RESEARCH ARTICLE

Climate dissociations: Trade associations, energy policy and climate communications in Europe

William Dinan(iD)*, **Victoria Esteves**(iD), **Steven Harkins**(iD), **Stefanie Hills**(iD)

Communications, Media and Culture, University of Stirling, Scotland, United Kingdom

* wd11@stir.ac.uk

Abstract

This paper focuses on how climate delay narratives populate the information environment of decision makers and regulators in EU policy making. We examine the communications of selected trade associations representing oil and gas extraction interests in Europe. Our analysis offers a novel synthesis, drawing on official data, industry and social media content, using mixed methods and informed by recent theorising on the advocacy activities of trade associations. The paper contextualises the lobbying and communication activities of oil and gas trade associations in Europe using publicly available data on lobbying (drawn from the EU transparency register) and the outputs of oil and gas trade associations (in trade, specialist and social media) to examine their preferred framings and promoted policy prescriptions for addressing climate and energy policy. We find that trade associations representing oil and gas interests in Europe spend millions of euros per annum producing and promoting policy ideas that seek to secure the long-term future of these industries. Wider climate science is rarely directly referenced or acknowledged in their public advocacy. We argue that the normalization of a new form of climate denial has emerged, based on unproven technologies and market mechanisms being pushed by powerful economic interests.

Introduction

This paper examines political communications and advocacy undertaken by pan European trade associations representing oil and gas interests to policy makers in Brussels. These actors are often overlooked in terms of their communications activities and strategies, and our research suggests they are integral to normalising and legitimising the voice of oil and gas interests in climate policy making. The role of trade associations in climate advocacy is generally under-researched [1,2], with EU trade associations attracting little critical attention [3–5]. Trade association advocacy has been largely neglected by communications scholars, with a few notable exceptions [6–9]. Our assessment of EU gas and oil trade association outputs and strategies helps explain how a new form of climate denialism has become entrenched in key policy networks in Brussels. 'Mitigation denial' refers to the notion that rapid and immediate emissions reductions can be postponed by the promise of a future technological solutions [10].

Our paper offers a theoretically sophisticated conceptualisation of EU climate advocacy as well as an empirically substantiated critique of oil and gas lobbying in Brussels. Our framework is novel, integrating literatures on elite communications, trade associations, lobbying and professional identities. We develop an account of the disembedded communicative conditions that apply in a unique communicative space, the Brussels Bubble, and offer a less media-centric framework to assess policy advocacy than is found in many studies of political communications. Methodologically, we have gathered data produced by our selected trade associations from a range of public sources. Unlike many studies which use the social media platform LinkedIn to develop a sampling frame, we use the content on this platform as both a resource and topic for investigation. We combine this data with trade publications and official disclosures on the EU transparency register to develop a robust and representative data corpus.

We find that oil and gas trade associations enjoy routine access to senior decisions makers and regulators in the EU and are deeply embedded in related policy networks. The lobbying capacity of the oil and gas industry in Brussels dwarfs that of environmental non-government organisations (NGOs). Our selected trade associations combine their access with considerable communicative resources to advance their policy preferences. The communicative power of oil and gas trade associations is a product of their economic, human and professional resources that are mobilised to protect and promote their interests. They engage with European decision makers on technical, political and cultural affairs, the latter being largely neglected by scholars examining policy making. Our focus on communications highlights this cultural dimension and offers new insights into the normative construction of the Brussels Bubble.

Our analysis addresses the strategic efforts by oil and gas interests to populate the information environment of decision makers and regulators in the EU with their preferred framings and policy ideas [11]. The bracketing out of wider climate science in the narratives produced by our selected trade associations is a recurring feature of their lobbying and advocacy communications. The discursive construction of climate advocacy by trade associations representing the oil and gas industry in Brussels also cements various norms and values. As such, we are interested in the normative and performative functions of strategic communication in the Brussels Bubble. This is also the information environment occupied by the actors we are studying, so we conceive of this in part as the production, reproduction and policing of the ideological and symbolic boundaries of what is sayable and thinkable on energy and climate policy in the EU's professionalised communicative arena.

The EU is particularly important in energy policy making, since key global innovations in climate policy making (e.g., carbon credits) and the design of regulatory architecture to promote renewable sources originated there. Europe also leads the industrial north in terms of adoption of renewables, research and innovation around renewables and decarbonization, and has become an important regulatory space globally for how new energy technologies can be adopted and implemented at scale.

Literature review

To contextualise our empirical data, we briefly review relevant literature on trade associations to help explain why these actors are worthy of study. We link this with scholarship on elite communications and the concept of disembedding, establishing the Brussels Bubble as a unique political communicative space. Trade associations play a significant bridging and transmission role. They are key connectors of European debates to wider global policy and governance fora. While policy and practice across the EU undoubtedly lags where independent science would recommend, Europe is still often a pacesetter and regulatory crucible

for market led solutions to climate change. EU trade associations are particularly important, given multi-level governance and the complexity of stakeholder engagement on climate issues in Europe, linking a global industry made up of a wide variety of member companies, to EU decision makers: 'On the whole, the Commission likes trade associations because we are aggregators for them of opinion... a huge majority of company lobbying is done through associations at EU level (...). So, from a policy maker point of view, from a decision maker point of view, they will generally only see trade association positions and there are lots of them' [5].

EU trade associations communicate down to national branches and members based in EU nation states [3,4]. Equally, these associations are embedded within global networks, and are significant transmission belts for political intelligence, key talking points, communications know how, and 'workable' advocacy strategies and tactics between different centres of political power. Sklair (2002) draws attention to the role of communications actors (such as lobbyists) in promoting ideologies and policies that constitute corporate led forms of globalization [12]. This model foregrounds how globalizing professionals in governance bureaucracies, transnational corporations, trade associations, policy planning fora and peak business associations coordinate to develop, promulgate and implement corporate friendly policies at global, supra-national, national and regional levels.

Our approach situates trade associations as key nodes and coordinators linking global networks with key European and national level policy networks. Trade associations (and other policy entrepreneurs like management consultants, advisors, think tanks) are broadly concerned with policy transfer or policy mobility. Largely absent from the literature on policy transfer is an explicit focus on power structures and non-state agents, meaning scholarship 'to date does not sufficiently consider and study (organized) strategies and the wide range of efforts undertaken to pre-empt, counter or shape policy transfer efforts, mechanisms and processes' [13]. Specifically in relation to climate and energy policy, there is limited research evidence of strategies to delay and dilute necessary climate policy: 'the global effort to oppose IPCC-backed climate policies provides ample evidence of quite diverse efforts to block, undermine, or delay climate action. Yet there is surprisingly little research dedicated to the analysis of opposition to ambitious climate policy across borders and scales' [13]. Our research helps address this gap, looking specifically at how oil and gas interests represented by trade associations operate to promote industry friendly climate solutions across Europe.

Existing scholarship on trade associations involved in climate advocacy is most developed in the US [2,14,15] where tax and lobbying disclosure systems mean that much more information is publicly available on the activities of these actors. Brulle and co-authors [1,2,16–18] have developed their analysis of the Climate Change Counter Movement (CCCM), encompassing various policy actors like trade associations, think tanks and astroturf citizen campaigns, all engaged in practical climate denial or delay. Their work on the Information and Influencing Campaigns (IICS) of this counter-movement in the US points the enormous political and economic capital invested in delaying meaningful climate policies: 'trade associations spent $3.4 billion on political activities related to climate change between 2008 and 2018... [spending] $2.16 billion on advertising and promotion, $729 million on lobbying, $394 million on grants and $105 million on political contributions' [2]. The CCCM is significant, as they have political counterparts and allies operating in the EU. While the assessment of what is possible politically in the EU may well differ from the US [19,20], and while the political opportunity structure is different, it is noteworthy that oil and gas trade associations use similar rhetoric, framings and tactics in pursuit of their public affairs strategies in Europe. There are some significant variations in emphasis that reflect the regulatory and political landscape in Europe, which we discuss below. There are also socio-cultural factors in play, not least the

norms and conventions of the Brussels Bubble, that elite European space where professionalized politics and public affairs takes place.

The Brussels Bubble

As a site of intense lobbying on energy policy, and as a locus for international regulatory benchmarking, Brussels deserves much more attention than it has received as a site of policy relevant climate communication [11]. This encompasses *content* production across briefing documents, policy position papers, commissioned research, and increasingly new *forms* of production, particularly audio-visual promotional materials. These lend themselves for use and reuse on social media platforms, allowing the circulation of key messages and policy relevant information among elite professional networks of lobbyists, trade association members, officials, elected representatives, regulators, trade press and specialist media.

Brussels is undoubtedly a unique setting for political communication and democratic participation. The complex powers and competencies of the different EU institutions, and how they interrelate, make the political system in Brussels difficult to understand from afar, let alone navigate and effectively participate in. It is a space and system populated by professionals specializing in law, public affairs, communication and technical-regulatory matters. One close observer of this scene notes how 'the circularity of social relations [in Brussels] has led this world to close in on itself over time' [21].

The term 'Brussels Bubble' was first used to describe the EU public affairs milieu in the early 2000s [22], and the term has since entered into common usage by civil society [23], media [24] and indeed academics studying the EU [21,25,26]. The metaphor of the bubble suggests a space that is insulated, or disembedded, from its surrounding environment. The term has become shorthand for the absence of a *demos* and a series of cultural and social behaviours that give EU politics and policy networks a distinctive flavour, particularly relevant here are commitments to the wider EU project and belief in market solutions to policy problems. The bubble refers to elite EU policy networks and expert discourses, using terminology, and referring to technocratic governance processes, that are largely impenetrable to outsiders. It also refers to shared cultural understandings of policy making, including normative commitments to perhaps idealised European democratic principles and cosmopolitan identities. The term has become code for European liberal elitism among populist politicians in some EU countries and is used to contrast with policy platforms that reject immigration, minorities, and climate mitigation [25]. While the right has sought to weaponise the concept of the bubble to help mobilise anti-EU electoral sentiment, the term is used by left leaning civil society organisations in Brussels to draw attention to the lack of accountability and popular participation in EU decision making, arguably resulting in corporate capture of parts of EU policy making [23].

A long-standing criticism of the EU institutions relates to the democratic deficits at the heart of this design. Civil society groups are often proxies for wider European publics [26], though the various types of non-governmental organizations operating in Brussels also deserve scrutiny, as many cannot be considered organically or meaningfully linked to wider popular social movements. While a full examination of the role NGOs participating in EU energy policy networks is beyond the scope of this paper, it is worth noting that the civil society terrain around Brussels is often corporate (i.e., linked to social movements 'from above', and in our case what could be considered the European version of the climate counter movement) and is both crowded and complex.

Professionals working in and around the institutions in Brussels are super served in terms of information. This is a highly mediatized space characterized by dense communicative and

interpersonal professional networks. There are trade publications specializing in distinct policy issues and serving related elite policy networks, including lobbyists. There are also media publishers (like *Euractiv* and *Politico*) that cover a wide range of policy issues, producing content for public affairs communities based in, or concerned with, developments in Brussels. Many of these media organizations also host policy conferences which create further spaces and opportunities for networking, unique content, and lobbying. There are also social media platforms, where lobbyists can publish content, share information and engage with decision makers, other professionals and (relatively rarely) other users outside the Brussels Bubble. There are clear disembedding tendencies at work in this information environment, evidenced by 'professionalized communications, cultures and associated elite networks which exclude journalists' [26], limited transparency and little external scrutiny [27].

The dominant cultural logics within the Brussels Bubble have significant normative force, and we examine this by exploring how oil and gas trade associations communicate via their social media channels. The vast majority of those operating professionally in Brussels are pro-EU, in that they believe in the wider European project of further integration, and the single market (though anti-EU parties and actors have gained some traction, they are not visible within polite and professionalized public affairs communities). Those concerned with energy policy in Europe are usually enthusiastic about market solutions to the climate crisis. The Brussels Bubble is said to be an elite pluralist arrangement [28]. It is formally an open and transparent political space, yet there are significant transparency gaps and real issues with access, influence and accountability which go back to the structural democratic deficits that are designed into the EU institutional architecture. Those who do not share the cultural norms of supporting the EU project and pursuing market-led solutions have little prospect of policy success, which raises questions about the character of pluralism available at the heart of EU governance.

Within the bubble 'the core resource in demand in Brussels is information-expertise.' [29]. Lobbyists have become key suppliers of such resources, and in many cases have a more sophisticated understanding of inter-institutional dynamics and political opportunity than the elected representatives and officials working within the institutions [27]. While institutional demand for informational and expert inputs from business sources underpins how Commission and Parliament often interact with outside interests, there is nevertheless the empirical challenge of the visibility of such interactions. The literature suggests that lobbyists, such as trade associations, are regularly consulted as the Commission develops proposals and regulation. Industry is asked for data and expertise (via expert groups and working groups for example), and these inputs are integrated into the policy work of the Commission long before it ever becomes visible or political as it reaches the European Parliament for discussion [21]. We have sought to minimise this empirical challenge by using a number of key information sources, all of which have limitations. The empirical core of this paper is underpinned by three published data strands: official disclosures on the EU's Transparency Register, trade association publications, and social media content produced by trade associations.

In their study of EU interest group communications Chalmers and Shotton (2015) suggest 'organizations maintain two objectives when using social media: to shape lobbying debates as they are played out in the news media and to shape their own public image' [30]. This account positions social media usage by organised interests as part of a larger repertoire of news media lobbying strategies. Arguably, this privileges news media over specialist media and more expert or elite professional communicative networks, and the types of 'identity work' and manufacturing of consensus and 'common-sense' that is part of the communication that animates these networks. We seek to extend this work as we examine how social media

content produced by trade associations articulates with a content strategy centred on trade and specialist publications, and in house public affairs content production.

Materials and methods

Our research design examines the framing devices employed by trade associations in their communications outputs, including selected social media posts. We contextualise these outputs with data available from public sources on the lobbying related activities of our selected trade associations in Brussels. One of our assumptions is that these publicly available outputs reflect some of the underlying policy priorities and political strategies of trade associations actively involved in lobbying in Brussels. They are representative of the 'trade narratives' [9] that associations produce to legitimate their place in policy networks. We do not assert that these represent a complete account of lobbying strategies, and we reflect on the limitations of our data and conclusions below.

The research design for this paper combines data drawn from an official European public register of lobbying, information published on websites of trade associations involved in European energy policy, as well as information published on LinkedIn social media accounts of selected trade associations, including official corporate accounts and accounts of those responsible for maintaining official lobbying disclosures for the selected trade associations in Europe.

The Transparency Register (TR) is a lobbying disclosure database operated by the EU institutions 'listing 'interest representatives' (organizations, associations, groups and self-employed individuals) who carry out activities to influence the EU policy and decision-making process. It is designed to show what interests are being represented at EU level, by whom and on whose behalf—and the resources devoted to such interest representation activities (including financial support, donations, sponsorship, etc.)' [31]. While the Transparency Register has made more information on lobbying visible in Brussels since its launch [26,32] it still offers considerably less detail on lobbying activity, particularly spending, than the equivalent lobbying disclosure system operated in Washington. It is also not a mandatory system, which means actors can choose not to disclose lobbying activity, and has limited verification capacity, which means erroneous and anomalous disclosures remain in the system. We use data in the TR to identify some trends in lobbying activity, especially around spending. We also cross-checked disclosures of meetings with senior politicians and officials with content gathered from social media posts. Despite its utility, some care needs to be exercised about definitive statements around lobbying activity based solely on self-disclosed entries in the TR.

Sampling and scope

We searched the Transparency Register (TR) using the data reporting tool for all trade and business associations in the 'energy' policy field, operating at EU and global levels, reflecting our interest in the role of trade associations as key links between European and global policy debates. This search identified 109 organisations. Many of the returns in this search were national level trade associations or business confederations which we excluded. We also excluded overarching employers organisations like BusinessEurope and EuroChambres (the association of European Chambers of Commerce and Industry). Our concern with trade associations operating at both EU and global levels representing the interests of oil and gas extraction companies meant we also excluded trade associations whose primary area of interest was not energy (e.g., CEFIC, the chemicals industry trade associations, or COPA, the European farmers association.). We also excluded trade associations representing SMEs, supply chains, companies operating transmission/grids, and those representing the coal industry

(such as EUROCUAL, the European Association for Coal and Lignite). We included in our sample Eurelectric, the trade association representing electricity companies. Its members include large energy utilities, including EDF, Centrica Energy (the trading arm of Centrica, trading power, gas & LNG), E.ON (who supply gas among a wider energy portfolio), Iberdrola (an electricity utility, but still a large user of fossil fuels globally), and Vattenfall (whose corporate tagline is 'fossil freedom' but currently uses fossil fuels in its upstream and downstream production chains). While the transition focus of Eurelectric is notably different to the other trade associations examined here, its inclusion in the sample has highlighted some of the dynamics of interest group activity in Europe.

Our sample consists of the following trade associations operating at European and global levels who represent the interests of oil and gas extraction companies and energy companies who continue to use fossil fuels:

1. Eurogas

2. European Biogas Association

3. Eurelectric

4. FuelsEurope

5. International Association of Oil & Gas Producers (IOGP)

6. Liquid Gas Europe

This sampling approach does not necessarily include every relevant trade association operating in Brussels. For example, GasNaturally self-defines as a partnership on the Transparency Register, operating at European and global levels, its category of registration is 'trade and business association' and the interests represented are the 'interests of its members', who include Eurogas, IOGP and Liquid Gas Europe. Energy is one of its declared fields of interest, with registration costs (i.e., the cost of its lobbying, public affairs and PR activities) between €200,000–€299,000 for 2022. Yet GasNaturally does not appear in the results based on the search terms we used to derive our sample, which illustrates some of the care needed given existing anomalies of the TR.

Our next task was to identify a representative sampling period, and gather relevant publications (reports, position papers, briefings, responses to consultations and other official bodies) from all the selected trade associations. Due to the volume of material produced by these trade associations, we prioritized covering a timespan to capture the key events and activities of the respective trade associations. This cycle appeared to be annual, thus we included trade association outputs and social media content, from November 2022 to the end of October 2023.

Our social media sample is drawn from LinkedIn. As an overwhelmingly corporate platform, LinkedIn offers a chance to view the professionalised public presentation of individuals and organisations who engage on this platform within the Brussels Bubble. For the purposes of this research, we restricted our data gathering to content posted on each trade association's corporate LinkedIn profile as well as from the public individual LinkedIn profiles of the person within each trade association who is legally responsible for either the organisation as a whole, or responsible for EU relations (as declared on each TA's return on the Transparency Register). This resulted in a sample of 959 different LinkedIn posts and comments for analysis. We gathered the LinkedIn data manually from public profiles, accessed via our personal LinkedIn accounts, and in line with platform terms and conditions. No LinkedIn research tools or APIs were used by the research team. We searched LinkedIn for organisations and identified individuals based on public disclosures on the European Transparency Register. All of the organisations in our sample, and those individuals legally responsible for

their disclosures on the Transparency Register had public LinkedIn profiles at the time our data was gathered. We have published our social media dataset as a collection of LinkedIn post and comment URLs to provide data transparency, whilst also complying with the platform's policies and the individual users' rights to permanently delete their posted content should they wish to.

We adopted a deductive approach to social media content. We had an initial focus on contacts within the EU institutions, official bodies, expert groups, working groups, as well as wider public affairs coalition participation. During the initial data gathering we noticed the importance of audio-visual content, as well as industry events and conferences. We gathered all social media content relevant to these criteria from 12 LinkedIn accounts, 6 corporate and 6 individual (see Table 1 for sample. Individual accounts also included comments on posts by those in the account owners' network). We used the standard LinkedIn profile, where the corporate accounts presented to us the same content in different time order, depending on our previous searching activity. LinkedIn posts are not directly time stamped but are dated relative to the moment of the search, meaning precise dates for some of the older social media content is unclear. Due to this, we identified the month the post was published, or reposted.

The corpus of text for analysis was gathered from publicly available material published by six trade associations. We examined two specific contemporary policy issues, additionally the terms 'European Green Deal', 'Green New Deal' and 'Repower EU' were fed into the search function of each trade association website. For trade associations without a search function, Google was used to search the specific site for these search terms. The exercise returned over 1.4 million lines of text with a wide variation in the output of each trade association—the bulk of the text came from the European Biogas Association, this may be explained by the lack of a search function on their website which meant using Google to find material on their website using these keywords.

We built a combined corpus of approximately 1.45 million tokens from the sampled trade association texts. To do so we pre-processed the six individual trade association text files with a simple R script to convert all text to lowercase, make URLs and e-mail addresses anonymous and easily countable by replacing them with a placeholder, and remove all punctuation that did not hold significant syntactic or semantic value for the purpose of this research (we retained hyphens, ampersands, and apostrophes), and replaced all URLs and e-mail addresses with a placeholder. Table 2 shows the exact token and type (number of unique tokens) count after pre-processing for the combined corpus as well as each sub-corpus.

Analysis was conducted in AntConc 4.2.4 [33]. After loading the combined corpus into AntConc with Western (latin_1) encoding and indexed for simple words, parts of speech (POS), and headwords, we first of all generated a word list of the 1,500 most frequently occurring tokens as well as of the 3,000 most common two word n-grams, the 2,000 most frequently

Table 1. LinkedIn social media sample (Nov 2022–Oct 2023).

Organisation	Posts	Individual	Posts
Eurogas	79	Secretary General (J. Watson)	8
Europ. Biogas Assoc.	76	Chief Executive Officer (H. Dekker)	61
Eurelectric	294	Secretary General (K. Ruby)	29
FuelsEurope	118	Director General (J. Cooper)	30
IOGP	46	Managing Director (F. Mouton)	70
Liquid Gas Europe	105	General Manager (E. Abramiuk-Lété)	43

N = 959.

https://doi.org/10.1371/journal.pclm.0000467.t001

Table 2. Trade association content corpora.

Corpus	Word Count	Token Count	Type Count
Combined	1,463,374	1,464,210	32,312
Europ. Biogas Assoc.	947,098	947,321	25,455
FuelsEurope	214,688	215,104	9,935
Eurelectric	187,254	186,033	7,065
Eurogas	87,825	88,666	7,166
Liquid Gas Europe	14,215	14,343	2,642
IOGP	12,294	12,743	2,363

https://doi.org/10.1371/journal.pclm.0000467.t002

occurring three word n-grams and the 1,000 most common four word n-grams, each time specifying a range of 3–6, meaning that each token or n-gram had to occur in at least three out of the six sub-corpora. This was done to ensure that the output would be somewhat representative of the lexicon used in the specific context that we are focusing on. We manually removed all numbers from the word list except for four-digit year references, as other numerical data was not deemed to be of interest for our analysis. We also generated the 100 most frequent clusters for a number of relevant terms that emerged from our frame analysis. We restricted the cluster size to two and again specified a range from 3–6 for the above-mentioned reasons. We then generated the 100 most frequent collocates for the same terms (nodes) we previously generated clusters for. Once again, we specified a range of 3–6 and a span of five words to the left of the node and five terms to the right of the node, to examine the wider context in which the relevant terms occur.

Results and findings

Oil and gas lobbying in Europe: Spends, trends, loose ends from the Transparency Register

Scholars have noted the significance of energy policy lobbying in Brussels [21] and the prominence of oil and gas companies interest representation in Brussels in the past decade [29]. The leading oil and gas companies clearly devote significant resources to their own direct lobbying, as well as influencing via third parties such as trade associations. While leading energy TNCs operate their own in-house lobbying, they also participate in collective action with other companies in the form of trade association lobbying and coalition building (as well as wider policy planning activities). This dimension of oil and gas lobbying has received relatively less attention than the activities of individual corporations.

Based on data disclosures in the EU Transparency Register, we get a sense of the resources devoted to EU level lobbying by our selected trade associations.

The total lobbying spend by trade associations in our sample during the current EP session (summer 2019–Dec 2022), *is at least* €23,525,000. There are some caveats to this figure which are worth noting. Under the EU transparency register disclosure system financial information is declared in bands. Table 3 presents the lower limit of each band (which is what most of those who use this type of data report, to ensure costs/resources are not over-estimated). While this is an understandably cautious way of treating individual declarations, it does inevitably lead to significant under-estimation of resources in aggregate, over time. Additionally, the way organisations declare lobbying activities changed in 2021, as the guidelines on lobbying disclosures were redrawn when the European Council was formally integrated into the Transparency Register. The decline in the declared lobbying spend by some trade associations between 2021 and 2022 (i.e., LGE) is likely to reflect new guidance on disclosure rather

Table 3. Selected trade association lobbying disclosures: 2019–22 (spending €).

TA	2019	2020	2021	2022
Eurogas	450,000	500,000	500,000	500,000
Eurelectric	350,000	200,000	100,000	100,000
Europ. Biogas Assoc.	150,000	600,000	600,000	600,000
FuelsEurope	2,375,000	3,375,000	3,500,000	4,000,000
IOGP	850,000	950,000	900,000	1,000,000
Liquid Gas Europe	350,000	350,000*	1,250,000	200,000
Total	4,525,000	5,975,000	6,825,000	6,200,000

https://doi.org/10.1371/journal.pclm.0000467.t003

Table 4. Summary of selected trade associations disclosed lobbying activities (2019–23).

Trade association	Meetings' 23	Meetings' 19-'22	FTE	Passes	EGs
Eurogas	2	25	5.5	9	3
Eurelectric	17	30	1.9	19	15
Europ. Biogas Assoc.	4	9	6	6	3
FuelsEurope	4	21	12	11	7
IOGP	7	26	3.6	9	9
Liquid Gas Europe	1	3	4	4	6
Total	35	114	33	58	43

https://doi.org/10.1371/journal.pclm.0000467.t004

than declines or disinvestment in EU public affairs. For instance, until 2022 IOGP disclosures stated: 'In the absence of a definition of "direct representation", IOGP has opted to indicate the entire budget of its Brussels office. This is financed through membership fees' [34]. IOGP's disclosed lobbying budget in 2015 was €1.820m, with 9 lobbyists, 6 holding EP passes. The current annual spend according to their TR return is at least €1m. Eurelectric records a big decrease in their spending declarations in 2022, compared to peak of 650,000 in 2017. This is at odds with the number of people involved in lobbying related activity, and the range of dossiers, working groups and expert groups that Eurelectric is involved with. The volume of social media content produced by the association is also notably greater than other organisations in our sample.

Table 4 shows high level meeting count (Meetings), FTE lobbyist count (FTE), number of European Parliament passes (Passes), and expert group involvement count (EGs) from 2019 to 2022.

By comparison, the direct EU lobbying spend of the largest corporates with oil and/or gas interests tends to be greater than that of their trade associations, though FuelsEurope outspent all these TNCs except Shell in 2022 (the year with the most recent complete data set). The following lobbying related information is disclosed.

Table 5 shows corporate lobbying spend in € (Spend), FTE lobbyist count (FTE), number of European Parliament passes (Passes), EU Grants in €, Trade association membership count (TAs), and expert group involvement count (EGs), and EU forum and platform count (Forums) for 2022.

All of the corporates listed here are members of key trade associations active in Brussels. The oil majors (BP, Shell, Exxon) are all members of FuelsEurope (the highest spending trade association in our sample), IOGP and the Zero Emissions Platform (ZEP). Hydrogen Europe and Wind Europe count the main European oil and gas companies as members (BP, Total, Shell and Equinor). Many of these corporates are also members of wider business lobbies. All except E.ON are affiliated to BusinessEurope, the employers umbrella group. BP, Shell,

Table 5. Selected corporate lobbying disclosures, 2022.

Corporation	Spend	FTE	Passes	EU Grants	TAs	EGs	Forums
BP	2,250,000	7	6	35,200	22	1	3
TotalEnergies	2,750,000	4.2	8	57,970,000	18	1	2
ExxonMobil	3,500,000	5.5	6	0	8	1	0
Shell	5,500,000	12	3	2,612,817	10	3	2
Equinor	2,500,000	7.7	5	2,303,380	11	0	0
RWE	1,750,000	7.8	3	140,885	11	2	1
ENERGIE	2,000,000	6	7	2,512,400	21	1	4
E.ON	1,250,000	7.1	6	13,900,000	15	2	2

https://doi.org/10.1371/journal.pclm.0000467.t005

TotalEnergies and ENGIE are also members of the European Round Table for Industry (ERT—formerly the European Roundtable of Industrialists), a key peak business organisation in Europe [35,36] that draws it members from leading TNCs of European 'parentage'. Overall, the leading energy companies with oil or gas interests active in European public affairs are members of a range of trade associations, expert or planning groups, and platforms that give them access to regulators, officials, and political intelligence. These dense overlapping memberships help coordinate industry positions on forthcoming legislative and regulatory proposals. We now turn to the preferred framings and key themes present in the public affairs content produced by our selected trade associations. From this content we make an assessment about the strategies and dynamics at play that normalise mitigation denial in Brussels.

Framing analysis

We adopted an approach to framing analysis drawing on Entman's (1993: 52) conceptualisation of how strategic framing makes certain aspects of a contested issue more salient through a selection process that involves highlighting a 'particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation' [37]. Following the model used by previous researchers studying strategic corporate communications on climate change we developed an approach that considered the wider existence of 'frame packages' which were used to provide a conceptual framework for a major systematic review of climate change communications framing (Schlichting 2013). These frame packages are developed into three key areas which are:

1. Manifest devices—exemplars and specific phrases used.

2. Reasoning devices—which focus on causes, consequences and justifications.

3. Implicit cultural phenomena—which focuses on the central organising ideas and values underpinning the frame package (2013: 495) [38].

Much of our data reflects the frame package of 'industrial leadership' that emerged from European multi-national corporations in the mid-2000s and framed the fossil fuel industry as a key actor in taking responsibility for, and finding solutions to, climate change. Industry led responses to this issue were reflected in corporate communications strategies that emphasised individual responsibility by focusing on energy use by consumers as the driving force behind fossil fuel emissions and constructing corporations as passive suppliers responding to energy demands. Furthermore, these strategic communications started to assert the centrality of the fossil fuel industry in finding solutions to the issue [39]. We traced the contemporary development of these frames in Europe through publications from key trade associations and industry actors.

Framing energy solutions

Transition is now the overarching theme of energy policy in Europe. No serious policy actor questions the broad climate science. However, the scope, pace, focus, and implementation of climate policy is very much open to contestation and lobbying. Climate 'realism' is characterised by a recognition that change is required. For oil and gas interests, change will preferably be gradual and phased. The urgency of scientific and civil society calls for policy action are countered with pragmatist industry solutions that insist current energy infrastructure is going to be needed in the medium term, and that this is compatible with longer term climate goals. Such policy prescriptions rely heavily on unproven at scale technologies, especially Carbon Capture, Use and Storage (CCUS) and a planning and implementation horizon that continues to recede further into the future. Much oil and gas industry lobbying in the EU is now predicated on helping decision makers meet climate obligations by 2050. The nearer term deadlines like 2030, 2035, and 2040 have become milestones rather than end points for a collective climate change journey (see S1 Table). These manifest framing devices are used to justify retention and investment in existing oil & gas infrastructure as entirely compatible with climate policy, meaning fossil fuels are positioned as transition fuels. There are parallels here with climate lobbying in the US, where industry has emphasised the role of fossil fuels in the energy transition, as well as the role of innovation and new technology, in shaping a future for fossil fuels in the energy mix [39–44].

Our exploratory corpus queries and analysis were guided by the framing approach outlined above, focusing on manifest frames in particular and provided us with descriptive statistics on the frequency of occurrence of a number of relevant communicative phenomena, such as on the predominance of references to milestone dates and the preference for aligning goals and commitments to far-away deadlines over more immediate one. Our data corpus contains a significant number of four-digit year references, the most frequently occurring ones being '2050' (46th most frequently occurring token, appearing 2,918 times across all six sub-corpora) and '2030' (54th most frequently occurring token, appearing 2,658 times across all six sub-corpora), indicating a focus on the distant over the more immediate future.

Table 6 shows the 24 most frequently occurring nouns across the combined corpus (not separated by part-of-speech. Asterisk indicates that the frequency count may include a percentage of verbs). Terms such as 'gas', 'energy', 'biomethane', and 'hydrogen' constitute expected neutral domain-specific terminology, whilst terms like 'emissions', 'climate', 'costs', 'production', 'market' and 'demand' broadly refer to common domain-associated concerns and considerations. There are notably fewer occurrences of terminology indicative of discourse around proposed remedies and solutions to the many concerns, such as "technologies". The preoccupation with 'potential' aligns with the emerging vague and distant future focus/deference theme.

Examination of the most common two-, three-, four-, and five-token n-grams in the combined corpus again highlights the deference preoccupation, commitment reluctance and future focus of European energy sector trade association communications. S2 Table shows the thirty most common four-token n-grams with stand-out phrases such as 'climate neutrality by 2050', 'in 2030 and 2050' and a number of references to 'potentials' (largely concentrated around the 'biomethane production potentials in the EU'). Statements such as 'in line with the' and 'as part of the', meanwhile, signal compliance with policy and (actual or intended future) pursuit of (not necessarily well-defined or clearly articulated) strategy.

If we take a closer look at common clusters that occur around some of the terms indicative of domain-relevant concerns such as 'climate' in Table 7, we can see that there is a significantly greater preoccupation with the expression 'climate neutrality'/'climate neutral' compared to 'climate change'. Whilst the commitment-indicating cluster 'climate action' comes up

Table 6. The 24 most frequently occurring nouns in the combined corpus.

Rank	Type	Freq	Range
1	gas	10846	6
2	energy	10502	6
3	biomethane	8197	4
4	biogas	8009	5
5	eu	6322	6
6	production	5032	6
7	hydrogen	4575	6
8	emissions	4240	6
9	transport	3710	6
10	climate	3475	6
11	europe	3420	6
12	electricity	3165	6
13	system	3163	6
14	market	3103	6
15	sector	2994	6
16	carbon	2918	6
17	plants	2755	6
18	co2	2685	6
19	industry	2672	6
20	costs	2505	6
21	potential	2498	6
22	fuels	2490	6
23	technologies	2359	6
24	demand	2341	6

https://doi.org/10.1371/journal.pclm.0000467.t006

a noteworthy 140 times across a range of four sub-corpora, more abstract and noncommittal expressions such as 'climate ambition/ambitions', 'climate goals', and 'climate mitigation' also fits the previously identified linguistic preoccupation with deference to the less immediate future, which is likely a deliberate effort to avoid communicating any sense of great urgency. Overall, this seems to represent a stark contrast to the shift from grammatically conditional to grammatically unqualified and hence less tentative expressions of urgency observed in climate science and climate activism [45].

For information on collocates of the node 'climate' see S1 Table in the supporting information.

In the context of conflict in Ukraine, and a cost-of-living crisis (where energy prices are a significant contributor), oil and gas interests have increasingly emphasised energy costs and energy security as reasoning devices to help orientate policy and decision making. Again, there are echoes of industry advocacy (from the US in particular) in this communications strategy [42,44]. Industry has seized on the opportunity arising from the conflict in Ukraine to place the EU's long-term low-carbon strategy under pressure, promoting a short-term, realpolitik concept of 'strategic autonomy'—to be autonomous (from Russian imports in particular) requires acceptance of an increased role for gas, oil and coal in the energy mix. This is routinely linked to an important policy aim of having affordable energy in Europe. Industry has been keen to emphasise that energy security should not mean substituting away from gas in the energy mix. Oil and gas industry lobbyists therefore recommend the EU accelerate exploration for natural gas in Europe. As such renewable gas is framed as a 'strategic investment

Table 7. The 24 most frequently occurring clusters for the term 'climate' in the combined corpus.

Rank	Cluster	Freq	Range
1	climate neutrality	410	6
2	climate change	362	6
3	climate neutral	176	5
4	climate the	166	3
5	climate and/&	187	5
6	climate action	140	4
7	climate ambition	92	5
8	climate targets	83	5
9	climate objectives	71	6
10	climate target	70	5
11	climate plans	61	3
12	climate policy	59	6
13	climate law	52	6
14	climate goals	51	5
15	climate mitigation	46	4
16	climate impact	36	3
17	climate ambitions	31	4
18	climate protection	29	3
19	climate policies	25	5
20	climate energy	21	3
21	climate transition	17	4
22	climate crisis	10	4
23	climate strategy	8	3
24	climate strategies	7	3

https://doi.org/10.1371/journal.pclm.0000467.t007

and ... key to unlocking energy security'. This is contrasted with the alleged unreliability of renewable energy sources and the predicted increasing cost of manufacturing renewable technologies over time.

Policy realists or climate fantasists? Cohesion and identity in the Brussels Bubble

A key role of trade associations in Brussels is to represent the voice of industry to policy makers. Another important function is to promote member cohesion and consensus around minimum and shared industry demands. Both the inward and outward functions of trade association activity are evident in their social media outputs. Joint statements, open letters and lobbying asks are a staple of this media content. These are indicative of coalition building and sectoral coordination to achieve public affairs objectives. A steady stream of commissioned research, policy reports and press releases feature throughout the social media accounts we examined.

Across all our sampled organisations there is a recurring emphasis on conferences, events and meetings where policy is discussed, and political opportunities are contextualised and explained for members. These events also often involve lobbying opportunities, as speakers from the Commission (from desk officers to Commissioners) and Parliament (particularly MEP rapporteurs on dossiers of interest) are regular participants at these industry events. Audio visual content produced by trade associations (e.g., presentations, reels, slide-decks, infographics and talking points from industry events) is shared with members and policy

stakeholders and is uniformly positive about the contributions oil and gas can make to the transition agenda. This content represents the presentation of industry positions on policy issues that have become public, usually as they approach votes in Parliament, or trilogues where Parliament, Commission and Council seek to agree on contested policy or regulation.

What is almost uniformly absent from this public presentation is evidence of direct lobbying meetings with Commissioners, officials, or elected members of the European Parliament. There is also very little engagement with industry critics, and virtually no mention of wider climate science including IPCC reports. Across our entire LinkedIn sample, only one trade association, Eurelectric's secretary general mentioned a meeting with senior figures in the Commission (meetings that must be disclosed on the TR) [46]. None of the other trade associations mention these meetings on social media. This confirms that there is selective transparency around policy dialogues in Brussels. The routine meetings between industry and decision makers are simply erased from the presentation of industry activity on social media. This structural absence raises the question as to who is the audience, and what is the purpose, of all this communications output? Industry documents suggest that all this audio-visual content and efforts to engage stakeholders are part of a strategy to secure the long-term future of gas in the imagination of policy makers. Eurogas developed a dedicated advocacy strategy from 2019, comprising developing a 'narrative' for gas (key messages included the cost-efficiency, flexibility and contingency of gas) and driving media engagement around the new secretary general of Eurogas [47].

Implicit cultural phenomena: Identity politics

Within climate denialism identity politics are at play; this has been noted within particular beliefs of individuals and groups [48]. Our analysis shows there is significant identity work occurring within trade associations. Firstly, ideas around a 'just' transition are invoked. These connote notions of democracy, fairness, equality. The role of choice is also significant here, and 'whataboutism' is a recurring trope as anti-industry policy options are dismissed under the guise of concern for particular social groups (such as workers who may lose jobs, caring for rural communities).

A 'just transition' implies a democratic approach, positioning policy alternatives as radical or unfair [49]. Radical and rapid changes demanded by climate scientists and grassroots movements are by extension inherently unfair and undemocratic. This translates into an identity battlefield, where fossil fuel actors weaponize language against 'radical' climate change proponents, who are (in this scenario) framed as unjust and undemocratic. With regards to the notion of a just transition, we must ask 'A just transition for whom?' [50] and consider how climate change disproportionately impacts poorer countries [51], and how 'the interests of global elites are more often than not misaligned with the energy needs and environmental vulnerabilities of the world's poorest people' [52].

Adjacent to the values of democracy is the importance of choice and freedom. By leaning into democratic language and values, trade associations frame certain positions on climate mitigation as antithetical to choice and freedom: 'The #EPBD should allow flexibility for EU citizens to choose appropriate technologies' (This was taken from our social media corpus in relation to the Energy Performance of Buildings Directive). This also links to Western capitalist ideas around individuality and identity, and the need to uphold these values as central to our way of life. For this reason, fossil fuel industries are keen to underline the notion of flexibility within their plans for a 'just transition', as flexibility creates opportunities for continued extraction and refining within the climate emergency. Furthermore, flexibility allows scope for continued inaction under the logic of delay.

Considering the current realities of climate change, fossil fuel companies have had to move from stances of denial to tactics of delay [53]. These companies—and their trade association

representatives—have also had to contend with very visible protests by grassroots movements and activists, whose growing numbers reflect increasing public concern over climate issues [54]. Thus, although we cannot claim that climate activists enjoy unwavering support from all citizens, public opinion is increasingly registering concern about environmental issues [55]. Fossil fuel companies have had to negotiate their public identities to retain their social licence; selectively adopting progressive language normally associated with social movements, whilst simultaneously eschewing any meaningful change. Whereas critiques against these behaviours are often voiced in accusations of 'greenwashing', the potential for these corporate rhetorics to muddle public understanding is significant. This purposeful ambiguity can be seen within the gas industry and its appeal for the wellbeing and needs of rural communities, whereby gas industries are positioning themselves as advocates for rural places and their inhabitants. This is reflected both in social media discourse: 'It's heartening to see the [gas] industry working towards making a positive impact in communities that need it most' [56] and in position papers: 'Liquid Gas Europe believes that the option of boilers certified to run on renewable fuels should be preserved (…) to meet the specific needs of rural offgrid communities and help them overcome the challenges they face' [57].

Another form of co-option noted within our analysis includes fossil fuel pleas to 'join the movement' (in relation to gas as a key transition energy source), which repurposes the language of EDI (Equality, Diversity, Inclusion) and sustainability for corporate ends. The energy industry embrace of the EDI agenda extends beyond language and framing. It is reflected in the increase of female leaders and women in other (visible) positions of power within the gas and oil industries. Although the gender imbalance within these industries remains, the prominent positioning of women as leaders in gas and oil industries signals an attempt to liberalise the image of the sector. The visibility of women in the fuel industry has been noted in our social media data collection. For example, one commenter writing 'Girl Power' underneath a photo taken during the European Liquid Gas Congress 2023, featuring a group of senior female executives.

The Brussels bauble?

Much of the audio-visual content produced by our trade associations addresses professionals working in the Brussels Bubble, having little wider news value. The language used and topics discussed are likely only of interest to public affairs professionals and those working within European policy networks. A significant feature of the content we examined on LinkedIn is geared towards the normalisation and celebration of the work that those lobbying on behalf of oil and gas interests undertake. Socialisation of those working for trade associations into the norms of the Brussels Bubble is common: dinners, receptions, social events, barbeques, and team building exercises all help cement solidarity and cohesion. There are also many examples of industry giving each other awards (e.g., best lobbying campaign, best organisation), as well as awards for various staff contributions to sustainability and transition, such as the 'Biogas Booster Award' [58] or the 'Women Leading the Way to Climate Neutrality Award' [59]. The Electrification Alliance (a coalition of 10 trade associations) created their own 'electrification award' and gave the first iteration to European Commissioner for energy, Kadri Simson in October 2023 [60].

Eurelectric also promote a scholarship scheme(the Ana Aguado Award) with winners attending the Florence School of Regulation's Summer School on Regulation of Energy Utilities, whose events and outputs crop up repeatedly in our sample. It appears to furnish industry with third party endorsements and analyses that are useful for lobbying and policy papers. BP, Shell, and TotalEnergies are all donors to the Florence School's energy programme. These

examples speak to Laurens' (2018) observations around the circularity of the Brussels public affairs scene [21].

There are examples where the studied civility of professional communications on social media become strained. Some of the criticisms of energy policy from environmental NGOs occasionally penetrate the rarefied world inhabited by senior EU bureaucrats and peak business lobbyists. Such criticism is rarely taken on its own terms, and is framed as bad faith or ideologically motivated: 'In reality, there is a big difference ... between 1/ really taking care of the planet and 2/ be against oil & gas industry first and above all, and whatever this industry is doing. Unfortunately, these organisations are of course in the second type of mindset and objective, and the planet is by far their second priority' [61].

Industry lobbying strategies nevertheless need to account for outside critics. While industry advocacy can appear quite defensive when challenged, there are efforts to engage civil society. A leaked Eurogas public affairs strategy paper revealed their gas advocacy strategy for the parliamentary term involved 'promoting and raising awareness of the role of gas (natural, decarbonised and renewable) in the energy transition and future energy mix vis-à-vis Brussels stakeholders in the short, medium and long term' [47]. Among the key stakeholders were NGOs, think tanks, academia and media. This strategy, and oil and gas industry engagement efforts with the environmental movement more generally, appears to have had limited success as the leading green NGOs in Brussels have collectively agreed to boycott the oil and gas industry [62]. However, there are a whole host of civil society organisations in Brussels that are little more than industry consultants and advisors. This strand of civil society provides useful cover for industry, and are willing partners with industry and the institutions in the current energy transition regime. IOGPs European regional director reacted strongly to a Green MEP publishing a call to ban fossil fuel lobbyists in Brussels [63], following the model debarring tobacco lobbyists due to their industry's demonstrable harm to public health. The reply encapsulates how deeply embedded the oil and gas industry is in EU policy making:

> 'The recent repeated efforts to restrict our industry's right to engage with EU institutions and ask that a key player in securing energy supply and enabling the energy transition be removed is unhelpful. In fact, it is simply undemocratic... I am firm believer in fostering informed debate and having sound and inclusive policymaking. This means having a constructive dialogue between decision makers and all key stakeholders so that the EU can take the energy transition forward while strengthening its long-term resilience. IOGP Europe will continue to put its expertise and data at the disposal of policymakers. .... All voices should be heard at the table....' [64].

The normative force of such a self-conception of lobbying should not be underestimated. This post ignores the privileged access enjoyed by IOGP and other TAs and TNCs linked to the oil and gas industry. What the IOGP are actually defending here is their insider status in Brussels, but using recognisable tropes of liberal democracy to legitimate practice and resist new ways of doing energy politics in Europe. The offer of putting industry expertise and data at the disposal of the EU points to another core element of how energy policy is shaped in Brussels.

Expertise, science and the technologies of transition

One of the most striking features of oil and gas advocacy in Brussels is the almost complete erasure of wider climate science in messaging and position papers. While the discursive universe that oil and gas industry lobbyists have created makes much of the importance of science and technology, the types of scientific authority invoked and mobilized is often that

which is managed, controlled or funded by industry. There is a marked emphasis on technical engineering and industrial chemistry in the position papers and policy recommendations promoted by oil and gas interests.

Disclosures in the Transparency Register point to the grants drawn down by industry under the EU's Horizon science budget, for projects such as carbon capture and storage. Initiatives such as the Biomethane Industry Partnership (BIP), involving the Commission, the EBA and its member companies, is tasked with producing the evidence base to promote investment, as well as the science to demonstrate the scalability of this sector. The research undertaken under the auspices of the BIM helps construct the market and regulatory framework to attract further investment and grow this sector. This level of institutional support and partnership is not matched elsewhere in our sample, but there are clear patterns of knowledge and data transfer across all our trade associations. The trade publications and social media examined in this report all draw heavily from industry owned data which are routinely used to buttress lobbying advocacy.

FuelsEurope has its own dedicated research arm, Concawe. This organisation's self-description sounds remarkably public spirited: 'Develop with scientific rigour technically feasible and cost-effective pathways to achieve the EU's health, environmental and climate goals' [65]. Its existence demonstrates the strategic importance of data and technical inputs into regulatory and policy processes. The science undertaken by trade associations is hardly disinterested. FuelsEurope mention an IPCC report in order to urge greater investment in CCS technologies [66], which is one of their lobbying priorities. The rest of IPCC work, analyses and policy recommendations are largely ignored in the sample period. CCUS was one of the main foci of the trade associations we examined. Almost all campaigned for CCUS, with straplines like 'No #GreenDeal without #CCS:' The inclusion of CCS in the NetZero industry act (NZIA) in 2023 was a key policy victory for the oil and gas industry in Europe, and clearly the result of concerted lobbying pressure [67].

There are some disputes over science and evidence in the data we examined. This tends to be rather narrow and technical, but illustrates the ways in which different organised interests mobilise science to provide the policy relevant evidence needed for lobbying and advocacy work. FuelsEurope criticised the NGO Transport and Environment, disputing statistics that showed poor performance of hybrid vehicles: 'Looks like a clear case of writing the headline before you design the study.....then design the study to produce the headline conclusion. This is not science!' [68]. This spat was part of a longer running contest between FuelsEurope and other organisations over policy on supporting hybrid as opposed to fully electric vehicles.

Transport and mobility were one of the policy areas that illustrated the tensions between different trade associations in our sample. FuelsEurope expended much effort lobbying against policy to support full electrification of transport, arguing for CO2-neutral fuels, clean fuels and hybrids. In contrast Eurelectric explicitly referenced IPCC studies 'The IPCC just reiterated the urgency of the #ClimateEmergency with 1.5°C rapidly slipping away' and NASA data 'Scientists confirm: July is on track to become the world's hottest month on record... Stopping this trend will require tackling the current challenges to deliver our climate ambition for 2030' [69] to build support for ambitious electrification policies.

The technical information and associated language used in much of the material in our sample reflects political interests (see also Laurens 2018 [21] for discussion of similar dynamic in relation to chemicals regulation). This scientisation represents a lobbying and policy opportunity for well-resourced industry groups rather than a disinterested scientific arena where independent data informs policy and regulation. While there is some evidence in our sample of different industry sectors competing with each other in these technical arenas, this is no substitute for open and democratic evidence-based policy making. Civil society and the wider

public, due to resource constraints, face unbridgeable barriers to enter these technocratic fora, leaving the space open for corporate voices to 'put its expertise and data at the disposal of policymakers'.

Discussion

Our analysis demonstrates how established discourses of climate delay are present in elite policy communications in Brussels. We suggest that policy framings in trade publications, and identity work on their social media platforms, are significant features of communicative action in Brussels. These outputs are a function of resources deployed and strategies pursued to normalize oil and gas industry friendly solutions to climate.

The lobbying resources deployed by oil and gas trade associations are significant, and our figure of €23,525,000 over the recent European Parliamentary session (2019–22) (from Table 3) is certainly an under-estimate of actual spending, given how the data is reported and published (as is the corporate lobbying spending reported in Table 5). Nevertheless, our evidence replicates some of the findings of recent research, which suggests 'the small number of Paris-aligned associations spent a total of €2.4 million to lobby EU institutions. This figure contrasts with the €43.5 million spent by twenty-nine associations that favour weaker EU climate protection measures. The latter associations also spent three times more, on average, for lobbying at the EU level compared with the twenty-four Paris-aligned associations.' (Plehwe et al, 329–30) [70].

It is quite striking that wider climate science is rarely mentioned or directly referenced in the dataset we gathered. This structured absence in the trade narratives produced by oil and gas TAs in Brussels requires further analysis. The clear preference from industry to emphasise their technical assessments and policy-orientated models and data appears to reflect both their favoured scientific ground for policy deliberation as well as their strategic exploitation of wider technocratic tendencies within the EU bureaucracy. Whether this is a feature of policy deliberation in various institutional expert groups working on climate issues remains an open question.

Our data supports the assertion that 'climate obstruction efforts in the European Union are shaped mainly by efforts to sow doubt about specific climate policy measures and by strategies to weaken their level of ambition... [this] frequently involves bad-faith efforts to push back climate policy goals ... by claiming adherence to the goals of the Paris Agreement but nevertheless engaging in a range of frequently difficult to recognize efforts to block ambitious policy' [70]. While there is unanimity across our sample that the energy transition is an agreed and important goal, the substance of what this means in practice is open to policy contestation and lobbying. Our focus in this research has been on trade associations representing oil and gas interests operating at the European and global levels. There are many examples within our data corpus of links between European trade associations and their counterparts in other parts of the world, which confirms the significance of the role of TAs in transmitting policy intelligence and know how across different governance contexts. There are also examples of coalitions of trade associations active on climate issues that extend beyond oil and gas producers, and include transport, manufacturing, agriculture, chemicals and aviation. The dynamics and efficacy of cross industry and civil society EU advocacy coalitions in relation to climate policy is an area of research that will repay further analysis

The creation and maintenance of a professional identity by trade association lobbyists in the specialised context of Brussels is a by-product of their trade narratives. Professional identities can produce a sense of meaning, evidenced by 'meaning-making through professional self-identification' and 'meaning-making through professional socialization' [71]. In our analysis of LinkedIn posts, we were able to find both kinds within the content analysed, i.e., a

positive sense of identity through work (being part of an organisation that promotes sustain-ability) and through work-related social activities (e.g., barbecues, cooking classes).

A question remains around aspects of identity and performance within this context: though these are interlinked, it remains difficult to establish their limits. In an era where the personal and the professional are increasingly blurred (i.e., through communication platforms and practices, the increasingly informalized aspects of corporate culture, the celebration of protected characteristics at work), we note the complexities surrounding the entanglements of these different forms of identities. This is an area that requires future enquiry, as the nuances pertaining to the fluidity of personal and professional identities has not been explored to its full potential. The platform we analysed arguably emphasises particular performances of identity. Whilst LinkedIn focuses on the professional presentation of the self (and thus has culturally agreed limits on how and what should be disclosed within it), its users still find a need to represent their 'selves' beyond a strict professional sense [72]. The nature and design of social media platforms (and their increasingly merged ownership) does not encourage the separation of identities; as Mark Zuckerberg once stated: 'You have one identity. The days of you having a different image for your work friends or co-workers and for the other people you know are probably coming to an end pretty quickly' (cited in Kirkpatrick) [73].

LinkedIn is no exception—whilst it lends itself to a more professionalised context, it still allows for this interweaving of identities through posts, particularly around work-related social activities. The processes around the blurring of identities within both Facebook and LinkedIn have been compared elsewhere in the literature, particularly in their ability to construct a narrative of the self [74]. Part of what transpires in our analysis of these LinkedIn profiles is the work they do as 'inscriptions of normative professional behaviour: each profile shapes an idealized portrait of one's professional identity' [74]. In the context of the energy sector, professional values must find ways to co-exist with personal values, as working within the energy industry among the backdrop of the climate crisis means that moral and ecological values are inseparable from actions within the sector. Thus, while one's professional identity is idealised on LinkedIn, personal identity will inevitably also be reflected in these spaces—something which the energy sector has been attempting to harness in order to humanise its narrative.

Limitations

Our research design, based on secondary analysis of a variety of official and industry sources, plus social media content, relies on communications that are by their nature public and produced and published in the knowledge that this information may be critically examined. The empirical underpinning of this research has a downstream policy focus. We are examining political communication on issues that have become public and visible. We have no direct access to content from private meetings or lobbying interactions between trade associations, their member companies, and officials and politicians in the European institutions. Neither do we have access to the technical and regulatory discussions that take place in upstream expert groups and policy making fora. However, these are common issues faced by social scientists seeking to 'study up' and examine elite policy processes.

Our sample selection was initially determined by the search results we obtained looking at the Transparency Register. While we believe this is a representative sample, for complete-ness, we could explore more trade associations active in Brussels. We could also examine the activities of member companies of key trade associations. Arising from a wider sample we could also look at more social media accounts, and indeed other social media platforms. Our work has involved a huge amount of manual reading and coding. Further research in this area

should consider automated data scraping and coding processes once valid coding protocols have been established.

Conclusions

We are witnessing unprecedented quantities of energy being put into the climate system by the fossil fuels industry. We are simultaneously seeing unprecedented amounts of political and communications energy puts into the democratic system by the fossil fuels industry. The latter is designed to mask the obvious and catastrophic effects of the former.

Climate lobbying in Brussels is neither open nor transparent. The participation of the oil and gas industry in upstream policy formulation is largely unseen, but downstream the impacts of the close cooperation between institutions and industry are visible in policy initiatives and decision making. There is significant and routine industry cooperation, not only through individual trade associations, but with the numerous ad-hoc coalitions of trade associations pushing for specific decisions. Our sample is replete with joint statements, position papers, open letters and other shared content that speaks to the coordinated efforts of the oil and gas industry to promote its interests and normalise its place in the decision-making apparatus in Brussels.

The policy responses to the climate crisis in Europe are marked by an economic orthodoxy centred on market solutions. A huge amount of industry lobbying effort is therefore expended trying to influence market terms and the regulatory architecture that underpins energy markets. In relation to oil and gas there has been a particular emphasis on ensuring a future for existing energy infrastructure and avoiding stranded assets. Energy security in the context of Brussels lobbying not only refers to global uncertainties, but crucially for industry lobbyists, securing a place for fossil fuels in the medium-term energy mix. As climate targets are pushed further into the future (2050 displacing 2030, and 2040 for instance) space is created to make the case for short to medium term investment in gas as a transition fuel. In the context of the conflict in Ukraine, the industry has pushed for increased fossil fuel exploration in Europe.

The reliance of the European Commission on industry data and expertise arguable creates an unhealthy hierarchy of credibility, where industry actors appear more influential than independent science. Technocrats in the Brussels bureaucracy show little appetite to radically depart from existing processes and the policy making status quo. This means that the oil and gas industry have voice in current and future energy discussions. Across our sampling period there has been emphasis on untried or unproven technologies to mitigate current and projected patterns of fossil fuel usage in Europe. That a policy framework, increasingly centered around 'mitigation denial' strategies, remains intact in the face of mounting evidence of climate change and its multiple negative impacts is testament to the efficacy of corporate lobbying.

To understand how this situation is sustained requires an appreciation of the political economy of energy policy. Our analysis has explored how trade association lobbying in Brussels reflects the material interests of the oil and gas industry. But we also need to think about the symbolic and ideological dimensions of this policy field. The framings we have identified in this research are continuous with existing research on strategic corporate climate communications [42]. Our work crucially points to the conditions under which such framings can have efficacy and be sustained. Here the political culture in Brussels, and the norms and expectations of those involved in policy making has some explanatory value.

The work of trade associations in Brussels can be seen as a complicated inter-elite exercise in story-telling and narrative construction. Such 'trade narratives' are unlikely to shift public opinion directly, but they have some efficacy in elite policy circles. Decontextualization and bracketing out of complicating or confounding information is a hallmark of these narratives.

In the case of oil and gas in Europe the wider climate crisis is an obdurate fact to be elided in the production of 'policy-based evidence' [9].

Our social media analysis suggests those most invested in the status quo, specifically the lobbying norms, processes and practices in the Brussels Bubble, are those who most benefit from and are most invested in this form of 'disinformation from above'. The policy consensus in Brussels on the role of gas (and to a lesser extent oil) in the energy transition is not a reflection of scientific knowledge. It is a product of enormous communicative effort to forge a 'common sense' in Brussels, to persuade elite decision makers that mitigation denial is a pragmatic or realist policy response.

Supporting information

S1 Table. Collocates of 'climate'.
(DOCX)

S2 Table. Most common n-grams.
(DOCX)

Author contributions

Conceptualization: William Dinan.

Data curation: William Dinan, Stefanie Hills.

Formal analysis: William Dinan, Victoria Esteves, Stefanie Hills.

Investigation: William Dinan, Steven Harkins.

Writing – original draft: William Dinan, Victoria Esteves, Steven Harkins, Stefanie Hills.

Writing – review & editing: William Dinan.

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