CLIMATE EMERGENCY FUND

LITERATURE REVIEW:

Protest Impact & Effectiveness

Review of Impacts of Climate and Environmental Protest

Emissions Reductions

Muñoz et al. (2018) found that US states with a higher frequency of climate protests had lower CO2 emissions between 1990 and 2007, even when controlling for ideological alignment of the state's residents. The number of environmental lobbyist organizations was not found to have a significant effect on CO2 emissions.

Increased Awareness of Climate Issues

Sisco et al. (2021) found that the 2019 School Strikes resulted in huge increases in online searching for information about the climate crisis in 46 countries around the globe. These protests increased the felt emotional severity of the climate crisis, perceived risk of the climate crisis, and perceived social norms around the climate crisis, all of which have been demonstrated to directly influence public opinion.

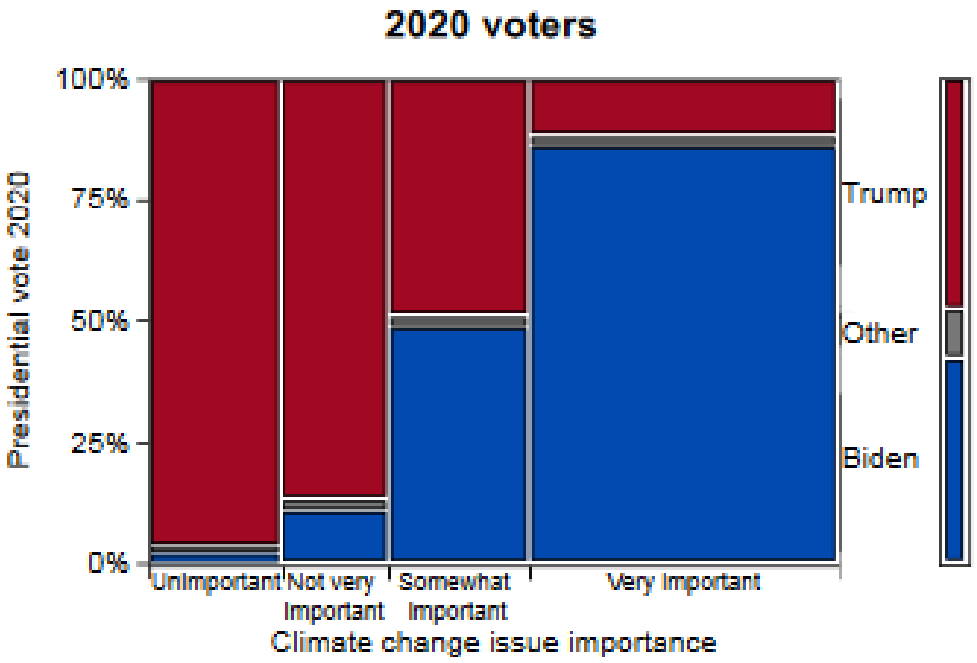
Increased Concern about the Climate Crisis

Increased knowledge of the causes of the climate crisis leads to an increase in concern for the climate crisis; thus, protests that lead to information-seeking behavior and provide knowledge to the public about the climate crisis can lead directly to increased concern. (Shi and Siegrist et al. 2016)

Public polling in the UK (Smith 2019) found that the proportion of British people naming the environment as one of the top three issues facing the country increased from 17% before Extinction Rebellion UK's April 2019 wave of protest to 29% immediately after. Another poll (Kenward and Brick 2019) also found a significant increase in concern about the climate crisis, as well as increased support for the necessity of taking direct action.

The process of climate protest leading to increased public concern about the climate crisis was demonstrated empirically by Brehm and Gruhl (2024) in a study published in *Nature Communications*. They found that a German citizen was 1.2% more likely to report concern about the climate crisis in the 14 days after a climate protest event.

The increase was driven by people moving from “not concerned” to “concerned”, showing that protests broadened the overall population concerned about climate rather than preaching to the choir. In comparison, major dry spell or heat wave events led to a 0.5-0.8% increase in likelihood of reporting concern for climate. The researchers found no “backfire” effect from disruptive protest leading to decreased concern about the climate crisis for any section of the population.



Increase in Pro-Climate Voting Behavior

Valentin (2022) found that German districts that local Fridays for Future protest between 2018 and 2021 caused an increase in vote share for Germany’s Green Party in the 2021 elections by 2.16%. The study also found that each additional Fridays for Future protest caused a roughly 0.5% increase in vote share for the Green Party, suggesting that repeated protests were effective at increasing voting support for climate policy.

Burgess et al. (2024), additionally, found that voters’ views on the climate crisis impacted their voting behavior in the 2020 elections. Viewpoints on the climate crisis were an extremely strong predictor of voting behavior, especially among independents, with climate-conscious voters favoring politicians with a climate forward agenda by a huge margin. The more climate protesters build public support

for climate issues, raise the salience of the climate crisis, and push political parties to center climate in their work, the more likely those politicians are to win elections.

Increased Support for Climate Organizations
A study by Ostarek et al. (2024) published in *Nature Sustainability* found empirical evidence of the so-called "Radical Flank Effect. In polling done just before and just after a major wave of protest by JSO UK in 2022, support among the UK population for a more moderate climate group, Friends of the Earth, increased from 50.4% of the UK population to 53.7%, equivalent to 2.02 million additional people expressing support for Friends of the Earth.

Increased Attention to Environmental Issues from Legislators
Olzak and Soule 2009 found that increases in environmental protests led to an increased number of US congressional hearings on environmental topics between 1961 and 1990.

Schürmann (2023) found that an increase in the number of Fridays for Future protests in a German legislator's district resulted in that legislator increasing the frequency of climate-related posts on Facebook, as well as increasing their engagement with climate policies in parliamentary debates. Repeated protests amplified these increases in public-facing climate messaging and engagement with climate policy.

Increase in Environmental Legislation
Agnone (2007) analyzed the interaction between protest activity, public opinion, and federal environmental legislation in the US between 1960 and 1998. He finds that protest has a direct effect on policy outcomes: for each additional protest covered in the New York Times, the likelihood of environmental legislation being passed increased by 1.2%. The study also found that protest has an "amplification effect", increasing the degree to which politicians take action that is aligned with public opinion: "When both protest and public opinion are at high levels, they jointly influence policy makers in ways that would be impossible if each existed without the other." Agnone's study suggests that protests increase the *salience* of public opinion, making legislators more likely to respond (the dynamics of issue salience are described in more detail below).

Increased public concern about climate/environmental issues increases the likelihood of governments passing climate or environmental policies. This has been repeatedly demonstrated in the US (e.g. Vandeweerdt et al. 2016, Agnone 2007) and in Europe (e.g. Anderson et al. 2017). Thus, when protests increase public concern, they create an indirect impact on public policy.

Success in Stopping Fossil Fuel Projects

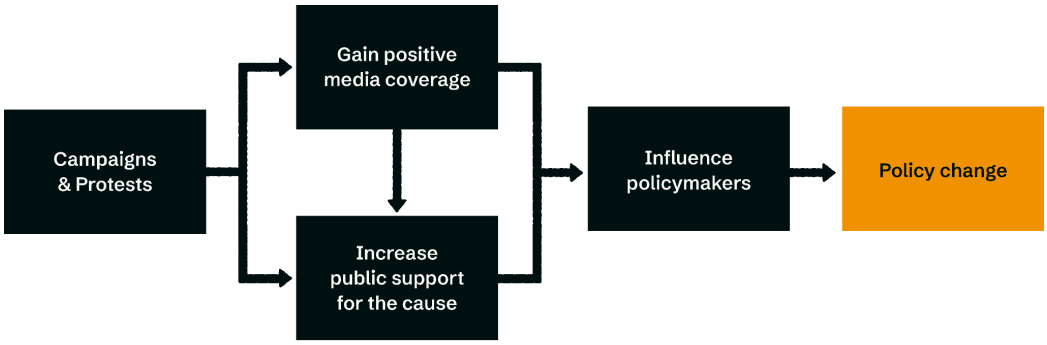
Temper et al. (2020) analyzed several hundred cases of movements directly resisting fossil fuel projects in countries around the globe and found that movements were highly effective at stopping fossil fuel projects. In the cases they studied, movements succeeded in canceling or delaying 28% of coal power or mining projects; movement demands were met in 18% of cases opposing oil and gas extraction; 26% of opposed fracking projects were canceled; and 39% of opposed pipeline projects were stopped, suspended, or lost key investors.

Synergistic Effects of Protest with Institutional Advocacy

Johnson et al. (2010) find that movements in the US had their greatest influence on environmental policy when institutional advocacy and protest are working side by side.

In a 2023 survey of social movement experts conducted by the Social Change Lab, respondents ranked "the strategic use of nonviolent disruptive tactics" as the most important tactical and strategic factor for a social movement's overall success.

Review of Impacts from the Broader Social Movement Research Literature



Social Change Lab (2022)

Changing Public Opinion

A key way that movements affect policy is by raising awareness and shifting public opinion. Quoting from Mcadam and Su 2002:

"In their exhaustive survey of the opinion/policy link, Page and Shapiro (1983: 175) find 'considerable evidence that public opinion is often a proximate cause of policy.' More recently, Stimson et al. (1995) have assessed the dynamic responsiveness of all branches of government to shifts in public opinion over the period 1956-1993, and, allowing for variable responsiveness by period and institution, they 'find [strong support] that policy responds dynamically to public opinion change' (p. 543)."

The positive effect of protests on public support for the protesters' cause is extremely well-documented in the research literature. In addition to the climate-related studies on public opinion cited above, we include a few additional examples below.

Branton et al. (2015) finds that the large immigrant rights marches in 2006 increased the likelihood of Latinos supporting "immediate legalization of current undocumented immigrants" by 10%. The effect grew larger as people were exposed to more protest events in their vicinity, and the increase in impact due to repeated protests was most significant among Latinos who had the lowest likelihood of supporting legalization before the protests occurred.

Similar dynamics have also been shown in relation to Black Lives Matter protests from 2014 to 2021 (Dunivin et al. 2022). Levels of participation in BLM protests led to sharp increases in search activity for terms denoting the movement's theoretically distinctive ideas, such as "systemic racism", with noticeable, durable impact well beyond the "viral" periods immediately following nationwide protests. This data suggests that BLM protesters succeeded in fundamentally reframing the issue of racism within the United States.

Madestam et. al (2013) found significant impacts on public opinion as a result of Tea Party protests in 2009. At a county level, larger protests lead to a 45% increase in the number of Tea Party supporters, a 26% increase in "feelings of outrage about the way things are going in the country", and a 25% increase in opposition to raising taxes on the wealthy.

Setting the Political Agenda

Scholars typically divide the policy-making process into 4 stages: agenda setting, content specifying, legislation passage, and policy implementation. Protests play a

particularly important role in the first stage of the legislative process through their *agenda-setting power*. Protests allow movements to raise the salience of their issue, elevating it to the top of the political agenda and pushing the public and the government to perceive it as the "most pressing" problem. This in turn pushes governments to engage with the issue. Agenda-setting and salience-raising is a critical, direct intervention in the policy-making process: garnering attention for an issue is a necessary condition for and precursor of policy change on the issue.

Anderson et al. (2017) describe how public opinion change can lead to "agenda breakthrough" and "non-incremental change."

Most of the time in an issue area, policy change is incremental, as attention is not focused on that area at the macro level, and a coalition of interests has accreted at policy sub-system level (Mazey and Richardson 2006). However, issues occasionally break out into the macro-political realm where elected politicians operate and where major policy shifts occur. Because of bounded rationality, politicians can only process issues sequentially (Walgrave and Dejaeghere 2016), and to break through their attention thresholds requires a positive feedback process whereby pressure for change builds. Policy entrepreneurs, the media, and public opinion positively feed-back off each other until punctuation in policy occurs. Broad public support for policy change, signaled by a major shift in public opinion, is not necessary for an agenda breakthrough, but it adds weight to other forces at work pushing against policy inertia (Jones and Baumgartner 2012). Thus, shifts in public opinion should increase the chances of non-incremental change.

To put it another way, the absolute value of public support can have an impact on policy outcomes, but public support alone is usually not sufficient to affect policy. On the other hand, major shifts in the level of public support, or perceived public support, caused by increases in protest activity can lead directly to policy impacts.

Multiple studies have found empirical evidence of the agenda-setting impact of protest by looking at specific movements:

- King, Bentele, and Soule (2007) show this dynamic for various US social movements in the 20th century - when the level of protest activity for a given issue increased, the number of congressional hearings on that topic also increased.
- Johnson (2008) shows this dynamic for the US environmental movement in the 1960s and 1970s. This analysis was based solely on the number of

registered environmental groups and not connected with levels or types of protest activity.

- Walgrave and Vliegenthart (2012) show this dynamic in Belgium from 1993-2000: Each additional nonviolent demonstration leads to a 0.8% increase in the number of times the issue is discussed in ministerial meetings, and a 1% increase in the number of laws passed on that issue, with large protests having a larger effect.
- Carey et al. (2014) found that the 2006 immigrants rights marches increased the percentage of Latinos reporting immigration issues as the most important problem facing the Latino Community by 17-21 percentage points.

While scholarship generally agrees on the agenda-setting power of protest, some studies (e.g. Johnson 2008, Olzak and Soule 2009), have found that the impact of protest diminishes significantly after the agenda-setting phase and has little impact on final policy outcomes. However, most of these studies focus broadly on peaceful marches and demonstrations, without controlling for the efficacy or salience of protests (e.g. protest size, police response, etc.).

McAdams and Su (2002) analyze both agenda-setting power and legislative outcome while controlling for protest salience. Their study of the connection between protests against the Vietnam War and Congressional voting behavior from 1965-1973 found that large demonstrations and violence against protesters had an agenda-setting effect by increasing the number of votes on war-related issues in Congress, but neutral or negative impact on pro-peace outcomes. On the other hand, they found that disruptive protests (often including violence or property destruction), had a strong positive impact on pro-peace voting, although they seemed to dampen the pace of voting, suggesting that winning concrete outcomes requires a more direct exertion of power.

Wasow (2020) finds compelling evidence of these agenda-setting dynamics at play during the Civil Rights era. Protesters were able to seed their concerns in the media and raise their salience, as well as exert some control over how the media framed the issues. Peaks in protest activity clearly correlated to peaks in media coverage and peaks with public concern for racial injustice.

Policy Change & Real World Impacts

Research showing the impacts of climate protest is further bolstered by the research literature demonstrating that other protest movements have successfully raised awareness about issues and greatly influenced behavior and policy outcomes.

A systematic study by Amenta et al. (2010) of all research papers studying movement outcomes that were published in top journals between 2000 and 2009 found a clear and consistent positive impact of protests on policy outcomes: 50 out of 54 movements studied generated positive outcomes, with 38 classed as having had moderate to strong influence on policy outcomes. It is worth noting that many of these studies focused on large movements (labor, civil rights, environmentalism, feminism) which were likely to be more impactful, potentially skewing the overall analysis. This study also found that certain issues are difficult for movements to influence, including those for which high levels of political or material resources are at stake, and those regarding military matters.

Wouters, R., & Walgrave, S. (2017) found that when exposed to hypothetical news stories about protests, politicians in Belgium demonstrably changed their positions to be in closer alignment with protesters. The changes were of similar magnitude for all politicians, regardless of initial political alignment. The size of the protest and the unity of messaging of the protesters had the largest impacts on politicians' viewpoints & positions.

A Study of the Tea Party Movement from 2009 by Madestom et al. (2013) found that representatives whose districts had larger Tea Party protests voted significantly more conservatively in 2009 and 2010.

Campbell (2023) found that cities with a Black Lives Matter protest in 2014 or 2015 experienced a 13% reduction in police killings for the subsequent 5 year period.

Experimental and Survey-Based Studies: Proceed With Caution

The research literature on the real-world impacts of protests, for climate movements and for other issues, is clear.

However, some research attempts to study the impacts of protest by creating experimental conditions in research labs, such as providing participants with descriptions of protests, either real or hypothetical, and asking them for their reactions.

There is some research that claims that "extreme" protest tactics, including nonviolent direct action, can create a "backfire" effect. It is notable that the vast

majority of studies that find this negative effect are carried out in laboratories, rather than studying effects in the real world. These studies have critical limitations.

This Social Change Lab literature review includes a good summary of these limitations:

> "One limitation of [experimental studies such as] Feinberg et al. (2020) and Bugden (2020) is that they both make use of an experimental vignette design, where study participants are presented once with a hypothetical situation and asked to note various sentiments. Kenward and Brick (2019a) use a very similar design, exposing participants to one case of media about protests, however in this case they use real media articles rather than hypothetical situations. Using these methods, there is a question of ecological validity, as the ways in which a member of the public might encounter a protest event could be drastically different to these study designs, as often highlighted by the authors. As noted in Feinberg et al. (2020), 'Using controlled settings in this way also removed much of the real-world context that might shape activists' choice of protest behaviours and observers' responses to those behaviours.'
>
> Specifically, it's very plausible that in reality, the public would be exposed to protest events repeatedly, potentially over a period of several days or weeks, or via different mediums, from social media to mainstream media. Exposure to content might only have a small effect in the short-term, but this might accumulate and increase in size over time if the exposure is repeated (Funder & Ozer, 2019). In addition, as found by Kenward and Brick (2019a), the effect on members of the public is dependent on the news outlet covering the protest, which adds additional complications. Finally, it's possible that exposure to a disruptive or extreme protest (and questions about their level of disruptiveness) will cause participants to answer more negatively towards questions of their support for the protest, whilst they might subconsciously have increased concern for the issue, or support the policy demands of the protestors to a greater deal."

While these concerns do not necessarily justify a carte blanche rejection of all experimentally-based studies, they do warrant heightened scrutiny of the conclusions coming out of those studies, especially if they do not align with the results of studies based on real-world data and analysis.

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