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Deactivating climate activism? The seven strategies oil and gas majors use to counter rising shareholder action

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ABSTRACT

International oil companies (IOCs) are facing mounting pressure to transition towards low-carbon business models in line with the Paris Agreement's goals to limit global warming. Shareholder activism in oil and gas companies has increased rapidly over the past decade but has not yet been widely researched. This study explores company communication strategies within the context of climate and transition-related shareholder activism at IOC annual general meetings (AGMs). We analyse 123 relevant proxy statements produced by ExxonMobil, Chevron, and BP at their AGMs from 2006 to 2022. This yielded 10 distinct categories of resolution request, and seven common themes of communicative strategy deployed by IOCs. IOCs were generally successful at minimising the impact of climate-related and environmental shareholder activism, with most resolutions unsuccessful, and even successful ones having limited impact on company performance. However, recent shareholder revolts reveal the oil and gas (O&G) sector is experiencing more instances of, and more successful, investor pressure to improve environmental performance. Cases of voluntary changes in company policy and behaviour further indicate the potential for shareholder activism to influence low-carbon transitions. Further research of the phenomenon itself to gain greater understanding of IOC response strategies can yield insights into the nature and likelihood of a transition away from fossil fuels in the future.

1. Introduction

Holding the increase in global average temperature to well below 2 degrees, as stipulated in the Paris Agreement, will require rapid and sustained reductions in (CO2) and other greenhouse gas (GHG) emissions [1]. Fossil fuels are the single largest contributor to global GHG emissions, accounting for over three-quarters, and reducing their production and consumption is a central focus of climate change (CC) mitigation efforts [2,3]. The oil and gas (O&G) industry consequently faces a significant threat to its core business model and increasing pressure to transition to low-carbon energy. One estimate shows 50 % and 30 % of proven oil and gas reserves respectively must remain unburned to achieve the Paris Agreement global warming target of below 2 °C, while a 1.5 °C pathway analysis by the International Panel on Climate Change (IPCC) shows investment in extraction of oil and gas falling by around 25 % over the next 20 years [4,5]. The International Energy Agency (IEA) Net Zero Emissions scenario (NZE) anticipates a large-scale transition from fossil fuels to low-carbon energy technologies and sees fossil fuels decline from nearly four fifths of global energy

supply to one fifth by 2050 [6].

Despite the urgency of mitigating climate change, few examples exist of international oil companies (IOCs) fully embracing a transition strategy. Capital investments in alternative technologies from 10 IOCs breached \$2 billion for the first time in 2019, but still represented only a few per cent of their total capital expenditure, which suggests an industry reluctant or unable to transition to low-carbon business models at the required rate [7].

A potential lever for change in the oil industry is shareholder activism. Environmentally motivated shareholder activism is not a novel phenomenon, but only recently has any meaningful shareholder action taken place in O&G companies [8]. 2022 saw a total of 282 climate-related proposals at US-registered company annual general meetings (AGM), almost double the previous year, and a record number of negotiated agreements between investors and their boards [9,10]. The trend of increasing sustainability activism is evidenced by the growth of the United Nations Principles for Responsible Investment (PRI), a network of institutional investors, asset managers, and owners who incorporate Environmental, Social and Governance (ESG)

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considerations into investment decisions. Since its founding in 2006 with 63 initial signatories, PRI membership has grown to 3826 signatories as of 2021 [11]. Within the proxy voting process at AGMs, shareholder campaigns focusing on environmental and social agendas have doubled from 2016 to 2021 at US-registered publicly listed companies [12].

The label of 'anti-fossil fuel norms' has been applied to the combination of shareholder activism and regulatory pressure in the O&G sector, and in particular their proliferation throughout governance systems [13]. ExxonMobil's 2021 AGM provides a practical example: institutional investor 'Engine No.1' replaced three members of the company board with directors distinguished for their climate and clean technology expertise, notably with backing from the largest institutional investors [14,15]. However, this example is not typical of shareholder activism within IOCs. Outcomes have historically been limited in affecting corporate strategy, with most environmental-related shareholder requests either being out-voted or achieving less substantive results. Hypothetically, if a resolution does not pass, then there will be little, if any, disruption to the company's core business model and corporate strategy. If a resolution does pass, then the company board is more likely to take it into account. While not legally obliged to take action, the board is ultimately responsible to the shareholders of the company, and may face unfavourable consequences if resolutions are not considered with sufficient gravity.

As external pressures increase for O&G companies to decarbonise their business models, communication between shareholders and board members becomes increasingly important – both for the companies to justify their position on shareholder requests, and shareholders engaging in active ownership to change company behaviour. However, there is only limited research on the topic of shareholder activism in oil and gas companies.

This study identifies and evaluates climate and transition-related shareholder activism and IOC response strategies. By conducting a thematic analysis of relevant proxy statements produced by ExxonMobil, Chevron and BP, the research objectives are to:

- 1. Identify the topics, requests, and success rates of climate and transition-related shareholder proposals.
- 2. Identify and analyse the communicative strategies deployed by the IOCs in response to climate-related shareholder proposals to justify their current business model and transition strategy.
- 3. Draw conclusions about the impact of shareholder activism in IOCs.

The rest of this paper is structured as follows. Section 2 presents the background literature. The methods are explained in Section 3. Section 4 shows the results of an analysis of the shareholder proposals and the companies' responses. The results are discussed in Section 5. Conclusions are drawn in Section 6.

2. Literature review

This literature review begins with an overview of technological innovation literature and transition case study frameworks, then explores literature highlighting the inherent obstacles to the energy transition. Debates on incumbent theory are then outlined, leading into fields covering external factors influencing O&G major decarbonisation strategies, particularly shareholder engagement.

2.1. Company-centric transition business model literature

In order to effectively analyse shareholder activism in IOCs, it is useful to provide an overview of current IOC business model literature. Varying typologies along a spectrum of IOC transition business models have begun to emerge [16,17]. These frameworks consider political and economic behaviour to determine a company's position regarding the transition. Categorisations have been made using several factors:

investment decisions into renewable technologies and the extent to which they diversify portfolios, the size of renewable energy investment, the firm's emissions intensity, and the size of their oil reserves [18–20]. Most companies are identified as deploying a 'hedging' strategy, meaning they diversify asset portfolios while retaining fossil fuel operations as the central business model [16]. Often cited within this literature is BP's re-branding to an 'integrated energy company' [17,21–24]. Other companies are typically categorised as either fully transitioning to 'low-carbon pure plays' such as Ørsted, or resisting transition by remaining 'resource specialists', as e.g. ExxonMobil seems to do [16,17].

2.2. Financial attraction of current business model

One of the primary obstacles to O&G majors undertaking a transition away from hydrocarbons is the financial attractiveness of the current business model. As IOCs are profit-seeking entities, financial considerations are of paramount importance to strategic decisions. In the face of oil price volatility and the fear of 'peak demand' approaching [25], companies must balance the financial priority 'trilemma' of dividends payments to investors, maintaining investments in exploration and extraction of hydrocarbons, and either exploring new revenue streams other than fossil fuels or investing in emissions reduction technology [26,27]. The immediate financial motivations to explore new revenue streams are limited. The profitability of fossil fuels is sizeable compared with renewable technologies, despite the rapidly falling investment and operating costs of renewables [28,29]. Consequently, a 'terrible paradox' emerges: in order to fund the transition to renewable energy producers, IOCs are inherently reliant on their current hydrocarbon business model [29]. Stranded assets may trigger a \$13-17 trillion devaluation of the fossil fuels industry under 1.5-1.8 °C climate stabilisation scenarios, giving ample financial incentive for IOCs to resist transitioning [30].

Aside from operational finances and shareholder dividend payments, company directors and executives have personal incentives to pursue hydrocarbon business growth in order to sustain performance-based compensation bonuses [31]. Board members are thus more likely to disrupt business model diversification, controlling the rate of transition to maximise personal gain, and driving business decisions not aligned with climate goals [31,32]. By continuing to pursue both anti-climate policy lobbying and public relations campaigns that project transition intent, O&G majors simultaneously forestall public policy intervention and gain public trust through the 'climate leadership' narrative, in turn upholding their 'social license to operate' within the remit of their core business model [32–34].

2.3. Incumbent strategy in the energy transition

A key area of literature explores incumbent strategy in response to potential demise resulting from industry transition. Historical parallels are drawn between the current clean-energy transition and the transition from coal to oil where incumbents, opting to remain tied to their core business model rather than seeking transition pathways, 'milked' assets to capitalise on raw material extraction before they became redundant [35–37]. The O&G sector faces the same incentives in the clean energy transition [38]. Transition incumbents simultaneously utilise framing and narrative control attempting to disrupt industry transition [39–41]. A recent example in the O&G sector saw fossil fuel companies framing the Russia/Ukraine war as a direct threat to energy security and sufficient reason to delay climate scrutiny of company operations to prioritise fossil fuel supply [42]. This argument reportedly reduced the success of climate-related shareholder campaigns [43].

The strategic positioning of O&G majors as 'transition leaders' draws from theoretical research on incumbencies and political dynamics of energy transitions [44–46]. Incumbent authority is in part sourced from 'material, institutional and discursive forms of power' to resist and accommodate destabilising influences on the core business model [47].

Such power is exercised, for example, by offering small and short-term compromises to external pressures to prevent a larger transition outcome, which perpetuates 'recurring and partially resolved' contestations between stakeholders and inhibits effective political action and long-term solution finding [45]. Research has revealed how O&G companies utilised their power bases to influence EU energy policy through discursive power and narrative control to best-serve company interests [48]. Institutional theory has gone some way to attempt to explain these dynamics within the O&G industry, outlining how companies and institutions interact and influence each other's behaviours [49,50]. This is one possible explanation for the generally accepted notion that European O&G majors have transitioned further than their US counterparts, as a result of the institutional and regulatory environment in which they operate [49].

2.4. Discourse analysis

Academics have begun exploring the discursive and narrative elements of the current O&G transition. Research on four major IOCs (BP, Chevron, ExxonMobil and Shell) showed the industry transition to be effectively non-existent, due to insignificant renewable growth and nonalignment of the companies' CC discourse and action [34]. The 'actions' of these firms are predominantly stated targets rather than visible activities [34]. An analysis of three IOC's climate reporting revealed that CC was most commonly interpreted as a financial risk across the three companies, with Total undertaking climate change as a responsibility, Suncor as a business risk and Statoil as a business opportunity [51]. The prevalence of risk rhetoric in IOC discourse has been identified as a potential ploy to remove agency from the companies in relation to proclimate solutions, simultaneously minimising their perceived contribution to environmental damage and prioritising CC mitigation strategies within their presented business model [52,53]. Climate reporting of firm activity in company reports serves as a data source for much of this research, but how companies communicate directly to shareholders at company AGMs has not been thoroughly analysed in published academic literature [51,54,55].

2.5. Shareholder activism

Fig. 1 shows the increasing scholarly attention awarded to share-holder activism, active ownership and investor engagement in recent years. A contributing factor is the proliferating trend of shareholder

Number of journal articles



Fig. 1. The number of published academic journal papers containing relevant key phrases in the Scopus database.

engagement on CC-related risk and environmental performance issues [56–59]. The O&G sector is naturally a common target of these agendas, particularly in the context of energy transitions, climate-related risk and the potential damage it may cause to shareholder value-creation [60,61]. This is in addition to other forms of protest and confrontation towards IOCs from wider society, which have also increased in recent years [62] [63]. The risks faced by investors emanate from market and regulatory-induced peak oil demand and fears of 'stranded assets', with subsequent shareholder campaigns aiming to either increase risk reporting at IOCs to improve investor decision-making, or exercise active ownership by altering company policy to leave hydrocarbon resources in the ground [25,64,65]. These strategies involve direct affronts to boards by requesting board member changes, or less direct routes such as proposing or voting on resolutions at AGMs on issues such as renewables expansion, emissions reduction targets, and climatelobbying disclosure [66]. Aside from engagement, investors have the option of adjusting portfolios and divesting from high-emitting companies to those that encourage the energy transition. This strategy has gained significant traction; over the past decade, the asset divestment commitments of finance institutions away from fossil fuels have risen from roughly \$0.01 trillion to \$14 trillion [67]. While the debate on whether divestment or engagement is more effective at encouraging the low-carbon transition is hotly contested, both are on the rise [68–70].

There is also a socially motivated element to climate-related investor engagement, commonly pertaining to corporate social responsibility (CSR) and ESG issues [71]. Increasing CSR demands at a sample of US firms increased overall CSR disclosure, but this did not correlate to changes in corporate behaviour or policy [72]. In an attempt to manage and nullify the risk of investor pressure, IOCs often overstate or frame strategy to anticipate shareholder demands [55,72]. This possibly explains why investors have achieved some influence over policy changes on emission reduction targets and production intensity, but significantly less so in obtaining assurances to reduce absolute production levels [73].

3. Methodology

To evaluate the prevalence of climate and transition-related share-holder activism and identify IOC response strategies, we extracted data from proxy statements within *Notice of Annual Shareholder Meetings* documents (presented at respective AGMs) of three majority shareholder-owned IOCs: ExxonMobil, Chevron, and BP. These companies were selected to achieve variety in geographic location and transition strategy [34]. The two American firms have historically resisted transition, with Chevron being slightly more aligned to a 'hedging' strategy [20]. UK-based BP was the first to endorse the possibility of low-carbon transition out of the three selected IOCs.

The research scope focuses exclusively on proxy statements and votes at O&G major annual general meetings (see Fig. 2). A proxy statement contains shareholder 'proposals' or 'resolutions' (used interchangeably) and a voting recommendation from the company to its shareholders with a supporting statement on each proposal.

The process of private negotiation between shareholders and the board and subsequent withdrawals of proposals is outside the scope of this study for two reasons. Firstly, data is naturally sparse and subject to conjecture of reliability regarding private negotiations. Secondly, there is no consensus on whether a withdrawn proposals represents a success or failure for the proponent, so including this phase of the process would potentially confuse results of the study [74,75].

3.1. Data collection

Data were collected from company websites (corporate.exxonmobil. com, www.chevron.com, and www.bp.com), and from the Proxy Monitor database (www.proxymonitor.org) which contains proxy statements from US-registered companies. This database provided access to official company reports where access on company websites was

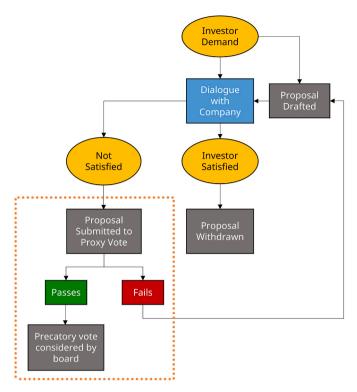


Fig. 2. An overview of the proxy process, highlighting the scope of this work within the dotted line.

not possible. A total of 123 shareholder proposals over a 16-year period (2006–2022) were analysed. Shareholder proposals were selected for analysis from the documents if they contained environmental, climate, or transition-related content. The corresponding Board response to each relevant proposal was also analysed. As multiple shareholder resolutions were analysed from each document, we use a shorthand for referring to specific resolutions for clarity (see Appendix 2). We identify resolutions using the company's shortened name (Ex for ExxonMobil, Ch for Chevron, and BP), the year, and a lower-case letter to identify which proposal is being referenced from that document, e.g.: (Ex2022d) refers to a resolution at ExxonMobil's 2022 AGM requesting a report on plastic production. The subject matter of the proposals will be noted in the reference where relevant.

3.2. Analysis

We conducted a document analysis, which applies the process of qualitative thematic analysis to written documents and involves the synthesis of written or spoken texts [76]. Raw data are systematically condensed into major themes containing a 'central organising concept' in order to extract meaningful insights from large quantities of qualitative data [76-79]. Thematic analysis has been used in many settings, including psychology, health care research, and political science [80-83]. Although the method is well-established in qualitative research, multiple variations exist on the specific processes of coding and thematic allocation [78], and researchers must determine the most apt process by which to conduct their study. The process followed here utilises Braun and Clarke's [79,80,84] six-phase approach to thematic analysis: (i) familiarisation with data, (ii) generating initial codes, (iii) generating themes, (iv) reviewing potential themes, (v) defining and naming themes, and (vi) producing the report. Document analysis is an iterative process and hence these stages are non-linear in concept and practice, with data collection and analysis occurring simultaneously in an inductive manner [76,85].

Both shareholder resolutions and company response strategies were

analysed using the following process. Codes were first identified from words and phrases relating to oil and gas major transitions to a low-carbon economy. These included topics associated with climate change and energy transitions, such as: climate-related policy, emission reduction targets, references to specific technologies, climate risk and financial disclosure, scenario analyses, environmental impacts of company operations, and climate-related lobbying disclosures. Raw data were collected in extraction tables grouped by company and year (see Appendix 1). Codes were then grouped into subcategories and eventually themes by re-reading original data sources and updating the extraction tables, allocating relevant codes to potential themes (see Appendix 3) [76]. Shareholder resolutions and company responses were analysed separately but using the same methodology, producing two distinct yet related lists of codes, subcategories, and themes.

4. Results and discussion

The results are structured in three sections. The first presents a brief contextualisation of the shareholder resolutions within the dataset. The second section identifies IOC communicative response strategies and presents these thematically. The third section explores some of the potential impacts of shareholder activism.

4.1. Proposals

Fig. 3 shows that ExxonMobil received a total of 67 relevant proposals, Chevron 50, and BP 6 from 2006 to 2022. The two American companies, which are widely considered to have progressed least towards low-carbon transition, received the majority of relevant shareholder proposals. This reflects the established narrative of European IOCs progressing further and faster through the energy transition than their American counterparts [17,86,87], assuming that environmental shareholder activism typically targets those firms with the worst environmental performance.

The frequency at which relevant resolutions were proposed at all three companies in the same year has increased in recent years. This only occurred in five instances, three of which occurred in the past four years, suggesting shareholder transition concern as represented by relevant proposals at AGMs has proliferated in recent years across the spectrum of transition strategies in the O&G industry, regardless of performance [16,17]. Further, the fact that BP, who began transitioning the earliest out of the three companies, has received 66 % of its relevant proposals

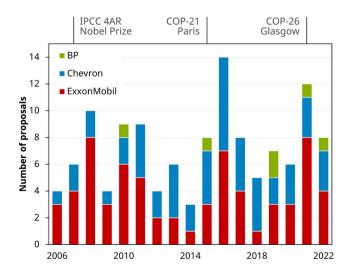


Fig. 3. Total environment and climate change related proposals at AGMs by year and company. The figure includes references to events which were accompanied by increased media coverage on climate change and coincide with the years that saw the highest number of relevant proposals.

within the last four years suggests that he O&G sector is facing increasing shareholder pressure on environmental and transition-related issues [10,16].

It is interesting to note the spikes in relevant proposals roughly occur just after major environmental world events, especially COP-21, COP-26, and Al Gore winning the Nobel peace prize. This suggests the possible causation that news and media coverage of environmental and climate events primes shareholders to propose related resolutions in the wake of more intense environmental media coverage. That a more environmentally aware public may embolden shareholders to demand better performance from their respective board members warrants further research into the media-shareholder relationship.

4.1.1. Proposal categorisation

Thematic analysis of resolution contents yielded 10 distinct categories of shareholder resolution, listed in Table 1. The distribution of proposals across the three IOCs is displayed in Fig. 4. Three prominent categories are discussed in more detail below.

4.1.1.1. Portfolio risk scenario analysis. Resolutions pertaining to portfolio risk scenario analysis were the most common proposal type with 31 out of 67 in total. This supports research showing that shareholders are becoming increasingly sensitive to both the physical risks of CC on company assets, which would damage their investments, and the risks of the evolving CC regulatory environment on company operations

Table 1Definition of the shareholder proposal categories identified by thematic analysis.

Category	Description of request
Portfolio Risk Scenario Analysis	A report on financial performance of specific asset types (e.g. hydraulic fracturing, natural gas operations etc.) or entire portfolio analysis under conditions of (1) reduced O&G demand (2) increased regulation and CC mitigation policies, or (3) meeting below 2 °C global warming goal (Parisaligned scenario).
Board Member Appointment	Board member changes to include executive with specific environmental or transition-related expertise.
Emissions Target Adoption	Adopt carbon and/or methane emission reduction targets from operations.
Climate Lobbying Disclosure	Report on lobbying expenditure related to influencing climate policy, including via associations and externally employed lobbying groups.
Report on Emission Disclosure	Disclose emissions produced by specific assets or entire operational portfolio, including carbon and methane emissions.
Reserve Replacement Metrics	Changing the measurement of oil and gas reserves from reserve replacement ratio to British Standard Units (BTU) with the aim of improving incentives for low-carbon transition.
Dividend Policy Alteration	Shifting the allocation of capital from O&G operations to shareholder dividends as a preferable use of company finances in response to CC and fears of stranded assets.
Executive Compensation Metric	Introduce a metric for executive compensation and performance-based targets related to low-carbon transition and environmental performance of the company
Exclusively Environmental/ Social Concerns	A report, target, or policy designed to disclose and/ or improve the environmental and/or social impact of company operations. Includes concerns relating to biodiversity, wildlife habitat conservation, health impacts on local community, community engagement, and legal compliance with local environmental laws.
Renewable Energy Policy	Target and/or policy to adopt or expand renewable energy generation assets within the company portfolio with the aim of reducing company emissions, as well as capitalising on the low-carbon transition

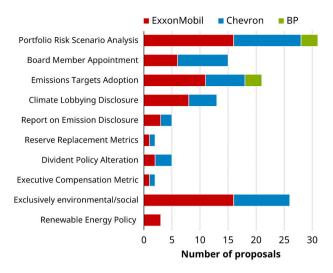


Fig. 4. Number of shareholder proposals received between 2006 and 2022, grouped by category and company.

[61,88]. Stricter regulation on emissions output and the growing interest in bans on O&G extraction operations have contributed to this concern of potentially stranded assets, and therefore shareholders have sought to gain further disclosure on IOC plans to mitigate these risks [61,65].

4.1.1.2. Exclusively environmental/social concerns. Resolutions pertaining to exclusively environmental, public health, and community impacts of company operations were the second most frequently proposed, with 26 in total. These covered a range of issues including water use, local community engagement, biodiversity impacts, habitat conservation, and public health. These resolutions made no explicit reference to financial impacts on the company or investors, giving credence to the concept of strictly environmentally motivated active ownership [8,89].

4.1.1.3. Climate lobbying. Fig. 5 shows that along with increasing frequency, there is increasing shareholder support for climate lobbying-related proposals at ExxonMobil and Chevron, demonstrating a growing awareness of companies obstructing stricter climate regulation. A 2021 report collected data on the 250 largest global corporations' climate lobbying expenditures and strategies, ranking ExxonMobil and Chevron first and second respectively in terms of 'most obstructive

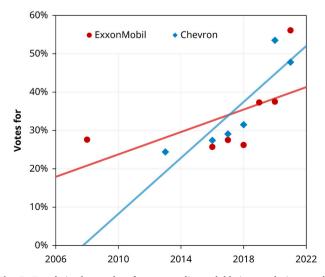


Fig. 5. Trends in the results of votes on climate lobbying resolutions at the AGMs of ExxonMobil and Chevron.

Number of successful proposals

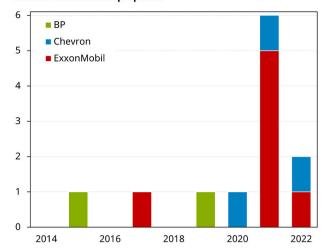


Fig. 6. The number of successful climate-related resolutions by year and company.

corporate and industry association holding back Paris Agreement-aligned climate policy' [90].

BP ranked ninth in the same report, yet received no climate lobbying proposals within this dataset. As a company with one of the most discernible mismatches between its climate and transition discourse and its concrete actions on the same issues, and with the largest annual climate lobbying expenditure of the three analysed companies, BP has seemingly avoided the trend of increasing investor pressure on climate lobbying disclosure [34,91]. This evidence supports research on incumbent theory positing that entities experiencing transition in their core business model or industry may adopt strategies to appear to lead the transition so as to pre-empt shareholder action [31,54,55].

4.1.2. Successful proposals

Fig. 6 summarises the proposals that received sufficient votes in favour to pass for board consideration, categorised by company and year. Only 12 proposals, 10 % of those analysed, received enough votes to be considered by the companies' Boards of Directors. These are detailed further in Table 2. No proposals prior to 2015 were successful.

Climate-related shareholder activism has evidently become more successful over the last decade at the three analysed IOCs. Three fifths of successful proposals were at ExxonMobil AGMs. The spike in 2021 can be explained by the 'Engine No. 1' shareholder revolt which replaced three members of ExxonMobil's Board with executives selected by the activist investor [61,65,92]. Each of these board nominations were accounted for individually. ExxonMobil advised to vote against all climate and transition-related proposals. Chevron advised to vote against all but one relevant proposal, in 2022. BP advised to vote in favour of two resolutions in 2015 and 2019.

4.2. Company responses

The vast majority of climate and transition-related shareholder proposals were opposed by ExxonMobil, Chevron and BP. This section considers the arguments and discursive strategies used by these IOCs in direct response to proposals. Thematic analysis of proxy statements yielded seven distinct themes within company responses, outlined in Table 3. The following sections discuss each strategy, and the final section outlines examples of changes in company disclosure and activity as a possible result of increased shareholder pressure.

4.2.1. Importance of Core business model

All three companies repeatedly justified their opposition to proposals by appealing to the importance of fossil fuels via two dominant arguments. The first describes the need to meet projected growth in energy demand and the role of fossil fuels in this responsibility. ExxonMobil repeatedly referenced the IEA scenario forecasts showing both an increase in global energy demand through 2040 and oil and gas consumption 'equal to, if not greater than, some of the scenarios already analysed' in company reports, concluding that hydrocarbons are 'essential to meeting growing energy demand' (Ex2016e, 2017c-portfolio risk scenario analysis). This aligns with discourse analysis research showing ExxonMobil using 'demand-as-blame' arguments which frame energy demand, rather than fossil fuel supply, as driving GHG emission increases [53]. Similarly, in 2010, BP quoted projections of 40 % growth in energy demand between 2007 and 2030, with 80 % of this demand being met by fossil fuels [93]. This was in response to a shareholder resolution regarding the investment assumptions behind the SADG oil sands project, with BP justifying its expansion by stating fossil fuels will need \$1 trillion yearly investments to meet demand (BP, 2010a). Referring to US domestic oil production declining by 35 % since 1985, BP made the dual argument that the core hydrocarbon business model is not just economically attractive, but expansion is necessary to meet increasing global energy demand. Notably, BP sold the SADG project in 2022, simultaneously expanding its offshore wind portfolio [94].

In 2015, BP stated that to meet increasing demand 'a diverse mix of energy sources will be needed, including fossil fuels' (BP2015a). This response was in support of a resolution requesting further disclosure on low-carbon transition business model planning, yet clearly states the necessity of growth in its core hydrocarbon operations. Opposing a similar proposal in 2018, Chevron echoed this notion of simultaneously acknowledging the need for transition while supporting the growth of its hydrocarbon operations; stating 'energy from diverse sources' is required to meet growing demand and defending its fossil fuel portfolio by arguing the board 'believes that strong demand for its current product slate will continue—even in a carbon-constrained scenario.' (Ch2018a). All three companies therefore emphasised the importance of fossil fuels in meeting global energy demand growth.

The second way IOCs argued for the importance of fossil fuels was by appealing to the social capital of their hydrocarbon products. By providing 'affordable and reliable energy, good jobs and public revenue', companies claimed they directly encourage development, which 'improves quality of life [and] alleviates poverty' (Ch2011d, Ch2015b, Ch2016d; Ex2016d). Similarly, Chevron cited the expanding global middle class as justification for its fossil fuel operations, linking its core business model with enabling economic growth and improved living conditions (Ch2015a, Ch2015b, Ch2016d). One proposal highlighted the opportunity for ExxonMobil to demonstrate 'moral leadership' to prevent the world's poorest being hit first and hardest by CC (Ex2011e-GHG emission goals). This CSR sentiment was reversed by company responses, which tied growing oil demand directly to improving living standards, emphasising the social good of fossil fuel products (Ex2011e, Ex2012b, Ex2013c, Ex2014a, 2016d; BP2015a).

4.2.2. Emphasis on hedging technology

While all three companies emphasise the role of particular technologies under development or currently being deployed to demonstrate their progress, no evidence presented in the responses suggested these technologies are transformative or potentially able to replace their current hydrocarbon business models. The two most frequently mentioned options were carbon capture and storage (CCS) and energy efficiency (including venting and flaring reductions). These were often mentioned in tandem as being either emission reduction focuses for future strategy (BP2010a; Ex2008a, Ex2009a, Ex2011d) or evidence of current decarbonisation (Ex2008c, Ex2008f; Ch2008b, Ch2009a, Ch2015b). ExxonMobil highlighted its energy efficiency improvement target of 10 % from 2002 to 2012 as evidence of adhering to some form of emission-related goal (Ex2009a-GHG emission targets). These technologies pose no threat to the hydrocarbon business model, as they merely attempt to mitigate the effects of fossil fuel use or the quantity

Table 2Thematic content of the 12 successful resolutions at ExxonMobil, Chevron and BP from 2006 to 2022.

Year	Company	Proposal title	'Resolved' request	Justification and evidence subcategories	Votes in favour	Outcome
022	ExxonMobil	Audited Report on Scenario Analysis for Climate Risk Disclosure	Report assessing how applying assumptions in IEA Net Zero 2050 pathway would affect assumptions, costs estimates, and valuations underlying financial statements, including those related to long-term commodity and carbon prices, remaining asset lives, future asset retirement obligations, capital expenditures and impairments	 Paris Agreement alignment Importance of fossil fuel companies' role in CC mitigation Stranded asset concerns Insufficient current disclosure Peer company out-performance 	51 %	Produced 2022 Advancing Climate Solutions Report
022	Chevron	Report on Reliability of Methane Emission Disclosures	Report analysing a critical CC concern, the reliability of Chevron's methane emission disclosures; summarise efforts to measure methane emissions; indicate likelihood of difference between direct measurement results and published estimates of methane emissions; assess degree to which differences would alter	 Detrimental impact of fossil fuel industry emissions Legal, reputational and/or social license to operate risks Value creation/financial risk mitigation Institutional, investor and/or government pressure Insufficient current disclosure 	98 %	Produced 2022 Chevron Methane Report
021	ExxonMobil	Report on Climate Lobbying	estimates of scope 1 emissions Report on if and how ExxonMobil lobbying activities (direct and indirect through trade associations) align with Paris Climate Agreement goal of limiting average global warming to well below 2 °C;	 Importance of fossil fuel companies' role in CC mitigation Paris Agreement alignment Legal, reputational, and/or social license to operate risks Value creation/financial risk mitigation Insufficient current disclosure Peer company out-performance Institutional, investor and/or government pressure 	64 %	Produced 2021 Climate Lobbying Reportx
2021	ExxonMobil	Report on Lobbying	Annual report disclosing company policy and procedures governing lobbying, both direct and indirect, and grassroots lobbying communications; payments made to the above effects, amount of payment and recipient; description of management and Board decision-making process for making payments as described	 Insufficient current disclosure Inconsistent goals/statements and actions Legal, reputational, and/or social license to operate risks Business-related consequence of poor performance 	56 %	Produced 2021 Climate Lobbying Report
021	ExxonMobil	Board Member Change x4	No 'resolved' request; activist investment firm and shareholder Engine No. 1 proposed four director nominees for election in opposition to nominees recommended by Board of Directors	N/A	Three out of four were successful	Three new board members appointed wit view to accelerate business model transition
021	Chevron	Reduce Scope 3 Emissions	Substantially reduce GHG emissions of energy products (Scope 3) in medium and long-term	Importance of fossil fuel companies' role in CC mitigation Peer company out-performance Institutional, investor and/or governance pressure	61 %	Introduced Portfolio Carbon Intensity Target for 2028 across scope 1, and certain scope 3 emissions
020	Chevron	Report on Climate Lobbying	Report on if and how Chevron lobbying activities (direct and indirect through trade associations) align with Paris Climate Agreement goal of limiting average global warming to well below 2 $^{\circ}$ C;	1. Paris Agreement alignment 2. Legal, reputational and/or social license to operate risks 3. Value creation/financial risk mitigation 4. Importance of fossil fuel companies' role in CC mitigation 5. Insufficient current disclosure 6. Peer company out-performance 7. Commend progress	64 %	Produced 2020 Climate Lobbying Report
019	ВР	Climate Change Disclosures	Annual strategy report in which board presents in good faith its Paris goals-aligned strategy, as well as: Capex alignment with Paris (including oil exploration, acquisition and development); metrics and targets; anticipated investment in oil and gas resources and reserves and other energy sources; targets to promote GHG emission reductions; estimated carbon intensity of energy products and progress over time; any links between targets and executive remuneration; progress on all the above	Paris Agreement alignment Insufficient current disclosure Institutional, investor and/or government pressure Financial risk mitigation	99 %	Included broader disclosures in its 2019 Annual Report
2017	ExxonMobil	Report on Impact of Policies to	Annual assessment of portfolio impacts of technological advances and global CC	1. Paris Agreement alignment	62 %	Produced 2017 Sustainability Report (continued on next page

Table 2 (continued)

Year	Company	Proposal title	'Resolved' request	Justification and evidence subcategories	Votes in favour	Outcome
		Limit Global Warming	policies; analyse impacts on ExxonMobil's O&G reserves and resources in scenario with reducing demand from carbon restrictions and related rules or commitments adopted by governments consistent with globally agreed 2 °C target; assess resilience of company's full portfolio of reserves and resources through 2040 and beyond; address financial risks associated with such scenario	2. Inconsistent goals/statements and actions 3. Insufficient current disclosure 4. Importance of fossil fuel companies' role in CC mitigation 5. ExxonMobil tried to exclude proposal the previous year on grounds of priorcompliance, SEC advised in favour of non-compliance 6. Institutional, investor and/or government pressure		
2015	BP	Strategic Resilience for 2035 and Beyond	Annual report on ongoing operational emissions management; asset portfolio resilience to IEA scenarios; low-carbon energy R&D and investment strategies; relevant strategic KPIs and executive expenditures; public policy positions relating to CC	 Peer company out-performance Insufficient current disclosure Commend progress Institutional, investor and/or government pressure 	98 %	Included requested disclosures in 2015 Annual Report and 2015 Sustainability Report

Table 3Summary of themes within company responses to climate and transition-related shareholder proposals.

Theme	Description of strategies
Importance of core business model	The important role hydrocarbon business roles play in (1) meeting projected growth in energy demand, and (2) the social capital of fossil fuels as providing improvements in quality of life, encouraging development and alleviating poverty.
Emphasis of hedging technology	Prioritising technological advances peripheral to that of the core hydrocarbon business model, e.g. carbon capture and storage (CCS), energy efficiency improvements, venting and flaring reductions, and research and development (R&D) of various alternative low-carbon fuels.
Transfer of responsibility	Removing agency of transition by highlighting CC as a whole and the onus of energy transition being shared across multiple phenomena and actors.
Devaluing metrics	Identifying measurement and disclosure metrics proposed by shareholders as insufficient and unapplicable to the IOC business model, devaluing the proposed change in favour of the status quo.
Financial stability	Emphasising strategy-guiding importance of financial performance in (1) shareholder value-generation (2) the relative profitability of fossil fuels, and (3) maintaining business performance relative to industry competitors.
Duplicative information	Claiming requested disclosure is unnecessary due to (1) information being already provided in company reports, (2) disclosures made to required government institutions and agencies, (3) sufficient legal compliance with disclosure laws, and (4) sufficient operational management mechanisms already being in place.
Mirroring concerns	Aligning company strategy with the concerns of shareholders, government, and the public by (1) utilising semantic strategies to reflect sentiments within proposals and (2) appealing to isolated examples of technological, environmental and social performance, including membership of external organisations.

used in extraction. The same resolution proposed four years later described energy efficiency and flaring reductions as 'low-hanging fruit' for IOC decarbonisation strategies (Ex2011e). Cost-effective solutions to flaring have proliferated and are cited as one of the few areas of progress in the O&G sector decarbonisation [16,95]. However, these technologies provide little evidence of a transition away from the core fossil fuel business.

Alternative energy technologies were similarly referenced to demonstrate company awareness or potential willingness to transition. Both ExxonMobil and Chevron referenced various combinations of geothermal, biofuels, hydrogen, and lithium-ion in response to transition or technology related proposals (Ex2007b, Ex2010e; Ch2009a, Ch2015b). Crucially, these were all within research and development stages at the time. ExxonMobil caveated its alternative technology research: 'The extent and magnitude of future investments in these areas will depend on the results achieved through this research and the shareholder returns through broad commercialization' (Ex2010e-report on energy technology). This implies hydrocarbon operations will remain central to the business model until alternatives can rival their value generation. As the profitability of renewable energy is lower than that of fossil fuels, there is little incentive for IOCs to prioritise it in their business models [29].

BP and Chevron emphasised the transition from coal to gas as a notable success (BP2015a; Ch2018a-transition planning disclosure). BP mentioned its public policy role in advocating for coal-to-gas transitions,

noting that 50 % of its asset portfolio was made up of gas in 2015, and Chevron highlighted its successful response to market signals by expanding its gas portfolio (BP2015a; Ch2018a). Increasing O&G industry pro-gas lobbying in the EU and the US supplements findings to suggest that IOCs are strategically presenting operations such as gas, already within their business model, as transitionary [90]. Capital market trends show asset managers and private and institutional investors becoming increasingly sensitive to coal investments, and some beginning to divest from oil and gas [7]. Gas still contributes significantly to emissions, and its role in the transition is disputed as continuing operations may contribute to long-term decarbonisation, or may result in carbon lock-in and thus should be phased out [96–98].

4.2.3. Transfer of responsibility

IOCs regularly transferred the responsibility of transitioning in resolution responses. The complexity of the fossil fuel value chain was often used to obscure requests for the adoption of emissions targets and transition business model disclosure. BP stated that 'no one company or sector alone can deliver a low-carbon future' (BP2019a-CC disclosures, 2019b-CC target adoption). ExxonMobil used the same argument: 'Elimination of plastic waste pollution requires the support, innovation, and global collaboration of the entire plastics value chain' (Ex2022d-plastic production). These arguments aim to reduce expectations of what any one IOC can achieve and attempt to absolve companies of responsibility for environmental performance.

In response to proposals requesting CC portfolio impact assessment and GHG reduction targets, Chevron questioned the assumption that siloed company action is an effective CC mitigation strategy (Ch2016a, Ch2017a, Ch2018a, Ch2019b). Their repeated response described societal and government responses to CC that require individual fossil fuel producers to curtail production proportionately as 'flawed and unrealistic', yet provided no supporting evidence. Responsibility for CC mitigation was directed towards less efficient companies: 'a decrease in overall fossil fuel related GHG emissions is not inconsistent with continued or increased production by the most efficient producers' (Ch2017a). This represents both an implication that GHG reduction targets of individual companies do not best serve CC mitigation, and a defence of Chevron's hydrocarbon business model by emphasising the important role of efficiency improvements in reducing O&G production's environmental impact.

4.2.4. Devaluing metrics

ExxonMobil made regular attempts to devalue the measurement metrics proposed by shareholders. A repeat proposal requesting CO₂ disclosure for consumers at petrol pumps was met with the argument that well-to-wheel measurements were complex and variable in scope, insinuating that the information was impossible to provide (Ex2007c, Ex2008d). The company also obscured GHG emission targets by claiming that reliance on multiple 'unforeseeable factors' deem them 'impractical for guiding business performance' (Ex2012a, Ex2013b, Ex2015b). Another resolution requesting Scope 3 emission disclosure was met with a similar argument describing the 'flawed accounting methods' using 'questionable, often double-counted estimates, with widely acknowledged deficiencies and inconsistencies' (Ex2022a). That said, ExxonMobil reported its Scope 3 emissions for the first time the previous year [99]. These were the highest of the companies analysed in 2021, providing an incentive to downplay potential measurement [99-101]. Considering ExxonMobil is widely regarded as a transition laggard [16-19], the communication strategy of devaluing its Scope 3 emissions seemingly attempts to justify its relatively poor environmental performance. In response to a similar proposal, BP argued that the company is not responsible for the end-use consumption of its products and should therefore be excluded from reporting such information (BP2019a).

4.2.5. Financial priorities

As profit-seeking entities, IOCs naturally prioritise financial performance and regularly defended 'no-vote' recommendations on climate-related proposals with economic arguments. These fall into three distinct sub-categories: (1) emphasising the relative profitability of fossil fuels, (2) emphasising the importance of shareholder value-generation, and (3) maintaining competitiveness with industry rivals.

In response to transition business planning shareholder resolutions, both ExxonMobil and Chevron made strikingly similar statements regarding optimal capital expenditure. ExxonMobil stated its belief in 'practical, prudent and affordable' solutions to CC and Chevron affirmed the board's belief in 'taking prudent, practical and cost-effective action' to CC risks (Ex2016d; Ch2017b). The word 'prudent' in both responses suggests the US firms use the relative profitability of fossil fuels to justify continuing their hydrocarbon operations. The term 'cost-effective' further implies prioritisation of fossil fuel operations over alternative energy. By pursuing 'disciplined investing in attractive opportunities across normal fluctuations in business models', IOCs sought to justify their hydrocarbon business model by emphasising its proven economic benefits (Ex2017b). In 2021, Chevron added the term 'ever-cleaner' to this repeated response (Ch2021b-NZE scenario analysis). That year, the company launched its New Energies business unit to assess the commercialisation of alternative energy technologies, a notable change in policy direction from historical reliance on external R&D institutions [102]. Proposals to develop such scenario analysis received 41 % of shareholder votes in 2016, and 33 % in 2019 (Ch2016b, Ch2019aemission reduction targets). These affronts to company voting recommendations (all against) represent both the scale of shareholder climate-related activism and the potential influence of active ownership on changing company policy.

The most prevalent financial concern relates to companies' fiduciary responsibility towards generating shareholder value, which is unsurprising as stockholders are the direct recipients of these statements. All three companies made a similar argument, committing to 'attractive business opportunities' that support 'long-term shareholder value' and emphasising that 'funding and growing a competitive dividend is already the highest-priority use of cash for the Company' (Ex2009c, Ex2017b; BP2019b; Ch2015a). The historical growth of dividend payments also justified the companies' priorities towards shareholder interests (Ex2009c, Ex2017b; Ch2015a).

Company responses highlighted potential risks to shareholder value, typically in response to resolutions requesting stricter environmental regulation, ending drilling in protected areas, and emissions disclosure (Ex2007b; Ch2006a, Ch2015b). Chevron noted 'the global expansion of protected areas has the potential to foreclose much needed oil and gas production, posing risks for future stockholder value', implying that including environmental considerations within business decisionmaking would curtail value-generation (Ch2006a). BP similarly argued that Scope 3 emissions are beyond the company's remit of control and therefore 'would risk the erosion of long-term shareholder value' by jeopardising the company's position as 'a world-class investment' (BP2019b-CC target adoption). These arguments were supplemented by warnings of risking competitiveness with industry peers, particularly in relation to climate-lobbying disclosure and climate target adoption that would hold the company to standards above the industry norm (Ch2015b, Ch2016b; Ex2016b).

The apparent prioritisation of value generation and dividend payments supports research showing IOCs have historically used and continue to use these as guiding objectives of business operations [27]. Yet the 2022 energy crisis has somewhat simplified the IOC 'trilemma' of prioritising dividend payments, oil and gas operations, or alternative technologies; rising oil and gas prices have seen BP's profits increase to their highest in 14 years, resulting in a 10 % dividend boost plus increased funding for both hydrocarbon operations and transition technology investments [103–105]. The continued growth of benefits to shareholders serves as further justification for IOCs to continue pursuing a fossil fuel-based business model.

4.2.6. Duplicative information

The three analysed IOCs routinely claimed sufficient information on proposal requests was already disclosed, therefore meeting shareholder demands would duplicate pre-existing output. These arguments come in four sub-categories: (1) references to published company reports, (2) disclosures to government agencies and institutions, (3) appeals to legal compliance for disclosures, and (4) sufficient operational management systems already in place.

All categories of proposal received a response from at least one of the three analysed IOCs in which annual reports, sustainability reports and technology or transition-specific reports were used as evidence of adequate company disclosure (see Table 1). These documents were effectively an extension of investor engagement by IOCs to communicate strategic and operational practices of the company. For example, BP began one response by guiding shareholders to its *Annual Report* which outlines its Paris Agreement-aligned strategy, before detailing its renewable investment targets and highlighting its support of a similar previous proposal [24].

ExxonMobil and Chevron frequently referred to their Corporate Citizenship Report (CCR) and Corporate Responsibility Report (CRR) respectively in response to proposals concerning transition strategies, portfolio risk scenario analyses and environmental impacts of company operations (Ex2011b, Ex2013b, Ex2017a; Ch2010a, Ch2012a, Ch2012b, Ch2016c). These reports detail company ESG activity and performance.

Both companies then renamed these documents to the *Sustainability Report* and *Corporate Sustainability Report*, respectively. Reframing these substantially similar reports could be interpreted as 'sustainable corporate visioning' in an attempt to direct company policy towards a more sustainable business model, as occurs in other transitioning companies [106]. Alternatively, American IOCs may be pre-empting further investor pressure by appearing to take concerns into account, effectively 'window-dressing' reports to appear more transition-ready than they are [55].

Proposals pertaining to climate lobbying disclosures were commonly met with arguments of legal compliance, exemplified by ExxonMobil highlighting its actions as being 'in accordance with all applicable disclosure laws' (Ex2021c; Ch2016g). ExxonMobil went further to note the company's belief in the quality of lobbying legislation, stating 'We believe these existing disclosure laws are appropriately broad and provide the necessary transparency' (Ex2017a). BP made no reference to its disclosure, possibly because its six resolutions related only to emissions target adoption and portfolio scenario analyses (see Fig. 4). Despite shareholders requesting detailed lobbying disclosure be presented to them directly, both ExxonMobil and Chevron cited mandatory SEC filings and Congress reporting as evidence of sufficient disclosure (ExxonMobil2019c; Ch2018d). American IOCs evidently rely on legal compliance to justify the status-quo and to prevent further disclosure.

4.2.7. Mirroring concerns

IOC shareholder resolution responses contain recurrent instances of 'mirroring': the communicative strategy of reflecting the same sentiments and concerns as shareholder resolutions. This involves two subcategories of response strategy. The first involves semantic reflection of certain keywords and phrases within proposals to align the company with the shared beliefs of government, shareholders, and the general public. The second relies on appeals to isolated examples of technological, environmental and social performance, including membership and/or funding of external organisations relating to the specific concern within the proposal.

This theme was less common in BP responses, but was present in the vast majority of ExxonMobil's and Chevron's responses and applied to all 10 proposal categories. These instances saw both companies maintaining they 'recognise', 'understand', and 'share' the risks and concerns presented in shareholder resolutions, despite recommending stockholders to vote against the proposals (Ex2007d, Ex2015c, Ex2022d; Ch2006a, Ch2011a, Ch2020b; BP2010a [52];). This is explicitly demonstrated by Chevron's assertion that 'Your Company is committed to improving public access to information on natural gas development and supports disclosure of chemicals used in hydraulic fracturing' (Ch2012a-environmental impact disclosure). The response lists measures deployed to meet this claim, including its Environmental, Social and Health Impact Assessment (ESHIA) process for environmental risk mitigation, despite flaws in industry self-regulation being explicitly mentioned within the shareholder proposal (Ch2012a).

Membership and funding of external organisations were used as evidence of company progress towards mitigating shareholder concerns. This was common in responses to environmental and social concerns in which community consultation and local reinvestment schemes were mentioned, and in resolutions pertaining to portfolio risk analyses where external R&D programmes and institutions were evidenced (Ex2011a, Ex2016e, Ex2017c, Ex2021b; Chevron, 2008b,2013a, 2013d 2019a). Chevron claimed the company 'often participates in research on evolving renewable technologies' (Ch2018a-transition business model planning). Similarly, ExxonMobil referred to over 80 university R&D partnerships for lower-carbon technologies (ExxonMobil 2016e, 2017c-impact scenario analyses). However, these examples were peripheral to the companies' core business models, and statements were tempered with caveats that commercialisation of these technologies relies on projected returns on investment, and would therefore likely remain outside the primary business focus of company operations (ExxonMobil2010e).

5. Discussion

5.1. Potential impacts of shareholder activism

The previous section identified the seven major communicative strategies deployed by ExxonMobil, Chevron and BP to oppose climate and transition related shareholder proposals. The question remains whether shareholder activism has resulted in any meaningful improvements in disclosure or changes in company operations. This section considers changes related to resolutions that received significant but insufficient (below 50 %) shareholder support to pass at AGMs.

Shareholder pressure is likely to have influenced changes in Chevron's risk analysis disclosure. In 2016, a resolution requesting a portfolio risk scenario analysis received 40 % of votes in favour (Ch2016b). The following year, the company released a report *Managing Climate Risks: A Perspective for Investors* [107]. This was renamed in 2018 to *Climate Change Resilience Report*, and has since been published annually [108]. Given the prominent number of scenario analysis requests (see Fig. 4), it is possible that Chevron was responding to growing shareholder pressure to focus its risk analysis more narrowly on those posed by CC.

In 2021, this report was updated to include IEA Net Zero pathway projection analyses within its risk assessment of company assets after a shareholder resolution requesting such an analysis received 47 % votes in favour [109]. In its 2022 proxy statement, Chevron stated this inclusion was 'subsequent to that proposal' (Ch2022b). This demonstrates that shareholder engagement can influence changes in IOC disclosure and supports similar findings of focused shareholder engagement in other corporate contexts [56,74].

ExxonMobil also demonstrated voluntary receptiveness towards shareholder pressure in its AGMs. In 2021, a proposal requesting financial portfolio risk analysis of the possible impacts of CC on company assets received 49 % of votes in favour (Ex2021a). The following year the company published its *Advancing Climate Solutions* report, focusing exclusively on low-carbon alternative energy technologies and their potential commercialisation [110]. While ExxonMobil did not explicitly state shareholder pressure influenced their decision to produce this report, it is plausible. By issuing a report on how the company is preparing for the low-carbon economy, however genuine, ExxonMobil's actions could be interpreted as seeking to satisfy shareholder demands for transition planning disclosure [55,111].

These examples suggest direct shareholder influence on company policy through resolutions with minority support. However, there were multiple instances of significant investor support for climate and transition related proposals which yielded no immediate perceivable change in company reporting or activity.

5.2. Legislation as the primary accelerator of the energy transition

As has been demonstrated, there has been little concrete evidence of IOCs changing core business model operations as a result of shareholder activism. Improvements in disclosure and company reporting have been undertaken as a result of successful shareholder proposals, but it is unclear whether this has translated into evidencable action on the part of the IOCs.

Hence, it is the view of the authors that legislation rather than shareholder activism is the primary driver to accelerate the clean energy transition. Regulations, legislation and international treaties can increase the likelihood and pace at which IOCs transition away from fossil fuel production. The IEA World Energy Model includes some 3000 public policy measures aimed at reducing GHG emissions, increasing the proliferation of alternative and renewable energy sources and general energy and climate-related policies [6]. National and supranational government implementation of carbon-taxes, cap-and-trade schemes, and electric vehicle subsidies are just a few examples of government-aided successes to reduce historic growth in oil demand [6,112]. Legislation has also recently been enacted to directly reduce O&G

extraction in Europe and the US [113-116].

Governments can shape public policy and regulation to create favourable conditions for transition, as evidenced by the Danish and UK national governments in significantly contributing to Ørsted's rapid transition [106]. Indeed, research has shown that O&G companies with headquarters located in geographical jurisdictions enacting stricter environmental regulations typically demonstrate more progressive decarbonising efforts [16]. Intensified regulatory scrutiny from the SEC and TCFD is improving CC risk disclosure, but the extent to which this can improve environmental performance of firms is yet to be seen [61,117,118]. The widespread acknowledgement of, and calls for, government intervention on energy transitions serves to demonstrate the historic and potential near-future role of the state [16,31,119–121].

Owing to their intrinsic bases of power and influence, however, IOCs are well-positioned to successfully lobby against strict climate-related regulation and convince both public institutions and wider society that they can be trusted to lead the energy transition. In doing so, they limit the ability of legislation and regulation to enforce a more rapid and deeper energy transition [31]. Consequently, efforts to curtail O&G operations have done little to prevent the sector from expanding. Analysis from Rystad Energy data has shown that the 20 largest (including majority state-owned) oil and gas companies expect to spend an estimated \$932 billion on new fossil fuel projects by 2030 [122].

6. Conclusion

Shareholder activism is increasingly prevalent as a tool for furthering the sustainable energy transition of the oil and gas industry. This study examined the form and success of this activity through thematic analysis of 123 proxy statements on climate and environmental topics at ExxonMobil, Chevron, and BP from 2006 to 2022. Shareholders put forward resolutions on topics ranging from reporting of energy transition risk to reductions in Scope 3 emissions. The vast majority targeted ExxonMobil and Chevron (with BP only receiving six relevant proposals in this time), possibly due to their perceived position as 'laggards' in the energy transition [123].

Only 12 of the 123 proposals were successful, all of which since 2015. While the success rate of climate-related shareholder resolutions has increased over time, in line with trends in the wider corporate sphere [9], only 10 % of environmental shareholder action at IOCs leads to the desired outcomes. Multiple attempts at submitting highly similar proposal did not lead to better chance of success.

The successful resolutions mostly pertained to reporting around climate impacts, business risk and resilience in the energy transition, and lobbying. The only exceptions were the replacement of three board members at ExxonMobil and the requirement that Chevron reduce its Scope 3 emissions, both in 2021. The fact that all successful instances of more radical proposals occurred in 2021 gives some indication that shareholder activism may be gaining more power in the companies, but even then the pace of change over the studied 17-year period is slow. AGMs which occurred in the immediate wake of environmental events that received intense media coverage such as COP conferences produced more environmental and climate related proposals, and such events possibly had an influence on the number of successful proposals in recent years. Further research in this area may produce insights into media-shareholder dynamics and private company AGMs reflecting wider engagement with climate change. Only three of the 12 successful proposals were supported by the Company Boards, which shows that shareholder activism can outweigh the Board's voting recommendation.

These results suggest that shareholder action has limited effect, but this conclusion has two caveats. Firstly, as this analysis relies on publicly available data, it does not account for undocumented negotiations between shareholders and companies. Such shareholder activity could well have influenced company decisions in addition to the outcomes seen here. Secondly, there are instances of failed resolutions becoming company policy shortly after being proposed, which could be evidence

of shareholders' ability to influence company behaviour even through unsuccessful proposals. This has happened especially with proposals related to portfolio risk scenario analyses. It would be instructive to analyse both caveats in further studies about the decision-making process and influencing factors around climate-related action in IOCs.

We identify seven communication strategies used by IOCs to counter shareholder resolutions. Greater awareness of these strategies may aid activist shareholders to make their proposals and other communications more effective by pre-empting and countering the company response types presented here. For example, the routine response that no one oil company can alone be responsible for climate action could be countered in relevant proposals by pointing out the range of energy transition activities across all areas of society, which mean that eventually every company will likely have to play a part in the change. References to legal compliance or participation in some environmental activity could similarly be countered in proposals by pointing out the areas in which such actions are inadequate for the required scale of climate change mitigation.

All three companies routinely appealed to generating shareholder value via dividend payment growth as a key driver of Board decision making, particularly when referring to clean technology adoption and proposals targeting the core hydrocarbon business model. As the risks posed to the fossil fuel sector by the energy transition become clearer, and shareholders look to engage in more severe action such as divestment, this argument may become less influential in justifying current business models.

Environmentally motivated shareholder action at ExxonMobil, Chevron and BP has led to some successes since 2016, but the overall scale of change remains small, with nearly all successful proposals leading to new reporting rather than direct changes in company strategy or emissions. As climate change mitigation becomes ever more urgent, activist shareholders face a dilemma: is it better to keep trying to create change from the inside, or divest their shareholdings to focus attention and capital on something else? Even though the track record of environmental shareholder resolutions in international oil companies remains modest, the successes of recent years may be a sign that the tide is turning.

6.1. Limitations and future research

This study analysed three IOCs' response strategies and therefore is limited in its reflection of the wider O&G sector. Future studies would benefit from including a wider range of IOCs to gain a broader insight into how the industry communicates with its shareholders on issues relating to CC and transition strategy. Additional contextual influences on transition strategy changes could also be considered.

The data for the study consisted exclusively of proxy statements as a reflection of company strategy and did not take into account private engagements between investors and board members. Inclusion the latter would benefit the understanding of this important aspect of shareholder activism, as would gaining potential anthropological and behavioural insights of key actors in the shareholder engagement process via interviews.

The document analysis conducted in this paper was carried out by one researcher and then checked by second reviewer. Including a group of multiple researchers each conducting their own independent thematic analysis to be later synthesised holistically would improve the reliability of the conclusions. The inclusion of multiple IOC publication types may also strengthen results by achieving a higher level of triangulation between multiple data sources.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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Appendix A. Supplementary data

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