruption and psychological suffering, and it may lead to increased physical suffering even in 'advanced' countries."⁹ Kaczynski's violent anti-technology stance, found a burgeoning home on both the left and right, where some have referred to Kaczynski affectionately as "Uncle Ted."¹⁰ Far-right actors behind the 2019 Christchurch, New Zealand shooting, and 2022 Buffalo, New York shooting used the ideology of eco-fascism—which blames immigrants, overpopulation, and technology for environmental degradation—to justify violence against immigrants, refugees, and other minorities. Both the Christchurch and Buffalo shooter drew inspiration from the anti-technology viewpoints espoused by Kaczynski.¹¹

This paper examines how Americans view different types of contentious eco tactics known as eco direct actions.¹² This is an umbrella term that encompasses everything from non-violent civil disobedience to property destruction to violent direct action including assault, arson, kidnapping and other forms of political violence. These eco direct actions are used to defend environmental causes or prevent pollution or fight against perpetrators involved in its destruction.¹³ Which eco direct action tactics do Americans generally find acceptable or unacceptable? And which tactics are more ambiguous in their level of acceptability? Are cyber eco direct actions viewed as acceptable? How does the threat of climate change and attitudes towards technology shape support for different tactics? To answer these questions, we turn to a series of surveys and survey experiments that we carried out on a nationally diverse sample of Americans in April and July 2022.

Why should we care about surveyed attitudes on eco direct actions? Public attitudes towards eco direct actions are an important part of the eco direct action movement. Movement campaigners are acutely aware of public opinions about their actions. For example one of the founders of

⁷ See <https://www.pewresearch.org/internet/2020/02/21/many-tech-experts-say-digital-disruption-will-hurt-democracy/> and <https://www.theatlantic.com/magazine/archive/2022/05/social-media-democracy-trust-babel/629369/>

⁸ See <https://www.vox.com/conversations/2017/3/8/14712286/artificial-intelligence-science-technology-robots-singularity-automation>

⁹ See <https://www.washingtonpost.com/wp-srv/national/longterm/unabomber/manifesto.text.htm>

¹⁰ See <https://nymag.com/intelligencer/2018/12/the-unabomber-ted-kaczynski-new-generation-of-acolytes.html>

¹¹ See <https://icct.nl/publication/ted-kaczynski-anti-technology-radicalism-and-eco-fascism/>

¹² Some people—particularly law enforcement officials refer to these tactics as "ecoterrorism."

¹³ See <https://medium.com/green-and-red-media/why-2021-needs-more-direct-action-3a2f6dfa3014>

Earth First!—one of the earliest most prominent environmental groups that used sabotage and other forms of direct action to defend wilderness, wild habitats, and biodiversity¹⁴—said the following about public opinion and direct action:

“(In our campaigns) we used non-violent civil disobedience and sabotage side by side...we needed to get the public on our side.... We wanted a larger movement, and thus we needed more anti-violent discipline.”¹⁵

Our main findings are that there is large variation in how acceptable certain eco direct action tactics are. Tactics that involve violence, or sabotage are seen as much less acceptable. Those who believe that climate change is more threatening, are more accepting of eco direct actions in general. Priming climate threat has a small effect on support for less extreme actions. Across two framing survey experiments we show that the framing of eco direct actions as providing a sense of justice against polluters, emphasizing the urgency of the problem, or the fact that groups had tried other, less contentious means slightly increases support for more extreme actions. We also show that the public seems to be slightly more tolerant of cyber sabotage as opposed to physical sabotage.

Finally, this research is part of a broader project that seeks to examine 1) why the eco direct action movement collapsed in the early 2000’s? And 2) given the threat of climate change, what does the future of eco direct action tactics look like?

.

Attitudes Towards Threat and Climate Change, and Technology and Disruption

Attitudes on eco direct actions are relevant to several different research areas. These include how people make sense of threat, particularly from climate change, attitudes and support for contentious politics, and attitudes towards technology and disruption.

Threat and Climate Change Attitude

Attitudes towards climate change and global warming are complex. They are influenced by personal experience, science attitudes, and political ideology (Gifford 2011; Gifford and Nilsson 2014). Climate change attitudes and perceptions are also related to what people think is causing it, with those who believe global warming mostly man-made (the scientific consensus) more afraid of the impacts (Krosnick et al. 2006). There’s some evidence that motivated reasoning leads conservatives or Republicans to downplay the threat of climate change and global warming (Kahan 2013), while others research argues that it’s equally plausible that both Republicans and Democrats are trying to form accurate beliefs but finding different evidence credible (Druckman and McGrath 2019).

How does exposure to threatening events influence attitudes? Studies of terrorism suggest that the threat of terrorism shift people’s attitudes. Increased terrorism exposure is shown to increase

¹⁴ See Woodhouse (2018)

¹⁵ Interview #EA_NS_0522

people support for exclusionary or aggressive policies, hardline political parties, as well as more hawkish foreign policies (Canetti 2017; Gadarian 2010; Getmansky and Zeitzoff 2014). Stress from this exposure is thought to be a key mechanism that shifts attitudes. Yet, the effects of exposure to climate events like extreme heat waves or wildfires has a more conditional effect (Hoffmann et al. 2022). For instance, Hazlett and Mildenberger (2020) finds that exposure to wildfires increases support for costly climate-related action, but only in Democratic leaning areas. Negative shocks from climate change spur action, but only in places that are predisposed to believe in climate change.

Contentious Politics

How does the public make sense of protest tactics? Previous research finds that the public is sensitive to the tactics used by groups protesting and draws a line between nonviolent versus violent tactics. Using data from the Black-led protests in the U.S. during the 1960s-70's, Wasow (2020) finds that non-violent protests met with state violence increased Democratic vote share, while violent protests decreased it. There's further evidence that minorities and marginalized groups are penalized even when they do engage in nonviolent protest, and that protesters responding to violence with violence of their own are seen as less reasonable (Edwards and Arnon 2021; Manekin and Mitts 2022). However, extreme protest tactics also allow protesters to get more media coverage and public attention ((Boyle, McLeod, and Armstrong 2012; Hellmeier, Weidmann, and Geelmuyden Rød 2018; Zeitzoff 2022).

In the context of the eco direct action movement, Brown (2021) shows how activists follow a stepwise escalation—when lower-level civil disobedience tactics fail, more escalatory actions are taken, and that many actors within the movement use more confrontational tactics at the same time as employing lower-level tactics. But other research suggests an activist dilemma—protesters who use more extreme tactics may be able to apply more pressure to targets, but at the risk of losing broader support (Simpson, Willer, and Feinberg 2018).

Attitudes towards the target of eco actions matters as well. People are more likely to support protest actions when they feel the target has violated a sacred value or moral taboo (Atran and Ginges 2012). Research from the vigilantism literature would suggest that people are more supportive of tactics when they feel that a target is not being punished, or able to use connections to avoid punishment (García-Ponce, Young, and Zeitzoff 2022).

It should also be noted, that while there have been several studies on attitudes towards cyber attacks (Gross, Canetti, and Vashdi 2017; Kostyuk and Wayne 2021), few studies have looked at the acceptability of cyber as a tool of contentious, protest politics.

Technology and Disruption

How do people form attitudes on technology disruption? Previous research argues that anti-technology and anti-science attitudes are closely related to conspiratorial thinking. People who are distrustful of elites, more conspiratorial minded, or believe in the paranormal are more likely to have anti-science attitudes (Rizeq, Flora, and Toplak 2021). One of the most prominent

mainstream conspiracies—particularly amongst those skeptical of science is in fact climate denial (Uscinski and Olivella 2017).

More generally, recent research has suggested that in addition to right-left/liberal conservative values, there is an anti-establishment domain to politics (Arceneaux et al. 2021; Uscinski et al. 2021). Anti-establishment orientations are correlated with support for populism, conspiracism, as well as political violence.

The “ecocentric” wing of the environmental movement has always had an anti-technology undercurrent (Woodhouse 2018)—valuing all life and not elevating humans above other species. This primitivist impulse has been popular with the green anarchist wing of the eco movement (Parson 2018). As Pellow (2014) describe it, the major ideological impulse of eco anarchists associated with the ALF and ELF was total liberation—liberation of animals, humans, and the environment—and a rejection of “techno-industrial global capitalism.”

The previous research offers several predictions for what shapes attitudes and perceptions of eco direct actions:

H1: Eco direct action tactics that are more violent or contain property destruction will be viewed as less acceptable.

H2: Those who feel climate change is more threatening will be more accepting of extreme eco direct action tactics such as property destruction.

H3: Framing the targets of eco direct actions as “getting away with it” will increase support for the actions.

H4: Increasing the perceived threat level from climate change will also increase support for eco direct actions.

The present study also includes several other open-research questions for which we do not have strong predictions:

OQ1: Is anti-technology sentiment associated with support for eco direct actions?

OQ2: How do other personality characteristics, traits, and attitudes such as aggression, anti-establishment attitudes, acceptability of political violence, partisanship, and age influence support for eco direct action tactics?

OQ3: Are eco direct action tactics that involve cyber sabotage viewed differently than non-cyber actions?

Data and Methods

The two surveys were carried out in April (N=1,932) and July 2022 (1,196) via the Lucid Theorem online platform (<https://lucidtheorem.com/>). Respondents were screened using several

questions and attention checks designed to weed out inattentive respondents.¹⁶ Standard demographic measures including gender, age, partisan identification, race, education were also collected. Our studies focus on five key outcomes listed below (along with the in which survey they were fielded):

1. Support for eco direct actions (July 2022)
2. Labeling activists who engage in property destruction as “ecoterrorists” (July 2022)
3. Experiment 1: The effect of priming climate threat on support for different eco direct actions (July 2022)
4. Experiment 2: How framing influence support for property destruction (April 2022)
5. Experiment 3: Are cyber direct actions viewed as different from their physical counterparts (July 2022)

In both the April and July 2022 surveys respondents were asked a 5-question item of perceptions of climate threat ($\alpha=0.91$ in April, 0.88 in July). In the July 2022 survey, I also included a 3-item measure of aggression ($\alpha=0.76$), a 4-item measure of anti-establishment sentiment ($\alpha=0.66$), and a 4-item measure of anti-technology sentiment ($\alpha=0.80$).

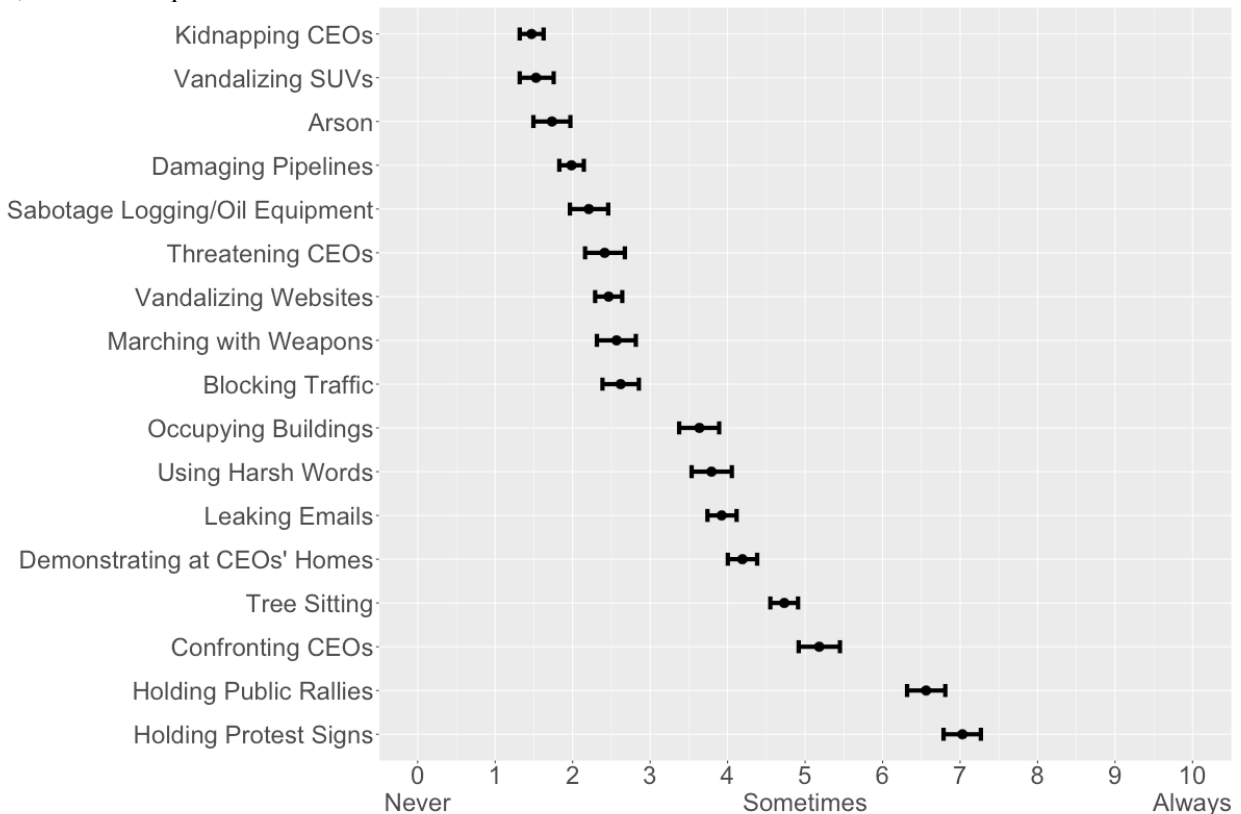
All variables and dependent variables were re-scaled and normalized to lie between 0 and 1 for comparability of effect sizes. A full list of the demographics, survey questions, treatments, along with the regression tables can be found in the Appendix.

¹⁶ This is as recommended in “Evidence of Rising Rates of Inattentiveness on Lucid in 2020” by Peter Aronow, Joshua Kalla, Lilla Orr, and John Ternovski at <https://osf.io/preprints/socarxiv/8sbe4/>. See Appendix.

Preliminary Findings

Support For Eco Direct Actions

Figure 1: Mean acceptability for different eco direct action tactics. 0-Never Acceptable, 5-Sometimes Acceptable, and 10-Always Acceptable. Point estimate are means with 95% confidence intervals from 10,000 bootstraps.



How supportive are respondents of different eco direct action tactics to protest individuals or companies contributing to climate change? To answer this question, we asked respondents to rank on a 0 to 10 scale of how acceptable 17 different eco direct action tactics were. Respondents were asked to rank 10 tactics in total. 6 of the tactics were shown to everyone—these include: 1) vandalizing websites of big polluters, 2) damaging oil pipelines, 3) sitting in trees, 4) leaking emails of companies that are big polluters, 5) demonstrating outside of CEOs' homes of big polluters, and 6) kidnapping CEOs of companies that are big polluters. The other four were randomly drawn from the remaining 11 out of the 17 tactics. Figure 1 shows the average acceptability for each tactic. In general, respondents are less accepting of tactics that involve violence (kidnapping CEOs), or property destruction (vandalizing SUVs, arson, and damaging pipelines). While leaking emails, demonstrating in front of CEOs' homes, or tree sitting were viewed as more ambiguous, and being sometimes acceptable.

Figure 2: Mean acceptability for different eco direct action tactics comparing those with above average (high) vs. below average (low) climate threat perceptions. 0-Never Acceptable, 5-Sometimes Acceptable, and 10-Always Acceptable. Point estimate are means with 95% confidence intervals from 10,000 bootstraps.

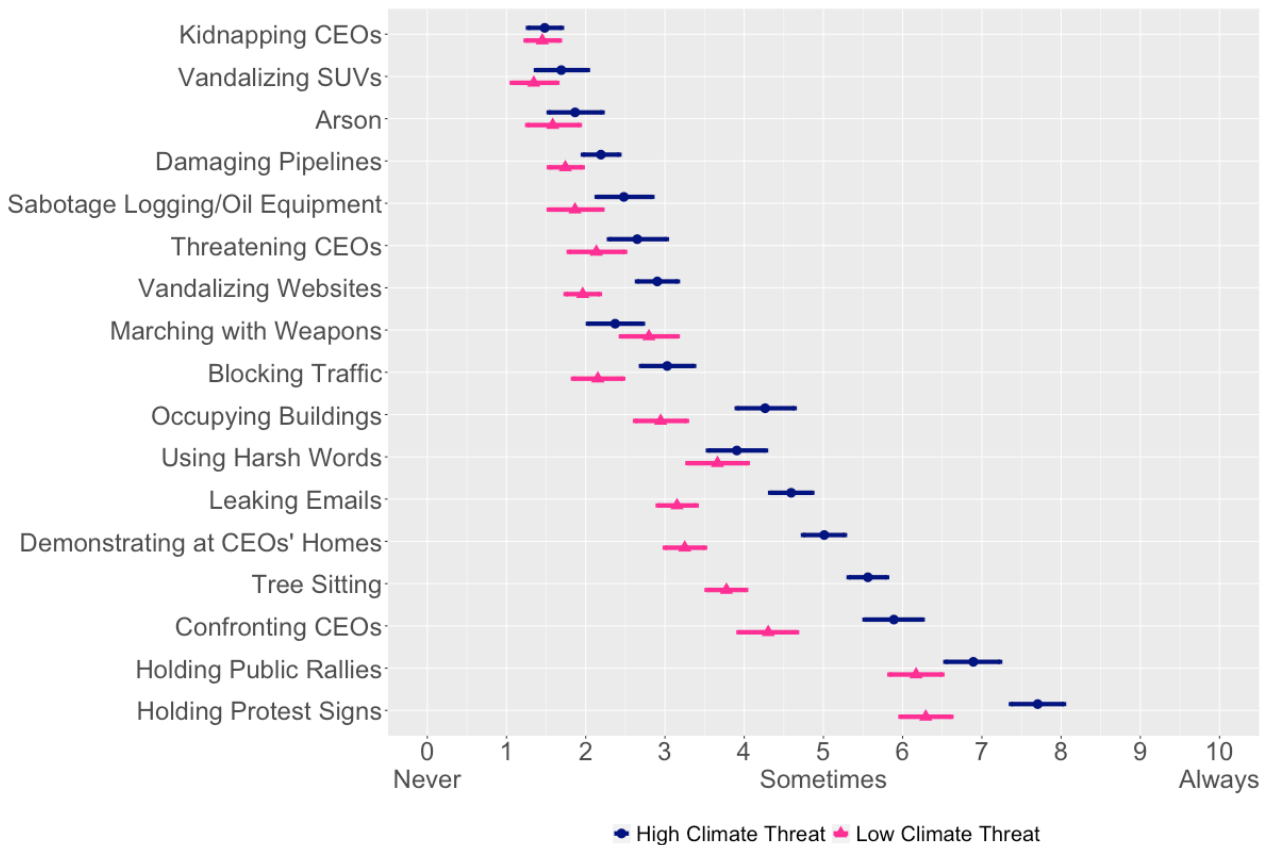


Figure 2 looks at the acceptability of eco direct action tactics but splits the data by high and low climate threat perceptions. In general, those who perceive climate change as a bigger threat are more accepting of eco direct actions. But what's interesting is that for more extreme tactics (those that are considered the least acceptable) there is a relatively small gap between those who have high and low climate threat perceptions. In contrast, for mid-level tactics like leaking emails, tree sitting, and demonstrating at CEOs' homes there are large gaps between those with high and low climate threat perceptions.

Figure 3: Correlates of support for eco direct actions in general. The dependent variable is an additive index (rescaled to lie between 0-1) of support for the six eco direct actions that were asked of everyone: 1) vandalizing websites of big polluters, 2) damaging oil pipelines, 3) sitting in trees, 4) leaking emails of companies that are big polluters, 5) demonstrating outside of CEOs' homes of big polluters, and 6) kidnapping CEOs of companies that are big polluters ($\alpha = 0.85$). Results drawn from Table 4 in the Appendix.

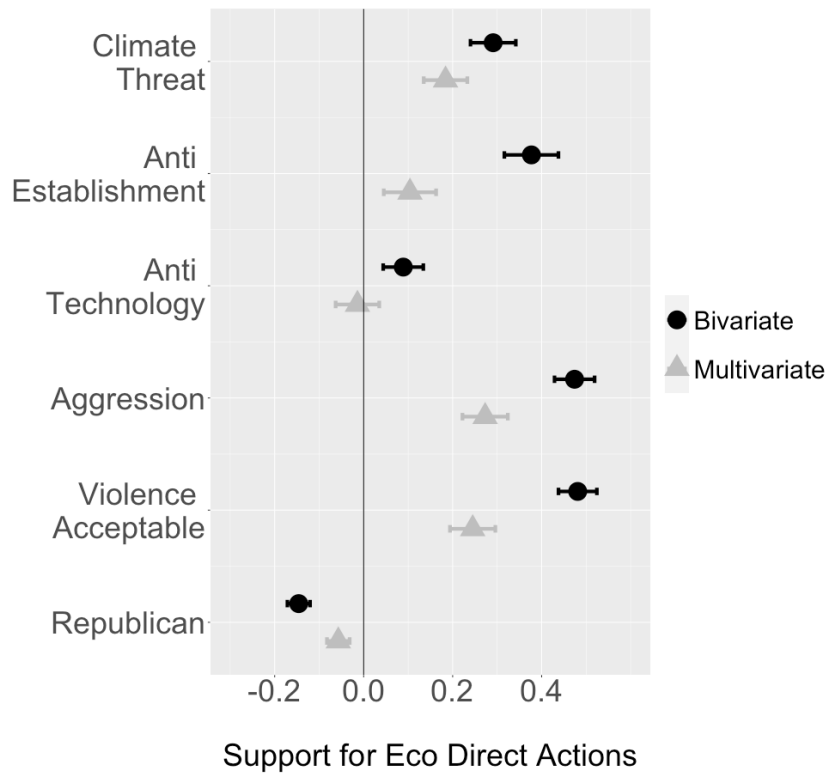
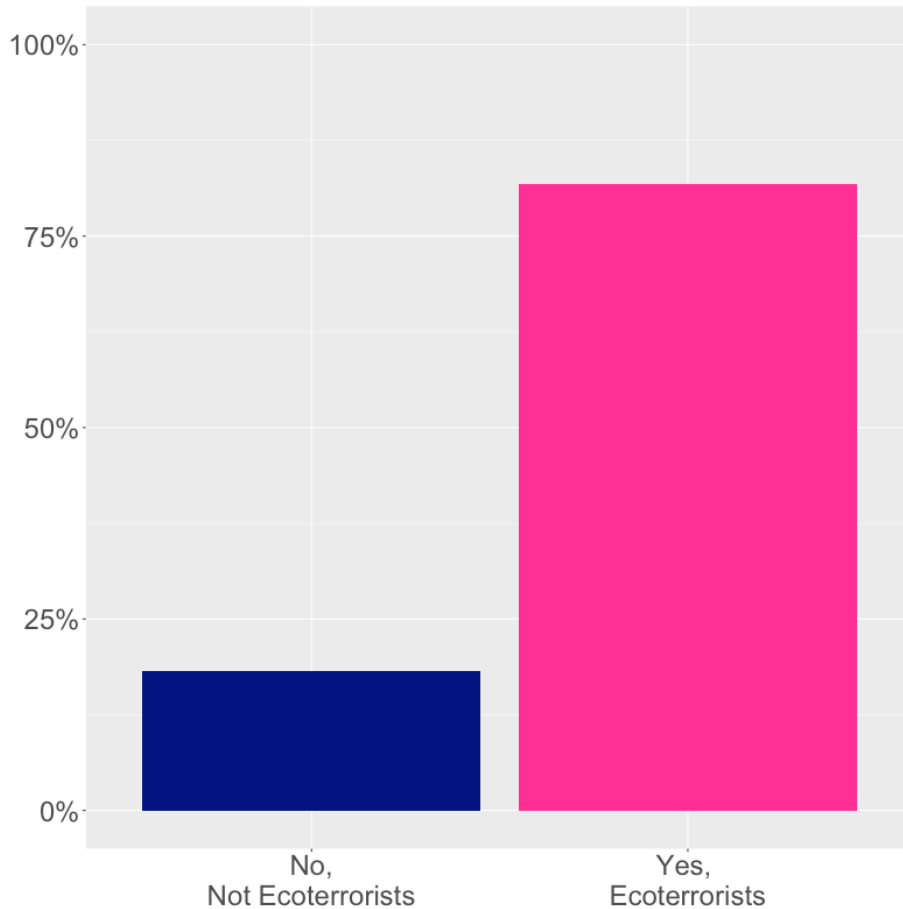


Figure 3 further shows looks at the correlates of support for eco direct actions in general using an additive scale from the six eco direct action tactics that were asked of everyone. Across both the bivariate and the multivariate correlations, climate threat perceptions, anti-establishment sentiments, trait aggression, and a belief that violence is acceptable are all positively correlated with support for direct actions. Identifying as a Republican is negatively correlated with support for eco direct actions, while anti-technology sentiment is only positively and significant in the bivariate relationship.

Labeling Ecoterrorists

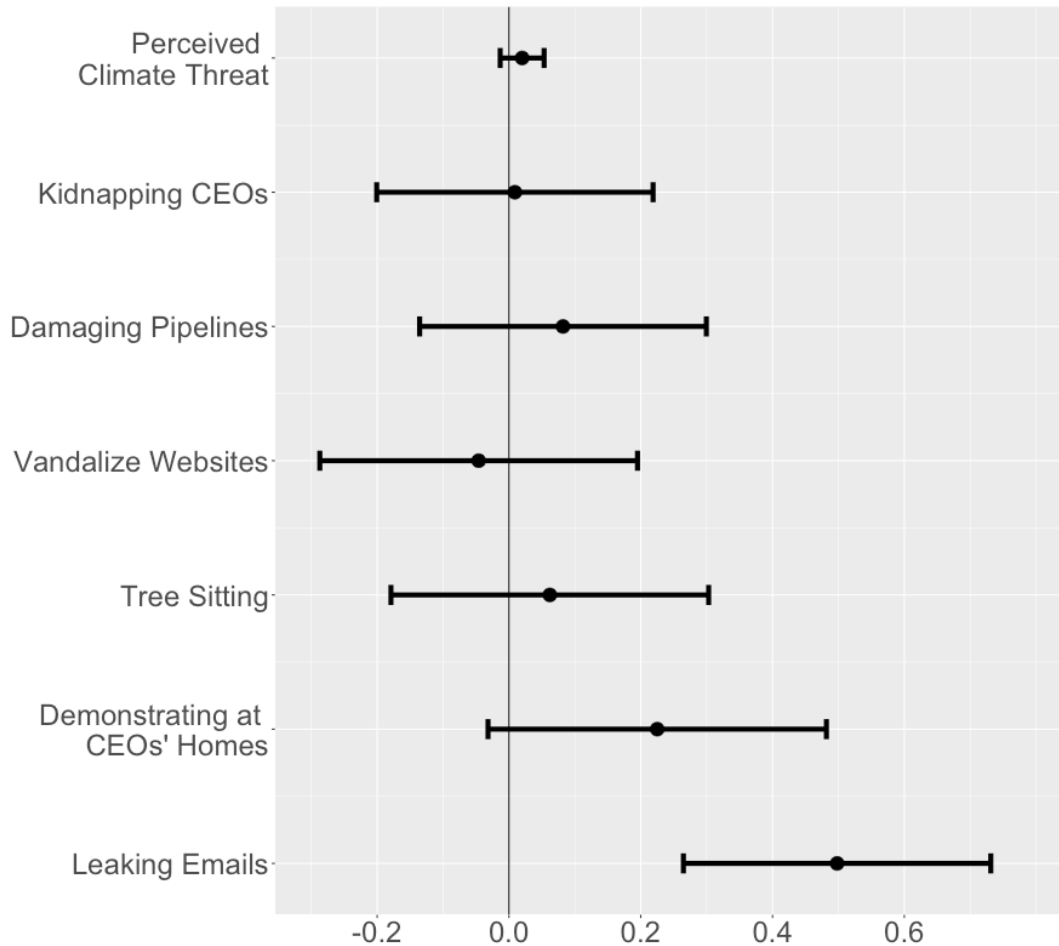
Figure 4: Percent who believe that activists who engage in property destruction or sabotage against companies that are polluters are “ecoterrorists.”



Does the public consider activists who engage in property destruction and sabotage against companies that are big polluters as “ecoterrorists?” This is an important question. Potter (2011) argues that part of U.S. law enforcement’s success prosecuting groups like ELF, ALF, and the eco direct action movement more generally in the early 2000s, was framing those in the movement as “terrorists.” This built public support for law enforcement to charge activists as terrorists, increasing the sentencing length, and helped to crush the movement. Figure 4 shows that a wide swath of the public (nearly 80%) views activists who engage in property destruction as ecoterrorists. In Table 5 in the Appendix, we further show that the best predictor of support for the ecoterrorist label is age, with older Americans more likely to call activists who engage in property destruction ecoterrorists. The role of anti-technology sentiment is also somewhat curious, as those who score higher on anti-technology attitudes are *more* likely to use the ecoterrorist label. This along with the results from Figures 3 suggest anti-technology attitudes are not a key driver of eco direct action attitudes.

Experiment 1: Priming Extreme Effects of Global Warming on Support for Eco Direct Actions

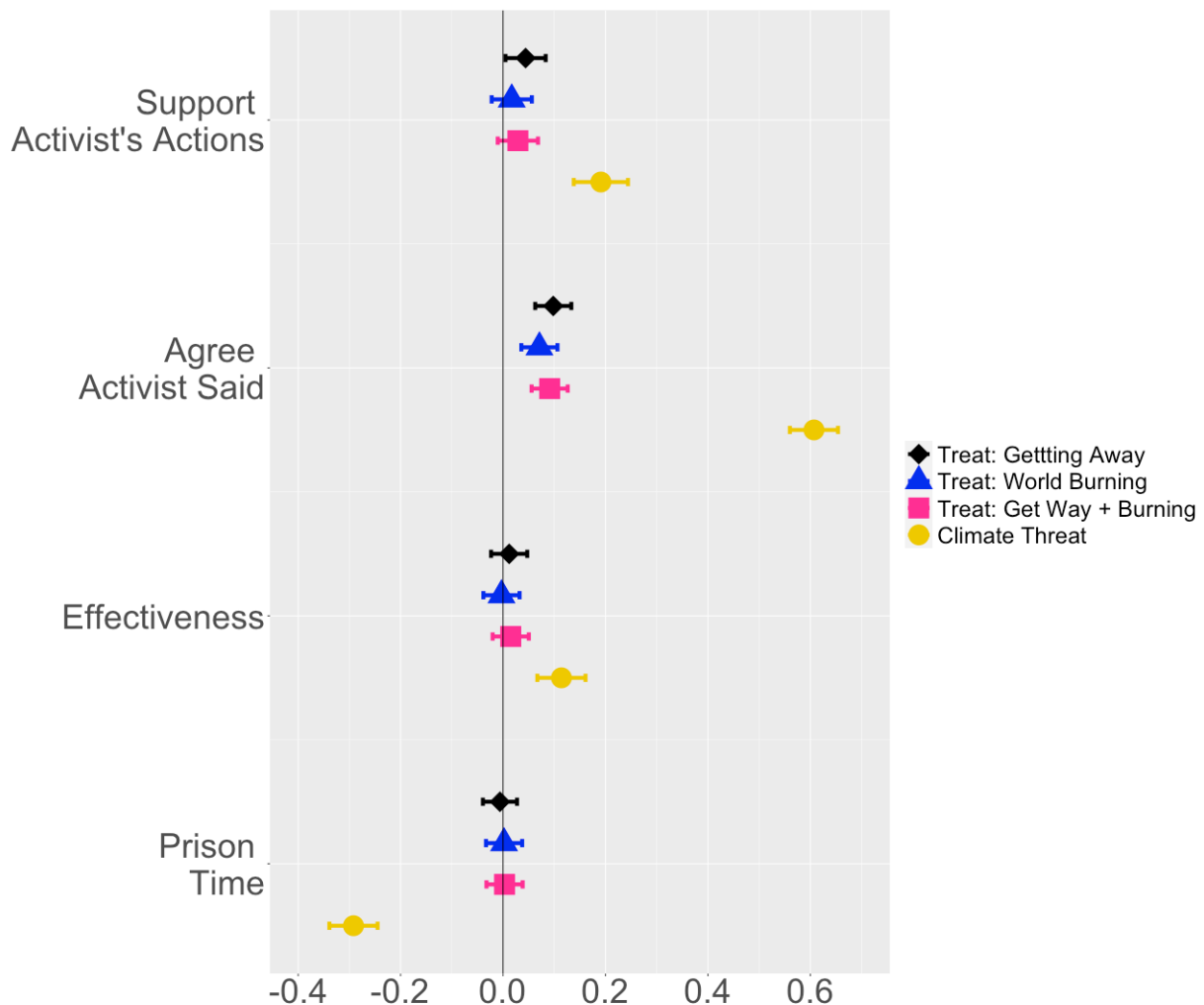
Figure 5: Effect of priming extreme climate threat on perceived threat from climate change and global warming, as well as support for different eco-direct actions. Results from Table 6 in the Appendix.



Does increasing the perceived threat from climate change influence support for eco direct actions? To answer this question, we conducted a survey experiment where we randomly assigned respondents to an article that presented respondents with an extreme threat condition from global warming, or more mild condition. We then asked respondents how big of a threat they perceived climate change to be, and then their support for the same six eco direct actions we asked of every respondent. Figure 5 shows the treatment effect for those receiving the extreme threat prime. The extreme threat prime marginally increased perceptions of threat. But it had no effect on support for kidnapping CEOs, damaging pipelines, vandalizing websites, or tree sitting. It does however increase support for demonstrating at CEOs' homes, and leaking emails—suggesting that heightened climate threat only increased support for eco direct actions that are less extreme to begin with.

Experiment 2: How Framing Influences Support for Property Destruction

Figure 6: Effect of different frames on 1) support for, 2) agreement with reasoning, 3) perceived effectiveness, and 4) how much prison time for an activist who firebombs the house of a CEO of an oil company. Results drawn from Table XXX in the Appendix.



How does framing of property destruction by an environmental activist influence attitudes towards those actions? To answer this question, we presented respondents with a short vignette about an environmental activist who set fire to the empty house of a billionaire CEO of an oil company. We then randomly varied what the activist said about their action:

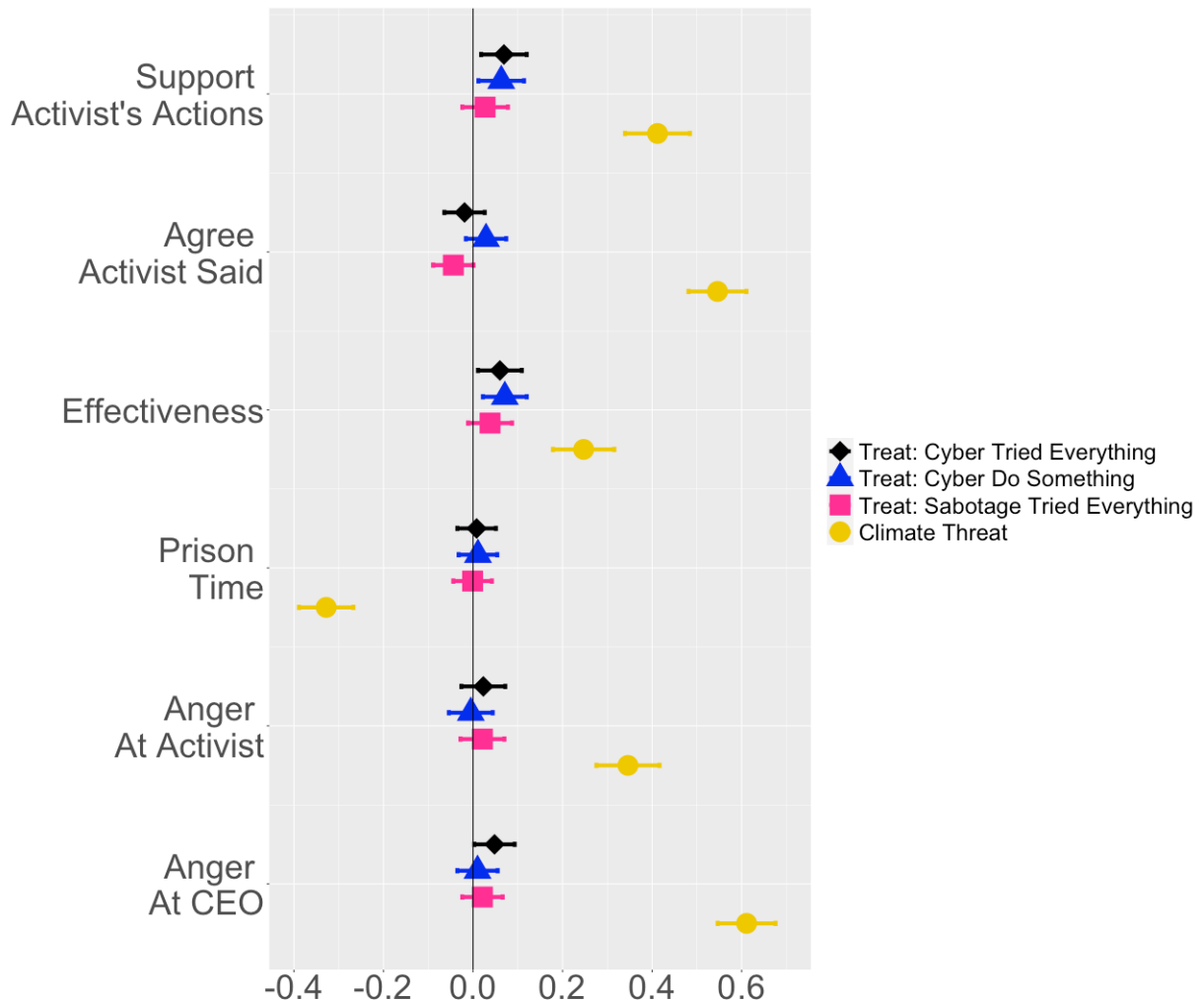
- 1) "Somebody had to do something." (Control)
- 2) "These oil companies have been getting away with it for years. They've been making money off poisoning our planet, and nobody is punishing them. Somebody had to do something." (Getting Away With It)
- 3) "The world is literally on fire, and if we keep burning fossil fuels there won't be anything left for our children. Somebody had to do something" (World is Burning)

- 4) “These oil companies have been getting away with it for years. They’ve been making money off poisoning our planet, and nobody is punishing them. The world is literally on fire, and if we keep burning fossil fuels there won’t be anything left for our children. Somebody had to do something.” (Getting Away With It + World is Burning)

Figure 6 shows the effects of these treatments as well as individual climate threat perceptions on the key outcomes. Few people support the activist’s actions ($M=0.23$ across all conditions). The Getting Away With It treatment leads a small increase in support for the activist actions relative to the control condition. Comparatively more people support the activist’s stated reasons ($M=0.53$ across all conditions). All the treatments increase agreement with the activist’s reasoning for the firebombing relative to the control condition. But none of treatments have a significant effect on the perceived effectiveness of the activist’s actions and how much prison time the activist should face. In contrast, individual’s climate perceptions have substantive and significantly large effects across all treatment conditions. Higher climate threat perceptions are associated with greater support for the activist’s actions, agreement with what the activist said, greater perceived effectiveness of the firebombing, and less support for jail time.

Experiment 3: Is Cyber Sabotage Different?

Figure 7: Effect of framing and cyber vs. physical sabotage on 1) support of, 2) agreement with reasoning, 3) perceived effectiveness, 4) how much prison time, 5) anger towards an activist, and 6) anger towards the coal company CEO for an activist who destroys coal company's equipment. Results drawn from Columns 2 and 5 in Tables 9, 10, and 11 in the Appendix. Base category is Treatment: Sabotage Do Something.



Does the public perceive cyber attacks as different than physical sabotage? What about when actions are framed as a last resort, after activists have exhausted other options? To answer these questions, we conducted a 2x2 experiment. We presented respondents with a vignette where an activist sabotaged equipment of a coal company. We then randomized whether it was a 1) cyber attack or a 2) physical sabotage attack. We also randomized the reason for the attack: 1) “somebody had to do something,” or 2) the activist had tried every other tactic.

Figure 7 looks at how the treatments shaped key outcomes. Few people support the activist's actions ($M=0.34$ across all conditions). However, the public is more supportive of the activist's actions in the cyber treatment conditions. More people support the activist's stated reasons for their actions ($M=0.54$ across all conditions). Yet, only the Cyber Do Something treatment increases agreement with the activist stated reasons relative to the other treatments. Cyber attacks are also more likely to be perceived as effective relative to physical sabotage. None of the treatments have a statically significant effect on how much prison time the activist should face or the level of anger towards the activist. The Cyber Tried Everything treatment increases anger towards the CEO of the coal company. Taken together, the findings suggest that cyber attacks are viewed slightly more positively and are seen as more effective than physical sabotage.

As in in Experiment 2, individual's climate perceptions have substantive and significantly large effects regardless of the treatment condition. Higher climate threat perceptions are associated with more support for the activist's actions, agreement with what the activist said, increased perceived effectiveness of the activist's actions, less support for prison time for the activist, greater anger at the activist (surprisingly), and much greater anger toward the CEO.

Future Work

The findings are still quite preliminary. But they show that the public has principled, but nuanced views on climate change. The public is more supportive of eco direct actions that are not considered violent or involve property destruction or sabotage. Anti-technology sentiments do not appear to be systematically related to eco direct action attitudes. The framing of eco direct actions is critical for shaping the public's perception of it. While only correlational, the findings here further show the importance of climate threat perceptions in shaping attitudes towards eco direct actions. Finally, the findings of the cyber versus physical sabotage, suggest that the public may be more amenable to cyber eco direct actions compared to physical direct actions—even when cyber yields the same level of destruction as physical sabotage.

One of the key questions of future research, but also more speculative is what does the future of direct action look like? An eco direct action organizer in the climate justice movement described the feeling that more intense and contentious actions are coming: "I feel like there's an Overton Window, some forms of sabotage are being more accepted of mainstream liberal audiences"¹⁷ But it's not a foregone conclusion. Another long-time eco radical in the climate movement and eco direct action trainer said, "I want to believe that more aggressive tactics are coming...But fighting the fossil company is really tough. It's not spiking trees or digging up roads—it's really hard to hit (these) targets with (all their) security."¹⁸

We are currently collecting and analyzing more data including 1) a dataset of eco direct actions in the U.S. from 1995-2022, 2) text analysis of more than 50 eco manifestos of prominent eco direct action activists and groups, and 3) 65 in-depth interviews with activists, journalists, and academics.

¹⁷ Interview #EA_TR_0622

¹⁸ Interview #EA_RS_0722

References

- Arceneaux, Kevin et al. 2021. "Some People Just Want to Watch the World Burn: The Prevalence, Psychology and Politics of the 'Need for Chaos.'" *Philosophical Transactions of the Royal Society B: Biological Sciences* 376(1822): 20200147.
- Atran, Scott, and Jeremy Ginges. 2012. "Religious and Sacred Imperatives in Human Conflict." *Science* 336(6083): 855–57.
- Boyle, Michael P., Douglas M. McLeod, and Cory L. Armstrong. 2012. "Adherence to the Protest Paradigm: The Influence of Protest Goals and Tactics on News Coverage in U.S. and International Newspapers." *The International Journal of Press/Politics* 17(2): 127–44.
- Brown, Joseph M. 2021. "Civil Disobedience, Sabotage, and Violence in US Environmental Activism." *The Oxford Handbook of Comparative Environmental Politics*. <https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780197515037.001.0001/oxfordhb-9780197515037-e-34> (July 1, 2022).
- Canetti, Daphna. 2017. "Emotional Distress, Conflict Ideology, and Radicalization." *PS: Political Science & Politics* 50(4): 940–43.
- Druckman, James N., and Mary C. McGrath. 2019. "The Evidence for Motivated Reasoning in Climate Change Preference Formation." *Nature Climate Change* 9(2): 111–19.
- Edwards, Pearce, and Daniel Arnon. 2021. "Violence on Many Sides: Framing Effects on Protest and Support for Repression." *British Journal of Political Science* 51(2): 488–506.
- Gadarian, Shana Kushner. 2010. "The Politics of Threat: How Terrorism News Shapes Foreign Policy Attitudes." *The Journal of Politics* 72(2): 469–83.
- García-Ponce, Omar, Lauren Young, and Thomas Zeitzoff. 2022. "Anger and Support for Retribution in Mexico's Drug War ←." : 39.
- Getmansky, Anna, and Thomas Zeitzoff. 2014. "Terrorism and Voting: The Effect of Rocket Threat on Voting in Israeli Elections." *American Political Science Review* 108(3): 588–604.
- Gifford, Robert. 2011. "The Dragons of Inaction: Psychological Barriers That Limit Climate Change Mitigation and Adaptation." *American Psychologist* 66(4): 290–302.
- Gifford, Robert, and Andreas Nilsson. 2014. "Personal and Social Factors That Influence Pro-Environmental Concern and Behaviour: A Review." *International Journal of Psychology* 49(3): 141–57.
- Gross, Michael L., Daphna Canetti, and Dana R. Vashdi. 2017. "Cyberterrorism: Its Effects on Psychological Well-Being, Public Confidence and Political Attitudes." *Journal of Cybersecurity* 3(1): 49–58.

- Hazlett, Chad, and Matto Mildenberger. 2020. "Wildfire Exposure Increases Pro-Environment Voting within Democratic but Not Republican Areas." *American Political Science Review* 114(4): 1359–65.
- Hellmeier, Sebastian, Nils B. Weidmann, and Espen Geelmuyden Rød. 2018. "In the Spotlight: Analyzing Sequential Attention Effects in Protest Reporting." *Political Communication* 35(4): 587–611.
- Hoffmann, Roman, Raya Muttarak, Jonas Peisker, and Piero Stanig. 2022. "Climate Change Experiences Raise Environmental Concerns and Promote Green Voting." *Nature Climate Change* 12(2): 148–55.
- Kahan, Dan M. 2013. "Ideology, Motivated Reasoning, and Cognitive Reflection." *Judgment and Decision Making* 8(4): 407–24.
- Kostyuk, Nadiya, and Carly Wayne. 2021. "The Microfoundations of State Cybersecurity: Cyber Risk Perceptions and the Mass Public." *Journal of Global Security Studies* 6(2): ogz077.
- Krosnick, Jon A., Allyson L. Holbrook, Laura Lowe, and Penny S. Visser. 2006. "The Origins and Consequences of Democratic Citizens' Policy Agendas: A Study of Popular Concern about Global Warming." *Climatic Change* 77(1): 7–43.
- Lanchester, John. 2007. "Warmer, Warmer." *London Review of Books* 29(06).
<https://www.lrb.co.uk/the-paper/v29/n06/john-lanchester/warmer-warmer> (July 17, 2022).
- Loadenthal, Michael. 2014. "Eco-Terrorism? Countering Dominant Narratives of Securitisation: A Critical, Quantitative History of the Earth Liberation Front (1996-2009)." *Perspectives on Terrorism* 8(3): 16–50.
- Malm, Andreas. 2021. *How to Blow Up a Pipeline: Learning to Fight in a World on Fire*. Verso Books.
- Manekin, Devorah, and Tamar Mitts. 2022. "Effective for Whom? Ethnic Identity and Nonviolent Resistance." *American Political Science Review* 116(1): 161–80.
- Parson, Sean. 2018. "Ecocentrism." In *Anarchism*, Routledge.
- Pellow, David Naguib. 2014. *Total Liberation: The Power and Promise of Animal Rights and the Radical Earth Movement*. U of Minnesota Press.
- Potter, Will. 2011. *Green Is the New Red: An Insider's Account of a Social Movement Under Siege*. First Edition. San Francisco: City Lights Publishers.
- Rizeq, Jala, David B. Flora, and Maggie E. Toplak. 2021. "An Examination of the Underlying Dimensional Structure of Three Domains of Contaminated Mindware: Paranormal Beliefs, Conspiracy Beliefs, and Anti-Science Attitudes." *Thinking & Reasoning* 27(2): 187–211.

Simpson, Brent, Robb Willer, and Matthew Feinberg. 2018. "Does Violent Protest Backfire? Testing a Theory of Public Reactions to Activist Violence." *Socius* 4: 2378023118803189.

Spadaro, Paola. 2020. "Climate Change, Environmental Terrorism, Eco-Terrorism and Emerging Threats." *Journal of Strategic Security* 13(4).
<https://digitalcommons.usf.edu/jss/vol13/iss4/5>.

Uscinski, Joseph E. et al. 2021. "American Politics in Two Dimensions: Partisan and Ideological Identities versus Anti-Establishment Orientations." *American Journal of Political Science* 65(4): 877–95.

Uscinski, Joseph E., and Santiago Olivella. 2017. "The Conditional Effect of Conspiracy Thinking on Attitudes toward Climate Change." *Research & Politics* 4(4): 2053168017743105.

Wasow, Omar. 2020. "Agenda Seeding: How 1960s Black Protests Moved Elites, Public Opinion and Voting." *American Political Science Review* 114(3): 638–59.

Woodhouse, Keith Makoto. 2018. *The Ecocentrists: A History of Radical Environmentalism*. Columbia University Press.

Zeitsoff, Thomas. 2022. *Nasty Politics: The Logic of Insults, Threat, and Incitement*. Book Manuscript.

Appendix

A1. Measures

Climate Change Threat (5 items, 5-point agree-disagree)

Climate change is the long-term change in average weather patterns including increased global temperatures known as global warming.

Global warming started in the 1850s and continues through the present.

Below are some statements about global warming.

Please tell us how much you agree or disagree with each statement

1. Human activity, especially burning fossil fuels, is the main cause of global warming.
2. Global warming will lead to more extreme heatwaves, droughts and floods, and stronger hurricanes.
3. Global warming will threaten the future of humanity.
4. The threat of global warming is overblown. (**Reverse coded**)
5. I am worried about global warming.

Aggression (3 item, 7-point scale) adapted from Buss Perry Aggression Questionnaire (1992).

Please rate each of the following items in terms of how characteristic they are of you, from 1 (Extremely Unlike Me) to 7 (Extremely Like Me).

1. Given enough provocation, I may hit another person.
2. I have threatened people I know.
3. My friends say I am somewhat argumentative.

Anti-establishment (4 items, 5-point agree-disagree). Adapted from Ucsinski and Parent (2014) conspiracy scale and Arceneaux et al., (2022) need for chaos scale.

1. Even though we live in a democracy, a few people will always run things anyway. (Conspiracy)
2. Much of our lives are being controlled by plots hatched in secret places. (Conspiracy)
3. The powerful are allowed to openly commit crimes and avoid punishment.
4. I think our political and social institutions need to be burned to the ground. (Need for chaos)

Anti-technology (4 items, 5-point agree-disagree)

Below are some statements people make about modern technology.

By modern technology we mean changes in communication like the Internet and social media, modern medicine, new forms of travel and transportation, and other changes that are a part of our modern, twenty-first century lives.

Please tell us how much you agree or disagree with each statement

1. Things were better in the past when there wasn't so much modern technology.
2. Communication technology like social media has mostly been a bad thing for society because it spreads hate and misinformation.
3. We have let modern technology like smartphones take over our lives.
4. All this modern technology prevents us from living in harmony with nature.

Acceptability of Violence (1 item, never to always acceptable) taken from the American National Election Survey

How often do you feel it is justified for people to use violence to pursue their political goals in this country?

Support for Eco Tactics (17 items, 11-point 0-never acceptable to 10-always acceptable)

****Note respondents rated 10 total tactics, 6 of which everyone rated (marked with**), and the other 4 were a randomly drawn subset****

Now we are going to ask you about several different tactics groups and individuals have used to protest against people and policies that contribute to climate change and global warming.

Please tell us how often you feel each tactic is acceptable on a scale from 0 to 10, where 0 is never acceptable, 5 is sometimes acceptable and 10 is always acceptable.

1. How acceptable is holding protest signs?
2. How acceptable is occupying buildings of companies that are big polluters?
3. How acceptable is vandalizing websites of companies that are big polluters?**
4. How acceptable is sabotaging equipment for logging or oil companies?
5. How acceptable is damaging oil pipelines?**
6. How acceptable is marching while carrying weapons?
7. How acceptable is sitting in trees to prevent them from being cut down?**
8. How acceptable is using harsh words on social media?
9. How acceptable is holding public rallies?
10. How acceptable is vandalizing SUVs or other vehicles that consume a lot of gas?
11. How acceptable is publicly confronting executives of companies that are big polluters?

12. How acceptable is threatening executives of companies that are big polluters?
13. How acceptable is leaking emails of companies that are big polluters?**
14. How acceptable is setting fire to buildings and equipment of companies that are big polluters?
15. How acceptable is blocking traffic?
16. How acceptable is demonstrating outside the homes of executives of companies that are big polluters?**
17. How acceptable is kidnapping executives of companies that are big polluters?**

Ecoterrorist Questions

Respondents were randomly assigned for this question to one of two frames: one that used the “big polluters” frame, the other that used the more neutral frame: “against oil, gas, timber, or mining companies”

Big Polluters Framing

Do you think that environmental activists that engage in property destruction such as arson or sabotage against companies that are big polluters are “ecoterrorists?”

Neutral Framing

Do you think that environmental activists that engage in property destruction such as arson or sabotage against oil, gas, timber, or mining companies are “ecoterrorists?”

- Yes, they are ecoterrorists
- No, they are not ecoterrorists

A2. Survey 1

Survey was conducted in April 2022 via the Lucid Online Survey Platform and used three standard screener questions to weed out inattentive respondents. 67% passed the most intense screener. 60 observations were deleted for speeding (taking it in 3 minutes or less). In total 1,974 respondents were used for the final analysis. An Attention Check was included before the treatments. Passed the Attention Check (97.4%). The basic demographics for the sample are shown below.

Age

- 18-29 20.3%
- 30-44 29.6%
- 45-59 25.2%
- 60 + 24.9%

Partisanship

- 44.2% Republican

Gender

- 45.7% Male

Race

- 75.4% non-Hispanic White

Education

- 44.5% Have graduated college or have a graduate degree
-

Note Climate Change Threat scale is strongly negatively correlated Republican ($r=-0.51$).

Table 1: Summary Statistics for April 2022 Lucid survey

Statistic	N	Mean	St. Dev.	Min	Max
DV Agree What Activist Said	1,932	0.53	0.32	0.00	1.00
DV Support Activist's Actions	1,932	0.23	0.31	0.00	1.00
DV Effective	1,932	0.18	0.28	0.00	1.00
DV Prison	1,932	0.43	0.28	0.00	1.00
Climate Threat	1,974	0.67	0.26	0.00	1.00
Republican	1,974	0.44	0.50	0	1
College Educated	1,720	0.45	0.50	0	1
White	1,974	0.75	0.43	0	1
Male	1,974	0.48	0.50	0	1
Age	1,974	0.38	0.23	0.00	1.00

A.3 Survey 2

Survey was conducted in July 2022 via the Lucid Online Survey platform and used three standard screener questions to weed out inattentive respondents. 59% passed the most intense screener. 50 observations were dropped from the analysis for speeding through the survey (taking it in 3 minutes or less). 89.9% passed the attention check that was done pre-treatment.

Age

- 18-29 21.1%
- 30-44 31.2%
- 45-59 23.9%
- 60 + 23.8%

Partisanship

- 43.8% Republican

Gender

- 46.2% Male

Race

- 77.9% non-Hispanic White

Education

- 40.0% Have graduated college or have a graduate degree

Table 2: Summary Statistics for July 2022 Lucid survey

Statistic	N	Mean	St. Dev.	Min	Max
DV Support Eco Direct Actions	1,156	0.31	0.23	0.00	1.00
DV They're Ecoterrorists	1,193	0.82	0.39	0	1
DV Perceived Climate Threat	1,196	0.65	0.31	0.00	1.00
DV Support Activist's Actions	1,196	0.34	0.33	0.00	1.00
DV Agree What Activist Said	1,196	0.54	0.32	0.00	1.00
DV Effective	1,196	0.28	0.31	0.00	1.00
DV Prison	1,193	0.41	0.28	0.00	1.00
DV Anger Towards Activist	1,195	0.39	0.32	0.00	1.00
DV Anger Towards CEO	1,193	0.48	0.32	0.00	1.00
Climate Threat	1,196	0.65	0.25	0.00	1.00
Anti-Establishment	1,196	0.54	0.21	0.00	1.00
Anti-Technology	1,196	0.61	0.22	0.00	1.00
Aggression	1,195	0.29	0.26	0.00	1.00
Violence Acceptable	1,196	0.16	0.26	0.00	1.00
Republican	1,196	0.44	0.50	0	1
College Educated	1,062	0.40	0.49	0	1
White	1,196	0.78	0.41	0	1
Male	1,196	0.46	0.50	0	1
Age	1,192	0.38	0.23	0.00	1.00

A.4 Experimental Treatments

Experiment 1: Increasing Climate Threat

Randomly assign to one of two treatments that emphasized different levels of threat from climate:

1. Mild Threat
2. Extreme Threat

Mild Threat Treatment

Climate Scientist 'Concerned' About Global Warming And Climate Change



A climate scientist speaking about global warming and climate change made the following three points:

- 1) "We're confident that human activity such as burning fossil fuels, cutting down forests, and pollution is leading to rising temperatures."
- 2) "It's affecting glaciers, sea level, floods, heat waves, hurricanes, and wildfires."
- 3) "It's concerning for sure"

Extreme Threat Treatment

Climate Scientist 'Terrified' About Global Warming And Climate Change



A climate scientist speaking about global warming and climate change made the following three points:

- 1) "We are confident that human activity such as burning fossil fuels, cutting down forests, and pollution is leading to rising temperatures."
- 2) "Glaciers are melting before our eyes, sea levels are rising quickly, floods are worse, heat waves are longer and more intense, wildfires are way bigger, and hurricanes are far more powerful."
- 3) "It's absolutely terrifying."

Post Experiment Questions

1. Given what the climate scientist said, how big of a threat do you think climate change and global warming are? Where 0 is not a threat at all, 5 is a moderate threat, and 10 is an extreme threat.
2. Given what the climate scientist said, how often do you feel each tactic is acceptable on a scale from 0 to 10, where 0 is never acceptable, 5 is sometimes acceptable and 10 is always acceptable.
 1. How acceptable is vandalizing websites of companies that are big polluters?***
 2. How acceptable is damaging oil pipelines?***
 3. How acceptable is sitting in trees to prevent them from being cut down?***
 4. How acceptable is leaking emails of companies that are big polluters?***
 5. How acceptable is demonstrating outside the homes of executives of companies that are big polluters?***
 6. How acceptable is kidnapping executives of companies that are big polluters?***

Experiment 2: Framing of Violence Against CEO of an Oil Company

Randomly assigned to one of three conditions:

1. Control
2. Getting Away With It
3. World Is On Fire

4. Getting Away With It + World Is On Fire

Treatment: Control

An environmental activist set fire to the empty house of a billionaire CEO of an oil company.

When asked why he did it, the activist said, "Somebody had to do something."

Treatment: Getting Away With It

An environmental activist set fire to the empty house of a billionaire CEO of an oil company.

When asked why he did it, the activist said, "These oil companies have been getting away with it for years. They've been making money off of poisoning our planet, and nobody is punishing them. Somebody had to do something."

Treatment: World Is On Fire

An environmental activist set fire to the empty house of a billionaire CEO of an oil company.

When asked why he did it, the activist said, "The world is literally on fire, and if we keep burning fossil fuels there won't be anything left for our children. Somebody had to do something"

Treatment: Getting Away With It + World Is On Fire

An environmental activist set fire to the empty house of a billionaire CEO of an oil company.

When asked why he did it, the activist said:

"These oil companies have been getting away with it for years. They've been making money off of poisoning our planet, and nobody is punishing them. The world is literally on fire, and if we keep burning fossil fuels there won't be anything left for our children. Somebody had to do something."

Post Experiment Questions

1. How much do you support or oppose the activist's actions?
 - Strongly oppose
 - Somewhat oppose
 - Somewhat support
 - Strongly support
2. Regardless of whether you agree or disagree with the activist's actions, how much do you agree or disagree with what the activist said?
 - Strongly disagree
 - Disagree
 - Neither agree nor disagree

- Agree
 - Strongly agree
3. How effective, if at all, do you think the activist's actions were in achieving their goals?
- Not effective at all
 - Slightly effective
 - Somewhat effective
 - Very effective
 - Extremely effective
4. How many years in prison, if any, do you think the activist should face?
- No prison
 - 3-6 months
 - 6 months to 1 year
 - 1-3 years
 - 3-7 years
 - 7-10 years
 - 10-15 years
 - 15-20 years
 - More than 20 years

Experiment 3: Cyber vs. Physical Attack

Treatment: Cyber Attack + Do Something

Cyber Attack Against Coal Company, Activist Says 'Somebody Had to Do Something'

An environmental activist carried out a cyber attack on a coal mining company, using hacking to disable and ruin much of the company's equipment.

When asked why they did it, the activist said, "This company and its billionaire CEO have been getting away with it for years. They've broken laws, polluted our water, and are making money off poisoning our planet."

"Somebody had to do something."

Treatment: Cyber + Tried Everything

Cyber Attack Against Coal Company, Activist Says 'It Was The Only Option Left'

An environmental activist carried out a cyber attack on a coal mining company, using hacking to disable and ruin much of the company's equipment.

When asked why they did it, the activist said, "This company and its billionaire CEO have been getting away with it for years. They've broken laws, polluted our water, and are making money off poisoning our planet."

"We already tried petitions, lawsuits, and peaceful protests. This was the only option left."

Treatment: Sabotage + Do Something

Sabotage Attack Against Coal Company, Activist Says 'Somebody Had To Do Something'

An environmental activist carried out a sabotage attack on a coal mining company, physically disabling and ruining much of the company's equipment.

When asked why they did it, the activist said, "This company and its billionaire CEO have been getting away with it for years. They've broken laws, polluted our water, and are making money off poisoning our planet."

"Somebody had to do something."

Treatment: Sabotage + Tried Everything

Sabotage Attack Against Coal Company, Activist Says 'It Was The Only Option Left'

An environmental activist carried out a sabotage attack on a coal mining company, physically disabling and ruining much of the company's equipment.

When asked why they did it, the activist said, "This company and its billionaire CEO have been getting away with it for years. They've broken laws, polluted our water, and are making money off poisoning our planet."

"We already tried petitions, lawsuits, and peaceful protests. This was the only option left."

Post Experiment Questions

1. How much do you support or oppose the activist's actions?
 - Strongly oppose
 - Somewhat oppose
 - Somewhat support
 - Strongly support
2. Regardless of whether you agree or disagree with the activist's actions, how much do you agree or disagree with what the activist said?
 - Strongly disagree
 - Disagree

- Neither agree nor disagree
- Agree
- Strongly agree

3. How effective, if at all, do you think the activist's actions were in achieving their goals?

- Not effective at all
- Slightly effective
- Somewhat effective
- Very effective
- Extremely effective

4. How much time in prison, if any, do you think the activist should face?

- No time in prison
- 1 - 3 days in prison
- 4 - 30 days in prison
- 2 - 3 months in prison
- 4 - 6 months in prison
- 7 months to 1 year in prison
- 2 - 5 years in prison
- 6 - 10 years in prison
- 11 - 15 years in prison
- 16 - 20 years in prison
- More than 20 years in prison

5. How angry do you feel towards the billionaire CEO of the mining company?

- Not at all angry
- Slightly angry
- Moderately angry
- Very angry
- Extremely angry

6. How angry do you feel towards the activist?

- Not at all angry
- Slightly angry
- Moderately angry
- Very angry
- Extremely angry

A.5 Regression Tables

Table 3: Correlates of climate change threat perceptions

	<i>Dependent variable:</i>
	Climate Threat
Anti-Establishment	0.046 (0.038)
Anti-Technology	0.024 (0.032)
Aggression	-0.029 (0.032)
Violence Acceptable	-0.009 (0.032)
Republican	-0.247*** (0.014)
College Educated	0.011 (0.014)
White	0.037** (0.017)
Male	-0.047*** (0.014)
Age	-0.123*** (0.032)
Constant	0.766*** (0.029)
Observations	1,058
R ²	0.269
Adjusted R ²	0.263
Residual Std. Error	0.213 (df = 1048)
F Statistic	42.832*** (df = 9; 1048)
<i>Note:</i>	* p<0.1; ** p<0.05; *** p<0.01

TABLE 4: Correlates of support for eco direct actions in general. The dependent variable is an additive index of support for the six eco direct actions that were asked of everyone: 1) vandalizing websites of big polluters, 2) damaging oil pipelines, 3) sitting in trees, 4) leaking emails of companies that are big polluters, 5) demonstrating outside of CEOs of big polluters, and 6) kidnapping CEOs of companies that are big polluters ($\alpha = 0.85$).

	<i>Dependent variable:</i>						
	Support Eco Direct Actions						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Climate Threat	0.291*** (0.026)						0.184*** (0.025)
Anti-Establishment		0.377*** (0.031)					0.104*** (0.030)
Anti-Technology			0.089*** (0.031)				-0.014 (0.025)
Aggression				0.474*** (0.023)			0.273*** (0.026)
Violence Acceptable					0.481*** (0.022)		0.245*** (0.026)
Republican						-0.146*** (0.013)	-0.057*** (0.013)
College Educated							0.043*** (0.011)
White							-0.022 (0.013)
Male							-0.006 (0.011)
Age							-0.033 (0.026)
Constant	0.121*** (0.018)	0.106*** (0.018)	0.256*** (0.020)	0.174*** (0.009)	0.237*** (0.007)	0.375*** (0.009)	0.068** (0.030)
Observations	1,156	1,156	1,156	1,156	1,156	1,156	1,022
R ²	0.100	0.115	0.007	0.278	0.294	0.099	0.471
Adjusted R ²	0.099	0.114	0.006	0.277	0.293	0.099	0.466
Residual Std. Error	0.218 (df = 1154)	0.216 (df = 1154)	0.229 (df = 1154)	0.195 (df = 1154)	0.193 (df = 1154)	0.218 (df = 1154)	0.168 (df = 1011)
F Statistic	127.511*** (df = 1; 1154)	149.959*** (df = 1; 1154)	8.541*** (df = 1; 1154)	443.486*** (df = 1; 1154)	479.659*** (df = 1; 1154)	127.358*** (df = 1; 1154)	90.063*** (df = 10; 1011)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 5: Correlation of belief that individuals who engage in property destruction and sabotage are “Ecoterrorists”

	<i>Dependent variable:</i>						
	They're Ecoterrorists						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Treatment: Big Polluter	-0.036 (0.022)	-0.036 (0.022)	-0.035 (0.022)	-0.035 (0.022)	-0.036 (0.022)	-0.039* (0.022)	-0.032 (0.024)
Climate Threat	-0.118*** (0.045)						-0.075 (0.055)
Anti-Establishment		0.004 (0.054)					-0.016 (0.068)
Anti-Technology			0.152*** (0.050)				0.107* (0.057)
Aggression				0.051 (0.044)			0.082 (0.057)
Violence Acceptable					0.023 (0.043)		0.062 (0.057)
Republican						0.054** (0.022)	0.013 (0.028)
College Educated							0.025 (0.025)
White							0.050* (0.030)
Male							0.036 (0.024)
Age							0.284*** (0.058)
Constant	0.914*** (0.033)	0.834*** (0.034)	0.743*** (0.035)	0.821*** (0.021)	0.832*** (0.017)	0.814*** (0.018)	0.610*** (0.068)
Observations	1,193	1,193	1,193	1,193	1,193	1,193	1,058
R ²	0.008	0.002	0.010	0.003	0.002	0.007	0.052
Adjusted R ²	0.006	0.001	0.008	0.002	0.001	0.005	0.042
Residual Std. Error	0.385 (df = 1190)	0.386 (df = 1190)	0.384 (df = 1190)	0.386 (df = 1190)	0.386 (df = 1190)	0.385 (df = 1190)	0.381 (df = 1046)
F Statistic	4.818*** (df = 2; 1190)	1.332 (df = 2; 1190)	5.863*** (df = 2; 1190)	2.000 (df = 2; 1190)	1.481 (df = 2; 1190)	4.196** (df = 2; 1190)	5.238*** (df = 11; 1046)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 6: Does priming climate threat increase support for eco direct actions (Experiment 1)? Control includes support for the eco direct action that was also asked pre-treatment treatment and measured earlier in the survey.

	<i>Dependent variable:</i>						
	Perceived Climate Threat	Kidnap Execs	Damage Pipelines	Vandalize Websites	Tree Sitting	Home Demonstrate	Leak Emails
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Treat: Extreme Warming	0.020 (0.017)	0.009 (0.107)	0.082 (0.111)	-0.046 (0.123)	0.062 (0.123)	0.225* (0.131)	0.498*** (0.119)
Kidnap Execs (pre-treat)		0.780*** (0.020)					
Damage Pipelines (pre-treat)			0.751*** (0.020)				
Vandalize Websites (pre-treat)				0.747*** (0.020)			
Tree Sitting (pre-treat)					0.806*** (0.019)		
Home Demonstrate (pre-treat)						0.783*** (0.020)	
Leak Emails (pre-treat)							0.799*** (0.018)
Constant	0.658*** (0.012)	0.425*** (0.081)	0.439*** (0.088)	0.684*** (0.098)	0.689*** (0.127)	0.523*** (0.124)	0.348*** (0.111)
Observations	1,170	1,147	1,170	1,170	1,170	1,170	1,170
R ²	0.001	0.564	0.550	0.540	0.599	0.580	0.628
Adjusted R ²	0.0002	0.563	0.550	0.540	0.598	0.579	0.628
Residual Std. Error	0.299 (df = 1168)	1.814 (df = 1144)	1.907 (df = 1167)	2.094 (df = 1167)	2.098 (df = 1167)	2.237 (df = 1167)	2.039 (df = 1167)
F Statistic	1.267 (df = 1; 1168)	739.134*** (df = 2; 1144)	714.135*** (df = 2; 1167)	686.322*** (df = 2; 1167)	871.395*** (df = 2; 1167)	805.161*** (df = 2; 1167)	986.288*** (df = 2; 1167)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 7: How framing influences support and agree with reasoning for activist who firebombs an oil company CEO's house (Experiment 2)

	<i>Dependent variable:</i>					
	Support Activist's Actions			Agree What Activist Said		
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment: Getting Away With It	0.047** (0.020)	0.044** (0.020)	0.033* (0.019)	0.107*** (0.021)	0.098*** (0.018)	0.089*** (0.019)
Treatment: World Is Burning	0.020 (0.020)	0.017 (0.020)	0.009 (0.019)	0.080*** (0.021)	0.071*** (0.018)	0.066*** (0.019)
Treatment: Getting Away + Burning	0.033* (0.020)	0.029 (0.020)	0.020 (0.019)	0.106*** (0.021)	0.091*** (0.018)	0.079*** (0.019)
Climate Threat		0.191*** (0.027)	0.124*** (0.031)		0.607*** (0.024)	0.546*** (0.030)
Republican			-0.036** (0.016)			-0.043*** (0.016)
College Educated			-0.031** (0.014)			-0.003 (0.014)
White			-0.034** (0.017)			0.026 (0.016)
Male			0.057*** (0.014)			-0.007 (0.013)
Age			-0.450*** (0.031)			-0.211*** (0.030)
Constant	0.202*** (0.014)	0.077*** (0.022)	0.330*** (0.033)	0.458*** (0.015)	0.061*** (0.020)	0.191*** (0.032)
Observations	1,932	1,932	1,720	1,932	1,932	1,720
R ²	0.003	0.029	0.178	0.018	0.257	0.282
Adjusted R ²	0.002	0.027	0.173	0.017	0.256	0.278
Residual Std. Error	0.310 (df = 1928)	0.306 (df = 1927)	0.284 (df = 1710)	0.322 (df = 1928)	0.280 (df = 1927)	0.276 (df = 1710)
F Statistic	2.032 (df = 3; 1928)	14.406*** (df = 4; 1927)	41.005*** (df = 9; 1710)	11.908*** (df = 3; 1928)	166.767*** (df = 4; 1927)	74.459*** (df = 9; 1710)

Note:

* p<0.1; ** p<0.05; *** p<0.01

Table 8: How framing influences perceived effectiveness and jail time for an activist who firebombs an oil company CEO's house (Experiment 2).

	<i>Dependent variable:</i>					
		Effective			Prison	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment: Getting Away With It	0.014 (0.018)	0.012 (0.018)	0.016 (0.017)	-0.010 (0.018)	-0.006 (0.017)	0.005 (0.018)
Treatment: World Is Burning	-0.001 (0.018)	-0.003 (0.018)	0.008 (0.017)	-0.002 (0.018)	0.002 (0.018)	0.001 (0.018)
Treatment: Getting Away + Burning	0.018 (0.018)	0.015 (0.018)	0.023 (0.017)	-0.004 (0.018)	0.003 (0.018)	-0.003 (0.018)
Climate Threat		0.114*** (0.024)	0.050* (0.028)		-0.292*** (0.024)	-0.256*** (0.029)
Republican			-0.043*** (0.015)			0.021 (0.015)
College Educated			0.002 (0.013)			0.037*** (0.013)
White			-0.032** (0.015)			0.053*** (0.016)
Male			0.068*** (0.012)			0.004 (0.013)
Age			-0.397*** (0.028)			0.185*** (0.029)
Constant	0.173*** (0.012)	0.098*** (0.020)	0.299*** (0.030)	0.430*** (0.013)	0.621*** (0.020)	0.459*** (0.031)
Observations	1,932	1,932	1,720	1,932	1,932	1,720
R ²	0.001	0.013	0.166	0.0002	0.073	0.125
Adjusted R ²	-0.001	0.011	0.161	-0.001	0.071	0.120
Residual Std. Error	0.276 (df = 1928)	0.274 (df = 1927)	0.254 (df = 1710)	0.283 (df = 1928)	0.272 (df = 1927)	0.264 (df = 1710)
F Statistic	0.598 (df = 3; 1928)	6.140*** (df = 4; 1927)	37.708*** (df = 9; 1710)	0.124 (df = 3; 1928)	37.862*** (df = 4; 1927)	27.065*** (df = 9; 1710)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 9: How framing and mode (cyber vs. sabotage) influences support and agree with reasoning for activist's actions against a coal mining company (Experiment 3). Note Sabotage Do Something treatment is the omitted category.

	<i>Dependent variable:</i>					
	Support Activist's Actions			Agree What Activist Said		
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment: Cyber Tried Everything	0.080*** (0.027)	0.069*** (0.026)	0.084*** (0.026)	-0.004 (0.026)	-0.019 (0.023)	-0.001 (0.024)
Treatment: Cyber Do Something	0.078*** (0.027)	0.063** (0.026)	0.092*** (0.026)	0.048* (0.026)	0.029 (0.023)	0.040* (0.024)
Treatment: Sabotage Tried Everything	0.043 (0.027)	0.027 (0.026)	0.035 (0.026)	-0.024 (0.026)	-0.044* (0.023)	-0.039 (0.024)
Climate Threat		0.412*** (0.037)	0.277*** (0.044)		0.546*** (0.033)	0.458*** (0.040)
Republican			-0.078*** (0.022)			-0.084*** (0.020)
College Educated			0.044** (0.019)			0.055*** (0.018)
White			-0.061** (0.024)			0.011 (0.022)
Male			0.021 (0.019)			-0.008 (0.017)
Age			-0.392*** (0.043)			-0.127*** (0.039)
Constant	0.286*** (0.019)	0.027 (0.030)	0.312*** (0.044)	0.531*** (0.018)	0.188*** (0.026)	0.297*** (0.041)
Observations	1,196	1,196	1,058	1,196	1,196	1,058
R ²	0.009	0.102	0.210	0.007	0.191	0.236
Adjusted R ²	0.007	0.099	0.203	0.005	0.189	0.229
Residual Std. Error	0.334 (df = 1192)	0.318 (df = 1191)	0.300 (df = 1048)	0.314 (df = 1192)	0.284 (df = 1191)	0.276 (df = 1048)
F Statistic	3.799*** (df = 3; 1192)	33.956*** (df = 4; 1191)	30.939*** (df = 9; 1048)	2.816** (df = 3; 1192)	70.465*** (df = 4; 1191)	35.979*** (df = 9; 1048)

Note:

* p<0.1; ** p<0.05; *** p<0.01

Table 10: How framing and mode (cyber vs. sabotage) influences perceived effectiveness and jail time for activist's actions against a coal mining company (Experiment 3). Note Sabotage Do Something treatment is the omitted category.

	<i>Dependent variable:</i>					
	(1)	Effective (2)	(3)	(4)	Prison (5)	(6)
Treatment: Cyber Tried Everything	0.067*** (0.025)	0.060** (0.025)	0.094*** (0.025)	-0.001 (0.023)	0.008 (0.022)	-0.002 (0.023)
Treatment: Cyber Do Something	0.080*** (0.025)	0.071*** (0.025)	0.103*** (0.024)	-0.001 (0.023)	0.011 (0.022)	-0.001 (0.022)
Treatment: Sabotage Tried Everything	0.047* (0.025)	0.038 (0.025)	0.056** (0.024)	-0.013 (0.023)	-0.001 (0.022)	-0.010 (0.022)
Climate Threat		0.247*** (0.035)	0.116*** (0.041)		-0.328*** (0.031)	-0.243*** (0.038)
Republican			-0.069*** (0.021)			0.040** (0.019)
College Educated			0.032* (0.018)			0.043*** (0.017)
White			-0.042* (0.022)			0.043** (0.020)
Male			0.061*** (0.018)			0.043*** (0.016)
Age			-0.453*** (0.040)			0.238*** (0.037)
Constant	0.236*** (0.018)	0.081*** (0.028)	0.344*** (0.042)	0.409*** (0.016)	0.615*** (0.025)	0.391*** (0.038)
Observations	1,196	1,196	1,058	1,193	1,193	1,058
R ²	0.010	0.049	0.195	0.0004	0.085	0.151
Adjusted R ²	0.007	0.046	0.189	-0.002	0.082	0.144
Residual Std. Error	0.307 (df = 1192)	0.301 (df = 1191)	0.281 (df = 1048)	0.280 (df = 1189)	0.268 (df = 1188)	0.259 (df = 1048)
F Statistic	3.935*** (df = 3; 1192)	15.424*** (df = 4; 1191)	28.284*** (df = 9; 1048)	0.149 (df = 3; 1189)	27.453*** (df = 4; 1188)	20.700*** (df = 9; 1048)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 11: How framing and mode (cyber vs. sabotage) influences anger towards the activist who acted against a coal mining company and the CEO of the coal mining company (Experiment 3). Note Sabotage Do Something treatment is the omitted category.

	<i>Dependent variable:</i>					
	Anger Towards Activist			Anger Towards CEO		
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment: Cyber Tried Everything	0.014 (0.026)	0.023 (0.025)	0.019 (0.026)	0.064** (0.026)	0.048** (0.023)	0.051** (0.025)
Treatment: Cyber Do Something	-0.017 (0.026)	-0.005 (0.025)	-0.008 (0.026)	0.032 (0.026)	0.010 (0.023)	0.027 (0.024)
Treatment: Sabotage Tried Everything	0.008 (0.026)	0.021 (0.025)	0.021 (0.026)	0.045* (0.026)	0.021 (0.023)	0.042* (0.024)
Climate Threat		-0.346*** (0.036)	-0.269*** (0.044)		0.611*** (0.033)	0.546*** (0.041)
Republican			0.039* (0.022)			-0.086*** (0.021)
College Educated			0.035* (0.019)			0.031* (0.018)
White			0.067*** (0.024)			-0.004 (0.022)
Male			0.068*** (0.019)			-0.042** (0.018)
Age			0.144*** (0.043)			0.032 (0.040)
Constant	0.390*** (0.018)	0.608*** (0.028)	0.391*** (0.044)	0.449*** (0.019)	0.066** (0.027)	0.131*** (0.042)
Observations	1,195	1,195	1,057	1,193	1,193	1,055
R ²	0.001	0.075	0.118	0.005	0.226	0.266
Adjusted R ²	-0.001	0.072	0.111	0.003	0.223	0.260
Residual Std. Error	0.317 (df = 1191)	0.305 (df = 1190)	0.300 (df = 1047)	0.322 (df = 1189)	0.284 (df = 1188)	0.280 (df = 1045)
F Statistic	0.528 (df = 3; 1191)	24.045*** (df = 4; 1190)	15.603*** (df = 9; 1047)	2.091* (df = 3; 1189)	86.636*** (df = 4; 1188)	42.051*** (df = 9; 1045)

Note:

* p<0.1; ** p<0.05; *** p<0.01

A.6 Additional Figures

Figure 8: Mean support for different eco direct action tactics (attentive respondents only). Point estimate are means with 95% confidence intervals from 10,000 bootstraps. Note this is only respondents who passed the attention check.

