Social Change Lab

What was the impact of the Insulate Britain campaign?

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Executive Summary

Insulate Britain was a single issue campaign group who carried out a series of nonviolent disruptive actions on UK motorways at the end of 2021. Within three weeks of their public existence, 90% of the UK public had heard of them. Their campaign ran for less than two months and in early 2022 they declared that they had failed in their goals. Two years on from that assessment, this report considers more fully the effects of their campaign. We assess quantitative evidence including media coverage, parliamentary mentions, Google searches, and opinion polls and qualitative evidence from interviews with MPs, NGOs, academics, industry representatives and activists.

The Insulate Britain campaign garnered a huge amount of press coverage, an average of 31 mentions per day in UK national newspapers as well as dozens of TV interviews, including several 'viral' moments. The coverage of the tactics of the protesters and public opinion towards them was predominantly negative. But the issue of home insulation, already popular with the public (a 2020 survey found 77% of the British public supported government insulation subsidies) became extremely prominent in public discourse. Media mentions of 'home insulation' went from close to zero before the campaign to hundreds of mentions per day. Mentions of home insulation in both Houses of Parliament also significantly increased.

We analyse the effect of this increased salience in discourse on government policy, by considering the Great British Insulation Scheme, a £1billion policy, announced a year after the Insulate Britain campaign, specifically for home insulation. We model the cost effectiveness of Insulate Britain in different scenarios based on their contribution to this policy and its timing. At the pessimistic end (based on 1% of the policy decision being attributable to Insulate Britain's role, and 1 year of saved carbon emissions — that is, the assumption that the policy was brought forward by one year) Insulate Britain was responsible for reductions of 0.05 tonnes of CO2 per £. At the optimistic end (based on 10% of the policy decision being attributable to Insulate Britain, and 5 years of saved emissions), it is 2.54 tonnes of CO2 per £. **We believe that a realistic estimate of cost effectiveness lies somewhere between these extremes, at between 0.25 and 1.26 tonnes of CO2 per £. We would suggest an estimate based on 10% of policy attribution to Insulate Britain and 1 year of emission savings (in other words, a 10% chance that Insulate Britain sped up this policy package by 1 year) — that is, around 0.51 tonnes CO2/£ — is a realistic estimate of cost effectiveness.**

This estimate puts the effectiveness of the Insulate Britain campaign on a par with that of Clean Air Task Force, evaluated (on the basis of bringing about emission reductions of 0.31 and 3.88 tonnes of CO2/£) as being the most effective climate charity .

Contents

Introduction

Between September 13th and November 4th 2021, Insulate Britain carried out a series of non violent disruptive actions in the UK. The group made specific demands on the government: first to improve insulation in Britain's social housing by 2025, and second, to improve insulation in all homes by 2030. The rationale for the demands was that better home insulation reduces both heating costs and greenhouse gas emissions. The civil disobedience actions involved blockading motorways, notably the M25 which encircles London, stopping traffic sometimes for several hours. In all, there were 13 documented days of actions over the period of the campaign.

Fig. 1. Insulate Britain supporters bring a motorway carriageway to a standstill.

Three months after the campaign ended, Insulate Britain declared, in February 2022, "We have failed". They said that their actions had failed to force the government to take meaningful action to reduce emissions and to protect the British public from the poor health and even deaths caused by poorly heated homes. They said they had also failed to persuade sufficient numbers of the public to join their campaign.

This report considers whether this gloomy assessment of their own campaign was right. Did the Insulate Britain campaign fail? Or did it have tangible beneficial effects? We will assess the campaign's effectiveness in terms of what Insulate Britain specifically sought, as well as wider effects on public opinion and discourse; others working on home insulation; the insulation industry and government policy.

The purpose of this work

"In a sports contest, a buzzer goes off and a final score is posted; in an electoral race, a final vote count comes in after the polls close, allowing the winning candidate to claim victory. But for movements pushing forward an issue, the results of ongoing efforts are usually much murkier. What looks like a defeat in the short run may be judged a triumph by history, or vice versa."

Engler, M., & Engler, P. "*This is an uprising*"

"It's always very hard to tell [effects on policy], as governments are not keen to advertise it when movements, and particularly direct action movements, influence what they do."

Interviewee (NGO Chief Exec)

Climate activists have the potential to reduce greenhouse gas emissions through their actions, particularly if they influence government policy. Previous cost effectiveness analyses of climate activism have shown that this approach to social change can be highly effective. One US analysis suggested activism might compare favourably in terms of cost-effectiveness with the most effective advocacy and political lobbying organisations. A similar analysis of Extinction Rebellion in the UK carried out by Social Change Lab also suggested that their 2019 protests were highly effective in terms of reducing emissions.

Such analyses cannot say with certainty the extent to which social movement organisations have a causal impact on specific outcomes. Instead, they model a range of scenarios which make estimates ranging from the very pessimistic to the very optimistic and present evidence supporting the likelihood of different positions. At the end of this report, we will consider the Insulate Britain actions in terms of their cost-effectiveness in a similar way. We will also evaluate more tangible measures relating to the message of the Insulate Britain campaign.

Methodology

Our methodology is based on a model of social change outlined in Figure 2. Protests can have a range of possible effects which contribute to protesters' desired outcomes, as well as additional desirable outcomes. In some cases, effects are indirect — for example, shifting public opinion does not directly bring about better insulated homes (except arguably in the fraction of people who might decide to actually insulate theirs) — but the change of opinion might lead to changed decisions and behaviour of politicians or others. In other cases, effects might be more direct — for example, if protests lead directly to a change in government policy, which has the potential to affect large numbers of homes.

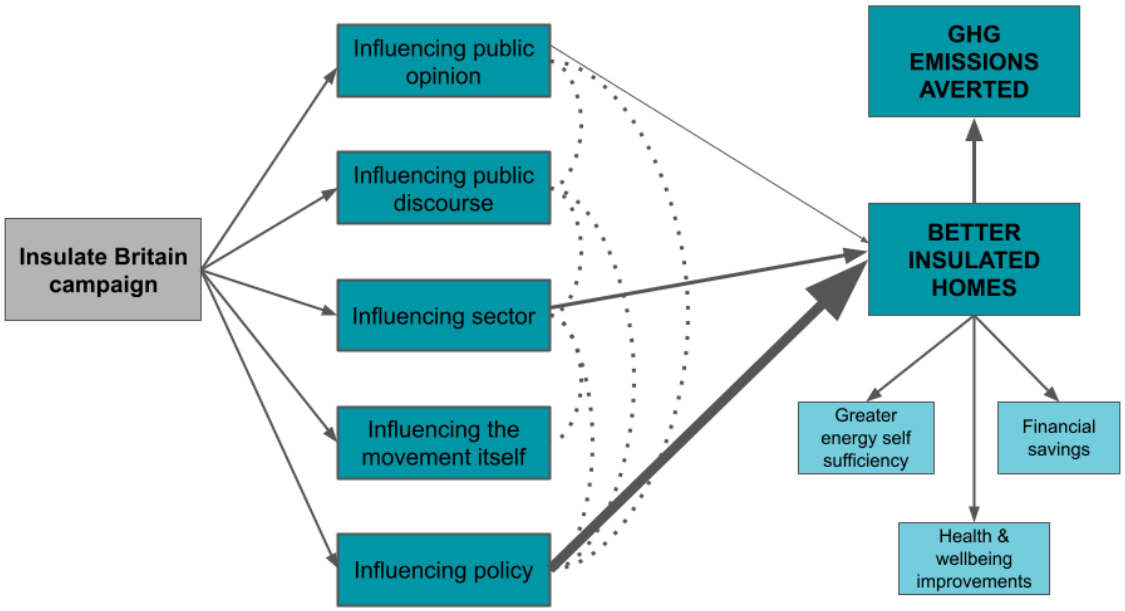

Fig. 2. Direct and indirect effects of the Insulate Britain campaign.

In this research we will consider this range of effects, to help piece the puzzle together. The different types of evidence have pros and cons. Public opinion is relatively easier to measure but more indirect. Policy influence is more subjective and harder to measure but more direct. By combining evidence from multiple sources, we aim for a more complete picture.

Our ultimate outcome measure of interest is reduced greenhouse gas emissions. The primary contributor to this outcome considered here is the government announcement of the Great British Insulation scheme, a £1 billion adaptation to the existing Energy Company Obligation scheme specifically focused on home insulation which was announced in November 2022. (The government's Energy Company Obligation (ECO) scheme has been running in various forms, all involving government subsidies for home energy improvements, since 2013.) The scheme is eligible to lower-income households and to homes with lower energy efficiency ratings (D-G ratings on EPCs). As part of this work we will evaluate the extent to which Insulate Britain's actions contributed to the Great British Insulation scheme policy announcement. We have selected this as a key measure of interest on the basis of its timing and focus: it came soon after the Insulate Britain campaign and was targeted specifically at home insulation. We would note that at the time of the campaign, the Labour Party made considerably more ambitious policy announcements than the government, including plans to insulate 19 million homes through investment of £6 billion a year for 10 years. Because of the level of uncertainty regarding the outcome of the UK general election (that is, whether the Labour Party will have the opportunity to enact its policies), we have not included this in our analysis.

However, if we were to review this report a few years from now, with a different government in power, we might see significant changes to our assessment.

We are carrying out our analysis now since sufficient time has elapsed from the campaign to assess their longer-term effects. This is important because a common theory of change for protest movements involves their role in 'shifting the Overton window'. This means changing the level of public acceptance of an idea, so that something that might have seemed outlandish becomes more commonplace. This takes time. It takes still more time for the consequences, such as the development of a new policy, to take effect.

We consider several factors which might have contributed to the Great British Insulation Scheme policy announcement. These factors include changes in public opinion, changes in public discourse, and the effects on others working on home insulation (NGOs, local councils, industry).

Our research uses mixed methods, bringing together quantitative evidence (including opinion polls, media mentions analysis, Hansard analysis) and qualitative evidence from interviews with a wide range of expert stakeholders. We interviewed 21 experts, including Conservative, Labour, SNP and Liberal Democrat MPs; local councillors; policy advisors; think tanks; industry experts; NGOs and charities; industry bodies; activists; philanthropic funders and academics.[1]

Background and context

Britain's homes currently emit an estimated 68 million tonnes (more than 15% of total UK emissions) of carbon dioxide, mostly because of homes being heated by gas boilers. Some estimates suggest that our homes use 35% of all the energy in the UK. The UK has a higher proportion of very old houses compared to other similar EU nations and is lagging behind in terms of home energy efficiency. 26 million homes or 80% of the UK's residences, need to be made net zero standard by 2050 in order to meet the government's climate commitments. While home insulation alone does not solve Britain's emissions — full retrofit requires replacing gas boilers with heat pumps or other renewable energy sources — it is, given its low cost and relative simplicity of installation, an obvious place to start.

Despite the fact that insulation seems a 'low hanging fruit' in terms of moving towards a low carbon economy, successive governments have failed to deliver. In 2011, the

[1] Our interviewees were: 7 MPs (2 Conservative, 3 Labour, 1 Lib Dem, 1 SNP), 1 local councillor, 2 academics, 1 industry expert and academic, 3 representatives from think tanks/policy organisations, 2 activists, 1 philanthropist, 1 NGO representative, 3 representatives of the energy sector.

government under David Cameron pledged a revolution in upgrading British homes by 2020. Of the 14 millions homes targeted for improvements, just 14,000 homes actually saw any change; a success rate of 0.1%. The number of newly-insulated homes plummeted (from more than 2 million annual installations to less than 0.5 million), when programme funding was cut in 2013. It has not improved since. Even though the Conservative government (led by Boris Johnson) elected in December 2019 included a manifesto promise to spend £9.2bn on making buildings more energy-efficient, this money did not materialise. According to the Climate Change Committee's report in June 2021, there had been 'minimal progress' on insulation and the 2021 Institute for Government report deemed this policy 'at risk'. In short, there has been a consistently large gap between rhetoric and reality on home insulation.

This mismatch is at odds with the views of the general public. In 2020, over two thirds (69%) supported government subsidies for home insulation. Before Insulate Britain began campaigning, over 75% of the British public were aware of the different types of home insulation and understood their importance in reaching net zero goals as well as reducing energy bills.

A key reason activists chose insulation as the focus of their demands was that, unlike more controversial green policies such as onshore wind, it is a 'no-brainer demand'. It carries benefits for households, in terms of cost savings and health and wellbeing improvements, it carries economic benefits in terms of new job opportunities and improved energy security and it already receives considerable public support. Yet despite all these benefits, successive governments had failed to enact policies to ensure proper insulation of Britain's homes.

In summary then, there is evidence that prior to the Insulate Britain campaign governments had considered the issue of home insulation over many years. While this points to the possibility that an insulation scheme might have been announced without the actions of Insulate Britain, it is also the case that for many years such a scheme had consistently failed to materialise.

There are some important aspects of the broader political and geopolitical context during the time between the Insulate Britain campaign and the announcement of the Great British Insulation Scheme a year later which need to be taken into consideration because they both offer alternative, or additional, explanations for pressing political need to act on home energy efficiency. The cost of living crisis, caused by the high rate of inflation, led to steady increases in the cost of goods and services. It was generally considered to have become a significant crisis by late 2021, and it meant that government, local and national, as well as charities and NGOs were focused, amongst other things, on reducing the cost of domestic heating bills. While short term measures (such as the energy price cap) were

taken, it is also conceivable that the crisis focused minds on longer term routes to reduce energy bills such as insulation.

The Russian invasion of Ukraine in February 2022 led UK policy makers to focus on the suddenly urgent need for greater energy self-sufficiency, as an alternative to relying on foreign fossil fuels. Again, one conceivable route to achieving this was via reducing energy demand: better insulated homes cost less to heat.

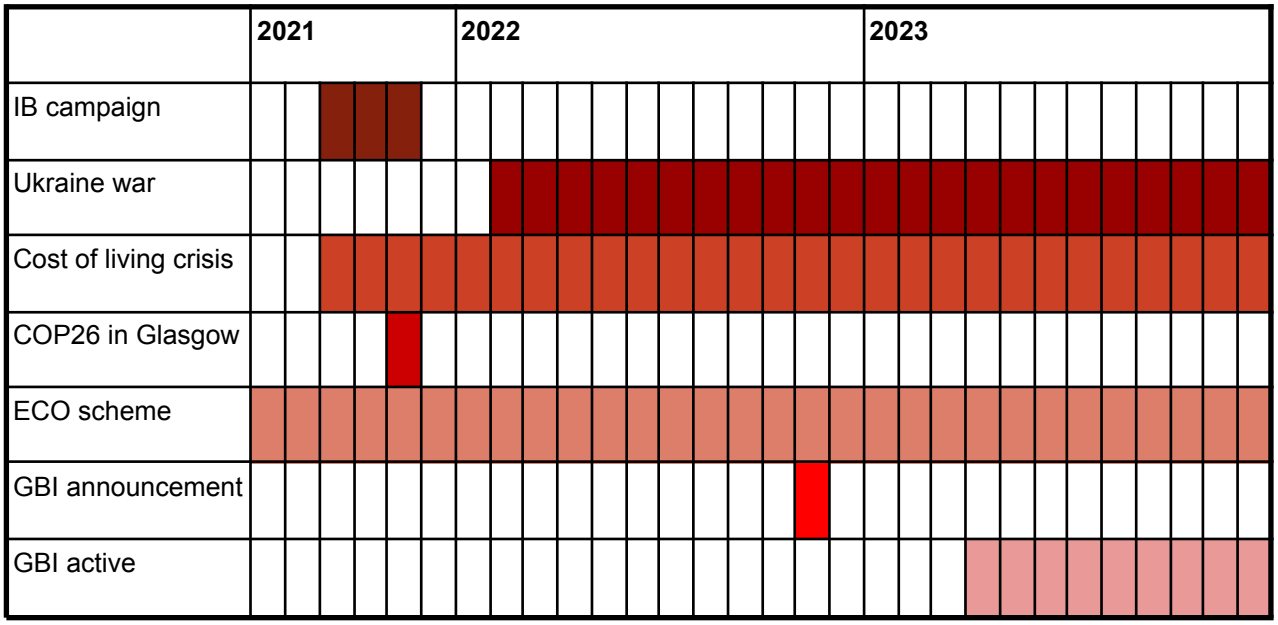

Fig. 3. Timeline of key events around the Insulate Britain campaign and government announcement of GBI (Great British Insulation) scheme.

A final significant event in the calendar of the time was the COP26 climate conference taking place in Glasgow in November 2021. The fact the summit was happening in the UK was one of the activists' motivations for the timing of the Insulate Britain campaign; having campaigners imprisoned while, as one activist put it, '*Boris was doing his Mr Green routine*' would shame the UK government in the eyes of the world and force them to act. The considerable media interest in the summit might also have contributed to climate-related discourse in the wider public. The figure above shows the timing of these key events.

In the next section, we consider the impact of the Insulate Britain campaign on public opinion, considering both opinion on the protests themselves and opinion on their message.

Results

Public opinion

"Insulate Britain was interesting because the ask was so mundane but the tactics so extreme."

Interviewee (MP)

"We'll be hated, but it will stir things up"

Insulate Britain activist

One way that protest can influence policy is through its effects on public opinion. It is a cornerstone of representative politics that politicians are more minded to act on an issue that is important to their electorate. We were interested in two effects on public opinion: opinion about the protests themselves and opinion about their message. Previous research suggests the public clearly differentiate between the two. It is important to consider both because part of the theory of change behind disruptive protest relies on their distinction. Simply put, the methods are what gets the attention that makes the message heard. Getting the message heard by large numbers is key. And while non disruptive traditional tend not to get much media attention, publicly disruptive protests tend to get a great deal. Oliver and Myers (1999) suggest that dramatic protest events get more media coverage; Wien and Elmelund-Præstekær (2009) show that this is particularly so for events that violate social norms. Sitting down in the face of lanes of motorway traffic certainly constitutes such a violation.

Public opinion on the protests

In terms of opinion about the protests themselves, YouGov conducted public polling of a representative sample of 1,635 British adults, on 15/16 September, just a few days after the start of the Insulate Britain campaign. Even at this early stage, awareness of the protests was very high: four in ten Britons had heard "a great deal" or "a fair amount" about the protests (42%). The majority of those asked tended to oppose rather than support the protests (59% vs 25%, with 26% unsure).

For a sub-group of respondents who were "concerned about climate change, pollution and the environment", 49% supported the protesters' actions and 39% opposed them. This pattern — people's attitudes towards an issue affecting how they react to disruptive

protests — is similar to patterns we have seen in previous studies of climate and animal rights protests[2].

As the protests continued, public support for them decreased further. A second YouGov poll on October 8th found 72% of respondents (13% higher) now opposed the group's actions. Just 18% now supported them.

Public opinion on the message

> "When people make up their opinions it's from a range of things. It's not just about not liking the messenger. People aren't going to say 'I hate Insulate Britain therefore I will have a cold home'.
>
> Interviewee (academic)

Public opinion on the message of the campaign is harder to pin down. As far as we are aware, specific longitudinal survey data tracking public opinion on home insulation over this time period does not exist. Instead, we have to take the best available proxies.

There is evidence that support for home insulation subsidies was high before the Insulate Britain campaign. CAST is a research organisation which assesses the social changes needed to address climate change in four countries, including the UK. According to their 2020 survey — the year before the campaign — 77% of UK adults supported subsidies to help people insulate their homes. In the UK, subsidies for home insulation were the most popular of the various policy suggestions surveyed.

The YouGov climate tracker surveys members of the general public, asking whether they would be willing to personally cover home energy improvement costs such as better insulation. This goes a step beyond support for subsidies, since paying for insulation yourself suggests increased commitment and understanding of its benefits. The numbers of people saying that they would do this increased slightly after the Insulate Britain campaign compared to before it (2021: 34%; 2022: 36%; 2023: 36%).

Moving a step closer to actual behaviour change, the Office for National Statistics data in spring 2022 (so a few months after the end of the Insulate Britain campaign) found that just over a quarter of adults (26%) were "considering changes" to their homes in order to make them more energy efficient. Again this was an increase compared to before the campaign: in Autumn 2021, this number was 19%. Insulation was the most common named improvement, with 42% of adults saying they were considering it.

[2] In previous research looking at similar disruptive, nonviolent protests by Animal Rising and JSO, latent profile analyses showed that people's baseline attitudes to the issue make a big difference to how they view the protests.

To summarise, there is strong evidence that the public are and were supportive of home insulation interventions and incentives. As one academic expert said, "*You can't argue against insulation!*" This support was high before the Insulate Britain campaign and remained very high after it. There was possibly a small increase in public support for insulation as measured by people's expressed intention of paying for home insulation upgrades themselves. While we cannot say that improvement was due to the Insulate Britain campaign, we can say that although public opinion was strongly against the campaign's tactics, the issue of insulation was not adversely affected.

Public discourse

"[Insulate Britain] has recently caused more comment about Britain's appalling housing stock than I managed in 35 years reporting."

Roger Harrabin, BBC Reporter, Energy and Environment Analyst on Twitter (now X), Sept 2021

"Their very public actions in blocking motorways in 2021 was successful in raising the issue"

Interviewee (MP)

If public opinion is a measure of how the public feel about an issue when asked, public discourse is a measure of how - and how much - they are talking about in the public domain. The public domain includes everything from mass media and social media to the home or the workplace water cooler. The level of public discourse is generally seen as an indicator of the salience of an issue — that is, the extent to which it is considered prominent or important. Public opinion and public discourse are not necessarily correlated. For example, public opinion is very strongly in favour of wearing seatbelts, but seatbelts are not a salient issue in public discourse.

During the time of the Insulate Britain campaign, there were some highly memorable and much discussed media moments. TalkTV host Mike Graham's interview with Insulate Britain spokesperson and carpenter Cameron Ford went viral, when the interviewer claimed it was possible to "'grow concrete". The clip became a meme on social media outlets internationally and was even celebrated in "you can grow concrete" anniversaries a year later. Another viral moment from the media campaign came when Insulate Britain spokesperson Liam Norton was interviewed on Good Morning Britain, ITV's flagship breakfast show, viewed by around ¾ million UK viewers. The interview, which ended with Liam walking off air mid-interview, had more than 2.5million subsequent views on Youtube.

Those moments are evidence of the extremely high visibility of the campaign. They concern both the message and the messengers. Our real interest here is trying to establish the extent to which the campaign succeeded in getting people talking about the message — home insulation. The main measure we have taken here to reflect public discourse is media mentions of specific issue-relevant terms. This sort of data is available through media analytic tools (we used the media monitoring site Meltwater for our analyses). Discourse in the national TV and news media — and its subsequent spread through social media — can reach very large audiences in one hit. It is this reach that disruptive protesters are targeting through eye-catching, newsworthy tactics. We also consider mentions in the parliamentary record Hansard (which might also be considered an indirect indication of salience in public discourse, through its influence on political discourse) in the section on policy.

In the figures below, we map media mentions of specific issue-relevant terms used by the campaigners to the specific dates of actions. Using key terms relating to the message of Insulate Britain also allows us to some extent to separate the message from the methods. The dates of the actions are available here. We chose two terms for analysis: 'home insulation' since it is the clearest encapsulation of demands and 'leaky homes' since this was a more idiosyncratic (and therefore unique) term used by IB.

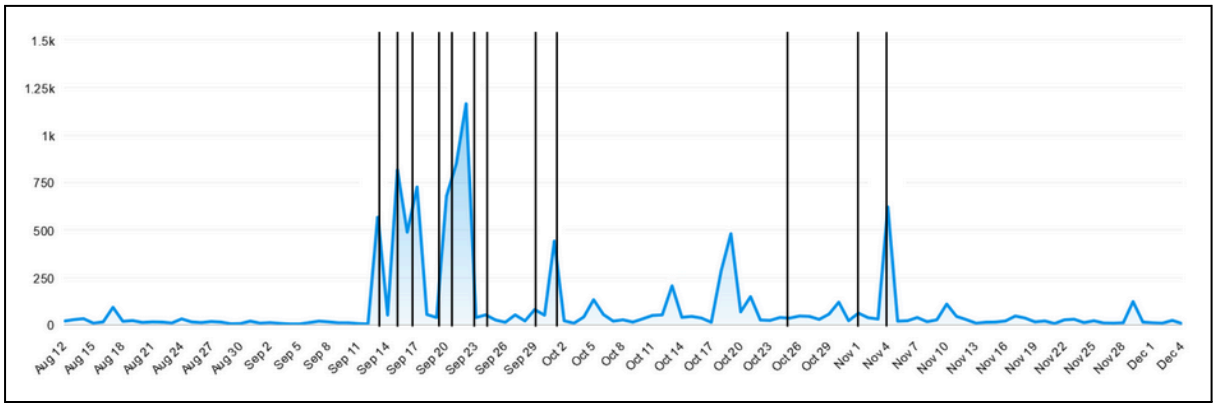

Fig. 4. Number of mentions of 'home insulation' in the UK media in the period of the Insulate Britain campaign (13 Sept to 4 Nov 2021) plus one month before and after. Days of actions are marked with vertical black lines.

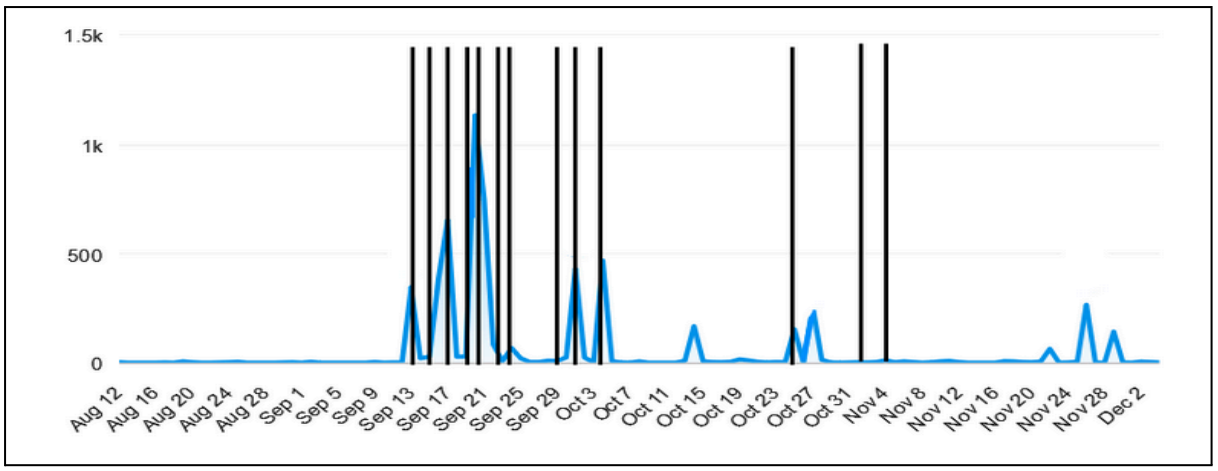

Fig. 5. Number of mentions of 'leaky homes' in the UK media in the period of the Insulate Britain campaign (13 Sept to 4 Nov 2021) plus one month before and after. Days of actions are marked with vertical black lines.

The figures show the extremely low number of references to these terms in the media in the period preceding the Insulate Britain campaign. These numbers increased dramatically and immediately following the first day of civil disobedience — with more than 500 mentions of 'home insulation' and more than 300 mentions of 'leaky homes'. As the campaign continued, the link between media mentions and protest events remained clearly visible, with daily media mentions peaking at over 1000 a day. Mostly, the references to these terms again decreased to very low or no references in the days between protest events. These data, and the strong correlation between days of action and media mentions, are strong evidence for the campaign raising the issue of home insulation and leaky homes in public discourse.

We also looked at Google searches for 'home insulation' before, during and after the Insulate Britain campaign. These searches act as a rough indicator of the extent to which home insulation was prominent in people's minds and even potentially indicate an early sign of behaviour change on home insulation. In figure 6 below we show the average daily searches for 'home insulation' from one year before the campaign to one year after it (i.e., 12 September 2020 to 5 November 2022).

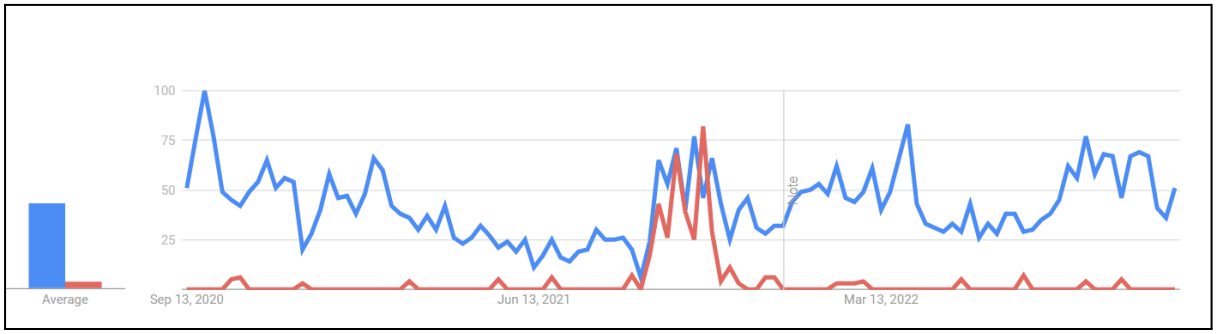

Fig. 6. Average daily Google searches for 'home insulation' (blue line) and 'Insulate Britain' (red line) from Sept 2020 to Sept 2022.

The number of searches for home insulation appears to have been steadily declining in the year preceding the Insulate Britain campaign, from September 2020 to September 2021. This should have been a time for action on domestic energy efficiency through the government's Green Homes Grant, so we might have expected an opposite trend. The scheme, however, has been derided as a disaster — including in the scathing report from the independent parliamentary Public Accounts committee — and we take this decline as evidence that insulation was not high on the public agenda.

There is a sudden large increase in searches for home insulation from the start of the Insulate Britain campaign. Searches remain high through the duration of the campaign. For the year following the end of the campaign, searches never return to as low a level as they saw just before it began.

To conclude this section, it is clear that Insulate Britain had a dramatic effect on public discourse about home insulation. Through the huge media interest in the protests, the activists successfully raised the issue of insulation in the public consciousness. According to Yougov, 68% of the British public knew "a great deal" or "a fair amount" about the Insulate Britain protests, an extremely high level of recognition for a few days of action. This awareness translated into greatly increased internet searches, news and social media articles about the topic of insulation.

Influence on the sector

"The protests were an important provocation that we needed to be doing more, acting faster, that it wasn't ok to do business as usual. They were asking us to shake out of our slumber."

Interviewee (policy think tank)

"They were made out to be ludicrous people doing silly things. It dragged the whole climate change insulating homes issue into that daft 'Aren't they ridiculous?' area"

Interviewee (industry body)

"They were putting forward something very achievable — because of all the background work that had been done. Their credibility rested on the work that many other organisations and experts had done over a long period of time."

Interviewee (industry body)

In this section we briefly outline some of the wider effects of the Insulate Britain campaign on the home insulation sector. By 'the sector', we mean a wide assembly of organisations, including NGOs, industry bodies, policy organisations and think tanks, who were all working in their different ways on home insulation. We demonstrate some of the interplay between different stakeholders, assessing the extent to which making the issue of home insulation more salient helps others who are trying to push that same agenda. This is a commonly accepted idea of how social change works — that the outcomes of actions such as protests, which operate outside formal institutional bodies, can facilitate the work of those working inside them. The pressure from the outside helps precipitate transformation inside.

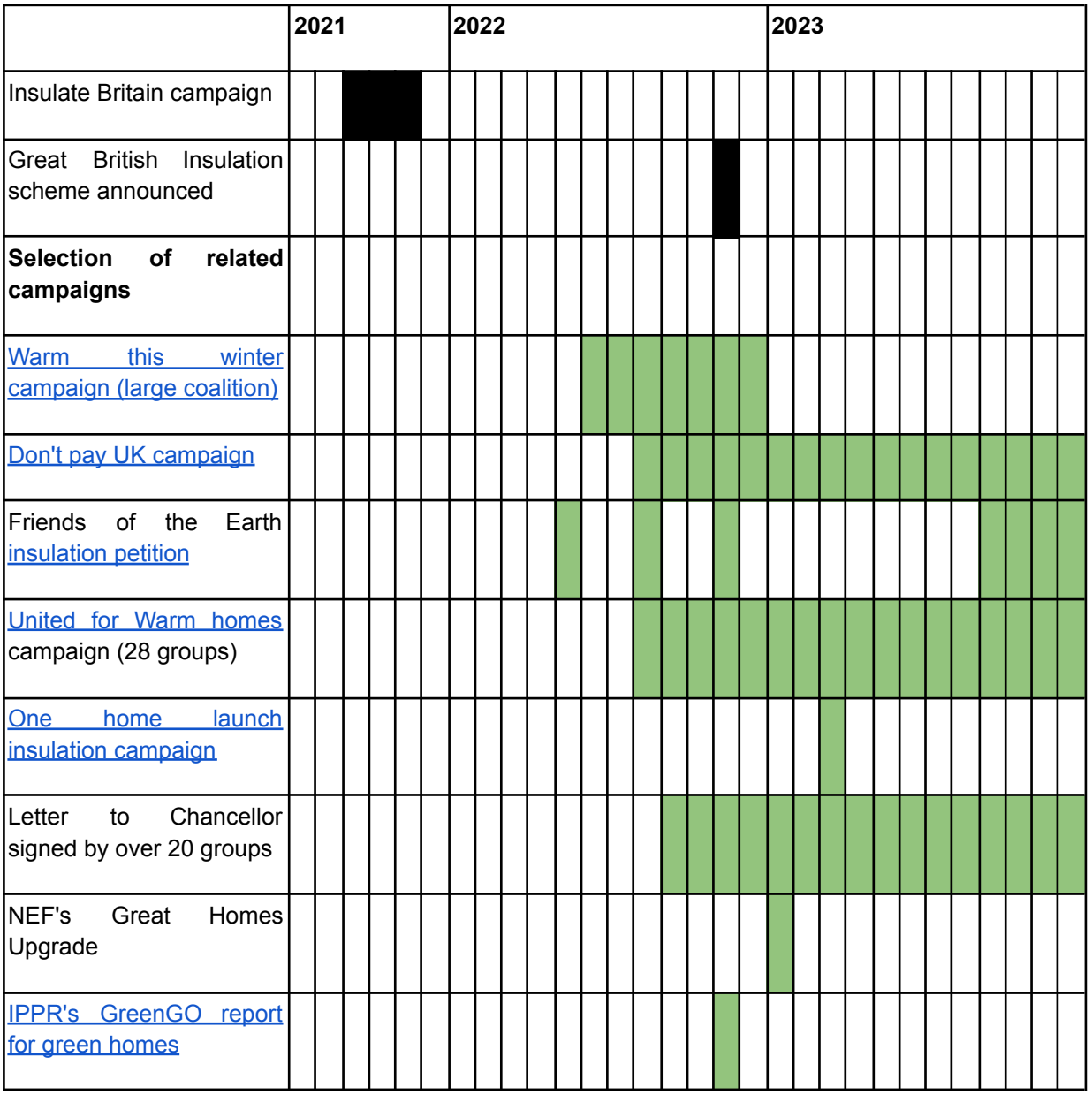

Fig. 7. Timeline showing some of the campaigns started on home insulation / green housing upgrades by others in the sector, in the period following the Insulate Britain campaign.

Several interviewees commented that before the Insulate Britain campaign, it was hard to get traction on home insulation. This was not because people were not supportive of insulation per se; rather, it was seen as "*boring*", as an issue that "*could never get anyone excited*", according to policy experts interviewed. But once the salience of the issue had been raised, it became easier for other organisations to act. As one interviewee said, "*In the past we couldn't get anyone interested in this issue… Insulate Britain changed that.*"

This changed perception had tangible results. One example was the New Economic Foundation's emergency insulation plan which was launched in March 2022, specifically to exploit the momentum on home insulation. Focusing on energy cost savings, the plan presented home insulation as a 'low hanging fruit' win. With a cost per home of £400 for loft insulation and £400-£1800 for cavity walls, for most homes, the financial energy savings alone would make home insulation pay for itself in less than 5 years.

Interviewees also made reference to how the campaign was successful in its novel approach of tying climate issues to current issues of poverty and poor health. As one interviewee put it, "*Insulate Britain countered the lie that protesters are all middle class white people who care only about the end of the world while the working class only care about the end of the month.*" An example of this was the 'Warm this winter' campaign. This was a coalition of charities whose demands for better heated homes was explicitly linked both to people's current struggles with energy bills and future affordable clean energy. The 'Warm this winter' pledge (the pledge was to "keep my constituents warm every winter by urging the Government to rapidly expand home retrofit schemes, support the swift deployment of homegrown renewables to speed up the net zero transition away from volatile fossil fuels, and provide further financial support to vulnerable households.") has been signed by 51 MPs representing all political parties.

Stakeholders vary greatly in the extent to which they attribute any positive actions or gains on home insulation to a protest group. There are a range of biases which might affect positions. These are sometimes political; for instance, one interviewee quoted a Conservative MP saying, "*The Chancellor can't exactly stand up there and say 'We've caved in to Insulate Britain'.*"

They are sometimes due to attribution biases in which people see their own influence as the most important, something that is likely to be true for all parties: activists as well as those who oppose their actions. For example, an interviewee from one of the key industry bodies for housing retrofits talked about how they had been lobbying for better policies on insulation for decades. They attributed change to their own tenacity and determination as well as expertise in working on inside route tactics. As we have

discussed, this synergistic relationship between those working on the inside and the outside is sometimes one that both sides fail to properly acknowledge.

Typically, it is also extremely difficult to tease apart the effects of different actors and determine the contribution of each. One councillor interviewed started work on a big city-wide home insulation project at a similar time as the Insulate Britain campaign and quite honestly said they "*could not say*" the extent to which the protests had any effect, positive or negative, on their work.

Additionally, there was some sensitivity in talking to interviewees about the influence of protests on their work. Several made reference to the highly polemical media reporting of the protests at the time. They felt compromised being called upon to give a position: if they said they were sympathetic to the protests, they were condemned for supporting publicly disruptive action (being seen as "*guilty by association*" as one interviewee put it). If they said they were not sympathetic, the media would use this to "*drive a wedge*" and further polarise the issue, which would be counterproductive to progress on insulation. We will talk more about polarisation effects in the section on negative consequences.

In terms of the effect of Insulate Britain's effects on others working on insulation, some people expressed their need to distance themselves from Insulate Britain's actions. However, the most commonly acknowledged effect was the observation that the issue of insulation was "*suddenly being talked about by everyone.*" Even those who were not supportive of the protests were likely to have benefited from this, whether or not they acknowledged it. For those who did acknowledge it, the common feeling was that an issue that had previously been hard to get traction on, simply because it felt boring and humdrum, had been made important. This helped to open conversations and drive policy recommendations with renewed vigour. While we do not attempt to quantify these effects, it seems reasonable to suggest that additional positive effects of the Insulate Britain campaign came indirectly through these alternative pathways.

Influence on policy and political discourse

"The prime minister has told ministers to divert more than £1 billion from existing schemes to focus on insulating poorer households. The Times has been told that during one meeting a No 10 official suggested it could be called "Insulate Britain". It was rejected when someone pointed out that it was the same name as the environmental campaign group that has caused widespread disruption. It may now be called the "Great British Insulation Scheme".

The Times 16th June 2022

"It is hard to disentangle any effect they might have had because the energy crisis was just so impactful."

Interviewee (industry body)

"It is not a huge surprise that the government would work on that agenda, but it is possible that the Insulate Britain campaign helped speed it up."

Interviewee (MP)

"Protests might have spurred the government to act to avoid further criticism on home insulation."

Interviewee (MP)

In this section we consider the influence of Insulate Britain on the specific government policy called the 'Great British Insulation Scheme', announced in November 2022. We canvassed some highly contrasting views on that topic which we will consider shortly. First we look at a less subjective, quantitative measure: namely, the number of specific mentions of 'Insulate Britain', 'home insulation' and 'retrofit' in the Houses of Parliament, related to the timing of the campaign.

Hansard is the record of all debates that take place in both the House of Commons and the House of Lords. In the period of active protests (that is between 13th September and 4th November 2021) there were 15 mentions of "Insulate Britain". In terms of valence, 4 of these were positive and 11 negative, with a strong consensus against the tactics of the protesters. A widely accepted view appears to have been that the government was already doing a great deal on green policies and therefore these kinds of disruptive protests were not justified. Of course, there are differences of view along party lines, as illustrated in the quotes, taken from Hansard, below.

"Insulate Britain is right. Its tactics might be colossally difficult for us to cope with, but it is right that the Government should be insulating the leakiest council housing homes in Britain, rather than allowing those people to spend cold winters, be ill and emit endless CO2 emissions."

Baroness Jones of Moulescoomb (Green), House of Lords

"Insulate Britain's irresponsible actions have disrupted thousands of people's lives. National Highways estimates the financial impact on drivers from time lost during just three days of disruption totals £559,946. This does not include costs of missed appointments or of managing the incidents, disruption to manufacturing or retail, or the impact of disruption on other days."

Baroness Vere of Norbiton (Under secretary of state for transport, Conservative), House of Lords

In terms of the issues raised by the campaign, we looked at whether there was a change in the number of references to the terms “home insulation” and “retrofit” before, during and after the campaign in both Houses[3]. Given the increased salience of these terms in public discourse, we would expect to see this reflected in parliamentary debate. This was the case: as shown in figure 8 below, there was a significant increase in the number of times politicians referred to these topics during and after the campaign compared to before.[4]

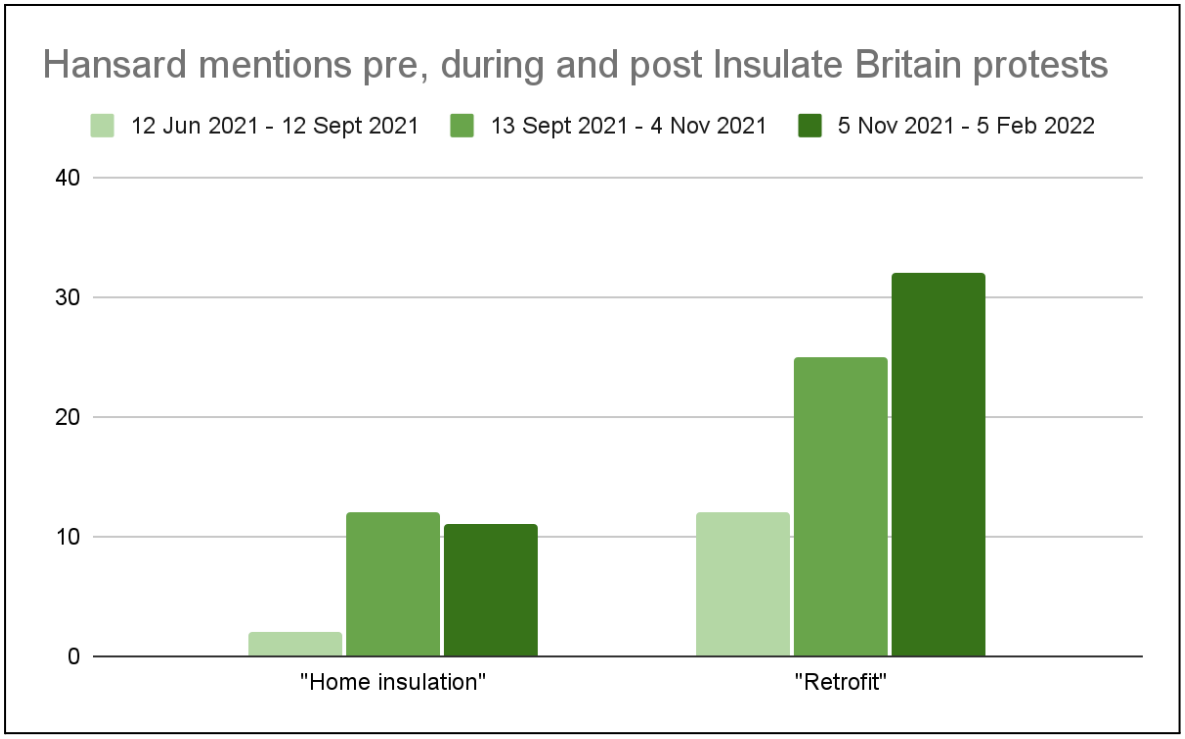

Fig. 8. The number of mentions of the terms “home insulation” and “retrofit” in both Houses of Parliament, in the periods before, during and following the Insulate Britain campaign.

[3] We ran a binomial regression model, estimating 3500 speeches in each time period and coding for mentions of “home insulation” and “retrofit”. The results show the chance of "home insulation" appearing in a speech was 6 times higher during vs. before the Insulate Britain campaign began (95% confidence interval (CI) [1.6, 38.7], z = 2.22, p = 0.026), and 5.5 times higher after vs. before it began (95% CI [1.5, 35.7], z = 2.35, p = 0.019). Similarly, the chance of the term "retrofit" being mentioned was 2.1 times higher during vs. before (95% CI [1.1, 4.3], z = 2.1, p = 0.04) and 2.7 times higher after vs. before (95% CI [1.4, 5.4], z = 2.91, p = 0.004).

[4] We checked that this was not a seasonal effect by comparing these data with the same periods in the previous year.

The Great British Insulation Scheme

We have chosen one specific policy on which to focus our analysis of Insulate Britain's effect on government policy. This is the policy initially billed as ECO+ but later renamed (notably, "to help with consumer recognition" according to the government announcement) as the 'Great British Insulation (GBI) scheme'. The scheme extended the eligibility for previous ECO schemes (which were for low-income and vulnerable households) to other households with low energy ratings and in the lower council tax bands (specifically, homes with EPC ratings D-G and council tax bands A-D (England) and A-E (Scotland and Wales)).

As outlined, we have chosen this policy for two reasons: it specifically concerned home insulation and its timing was a year after the Insulate Britain campaign (that is, its timing makes a role for IB's influence plausible).

Although we are focusing on this policy for analysis purposes, we do not wish to imply that this policy represented the full extent of what the government needs to do to improve home energy efficiency in the UK. As many have pointed out, the policy represented just a fraction of the emission reductions needed to meet net zero commitments. It is also noteworthy that since this policy was announced, the government has scrapped their energy efficiency taskforce, whose job it was to oversee initiatives such as home insulation.

Background to the scheme

Given that the GBI scheme was an evolution of the ECO scheme, it is relevant to consider the background to the government's Energy Company Obligation (ECO) scheme which dates back to 2013. There have been four versions of the scheme, all of which legally oblige the big energy providers to reduce the cost of home heating for low income and vulnerable households. Reducing costs could be through insulation or other measures such as upgrading heating systems. The scheme aims to encourage and support home energy efficiency for households at risk of, or in fuel poverty. The scheme is administered by Ofgem, the independent energy regulator.

"The Government had to comply with net zero and this is an easy win."

Interviewee - academic

"It is hard to disentangle any effect they might have had because the energy crisis was just so impactful. People's bills were going from £800 to £4000, it was just so big. That was far away the main focus driving the crisis."

Interviewee - energy company

"It wouldn't surprise me if aspects of it such as the name change were in response to the concept of insulation being higher up the agenda because of the protests."

Interviewee - MP

We analysed the role that the Insulate Britain campaign played in the GBI policy qualitatively. Interviewees were asked about their understanding of how the GBI policy came about. They were then asked for their views on the influence of the Insulate Britain campaign on the GBI policy. Responses varied a great deal. One interviewee (a Conservative MP) said that Insulate Britain had "absolutely zero" effect on the policy; another (a chief executive of an NGO) said that the policy would not have happened without the protests.

Interestingly, even interviewees who were vehemently opposed to the protests (e.g. several claimed that the nature of the protests polarised debate and impeded the cause of insulation and 'green issues' more generally) did not go so far as to say, when asked, that the protests had an adverse effect on policy. Put simply, no interviewee said that Insulate Britain made things worse. It seems reasonable then to assume a lower bound of zero when looking at the effect of the campaign. That is, as opposed to the idea that the campaign might have had a negative effect, for example by reducing the amount of the policy package or delaying a policy announcement.

Translating policy into emission reduction estimates

To translate the effects of a £1 billion home insulation into emission reductions is complicated by the fact that different types of insulation vary greatly in their cost and

effectiveness, According to the Energy Saving Trust, an independent organisation focused on energy efficiency and clean energy, the simplest and most common types of insulation, which are roof and loft insulation (cavity wall insulation typically being more complex and costly) they estimate that every £1 spent on insulation saves roughly 1 kg CO2 per year. By this estimate, £1 billion spent on home insulation brings a reduction of 1 million tonnes (1 billion kg) of CO2 per year. However, for our estimates of effectiveness, we have used the considerably more conservative figures outlined in the government's GBI impact assessment. These suggest CO2 savings of 130,000 tonnes per year.

To calculate cost-effectiveness, we also need to make an estimate for how many years this CO2 reduction should apply. Home energy upgrades such as insulation needed to happen at some point in the coming years in order for the UK to meet its net zero pledges. These state that public sector building emissions will be reduced by 50% by 2032, and 75% by 2037, against a 2017 baseline, and that all emissions must reach net zero by 2050. If we estimate that homes will be insulated 5 years earlier due to this policy, we should multiply CO2 emission reductions by 5. This estimate is also made in the government's impact assessment[5] which reports 'Non-traded greenhouse gas savings for carbon budget 5' as 650,000 tonnes of CO2e.

According to data from the Climate Emergency Fund, who funded the Insulate Britain campaign, the cost of it was £128k. If Insulate Britain were entirely responsible for the policy on home insulation, this would be the equivalent of 650k/128k) 5.08 tonnes of CO2 emissions abated per £1 spent. Clearly, Insulate Britain was not 100% responsible, but to what extent could the policy reasonably be attributed to their actions? Most would agree that the scheme came about through some combination of the contributions of the existing ECO scheme; pressure from the cost of living crisis; pressure from the Ukraine war (and its effect on gas prices); internal government considerations such as the need to act and to be seen to act (including unknown factors of internal party politics and contemporaneous popularity ratings); and the actions and influence of a range of NGOs, industry bodies and campaign groups. Assigning contribution involves charting all potential influences and assigning the percentage proportion of their influence.

Determining the contribution of any one component to a policy change is clearly complex, highly subjective and likely to be highly contested. Nonetheless, we share with many organisations the view that it is important to try to make quantified estimates; bluntly, concrete numbers help funders and others compare the effectiveness of different approaches to social change. We believe this is especially important given the enormous differences in effectiveness between the most and the least effective organisations.

[5] See table 12 on page 26 of the impact assessment.

In the table below, we show different cost-effectiveness estimates based on savings of 1, 5, and 10 years of CO2 emissions (time frames which all lie within the timelines of net zero pledges). These numbers reflect the view that insulation improvements are likely to happen sooner or later, in order to meet net-zero pledges but that there is considerable variation in their possible timing. These estimates therefore refer to the number of years insulation policy was brought forward, each year bringing CO2 emissions savings.

All interviewees were asked to estimate the percentage of this policy attributable to Insulate Britain. Many interviewees understandably did not feel comfortable making this sort of quantitative estimate. (We should note that we did not ask for estimates on timing effects — that is, whether Insulate Britain played a role in bringing forward a policy that might have otherwise happened later.) For those who did respond (15 out of 22 people), their estimates varied between 0 and 65%, with all but one in the range of 0 to 25% attribution[6]. If we remove the high outlier of 65% (activist) as well as the funder's response (20%) because of likely bias[7], the mean estimate of interviewees was 5.79%. **As a rough indication, this would give a cost-effectiveness value of 0.29 tonnes of CO2 reduction per £1 per year.**

	Number of years CO2 emissions saved / Number of years the policy was sped up by		
% attribution to Insulate Britain	1y	5y	10y
1%	0.05	0.25	0.51
5%	0.25	1.26	2.54
10%	0.51	2.54	5.08
20%	1.02	5.08	10.16

Fig. 9. Cost effectiveness analysis estimates for the Insulate Britain campaign based on varying estimates of % attribution and timing (insulation policy being brought forward sooner). All estimates are in tonnes of CO2 per £1. The colours refer to our estimates of

[6] The 15 estimates given were as follows. Where estimates were a range, the mean (given in brackets) was taken: think tank analyst: 20-25% (22.5%); academic: 6%; think tank analyst: 0%; policy analyst: 0%; Labour MP: 10%; Con MP: 0%; industry representative: 0%; industry expert/academic: 14.3%; industry/policy analyst: 0%; Insulate Britain philanthropic funder: 20%; Insulate Britain activist: 60-70% (65%); SNP MP: 20-25% (22.5%); Lib Dem MP: 0%; Con MP: 0%

[7] Of course, everyone has bias but we have removed these two due to their direct association with the campaign.

how likely the various scenarios are: green 'very likely', yellow 'somewhat likely', orange 'somewhat unlikely' and red 'very unlikely'.

In the table above (Figure 9), we model CO2 emissions saved in different scenarios. The first column shows different policy contribution percentage estimates of Insulate Britain. The first row shows different estimates for the number of additional years of emission reductions. The number of years of emission reductions is a measure of 'speeding up' policy change —- that is, 5 years would say that the policy was sped up by 5 years. The assumption here, as explained above, is that carbon saving policies will need to happen at some point to meet net zero goals. But the speed and timing of change is also important in determining the overall carbon emitted; for example, a late and deep cut in emissions means more total carbon.

Given the demonstrable effects of the Insulate Britain campaign on public and political discourse, we consider a 1% contribution extremely pessimistic. At the other extreme, given the synchronous influence of the cost of living crisis and the Ukraine war, we would consider a contribution as high as 15% to be very optimistic. Attribution estimates in the 5-10% range seem the most reasonable. **Taking the lower numbers of years of emissions saved (that is, 1-5 years of savings), this would put the range of cost effectiveness estimates between 0.25 and 0.51 tonnes of CO2 emissions saved per pound spent. We would suggest an estimate based on 10% of policy attribution to Insulate Britain and 1 year of emission savings — that is, around 0.51 tonnes CO2/£ is a realistic lowest case estimate of cost effectiveness.**

For comparison, other analyses such as the Giving Green cost-effectiveness analysis of climate activism in the US in 2021, have considered the cost effectiveness of climate protests in reducing emissions. According to their model, the cost of reducing CO2 emissions through activism was between 0.65 (in a pessimistic scenario), 6.70 (in a realistic one), and 13.72 (in an optimistic one) of metric tonnes of CO2e[8] per dollar spent.

Social Change Lab has also analysed the cost effectiveness of the Extinction Rebellion 2019 campaign. Our estimates, similarly based on a range of models ranging from highly pessimistic to highly optimistic, found that the campaign abated between 0.3 and 71 tonnes of greenhouse gas emissions per pound spent. The median estimate was 8 tonnes of emissions saved per pound spent.

Climate Emergency Fund, who support disruptive, non-violent climate activism and who funded the Insulate Britain campaign, have also conducted their own cost effectiveness

[8] CO2e refers to CO2 equivalents; according to the Environmental Protection Agency, it means "the number of metric tons of CO2 emissions with the same global warming potential as one metric ton of another greenhouse gas."

analysis of IB. Their analysis finds the cost effectiveness of their support being 3.45 tonnes of CO2 emissions reduction per dollar spent.

For comparison beyond activism, the organisation Founders Pledge assesses the most impactful organisations in certain key effective altruism interest areas. Their assessments led to them designating the Clean Air Task Force (CATF) their most highly rated climate change charity. By their estimate, CATF advocacy brings about between 0.31 and 3.88 tonnes of CO2e reduction per pound spent. **We would thus conclude that the Insulate Britain campaign was not, as the activists suggested, a "failure". Rather, their actions were similarly cost effective as an approach to climate improvements as a top-rated climate charity.**

Unaccounted benefits

There are several additional benefits of investment in home insulation that we do not include in our analysis. These include:

- Economic benefits to households from having cheaper energy bills (saving hundreds of pounds in the short term plus being protected from energy bill price hikes should international gas prices increase)
- Health and wellbeing benefits from living in warmer homes (the EEIG estimate that 10,000 excess winter deaths could be prevented by better insulated homes, as well as over £1.4billion savings for the NHS)
- New jobs (the IPPR estimate that a comprehensive energy efficiency plan could support tens of thousands of new jobs by 2030)
- National security benefits from greater energy self-sufficiency.

We mention these benefits to show that the cost-effectiveness analysis, in considering only CO2 emissions reduction, underestimates the overall benefits in some important ways.

Influencing the movement

Here, we briefly consider the effects that the Insulate Britain campaign had on the wider ecosystem of protest movements. Here, we again assume that active protest is — specifically — a necessary component of the change needed to address the climate emergency and — more generally — an essential component of a healthy democracy with active citizenship.

The Insulate Britain campaign played a direct and important role in the formation of the A22 network which was formed in late 2021. A22 is an international network made up of

12 organisations committed to effective, nonviolent civil resistance. Many of the groups (which include Letzte Generation in Germany, Just Stop Oil in the UK and Ultima Generazione in Italy) use the sort of nonviolent, publicly disruptive tactics which Insulate Britain deployed and are funded wholly or in part by the Climate Emergency Fund. Many actions involve disruption to high profile events with the aim of gaining the maximum amount of media coverage for their cause. In France, the group Dernière Rénovation followed Insulate Britain in campaigning specifically on greener homes, using similar road blocking tactics as well as actions at high profile sporting events, notably the French Open tennis championship. While a full analysis of their impact is beyond our scope, their actions appear to have played a role in the French government announcing a €7 billion investment in greener homes.

Several interviewees made the observation that Insulate Britain, as well as raising the salience of home insulation, also raised the salience of nonviolent disruptive protest as a tool for change. In the UK, several activists who were involved with the Insulate Britain campaign have gone on to take part in Just Stop Oil actions. Like Insulate Britain, this group has been very successful in generating media attention. In the short term, much of the coverage has been negative towards the group's tactics but as we have seen, this short term view on the method rather than the message presents only a partial picture.

If Insulate Britain had even a small effect on the development of the A22 network, its strategy and tactics, the successes of those groups can also be attributed in part to the Insulate Britain campaign.

Negative effects

As well as considering the unaccounted positive effects of the Insulate Britain campaign, we also briefly outline some of the potential negatives. One significant negative effect of the Insulate Britain campaign was that suffered by supporters themselves. Hundreds were arrested, nine were sent to prison during the campaign, another six were given prison sentences a few months later, and several others received suspended sentences.

The campaign also spurred the government to announce its intention to pass new measures to restrict protest. The Public Order Bill, first announced in the Queen's speech of Boris Johnson's government in May 2022, and passed into law the following year, banned actions such as 'locking on', made obstruction of infrastructure such as roads illegal and extended the stop and search powers of the police. This bill was a direct response to Insulate Britain, as outlined in Priti Patel's speech in October 2021 when the campaign was active. Boris Johnson added ad hominem attacks on campaigners, who he referred to as "irresponsible crusties". The bill was highly controversial. Campaigns were started to try to prevent it being passed into law and it was strongly criticised and

amended in its passage through the House of Lords. The legislation may have had a depressive effect on UK grassroots movements as a whole - the increased legal risk dissuading people from getting involved in public protest.

There are some more indirect potential negative effects. Several interviewees believed that the protests led to increased polarisation of the wider debate on the climate crisis, entrenching and broadening the voice of climate change sceptics. (We found a trend towards such a polarisation effect In previous research looking at Just Stop Oil.) One MP said, "*I felt that they antagonised the public and made it more difficult to argue in favour of energy efficiency measures.*" In the years since the campaign, the government has rolled back on previous environmental pledges, including those on speeding the transition to electric vehicles and banning fossil fuels. Another MP interviewed said that "*a lot of lower-middle-class people are being radicalised against green policies — and protests and protesters are partly to blame.*" The climate debate has, some suggest, become weaponised as part of the government's political strategy. According to some interviewees, disruptive protests made this easy for them to do.

Another criticism levelled against Insulate Britain is that, by targeting the government so vociferously, they let other bad actors off the hook. In particular, one interviewee pointed to the big housing companies who have been doggedly pursuing an agenda to resist toughened laws on home energy efficiency improvements. This agenda is documented in Select Committee hearings in which one MP commented how "*dismayed*" they were to hear, during the BEIS hearings, that the housing company Persimmon "*had lobbied the Government to ditch the zero carbon homes policy*." It seems legitimate to argue that these actions should be contested. However, laying blame for this not happening on Insulate Britain seems unwarranted.

Conclusion

Home insulation is not a controversial topic. In fact, the idea that we would benefit from better insulating our draughty and inefficient British housing stock, is something that almost everyone agrees on. It makes sense financially (e.g., the payback time of loft insulation is as little as 1- 3 years). It makes sense in terms of health and wellbeing (e.g., according to a 2023 House of Commons briefing, reducing the risk of asthma and other respiratory illnesses, heart disease and cardiac events, musculoskeletal conditions such as arthritis and mental health conditions such as depression and anxiety). It makes sense in terms of reducing our reliance as a nation on unpredictable, outside energy supplies. It creates jobs. And of course it makes sense in terms of reducing carbon emissions from the fossil fuels used in domestic heating.

It is unsurprising then that before Insulate Britain began campaigning, many organisations were already working on the issue of improved insulation for homes — and some had been working on it for decades. However, many of them were, as one think tank analyst put it, "*struggling to make energy efficiency interesting*" and battling to get insulation the attention it deserved. Home insulation "*was seen as boring*", and even the schemes that were available to improve home insulation were not taken up because people mostly did not know they existed. So although there were many people working on the issue, they were not getting a huge amount of traction.

Insulate Britain changed that. For the months of their campaign, and also afterwards, they "*put this topic at the top of the agenda*". In a short space of time, home insulation "*became the subject of water cooler conversations*". Although most people did not support the methods of the protesters, in fact many were vehemently opposed to them, their impact was seen in increased prominence of the topic: from within NGOs and think tanks to climate and poverty campaigners to government and the general public. There is strong evidence that the campaign had a significant impact on public discourse. As one interviewee sums it up, "*My interpretation is that the protests were unbelievably effective at making insulation go from one of many solutions to top of the list.*"

What were the tangible effects of this increased salience in discourse on government policy? It is likely, given the legally binding commitments to reduce carbon emissions, that the government would have, sooner or later, earmarked public money to improve home insulation. However, that could have been said at any point since 2008 when the net zero targets were set. For 15 years it had not happened. Then in 2022, less than a year after the Insulate Britain campaign, a year in which the topic of home insulation had been discussed and seen by millions in news reports and social media posts, the government announced a scheme specifically focused on — and named for — home insulation, The Great British Insulation Scheme.

While some argue that this was nothing to do with the protests ("*I don't think I can draw a direct line between the two*"), others argue that it was ("*The biggest proof* [of Insulate Britain effectiveness] *is in the pudding of the government meeting their demand not long after.*") There will of course always be different views on the role of any one player in outcomes as complex as government policy decisions. And there are invariably multiple necessary factors.

In our modelling of the cost effectiveness of Insulate Britain as judged by the scale of their role in this policy, we show a range of realistic estimates of the Insulate Britain campaign. At the pessimistic end (based on 1% of the policy decision being due to their actions, and on just 1 year of saved carbon emissions) the Insulate Britain campaign was responsible for 0.05 tonnes of CO2 per £. At the very optimistic end (based on 20% of the policy decision being attributable to IB, and for 10 years of saved emissions), that number is

10.16 tonnes of CO2 per £. We believe that a realistic estimate of cost effectiveness lies somewhere between these extremes, at between 0.25 and 2.54 tonnes of CO2 per £. We would suggest an estimate based on 10% of policy attribution to Insulate Britain and 1 year of emission savings - that is, around 0.51 tonnes CO2/£ is a realistic lowest case estimate of cost effectiveness.

This estimate is lower than similar estimates made for XR's 2019 UK actions (8 tonnes/£) and 2021 climate activism in the US (6.7 tonnes/$). It puts the effectiveness of the Insulate Britain campaign on a par with that of Clean Air Task Force, the climate charity evaluated (on the basis of bringing about emission reductions of 0.31 and 3.88 tonnes of CO2/£) as being the most effective.

Limitations

We have discussed some of the major confounding factors in attributing Insulate Britain's role in policy. In particular, contemporaneously, the UK was in the midst of a cost of living crisis and Russia invaded Ukraine, both of which factors meant that many minds were thinking of ways to reduce the cost of home heating. The likelihood is that several factors contributed. It could be argued that these events were more important influencers on the announcement of the Great British Insulation scheme. It could also be argued that the critical nature of these events might have prompted more direct and immediate action such as price caps on fuel, since even the fastest insulation scheme would still take several months to start to benefit households.

The history of the ECO scheme, its timing and its nature further complicate the issue of attribution to policy. The timing of COP26 in Glasgow, taking place during the Insulate Britain campaign, could also have affected the amount of discussion of climate relevant topics (including home insulation) in the media and in public discourse.

Other limitations of our research include the sampling bias of interviewees. While we sought out voices from many points on the political spectrum and people coming from different perspectives (industry, charity, politics, etc), the small samples involved in this sort of work mean any sample is not completely representative.

We thank everyone who gave their time and expertise to contribute to this research.

About Social Change Lab

Social Change Lab conducts and disseminates social movement research to help solve the world's most pressing problems, focusing predominantly on animal advocacy and climate change.

We seek to inform advocates, decision-makers and philanthropists on the best ways to accelerate positive social change. You can see a list of previous research projects here.

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