IPIE

International Panel on the Information Environment

Obstruction by Design

Evidence Gaps on Intermediaries and Information Integrity in the Climate Transition

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SYNOPSIS

The fossil fuel industry opposes climate policy through intermediaries such as trade associations, public relations firms, consultancies, and think tanks. These organizations influence public opinion and policy development on the climate transition, yet their sources of operations and funding are largely obscured by their intermediary role. Researchers seeking to account for the structure and influence of this intermediary network and aiming to make evidence accessible are hampered by limitations in the regulatory and legal context. These include a lack of content moderation policies on social media platforms; a lack of disclosure requirements for political support on social media; limited researcher access to social media data; a lack of disclosure requirements for private-sector coalitions; and growing patterns of harassment and intimidation of researchers.

Platform monetization policies, advertising technologies, and generative artificial intelligence amplify the influence of these intermediaries on climate communication. Taken together, the financial and discourse networks of climate misinformation present formidable obstacles to information integrity.

The report reviews research on the intermediary network and the obstacles to studying it, and identifies ways that civil society organizations, the media, platforms' trust and safety teams, policymakers, and regulators could respond:

1. **Train climate researchers in investigative methods**: Open-source investigation techniques adapted from journalism let researchers collect and cross-reference social media posts, websites, and platform metadata to identify key disinformation actors.
2. **Build collaboration with technology policy actors**: Partnerships that bring academic researchers and climate communicators together with platform trust and safety experts can diagnose threats to trust in climate information and develop recommendations for content moderation.
3. **Give researchers access to media monitoring tools**: The subscription-based social listening tools that marketers use to track campaigns could help researchers overcome the limits of studying climate disinformation across platforms.
4. **Fund coordination among research centers and observatories**: Independent organizations that monitor anti-climate behavior lack the resources and central body needed to produce coordinated accounts across geographies and issue areas. Support for collaboration and for issue hubs built around defined problems would strengthen their impact.

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SECTION 1. MAPPING THE LANDSCAPE

Despite the robust scientific consensus on the role of fossil fuel combustion in global warming, climate policy has not kept pace with that consensus. Research in organizational theory, political science, and sociology attributes part of the gap between science and policy to organized networks that contest climate science, fund advocacy, and lobby against regulation [1], [2], [3], [4], [5], [6], [7], [8].

Researchers in academia and civil society document these networks, but several obstacles limit their ability to compile accurate data on the funding, sources, and reach of disinformation and influence campaigns. Section 3 describes these obstacles.

This report identifies the challenges to building an evidence base on climate obstruction, including regulatory gaps that keep key funding and communications undisclosed, and proposes research steps to strengthen it.

Identifying the actors and organizations behind climate disinformation is a prerequisite for studying it. The "networks of opposition" to the climate transition are well established, well resourced, and largely hidden from public view [1]. Their work extends beyond short-term information and influence campaigns to long-term advocacy that cultivates a social and regulatory environment favorable to continued reliance on fossil fuels. This advocacy sustains the public legitimacy of fossil fuel infrastructure, sometimes termed a social license to operate. Each obstacle identified in this report concerns how that legitimacy is financed or communicated.

Over the past 50 years, these networks have mobilized business interests and free enterprise ideology against environmental and climate regulation [1], [2], [3], [4], [5], [6], [7], [8]. Such power networks exert influence through both discursive and financial means. Sociologist David Knoke argues that the two should be examined

separately, calling communication ties "influence networks" and financial ties "domination networks" [9]. In his words:

> The patterns, meanings, and significance of both types of ties vary so greatly among elites that their conflation into a single power network would obscure the distinctive contributions that each makes to system differentiation and structural integration. Rather, researchers must investigate how the influence and domination networks each mutually shape and constrain one another [9].

Scholars examining the features of corporate political action have documented specific ways corporations have used organizational intermediaries to influence the political environment and exert power over other sectors of society, such as environmental and public interest groups [10]. Stephen Barley [5] identifies nine types of organizations that function as "command posts" to exert intermediary influence:

1. *Peak organizations* are associations made up of other organizations, such as trade associations and chambers of commerce. These organizations coordinate funding and political campaign contributions; monitor government activities; and lobby on behalf of their members. Robert Brulle and Christian Downie [11] found that United States-based trade associations implicated in hampering climate policymaking spent over 3 billion USD over a 10-year period, from 2008 through 2018, on political activities including advertising, lobbying, grant-making, and political contributions. Trade associations confer legitimacy on major carbon producers by presenting the interests of a few firms as the position of an entire sector, which lets those firms influence policy without bearing the reputational cost of direct advocacy.
2. *Political action committees* (PACs) are tax-exempt organizations that can raise funds for political candidates or legislative initiatives. PACs can take on an advocacy function and carry out advertising campaigns to support a

particular political position [12]. Stephen Ansolabehere and others [13] argue that PAC contributions are employed specifically to gain access to legislators.

3. *Government affairs* or government relations bureaus are the communications arms of corporations that engage government officials directly. These can be located within the corporation or as part of a public relations firm [2], [14].
4. *Public relations firms* working for fossil fuel clients develop information and influence campaigns through the media and sponsor advocacy initiatives among affiliated or nonaffiliated groups on behalf of their clients [15], [16]. Sometimes criticized as "astroturf" or inauthentic grassroots campaigns, these initiatives incentivize publics such as employees, customers, suppliers, and consumers to contact their political representatives to express opposition to or support for pending climate policies.
5. *Law firms and lobbying firms* are hired by peak organizations, PACs, and public relations and government relations firms to advocate for their or their clients' positions. Brulle [17] shows that lobbying expenditures rise in relation to "the introduction and probability of passage of significant climate legislation." Sung Eun Kim and others [18] examine lobbying disclosure data related to electric utilities.
6. *Issue-specific organizations* such as business coalitions or transnational advocacy networks are made up of actors united around a common policy agenda or issue. Downie [19] examines how issue-specific business coalitions created in the gas, oil, and coal industries between 2013 and 2017 have "shaped contemporary policy contests" around climate change [20]. Jonas Meckling [21] shows how business-led advocacy coalitions emerged around carbon trading schemes as a strategy to avoid more formal and restrictive climate policies.

7. *Conservative philanthropic foundations* help fund the ideological opposition to the climate transition. Brulle [3] traces the links between philanthropic foundations engaged in climate countermovement activity and the organizations they fund, examining both the levels and the sources of the financial resources they wield.
8. Pro-business *think tanks* are often used to insert a free-market perspective into policymaking discourse. Several recent studies have documented think tanks' influence on opposition to climate policy. Núria Almiron and Jordi Xifra [22] document the presence of climate-skeptic, or "obstructionist," think tanks in several countries across Europe.
9. *Administrative appointments and advisory committees within government* offer advocacy opportunities for business leaders and their corporate interests. Starting in the 1970s, researchers raised concerns about a "shadow government" of private special interests that influence policymaking through roles within governmental agencies [23]. Nicholas Ashford [24] documents the potential for political manipulation of government advisory committees in relation to environmental policy. Steven Balla and John Wright [25] further show how these political roles allow interest groups to gain information about the ins and outs of a given policy in order to influence its implementation. Timothy Donaghy and others [26] write about political interference in federal climate science that occurs through these appointments.

These nine types of organizations coordinate and amplify corporate political influence while dissimulating the appearance of direct corporate interference in political affairs. The organizations coordinate flows of information, funds, and personnel across the network and synchronize strategies, campaigns, and targets for dissemination throughout information environments. Researchers studying climate countermovement network effects have shown that these corporate-

funded organizations have helped shape not only the production but also the language and thematic content of ideological polarization around climate change and potential solutions to it [27], [28].

Scholars generally agree that many of the intermediary network organizations engaged in climate obstruction originate in the United States. Considerable research has demonstrated that this organizational field extends to other countries, with similar effects [29]. In international climate policy, these organizations have mobilized to influence decision-making at major international summits such as the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP). They also question the legitimacy of science and scientists working with global governance organizations, such as the Intergovernmental Panel on Climate Change (IPCC), to address the global risks of climate change [4], [30].

Civil society and academic research partnerships have corroborated and updated these findings. Greenpeace USA's *Dealing in Doubt* traces organized attacks on climate science and climate scientists from the early 1990s to 2013, and lists the think tanks funded by ExxonMobil, DonorsTrust, and Donors Capital Fund [31]. The Corporate Mapping Project, a research partnership led by the University of Victoria, the Canadian Centre for Policy Alternatives, and the Parkland Institute, has mapped the ownership networks and political influence of the fossil fuel industry in Western Canada [8], [32].

More recent examinations of corporate political influence in the international information environment have surfaced the roles of additional intermediaries including economic and management consultants [33], [34]; universities [35], [36], [37], [38]; banks and fund groups such as pension funds [6], [32]; and conservative media outlets [39], [40], [41].

In the current digital information environment, the role of media and technology platforms as corporate political intermediaries deserves particular scrutiny. In Australia, the Senate appointed the Select Committee on Information Integrity on Climate Change and Energy on 30 July 2025 to inquire into the prevalence and impacts of climate and energy mis- and disinformation [42]. The committee solicited submissions from the public and from experts, including one from the University of Technology Sydney that argued:

> To be effective, efforts to address problems of information integrity must therefore encompass a range of policy and regulatory measures, including: A broad-based regulatory framework to promote general digital platform transparency and accountability for, inter alia, algorithm and other system design, data collection, political and other targeted advertising, and the impacts on human rights, including freedom of expression [43].

Emerging research examines how commercial platforms and search engines enable asymmetrical monitoring, data exploitation, persuasion networks, and predatory advertising. In the realm of climate misinformation, one study reveals that a coordinated network of accounts on the social media site X, formerly Twitter, uses recurring events, such as cold weather and climate conferences, to spread doubt. Its network map identifies a small number of highly influential and retweeted accounts among climate deniers [44]. A second study examines more than 20 million posts on Facebook, Instagram, Twitter, and YouTube from 2018 to 2022 and shows that social media discussion tracks offline climate events such as Climate Action Week, COP26, and Fridays for Future strikes [45]. A third study examines Twitter discussion of United Nations (UN) climate conferences from 2014 to 2021 and finds a sharp rise in ideological polarization at COP26, which the authors attribute to growing right-wing activity [46].

The report proceeds in three sections. Section 2 profiles 25 organizations that research financial and economic obstruction of the climate transition, identifying

the reports and datasets most relevant to this analysis. Section 3 examines the obstacles that limit this research, including opaque funding channels, shrinking access to platform data, lax disclosure rules for intermediaries such as public relations firms, and growing legal and personal risks to researchers. To address these obstacles, Section 4 proposes recommendations for civil society groups, journalists, platform teams, and regulators who use the IPIE's evidence.

SECTION 2. MAJOR RESEARCH ORGANIZATIONS

This section profiles, in alphabetical order, 25 organizations that research financial and economic obstacles to information integrity around the climate transition, as well as selected reports and datasets. The Scientific Panel on Information Integrity and the Climate Transition assembled the list of organizations. It is a nonexhaustive representation of prominent organizations engaged in international and intergovernmental research and policy negotiations around the climate transition. This list serves as a reference for sources of reliable and credible documentation of international climate obstruction activities.

ANU Institute for Climate, Energy and Disaster Solutions

The Institute for Climate, Energy and Disaster Solutions at the Australian National University (ANU) conducts research on climate and energy misinformation in Australia.

ARIA

Based in Brussels, the Analysis, Research, Insight, Action (ARIA) group researches obstruction of the climate transition, including industry influence on international political and legal systems. Their research investigates activities that result in financial support for fossil fuel infrastructure and unrealistic solutions, including carbon capture and storage and other emission-reduction strategies that do not align with the climate transition.

Center for Climate Integrity

The Center for Climate Integrity is an advocacy group located in Washington, D.C. that investigates corporate obstruction and deception regarding climate change, natural gas, and plastics in the United States. Its December 2025 report, *Big Oil's Deceptive Climate Ads: How Four Oil Majors Sold False Promises from 2000–2025*,

reviews the narratives and framing of the four companies' advertising campaigns over that 25-year period [47]. Its appendices reproduce the advertisements and catalog the campaigns [48], [49].

Center for International Environmental Law

Attorneys and policy experts at the Center for International Environmental Law provide legal counsel, advocacy, policy research, and capacity building across four program areas: Climate and Energy, Environmental Health, the Fossil Economy, and People, Land and Resources. The Center maintains offices in Washington, D.C. and in Geneva, Switzerland, and develops legal strategies to counterbalance the power of multinational corporations and strengthen corporate accountability across borders. Most relevant to this report is its 2026 brief *Deep Pockets, Dirty Profits: How Banks and Investors Are Financing the Global Petrochemical Industry*, which examines financial flows from banks and investors to 15 global petrochemical companies [50]. The Center also compiled a dataset, available on request, of 531 carbon capture and storage lobbyists at the 30th Conference of the Parties (COP30), the 2025 UN climate summit [51].

CGIAR

CGIAR, originally the Consultative Group on International Agricultural Research, is a global research partnership headquartered in France. It works on food security and natural resource management, aiming to help food, land, and water systems withstand climate change. A recent CGIAR Climate Security project under its Climate Action program is studying the online circulation of climate-related disinformation in Brazil and its influence on the public's understanding of the Amazon.

ClientEarth

Lawyers and policy experts at the environmental law charity ClientEarth focus on climate obstruction by banks and corporations. The organization works across Europe, Asia and the Pacific, the Americas, and Africa. Its publication most relevant to this report is *Digital Distortion: How Social Media Platforms Are Driving Climate Disinformation in Europe and Beyond*, released in November 2025 [52].

Climate Accountability Lab, University of Miami

The Climate Accountability Lab at the University of Miami, headed by Dr. Geoffrey Supran, studies the history of fossil fuel-related climate disinformation and the role of institutions and networks in reinforcing fossil fuel dependence. A 2024 *WIREs Climate Change* review co-authored by Supran investigated ties between the fossil fuel industry and higher education [53]. Supran also testified at the May 2024 hearing of the U.S. Senate Committee on the Budget on Big Oil's efforts to avoid accountability for climate change [54].

Climate Action against Disinformation

Climate Action against Disinformation is a global coalition of organizations working to strengthen responses to climate mis- and disinformation. As an advisory member of the Global Initiative for Information Integrity on Climate Change, it works with the Government of Brazil, the UN, and the UN Educational, Scientific and Cultural Organization (UNESCO). Its newsletters, press briefings, and reports track sources of climate mis- and disinformation, including spending on fossil fuel advertising, lobbying at UN climate summits, and technology platforms.

Its members include regional organizations that investigate climate influence operations, map funding and amplification networks, and track climate denial and delay campaigns across continents. The coalition recently launched the "aCAADemy of Obstruction," which connects practitioners with academic

researchers to bring peer-reviewed findings into policymaking. It also maintains a bibliography of scholarly and gray literature on climate disinformation.

Climate Investigations Center

The U.S.-based Climate Investigations Center is a nonprofit that monitors corporations, front groups, individuals, political organizations, and trade associations working to delay climate-related energy and environmental policy in the United States. It maintains a library of primary documents, most of them historical, on oil company strategies and operations.

Climate Litigation Lab

Part of the Oxford Sustainable Law Programme at the University of Oxford, the Climate Litigation Lab works with legal teams to develop evidence and strategy for holding the fossil fuel industry accountable. Its researchers quantify climate damage and investigate historical archives. The Lab also maintains the Oxford Carbon and Climate Advertising Library, a research collection of 3,000 climate-related advertisements created for fossil fuel producers that Appendix A describes in more detail [55].

Climate Social Science Network

The Climate Social Science Network is an international network of social scientists researching political conflict concerning the climate transition. Its research focuses on organizations around the world involved in this conflict and the activities through which they shape climate policy, media coverage, and public understanding. Two edited volumes from the network, *Climate Obstruction across Europe* and *Climate Obstruction: A Global Assessment*, document obstruction strategies in Europe and worldwide [29], [56]. The network also hosts working groups on the following topics, among others:

- Climate Obstruction in the Financial Sector, on the role of banks, insurers, investment firms, and other financial institutions in obstructing climate action
- Global Census of Climate Obstruction Organizations, on the actors, organizations, foreign partners, and strategies involved in climate obstruction
- Spinning Climate Change, on the role of public relations and greenwashing

Conscious Advertising Network

The Conscious Advertising Network is a U.K.-based nonprofit coalition of civil society groups, media agencies, technology providers, and other organizations that promotes sustainable and ethical advertising. In April 2026, the Network and the UN Department of Global Communications published an issue brief, *Strengthening Information Integrity: Advertising, Artificial Intelligence and the Global Information Crisis*, which examines the role of advertising in the information environment, the commercial incentives shaping digital media, and the growing use of artificial intelligence in advertising [57].

Corporate Europe Observatory

The Corporate Europe Observatory is a Brussels-based nonprofit that exposes the tactics, spending, privileged access, and connections of corporate lobbyists in European policymaking, including on climate and energy. Its 2026 report with LobbyControl ranks the corporations spending the most on lobbying in the European Union (EU) and highlights heavy spending in agribusiness, banking and finance, chemicals, energy, and technology [58]. The full dataset, including the list of lobbyists, is publicly available. With Corporate Accountability and Global Witness, the Observatory also identified 636 fossil fuel lobbyists registered for COP27 in 2022 [59].

DeSmog

DeSmog is an international reporting and research organization focused on climate disinformation and obstruction, headquartered in the United States, with a separate entity in the United Kingdom. It maintains six databases [60]:

- Advertising and Public Relations Database: advertising and public relations firms that have protected the reputations of fossil fuel clients and created greenwashing campaigns
- Agribusiness Database: international agribusiness companies' and organizations' current messaging on climate change, lobbying around climate action, and histories of climate science denial
- Air Pollution Lobbying Database: organizations opposing or seeking to weaken planned air quality measures in the United Kingdom
- Climate Disinformation Database: individuals and organizations engaged in climate disinformation internationally
- Industrial Aquaculture Database: major producers' positions on sustainability, fish feed supply chains, and lobbying records
- Koch Network Database: individuals and organizations linked to the Koch family, Koch Industries, and related entities

Drilled Media

Drilled is a global media organization that aims to conduct "independent, cross-border investigations into climate obstruction," including disinformation, undisclosed political funding, and legal threats against climate researchers.

Energy and Policy Institute

The Energy and Policy Institute is a U.S. nonprofit that investigates how fossil fuel companies and electric utilities companies obstruct the climate transition. Its

reports examine front groups, often called dark money groups because they do not disclose their donors, and these groups' spending on advertising and campaign contributions. A 2026 report on utility companies' contributions to Section 527 political organizations includes a searchable table of all utility companies' and utility trade associations' contributions, compiled from Internal Revenue Service (IRS) Form 8872 filings [61]. The Institute also tracks state energy legislation.

Forum on Information and Democracy

The Forum on Information and Democracy is a European nonprofit working on information integrity, focusing on artificial intelligence, climate change, media sustainability, and the transparency and accountability of large technology companies. In February 2025, the Forum launched a workstream on information integrity concerning climate change and environmental issues, co-chaired by the governments of Armenia and Brazil [62].

Global Energy Monitor

California-based Global Energy Monitor builds open-source tools and maps of the global energy system, including four trackers covering the finance and ownership behind energy assets [63]:

- Global Coal Project Finance Tracker: "Tracks global financial flows to coal power projects, identifying lenders, investors, deal terms, and financing timelines at the asset level."
- Global Energy Ownership Tracker: "Open, global data on who ultimately owns key energy assets, from individual projects to multinational parent companies."
- Global Gas Finance Tracker: "Covers project-specific finance transactions for in-development LNG terminals and gas-fired power plants. Current

tracking includes Australia, Canada, Latin America, the Caribbean, and parts of South, East, and Southeast Asia."

- Private Equity Tracker: "Maps private equity ownership of global energy assets, linking firms to fossil fuel companies, infrastructure, emissions, and financial risks."

InfluenceMap and LobbyMap

The InfluenceMap think tank investigates how companies and financial institutions influence climate policy. Headquartered in London, with offices in seven major cities in the Americas, Asia, Australia, and Europe, the organization's reports cover corporate influence on climate policy by sector and region, the strategic narratives industries use, and their opposition strategies and lobbying tactics. Its LobbyMap database profiles and ranks 1,000 companies and 330 industry associations lobbying on climate policy worldwide [64].

Institute for Strategic Dialogue

The Institute for Strategic Dialogue studies online manipulation and information warfare, including campaigns targeting the climate transition, from its bureaus in the United Kingdom, the United States, Germany, Jordan, Canada, and France. Its recent policy briefs examine the regulatory challenges that conflict-related risks and illegal content on small platforms pose for governments and regulators [65], [66].

Latin American Center for Investigative Journalism (CLIP)

CLIP is a Costa Rica-based nonprofit that conducts investigative reporting on climate change, misinformation, and other issues. One series investigates carbon credit projects in the region that have not delivered their promised benefits [67].

Oii: Observatory for Information Integrity – Climate, Environment, and Democracy

FALA, a Brazilian impact studio, launched the Oii observatory in 2025 to track conspiracy theories, false narratives, and climate obstruction on Brazilian digital platforms. Since 2020, FALA's Lies Have a Price project has studied the "supply chain" through which environmental and climate misinformation is created, amplified, and weaponized.

Re.Climate

Re.Climate is a Canadian research and training center for climate communication. Its reports on climate misinformation in Canada include analyses of media coverage [68], [69], and it also conducts and summarizes public opinion surveys on climate change [70].

UNESCO and United Nations Department of Global Communications

Since 2024, the UN has issued guidance and recommendations to help member states protect information integrity [57], [71], [72]. At COP30 in Belém in November 2025, the Global Initiative for Information Integrity on Climate Change, a partnership of Brazil, the UN Department of Global Communications, and UNESCO, launched a Declaration on Information Integrity on Climate Change [73]. The Declaration commits signatories to countering climate disinformation and promoting accurate, evidence-based information on climate issues. In 2025, the Initiative's Global Fund received 447 proposals from nearly 100 countries and began funding a first group of projects with 1 million USD from the Government of Brazil [73].

Union of Concerned Scientists

The Union of Concerned Scientists is a U.S. nonprofit, founded in 1969, that conducts research and advocacy on environmental and security issues. Its climate work focuses on holding fossil fuel companies accountable for deceptive practices. Its May 2025 report, *Decades of Deceit*, sets out the case that major fossil fuel companies have committed climate fraud and are liable for damages [74].

SECTION 3. OBSTACLES AND CONSTRAINTS

This section examines some of the financial and economic obstacles facing the organizations identified in Section 2, along with the data and access constraints that limit their research. First and foremost is the challenge of tracking and documenting climate obstruction in a digitized and increasingly automated information environment. Research has shifted from a focus on legacy media and direct sources to influencer content, programmatic advertising, and generative artificial intelligence, making it significantly harder to access sources, content, and funding. Moreover, social media systems are overwhelmingly controlled by industrial actors, which may increase the risk of bias and distort vital evidence needed for effective policy and regulation [75].

Accessing Sources of Financial Flows

Because researchers lack access to primary records of funding within opposition networks, nearly every organization profiled in Section 2 reconstructs financial flows from disclosure regimes built for other purposes. One study combines IRS tax data on the income of 91 countermovement organizations with Foundation Center records of grants to them [3]. Another uses U.S. federal lobbying disclosures from 2005 to 2024 to estimate that the oil and gas industry spent nearly 1 billion USD lobbying for carbon capture subsidies [76]. InfluenceMap measures industry advertising with data from the Meta Ad Library [77]. The Energy and Policy Institute reconstructs trade association funding from utility rate cases, where utilities list Edison Electric Institute dues among their operating expenses [78]. The *Banking on Climate Chaos* report, produced by a coalition led by Rainforest Action Network, compiles details of lending and underwriting supplied by the 65 largest banks to more than 2,700 fossil fuel companies [79]. Each proxy captures a single channel of spending, but none connects a specific payment to a specific message.

The trail often ends at the original funder. Brulle found that ExxonMobil and Koch-affiliated foundations pulled back from traceable giving after 2008 [3]. Meanwhile, funding through intermediary vehicles such as DonorsTrust rose sharply, and by 2010 DonorsTrust alone accounted for a quarter of traceable foundation funding to organizations promoting climate denial [3]. Public records could account for only a fraction of these organizations' total income [3]. An update extending the analysis through 2018 found DonorsTrust and Donors Capital Fund still coordinating donations while keeping core donors anonymous [80].

U.S. federal rules have since widened this gap. Under 2020 Treasury regulations, trade associations and social welfare organizations no longer report the names of donors giving 5,000 USD or more, even to the IRS, and report only the amounts [81]. Membership dues paid to trade associations are generally not treated as contributions on Schedule B, the form on which tax-exempt organizations report their contributors [82]. Trade associations, the main conduit for industry legitimation identified in Section 1, are therefore the intermediaries that these disclosure rules cover least.

Payments to social media influencers for political support follow the same pattern in a newer channel, since no federal rule requires their disclosure [83]. Even the payments that appear in campaign finance reports are often routed through third parties [83].

Tracking Industry Communications

The EU Digital Services Act regulation (DSA) mandates that Very Large Online Platforms (VLOP) and Very Large Online Search Engines (VLOSE) maintain public advertising repositories for public access. The DSA requires these repositories to include advertising content, targeting criteria, and payment details, among other information. In principle, researchers can consult these ad libraries at will to evaluate how paid commercial content influences the information ecosystem. In

practice, the repositories have been found lacking in several respects [84], including:

- lack of compatibility across ad repositories
- limited application programming interface (API) data
- limited data for studying self-promotion and influencer content
- limited search capability
- missing or inaccurate advertising data
- weak user interface

From December 2023 to January 2024, the Mozilla Foundation conducted an independent assessment of 11 of the largest companies' advertising repositories for robustness, reliability, and effectiveness, concluding that "none of these ad repositories are fully fit for the purpose of researchers…" [84, p. 47].

Similar obstacles arise outside the EU. In Brazil, where electoral rules require Meta to keep a public repository of election ads with accurate data on spending, reach, payers, and targeting, the IPIE's audit of 7,677 ads from the 2026 presidential election found that Meta returns something under every heading the rules name, yet reports spending only in broad ranges, relies on self-declared payer information, and limits targeting data to age, gender, and location (TP2026.3). As the authors conclude, "a repository can meet the letter of a disclosure rule while leaving its purpose unmet" (TP2026.3, p. 24).

With respect to climate issues specifically, peer-reviewed studies have documented advertising strategies used by fossil fuel companies that exploit programmatic, or automated, advertising systems to maintain visibility in crowded information environments [85], [86]. As artificial intelligence starts being used in programmatic advertising, identifying the source, funding, and targeting of ads will become even harder [57].

Commercial monitoring services such as Kantar Media and Meltwater allow partial tracking of broadcast placements, earned media, and social media, but subscriptions are costly. Meltwater's published prices start at 10,000 USD a year, and its Pro tier starts at 25,000 USD [87]. Platform data has also become harder to obtain. X, formerly Twitter, replaced free research access with paid tiers costing 100 to 42,000 USD a month, and a survey by the Coalition for Independent Technology Research found more than 100 studies of the platform canceled, suspended, or altered as a result [88]. Meta shut down its CrowdTangle monitoring tool on 14 August 2024 despite petitions from researchers and journalists, and 88% of researchers surveyed expected the closure to hinder their work [89]. Its replacement, the Meta Content Library, excludes for-profit newsrooms [89]. Scraping is no longer a reliable workaround, since platforms now block it through Completely Automated Public Turing tests to tell Computers and Humans Apart (CAPTCHAs), dynamic rendering, Internet Protocol (IP) address restrictions, and JavaScript obfuscation [90].

What remains visible depends on how advertisers label their ads. The Meta Ad Library shows all active ads. Once an ad stops running, the library retains it only if it is classified as election, political, or social issue advertising [91]. InfluenceMap found fossil fuel ads that had not been labeled correctly [77], and ads paid for by Chevron and Shell did not always identify these companies as their sponsors [92]. Targeting data is published only for these labeled ads, and only for ads run from August 2020 onward [91]. Researchers can therefore see industry targeting only when the industry has classified its own ads as political.

The newsrooms that turn this evidence into public knowledge are also shrinking. In the United States, layoffs left CBS News without climate reporters, and the *Washington Post*'s February 2026 layoffs cut its climate desk by 74% [93]. National Public Radio (NPR) closed its standalone Climate Desk and cut its climate team by

22% [94]. Global climate coverage in 2025 was 38% below its 2021 peak [93]. The decline matters for accountability because journalism has brought much of the evidence on industry obstruction to public attention, from the leaked 1998 American Petroleum Institute communications plan [95] to the Unearthed recording of an ExxonMobil lobbyist [96].

Incommensurate Metrics

Companies report their climate impact using different accounting choices, which makes sector-wide comparison difficult. Ketan Joshi's compilation of emissions data produced by large technology companies shows each firm adjusting its figures differently, with some applying offsets and others substituting projected figures for actual ones [97]. The resulting distortion can be large, as a *Guardian* analysis of in-house data center emissions at Apple, Google, Meta, and Microsoft from 2020 to 2022 shows [98]. Using location-based accounting in place of the renewable energy credits the companies had netted out, the analysis found emissions nearly eight times higher than reported.

The trackers themselves measure different things in different units and share no common data schema. DeSmog maintains separate databases on agribusiness, climate disinformation, the Koch network, and U.K. air pollution lobbying, each built from profiles of people and organizations [60]. Global Energy Monitor tracks physical assets such as extraction sites, mines, pipelines, and power plants, with separate trackers for cement, coal, methane, oil and gas, and steel [63]. InfluenceMap scores companies and trade associations on an A-to-F scale combined with a lobbying intensity measure [64]. The Energy and Policy Institute works from dues records and utility rate cases [78]. Because the datasets do not use a common identifier, linking a Global Energy Monitor asset to its owner's InfluenceMap score requires manual entity matching. The same is true for linking that owner to its trade associations and to the think tanks in DeSmog's database.

Firms' published self-assessments do not solve this problem, because each firm defines alignment on its own terms [99].

Spending data also cannot establish effects. Most trackers measure inputs such as advertisements, dollars, and meetings, so the link from input to policy outcome or public belief remains largely inferential. Additionally, laws can rarely be attributed to a particular lobbying effort [76].

Uneven Coverage in Terms of Access, Geography, and Study Period

Table 1 summarizes the access, geographic coverage, and time depth of major datasets. Coverage follows disclosure law, so the richest data come from jurisdictions with filing requirements, such as the EU, the United Kingdom, and the United States. National oil companies such as Petrobras and Saudi Aramco

Table 1. Access, Geographic Coverage, and Time Depth of Major Datasets.

Dataset	Access	Geography	Time depth
Banking on Climate Chaos	Open dataset	65 largest banks	2016 onward
Brulle counter-movement funding	Published academic data	United States	2003 to 2010, updated to 2018
DeSmog Climate Disinformation Database	Open web profiles	United Kingdom and United States primarily	U.K. database launched 2017
Global Energy Monitor, Global Cement Tracker	Open, download through a form	Global	Proposed since 2018, retired since 2021
Global Energy Monitor, Global Coal Plant Tracker	Open under CC BY 4.0, download through a form	Global	Proposed units since 2010, retired since 2000
Gulden and Harvey carbon capture lobbying	Published academic data	U.S. federal	2005 to 2024
Meta Ad Library targeting data	Public, labeled political ads only	Global, uneven by country	Ads from August 2020
Meta Content Library	By application through the Inter-university Consortium for Political and Social Research, academics and nonprofits only	Global	Varies

Source: [3], [60], [63], [76], [79], [80], [91], [100], [101].

are therefore documented far more thinly, as are intermediaries working in languages other than English. Platform advertising data, the most direct record of current influence campaigns, begins only in August 2020, whereas asset and finance trackers reach back one to two decades.

Industry access to climate negotiations has been documented systematically only since 2023, when the UNFCCC began requiring delegates to disclose their affiliations [102]. At COP27 in 2022, before that requirement took effect, at least 636 fossil fuel lobbyists registered, many of them through national delegations [59]. Industry presence inside national delegations at earlier summits therefore cannot be reconstructed systematically.

The post-2008 shift from traceable foundation grants to pass-through vehicles such as DonorsTrust [3] also limits how long any funding dataset remains current. Brulle's data establish the timing of this shift but not its cause, so a dataset mapping one period's funding channels may miss the channels for successive periods.

Challenges to Accountability

Several types of boundary organizations operate with little regulation and little accountability for the effects of their services. Advertising agencies, consultancies, and public relations firms are generally not required to disclose their clients. Because public scrutiny can deter firms from representing controversial clients, the absence of disclosure removes this check.

These firms are also not bound by strict conflict-of-interest rules, so a single holding company can represent clients working at cross-purposes on the same policy. Law firms must run conflict checks, obtain client consent, and in some cases withdraw from representation, but no equivalent rule binds advertising, consulting, or public relations firms. Both McKinsey and agencies owned by the advertising group WPP, for example, have served clean energy companies and

carbon producers at the same time, with no mechanism requiring disclosure to either client [103].

Lobbying is the apparent exception, since the U.S. Lobbying Disclosure Act and the EU Transparency Register require registration. Enforcement, however, is weak, and referrals under the Act to the U.S. Attorney's Office for the District of Columbia rarely lead to prosecution [104]. U.S. filings report issue areas rather than positions taken, and employees spending less than 20% of their time lobbying for a client are exempt from registration [105]. A "strategic advice" carve-out also lets firms shape a campaign without triggering disclosure [106]. Both systems therefore record that a lobbying relationship exists but not its content, and often not its full extent.

For advertising agencies, consultancies, lobbying firms, and public relations firms alike, the absence of enforceable conflict-related rules is a structural feature of their sector rather than a gap in an otherwise functioning regulatory scheme. It allows the same firm to sell climate credibility to one client and climate obstruction to another, as the McKinsey and WPP examples illustrate [103].

Risks to Researchers

As evidence mounts that fossil fuel companies have accelerated climate change and misled the public about the dangers of their products, opposition groups have increased attacks against climate researchers producing this evidence in academic and legal spheres [107]. Advocacy groups have also been targeted in relation to their efforts to raise awareness of climate damages caused by fossil fuel companies [108], [109].

At the same time, regional and federal governments in the United States and internationally have taken steps to limit support for climate-related research. In the United States, climate researchers have experienced delayed or canceled federal grants and political influence over grant funding selection [110]. Climate

research is further threatened by the transformed missions of government agencies dedicated to climate-related research, such as the National Oceanic and Atmospheric Administration and the Environmental Protection Agency [111], [112], and by the concurrent rise of recruitment initiatives by countries outside the United States [113], [114].

Opposition groups with ties to the fossil fuel industry aim to discredit scientific findings and scientific researchers in order to stymie legal efforts to hold fossil fuel companies accountable for climate damages. Research documenting fossil fuel companies' role in misleading and deceiving the public, and casting doubt on the reliability of climate science, has contributed to the evidentiary basis for imposing legal liability on the industry [115]. Additional research efforts in climate attribution science, which assesses connections between extreme weather events and climate change, are also used in lawsuits against major industry actors to require companies to address climate change [116].

Opposition groups target academic researchers studying climate change. Recent investigations have documented the use of open records requests by opposition groups to intimidate and discredit scholars at U.S. public universities [107], [117]. Journalists with the news site *Politico* documented "more than 100 open records requests filed at 19 public universities across the country, targeting at least 30 researchers over the past five years," with more than half filed since November 2024 [107]. The journal *Nature* documented over 30 open records requests to public universities since 2024 seeking research correspondence related to climate attribution by faculty scientists [117]. At least one private university in the United States has also been targeted by a law firm for producing research about climate obstruction [118].

On social media, online harassment of climate scientists has implications for researchers' professional and personal lives. A 2023 survey by Global Witness

found that climate scientists with greater prominence in publications and media appearances face increased harassment [119]. Attacks on researchers' reputations and credibility accompany attacks on the science itself. The survey documents effects on researchers' mental health as a result of continued harassment. A recent study found that online harassment of scientists leads to indirect effects on the perceived risk by "bystander" scientists as scientists face mounting harassment: "The elevated sense of personal risk may add a further psychological burden by creating a persistent expectation of being targeted" [120]. Universities are not equipped to process bad-faith open records requests and do not assume responsibility or offer protection or training for the psychological and professional burden placed on their faculties [107].

Watchdog organizations also face legal and financial risk. In a suit brought by the pipeline company Energy Transfer, a North Dakota jury found Greenpeace entities liable for more than 660 million USD, and the court later entered a 345 million USD judgment [108]. North Dakota also has no law allowing early dismissal of strategic lawsuits against public participation (SLAPPs) [109]. Elon Musk's X Corp. sued the Center for Countering Digital Hate over its research on X, and a federal judge dismissed the suit in March 2024 [121]. Litigation risk of this kind raises the cost of publishing the attribution claims on which this field depends.

SECTION 4. NEXT STEPS

The IPIE aims to strengthen the information environment on which democratic participation and public trust depend. To that end, it produces evidence for those who shape information integrity policy, including civil society organizations, the media, platform trust and safety teams, policymakers, and regulators. These actors could respond to the obstacles identified in Section 3 in several ways:

Training in investigative methods for climate researchers: A growing number of researchers are exploring how to adapt investigative journalism tools and techniques using open-source methods to collect and examine publicly available information such as social media posts, websites, and platform metadata. Known as open-source intelligence (OSINT) or open-source investigations (OSINV), these techniques involve collecting, organizing, and cross-referencing digital traces to identify the behaviors of key disinformation actors online and provide evidence for journalistic investigations.

Collaboration with technology policy actors: Academic-practitioner collaborative efforts combine scholarly and industry diagnoses of problems related to trust in climate information on platforms and develop strategies that might address them. The U.S.-based group Taking Action on Civic Trust for Climate Science brings together academic researchers and climate communicators with trust and safety experts employed at social media platforms to raise awareness of threats and harms in the current media ecosystem and develop policy recommendations to improve content moderation of climate disinformation on online platforms.

Access to media monitoring tools: Strategic communicators in marketing and advertising contexts make use of subscription-based media monitoring and "social listening" tools to track the progress and uptake of their campaigns. Social listening refers to monitoring of social media commentary. Providing climate

researchers with access to these tracking tools may help them develop analytical frameworks that overcome some of the limitations inherent in studying cross-platform climate disinformation, as discussed above.

Networking international corporate and media research centers and observatories: This report has identified many independent, nongovernmental organizations dedicated to observing anti-climate behavior and to producing robust, unbiased research. This research can inform policymaking for the climate transition. Yet these organizations lack the resources and a central authoritative body to produce fuller and more coordinated accounts of information integrity challenges across geographies and issue areas. Funding support for coordination and collaboration among these organizations, as well as the creation of issue hubs to rally research around clearly defined problem areas, would considerably strengthen the impact of this ongoing and vital research.

In the immediate near term, interviews with the Section 2 organizations would establish their specific needs for research support, data access, and funding, and would test the extent to which the obstacles described in Section 3 match their experience.

In the medium term, datasets held by different Section 2 organizations could be linked to answer questions no single dataset can. For example, the organizations represented by the 636 fossil fuel lobbyists registered for COP27 [59] could be matched against advertiser records in the Meta Ad Library, which InfluenceMap has already used to study oil and gas advertising [77]. The match would identify which of those organizations ran climate-related political or social issue ads on Facebook and Instagram from 2023 to 2026. Ownership and membership ties among those organizations could then be traced through the DeSmog and InfluenceMap databases [60], [64], providing a test case for the manual entity matching that Section 3 identifies as the main barrier to combining these

datasets. Researchers compiling these datasets will also need to respect cross-border data transfer rules and the terms of service of each platform they use.

Legal and government inquiries have also opened internal industry records to researchers. From 2021 to 2024, the U.S. House Committee on Oversight and Reform investigated climate disinformation by fossil fuel companies, questioning the chief executives of BP America, Chevron, ExxonMobil, and Shell and releasing internal communications in which executives contradicted their own companies' public climate commitments [122], [123], [124], [125], [126]. The investigation produced a joint staff report with the U.S. Senate Committee on the Budget in 2024, along with a Senate hearing of the same name [54], [127]. A parallel inquiry by the House Committee on Natural Resources did the same for the public relations firms that build these campaigns, publishing redacted documents from their work for oil and gas clients [128], [129], [130]. These records let researchers compare what companies said in public with how they planned those communications internally.

As this report shows, the evidence base on climate obstruction reflects what disclosure law and platform policies make visible. Trade associations, public relations firms, and consultancies fall largely outside those rules, so their funding and communications remain the hardest to document. The recommendations in this report target those blind spots. Closing them will require sustained funding for research coordination, along with disclosure requirements that reach the intermediaries currently exempt from them.

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APPENDICES

Appendix A. Research Tools and Resources

Climate Investigations Training

Climate Investigations Training offers courses in digital research tools for climate investigations.

Computer-Assisted Recognition of Denial and Skepticism

Computer-Assisted Recognition of Denial and Skepticism (CARDS) is a machine learning model that classifies contrarian claims about climate change [131]. A 2024 study applied a hierarchical version of the model to five million climate-themed tweets posted over six months in 2022, finding that more than half of contrarian climate claims on Twitter involved attacks on climate actors or conspiracy theories [132].

Industry Documents Library, University of California, San Francisco

The Industry Documents Library at the University of California, San Francisco holds internal documents from industries whose products affect public health, including the fossil fuel industry.

Industry Documents Research and Analysis (Indra)

Indra is a searchable research index that compiles 13 archives containing corporate and industry documents spanning tobacco, fossil fuel, chemical, opioid, and firearms industries [133].

Oxford Carbon and Climate Advertising Library

The library holds 3,000 climate-related advertisements created by fossil fuel producers and publishes four datasets on the carbon majors, the largest of those producers [55]:

- Carbon major ad spend, 2007 to 2025: estimated U.S. advertising spending, including subsidiaries, across digital, print, and television, excluding email, out-of-home advertising, TikTok, and some local market spending, with no digital data before 2012
- Carbon major climate-related advertisements, 2006 to 2025: advertisements created by American Petroleum Institute, BP, Chevron, ExxonMobil, Shell, and Total
- Carbon major climate-related advertisements in local Designated Market Areas, 2019 to 2025: advertising in local U.S. media markets
- Carbon major creative agencies

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