Oil and gas industry's response to climate change, empirical evidence

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Résumé :

This study investigates whether oil and gas majors become sustainable by investing in renewable energy. The study adopts a longitudinal, inductive approach, examining the evolution of CSR practices within PetrolCo, a European oil and gas major. Data collection methods include participant observations, semi-structured interviews, artefacts, and archival data, with inductive coding for analysis.

The contextualization of the case study and longitudinal coding reveal four stages in the climate action implementation process in PetrolCo climate action logic, a combination of four interorganizational orders developed within the neo-institutional theory. A key contribution of this research is the identification of three types of institutional work involved in coupling and decoupling climate action with strategy: cognitive, relational, and material.

The study highlights the fragility of climate action inclusion in corporate strategy, emphasizing the tension between economic performance, environmental and climate commitments. It

explores the foundations of climate inclusion in related practices and highlights the role of organizational culture in sustaining climate practices.

Future research should extend this study using multiple case studies within the energy industry and other carbon-intensive industries. Additionally, applying the paradox approach could further examine how tensions in CSR strategy are managed at different organizational levels.

Mots-clés : Corporate Social Responsibility (CSR), climate action, energy transition, institutional complexity, ethnography, qualitative longitudinal methods

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1. INTRODUCTION

Global greenhouse gas (GHG) emissions continue to rise, reaching 57.4 gigatons of CO2 equivalent (GtCO2e) in 2022 (United Nations Environment Programme, 2023). Fossil fuels remains the dominant energy source, accounting for 81% of the global energy supply in 2022 and oil and gas combustion contributed respectively to 33% and 22% of global GHG emissions (IEA, 2024). Therefore, the climate action of oil and gas multinational companies is impactful, ranging from the diminution of their production GHG emissions - 10% of annual global GHG emissions according to IEA (2023a) – or by deeper systemic changes to lower the fossil fuels combustion worldwide.

In that sense, the six largest private and publicly traded oil and gas (O&G) companies in the world, the *majors*, have committed since 2020 to climate neutrality by 2050. We thus could posit that the oil and gas industry acknowledged the need for action against climate change and are willing to be part of the global and collective response to the challenge. Most of the O&G climate action is framed by the *concept* of the energy transition, underlying a strategic diversification towards less emissive and renewable energies, tackling both resource depletion and GHG emissions. However, the International Energy Agency[1] (IEA) estimates in his latest report that the oil and gas remains a "marginal force in the world's transition to clean energy

[1] The International Energy Agency (IEA) was established by the Organization for Economic Co-operation and Development (OECD) in 1974, following the first oil crisis, responsible for ensuring oil and energy supply security, promoting energy savings and more recently, supporting the energy transition and addressing climate change.

system" (IEA, 2023b). Even more concerning is the divestment movement by major companies in low-carbon solutions, observed since mid-2023 (Ben Wright, 2024).

However, PetrolCo, a European O&G major multinational company, is creating a "third way", not divesting totally from low-carbon activities (LCA) while developing fossil activities (FA) publicly too. Compared to the two other European O&G majors divesting LCA, how to understand the different strategy of PetrolCo? Does it mean that PetrolCo is deeper engaged in a systemic change required to address the climate crisis?

The neo-institutional theory's concepts of organizational response and institutional complexity is a suited theoretical framework for studying PetrolCo third way. For example, to explain this diversity in strategic response to climate change, Hartmann et al. (2021) conceptualize it as "a function of both the external pressures as well as the internal stock of resources and competences that the firm has at its disposal" (*ibid*: 880). European *majors* are sharing the same external pressures, being the regulative and normative pressure, as they share roughly the same European regulation and social norms and values influencing activism and political pressures, allowing for their comparison. However, not all four European O&G *majors* considered share the same strategic answer to climate change. Therefore, exploration at organizational level, rather than at industry level, is needed to better understand how O&G *majors* strategically respond to climate change.

We drew upon empirical studies, corporate reports, and press articles to describe how majors have been and are engaging in strategic renewal, transitioning from being solely oil and gas producers to becoming broad energy suppliers. Significant disparities between the six corporate strategies of investment in renewable as much as a cyclical pattern of investment and disinvestment emerges from this historical study. These findings suggest a need to further examine the antecedents and factors influencing the *majors'* commitment to address climate change.

The research adopts a longitudinal, inductive approach to examine the evolution of CSR practices within PetrolCo, a European O&G major. By leveraging a combination of participant observations, semi-structured interviews, artefacts, and archival data, this study provides a comprehensive analysis of how CSR is being include into strategic decision-making and organizational culture.

We selected PetrolCo, a major oil and gas company incorporated in Europe, based on the researcher's access to the field. For nearly a decade, PetrolCo has pursued a diversification strategy, incorporating the production of renewable and low-carbon fuels and electricity into its portfolio. We chose a single case study approach due to the nature of the field access and the ethnographic approach adopted. The study design aims to compare the perspectives of actors from the day-to-day operations at different levels within PetrolCo (subsidiary, business unit, branch), in various positions (intern, short-term contract, PhD contract), and roles (strategy analyst, regulation analyst, advocacy officer).

This investigation contributes to the existing literature by bridging strategic management and CSR research, offering new insights into the complex motivations behind CSR initiatives. Furthermore, the study tests and develops methodologies from the strategy process and strategy-as-practice literatures, providing a robust framework for understanding the strategic and cultural transformations within O&G companies. Ultimately, this research aims to provide practical insights for managers and policymakers, emphasizing the importance of integrating CSR into core business strategies and organizational cultures to address the grand challenge of climate change effectively.

2. THEORETICAL FRAMEWORK

Measuring climate action is challenging, even more since it is complexified by the broader implications of the anthropogenic exploitation of the natural environment. Slawinski et al. (2017) defined the effectiveness of corporate climate action as "achieving durable emissions

reduction in absolute terms" (: 3). However, climate change as a global grand challenge cannot be limited to GHG emissions and should be linked to the larger environmental challenges posed by overriding the planetary boundaries (i.e., biodiversity losses, disrupted nitrogen and phosphorus cycles, stratospheric ozone depletion, ocean acidification, global freshwater use, change in land use, chemical pollution, atmospheric aerosol loading). Therefore, we will define corporate climate action as the willingness of corporations to effectively mitigate climate change by engaging in the process of systemic change respecting the planetary boundaries. Behing naivety, the definition enables to conceptualize different layer of corporate engagement in sustaining the global natural environment, distinguishing between different levels of ambition and integration of corporation climate action into their core strategies (Meuer et al., 2020; Van der Byl & Slawinski, 2015; van Marrewijk & Werre, 2003).

The climate crisis being a global interdependent challenge (Brammer et al., 2019; Gariel & Bartel-Radic, 2024), multinational corporations are both part of the problem and the solution (Wright & Nyberg, 2017). Over time, the corporate response toward climate change evolved, from denial and fighting against environmental policies to engagement with climate policy (Boon, 2019; Wright & Nyberg, 2024). The latter engagement was triggered by the Paris Climate Agreement in 2015, fostering "net-zero by 2050" commitments in various industries, especially emissive ones such as the O&G sector.

2.1. STUDYING ORGANIZATIONAL ACTION AND RESULTING INSTITUTIONAL CHANGE

Organizational response to evolving institutional pressure has been studied within the neo-institutional theory works, as the adaptation in strategy, structures and practices of organizations to survive (DiMaggio & Powell, 1983; Oliver, 1991). Management research exploring how organizations contribute to tackling climate change framed as grand challenge is also grounded in institutional theory (Gariel & Bartel-Radic, 2024). Corporate sustainability research also primarily relies institutional theory (Cantele et al., 2024), which enable to use this

theoretical lens for bridging both research literatures. Thus, the institutional lens is therefore highly pertinent to link our research objectives.

2.1.1. Bridging climate action and grand challenges research through the institutional perspective

Institutional complexity is defined by competing demands arising from one organization's stakeholders (Greenwood et al., 2011). Climate change is being characterized by high level of institutional complexity, where the boundaries definition of the challenge, nor the solution to be put in place are being set at global level (Gupta, 2016). The neo-institutional theory research offers several insights on how organizations may face organizational complexity. Ansati et al. (2013) for example explain how diverse actors (i.e., states, governments, NGO, business representatives) managed to define collectively a frame for sustainability. The use of the institutional perspective is here particularly useful.

The institutional logics perspective emerged from the criticism of neo-institutionalism by Friedland & Alford (1991), who argued that it lacked a comprehensive framework to understand the interplay between institutions and actions. They introduced the institutional logics perspective to emphasize the importance of understanding the cultural and symbolic systems that guide behavior within different institutional contexts.

Multiple logics can coexist and interact, influencing both stability and change within institutions. Thornton et al. (2012) describe institutional logics as the socially constructed practices, values, beliefs, and norms that guide how individuals and organizations sustain their existence and create meanings. Table 1 illustrates the different institutional logics that we will use in this research to track the organizational response evolution to climate change of the studied companies.

Tableau 1 – Interorganizational orders structuring organizational institutional logics (Thornton et al., 2012)

Orders	**Environmental community**	**Market**	**Corporation**	**Profession**
Legitimacy	Trust, reciprocity	Share price	Market position	Personal expertise
Source of authority	Community values and ideology	Shareholder activism	Top management	Professional association
Source of identity	Shared emotional connection	Faceless	Bureaucratic roles	Personal reputation, quality of craft
Strategy basis	Status, honor of practices	Efficiency and profit	Size and diversification	Reputation

Corporate action against climate change illustrates organizations facing conflicting demands from diverse stakeholders, experiencing institutional complexity, and undergoing forced institutional change.

2.2. INSTITUTIONAL WORK TO COUPLE AND DECOUPLE CLIMATE ACTION WITH STRATEGY

To unpack how an organization respond to conflicting institutional pressures, we will rely on the institutional work framework developed (Bertels & Lawrence, 2016; Lawrence & Suddaby, 2006). Institutional work explains how organizations and actors use their agency to disrupt, maintain or create new norms. While looking to understand the "third path" as PetrolCo's climate action, shedding light on how the organization *did* shape the climate action logic is a

source of insights for the policy maker on how to deeper engage or control corporate climate action.

Combining strategy process and strategy as practice research, two distinct "research traditions" studying strategy as a phenomenon (Mirabeau et al., 2018), enables us to consider both the contextualized decision-making and changes (Pettigrew, 1992). Strategy, defined as something people do rather than something people have (Jarzabkowski et al., 2007), in a social practice requiring study "under the sociological eye" (Whittington, 2007: 1577). Building on gaps identified by Gond et al. (2018) within the strategy-as-practices research, institutional work research (Lawrence & Suddaby, 2006) allows to reintegrate actors' agency covering one gap of the strategy as practice literature. In doing so, we explore how individuals engage in their practices and how they can shape organizations through the concept of *strategifying*, exploring the "the neglected micro-level dynamics that explain the changing status of CSR in the eyes of managerial eyes" (Gond et al., 2018: 243).

3. RESEARCH DESIGN

The researcher entered PetrolCo in April 2021, as an end-of-study intern in the strategic department of the French subsidy responsible for the national development of renewable energies. A few months later, in September 2021, she moved to become a regulation analyst and lobbyist for the newly created biogas department at the headquarters, but at relatively low hierarchical level, more focused on business and operational levels. In January 2024, she moved again to the Public and Regulatory Affairs team at the branch's direction, that gather new businesses (renewable electricity and gases, electricity storage and flexibility) and lower-carbon activities compared to oil (natural gas and liquified natural gas). She thus observed diverse practices related to sustainability and CSR. in fact, the mentioned branch is flagged as the future of the company, being *more* sustainable, where CSR should be at the very heart of the strategy, values, norms, and practices.

2.3. DATA COLLECTION

Four main data collection strategies have been used within this inductive research: participant and non-participant observations, semi-structured interviews, artefacts, and archival data gathering. These data have been selected from all data collected given their link to CSR. Table 2 summarizes the data collected.

Participant and non-participant observations Participant observation is an immersive inductive method, part of the ethnographic work, enabling the researcher to shadow interactions and experiences within the social context being studied. This data collection method does represent methodological difficulties (Gioia et al., 2013), such as a prolific record-keeping data that must be analyzed. To distinguish between accurate and theoretical useful data, Van Maanen (1979) propose to differentiate "first-order conceptions" being the "facts" and "second-order conceptions" being concepts and theories used by the researcher to explain the first-order data. All data collected through ethnographic observations (researcher position made clear) and internal meetings' transcriptions are kept in the field research log.

Semi-structured interviews were conducted using ethnographic interviews methodology principles (Spradley, 1979), recorded and transcribed (20 interviews). Informants were selected across different corporate levels to mitigate biases through informants' triangulation (Yin, 2014). Informal conversations, phone calls and text messages were also captured in field notes.

Artefacts PowerPoint presentations, emails, internal reports, meeting minutes, union communications, materializing and triangulating observed practices (Nicolini, 2013).

Secondary data such as annual reports, CSR reports, ESG reports, institutional reports, and press articles, regulations. As the immersive data collection only started in 2021, secondary data have been used to track the CSR inclusion into strategy process over time, starting from the oldest available reports, being the 2010 PetrolCo CSR Report. For contextualization

purposes of the case-study, we also gathered annual and CSR reports of five biggest *majors* competitors (starting from 1998), press and literature materials.

2.4. DATA ANALYSIS

Temporal bracketing, developed by Langley (1999), is a generic strategy to make sense of process data by comparing actions and behaviors within constructed periods of time, considering their continuities and discontinuities over time. This method helps explain the historical development path of successive periods, making them units of analysis to contextualize patterns and variables of organizational change. It also allows for internal replication from one period to another, and to deepen the single case study analysis of the phenomena observed.

Following Langley (1999), we combined temporal bracketing with the narrative strategy to contextualize data, using industrial and institutional contexts for data triangulation, enhancing accuracy and generality. These methods prepared a chronology of organizational evolution, focusing on the climate action development path, defined by the organization as a decarbonization strategic diversification. We then used the institutional logic perspective (Friedland & Alford, 1991; Thornton et al., 2012) to shed light on the historical pattern of combination and recombination of the organizational response to the climate crisis within the frame of PetrolCo's climate action logic.

In a second step, we used the grounded theory as prescribed by Gioia et al. (2013). We coded inductively data, using interviews for past periods and abstraction purposes for real-time collected data. "First-order concepts" included institutional work tactics, such as "demoralizing climate action".

We then engaged in the theorization process of "constant comparison" between theory and data (Glaser & Strauss, 1967), clustering tactics into "second-order themes" (Gioia et al., 2013;

Nicolini, 2013). In the final coding step, we grouped the second-order themes into "aggregate constructs" (Gioia et al., 2013). We then related the constructs to the three types of institutional work identified by Gond et al., (2018): "cognitive, rational and material" coupling, where we also added the possibility for these tactics to be part of a second actor's strategy of decoupling.

Tableau 2 – Data inventory

Data type		**Interviews informant description**
Semi-structured recorded interviews	7	Informant 1: Business developer (30 minutes)
Informal interviews	4	Informant 2: General secretary business unit (45 minutes)
Text messages	4	Informant 3: Strategy analyst (45 minutes)
Internal meetings report and verbatims	33	Informant 4: head of branch's sustainability (2x 1 hour)
Field notes report	121	Informant 5: head of Public Affair (2x 1 hour)
PowerPoint presentations	13	
Mails	358	
O&G industry biggest *majors* CSR annual report	121	
PetrolCo only	*32*	

2.5. Case context: climate action in the oil and gas sector for European-based majors

Oil and gas *majors*, primarily private and listed on stock markets, have traditionally followed a strategy of vertical integration across the value chain, from upstream extraction to downstream marketing (Inkpen & Ramaswamy, 2017). Since the early 2000s, these have begun exploring

new energies and low-carbon solutions as part of their corporate social responsibility (CSR) inclusion into strategy. The industry had already started incorporating CSR to improve social and environmental performance in the 2000s, but this focus intensified significantly after the Deepwater Horizon oil spill in 2010.

CSR is "governed by public initiatives" (Gond et al., 2011), particularly in Europe, where CSR was institutionalized into law from the 2000s. In contrast, the United States (U.S.) has remained pro-market, which has influenced how oil and gas (O&G) majors incorporate CSR into their strategies (Boon, 2019). The O&G industry is particularly sensitive to regulation and often views it as a risk (Kolk & Pinkse, 2004), highlighting the gap between European and North American majors. Additionally, CSR is socially and culturally embedded (Frederick, 1986), and the differing conceptions of CSR between Europe and the U.S. further explain this gap, as demonstrated empirically (Pickl, 2019).

The EU Emissions Trading Scheme (EU ETS) represents a milestone in environmental policy development by limiting greenhouse gas (GHG) emissions from the most polluting industries since 2005. The EU ETS has since evolved to cover most industrial sectors in the EU and, since 2024, includes imports from abroad. Additionally, the European Green Deal, adopted in 2020, is a comprehensive strategy aimed at achieving climate neutrality by 2050. Key measures include banning the sale of new internal combustion engine vehicles by 2035, regulating energy use through the Renewable Energy Directive (RED), enhancing energy efficiency with the Energy Efficiency Directive (EED), and further regulating biodiversity preservation and soil health restoration. The EU also requires large companies to disclose non-financial performance metrics, including GHG emissions, environmental impact, social and employee well-being, diversity, human rights, and anti-corruption efforts.

Beyond legal requirements and CSR initiatives aimed at improving social and environmental performance, oil and gas majors have significantly shifted their strategies in response to the

rising climate change awareness following the 2016 Paris Agreement and government commitments to achieve Net-Zero emissions by 2050. By 2020, most European majors had pledged to reach Net-Zero by 2050, necessitating an accelerated strategic diversification towards low-carbon businesses. This commitment extends beyond direct GHG emissions, already addressed through CSR practices, to include indirect emissions. Consequently, oil and gas majors must reduce the carbon content of the energy they sell, which involves substantial investments in renewable power and gases, biofuels, and carbon capture technologies. Having contextualized the sector's evolution, we will now focus on changes at the organizational level.

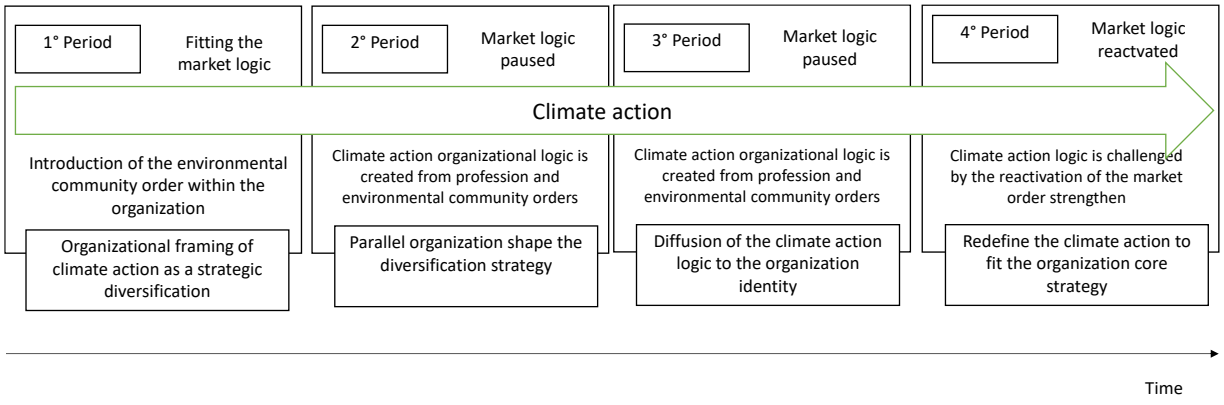
4. RESULTS: STRATEGIC CHANGES INCORPORATING CLIMATE ACTION

Annex 1 gives a complete view of the four stages identified in the CA implementation in strategy process, from the progressive institutionalization of strategic diversification from CA to the begin of its deinstitutionalization.

4.1. THE DEVELOPMENT PATH OF THE CA WITHIN PETROLCO: CLIMATE ACTION LOGIC VS MARKET LOGIC

Four stages have been identified within the development process of organizational response as CA and studied how both market and environmental community institutional logics interacted to each other.

Figure 1 – Development process of the CA within PetrolCo over time



4.1.1. Organizational framing climate action as diversification

Already in 2013, the CSR report mentioned that "climate change is finally becoming a real priority" (CSR report, 2013). In 2014, the Investors presentation dedicated a slide to PetrolCo's commitment to "better energy" and "working toward climate change solutions." PetrolCo chose to frame climate action as a diversification strategy, enabling to combine the imposed environmental community logic with the organizational dominant one, the market logic.

This definition of the organizational response to institutional pressures was developed during this first period. Business developers started to look into the different low-carbon technologies existing to select the most promising markets, but also to overcome possible limitations of the company's economic growth due to the depletion of fossil fuels.

> *"In 2007, (...) There is an awareness from the general management of [CEO a that time], in fact, of a double challenge: an energy challenge because (...) So we need new forms of energy. And the second challenge is, yes, there is a need for energy, but there is also a climate challenge, so we can't just do anything. We need to add clean energy." BDBIO1 (2023)*

4.1.2. The creation of a parallel organization to implement climate action

During the following years, PetrolCo choose to hire external resources for the structuring of the new LCA business units, gathered in a new branch and creating a spin-off for renewable electricity only. The spin-off therefore had the opportunity to develop its own organizational culture, and to further develop the environmental community logic, hiring external experts of renewable energy sectors, generally committed to achieve better environmental performance. Thus, climate action logic is a combination of a profession and an environmental community interorganizational orders. We thus consider the market logic to be "paused" within the strategic diversification process: the organization put in place specific governance rules for new LCA, especially regarding the level of rentability necessary for a project to be sanctioned by the top-management.

However, the market logic remained dominant within the organization. The Strategy Outlook presentation for investors in 2018 illustrates how the organization tried to justify the necessity to include climate concerns from the CA into strategy, as if it was a concern of competitive advantage and business opportunity: "Integrating climate into strategy. Considering anticipated market trends". The Strategy Outlook 2019 mentions the "sustainable and profitable growth" that represent low-carbon business, mixing the concept of sustainable development with financial sustainability: "focusing on breakeven and financial strength […] controlling breakeven at the heart of sustainability". CA is presented as a way to cope "with volatile and changing energy markets", to build on organizational capabilities to develop further the oil and gas as "profitable", to commit to "long term shareholder return" and lastly, to invest in "growing energy markets (LNG & power).

4.1.3. CA logic becomes part of the organizational identity

In 2020, the President and CEO of PetrolCo announced the company's commitment to achieving carbon neutrality by 2050. Furthermore, PetrolCo changed name to become "EnergiesCo", signaling the company is no longer an O&G company, but an energies provider, a "broader energy company". The discourse is closely linked with the means, strategy content, and implementation. Annually, 20 to 35% of the company's total investments are allocated to low-carbon businesses, including renewable energies and gases, biofuels, energy storage, power, and CCUS. Moreover, in 2022, the company aimed to invest the 2021 financial expedients in low-carbon acquisitions. These acquisitions have enabled the company to grow rapidly in the low-carbon sector, from acquiring a solar panel manufacturer in 2011 to undertaking larger operations.

In 2020, PetrolCo announced its active engagement in ESG (Environmental, Social, and Governance) ratings, beginning to benchmark its performance against O&G and utilities peers.

Additionally, a cultural change is being introduced by top management Sustainability is been declared "at the heart of [PetrolCo's] transformation" and "strategy".

At the corporate level, the "Sustainab'all" doctrine was defined in 2023, and the implementation of the Net-Zero commitment will be completed in 2024. Four pillars define the scope of sustainability within the strategy: "climate and sustainable energy," "caring for the environment," "acting for the well-being of employees," and "positive impact for stakeholders." To operationalize these approaches, ten key performance indicators (KPIs) have been selected to monitor the organization's progress. These KPIs relate to the Sustainable Development Goals (SDGs) developed by the United Nations. The development of a sustainable culture also includes the creation of Sustainable Golden Rules, an annual Sustainab'all week, the inclusion of safety and sustainability moments at the beginning of every internal meeting, and the incentivizing of management based on ESG criteria.

The environmental community logic is increasingly supported within the company. However, the dominant market logic, remaining silent, continues to deeply structure the organization: CA remains a strategic diversification for economic growth, as demonstrates the company's moto "more energy, fewer emissions".

4.1.4. Market logic is welcomed back on stage: redefinition of the CA logic

The economic context deteriorated at the end of 2023, leading shareholders to pressure PetrolCo for higher dividends and buybacks. Consequently, this pressure impacted low-carbon businesses, which struggled to achieve the same profitability levels as oil and gas activities. 2024 Investor Presentation illustrates the change: "More Energy, Less Emissions, More Value", and announces reduction in resources allocated to low-carbon business units. The company halted further investments and instructed teams to optimize the production and profitability of existing assets.

This situation highlights a decoupling of CSR and strategy, an intriguing empirical finding that, to the researcher's knowledge, has not been previously studied in this research design. The resurgence of the market's logic characteristic demonstrates how the dominant logic never disappeared but stayed hidden until its "come back on stage" would be perceived as acceptable for stakeholders.

4.2. INSTITUTIONAL WORK EXPLAINING THE CSR DEVELOPMENT PROCESS

First, it should be noted that the pace of strategizing work depends on the intensity of CA inclusion into the strategy. Empirical findings demonstrate a strong acceleration of strategic CA inclusion as a strategic imperative, whereas the pace was relatively stable before the 2020 Net-Zero commitment.

Table 3 describes the inductive coding that identifies practices from the institutional work framework adapted by Gond et al. (2018). Coupling strategic discourse and practices while including CA is enabled by three types of strategizing work, as proposed by Gond et al. (2018). These practices are both purposive and effortful, exploring the cultural dimension and intra-organizational power dynamics inherent to strategy-making.

4.2.1. Coupling CA and strategy activities

Cognitive coupling involves activities that organizational actors undertake to shift the meanings of CA to be strategic, using various practices. Relational coupling refers to mobilizing authority and relationships within the organization to enhance the inclusion of CA in the organizational strategy, as defined by the cognitive dimensions of practice. The material dimensions of strategizing encompass the inclusion of CA into strategy through the day-to-day monitoring and evaluation of performance.

4.2.2. Decoupling activities

From these practices, we will also explore which institutional work activities are necessary to decouple CA from strategy, starting in 2024.

Regarding the cognitive dimension of institutional work related to coupling and decoupling, CA awareness within the organization tends to diminish as the corporate internal discourse shifts towards profitability and financial performance. Although the definition of CA remains unchanged, the focus on past CA performance is redirected towards meeting shareholders' demands and the overall profitability of the company. The organization continues to impose its unified definition of CA, emphasizing profitable CA by presenting it as a business case: "we only develop profitable low-carbon businesses" (branch director, town hall, November 2024). Emphasizing the economic performance of renewables and low-carbon fuels also contributes to the demoralization of sustainability, reducing it to a means of financial development for the company, regardless of the potential increase in GHG emissions (branch director, town hall meeting, November 2023).

Relational decoupling is also observed. The symbolic power allocated to CSR activities has diminished, with employees preferring to "leave the ship before it sinks" (biogas headquarters employee, June 2024) and take positions in the gas department or trading division. The hierarchy is no longer driven by the commitment to renew the company and develop further renewables and low-carbon solutions. Consequently, employees feel lost in transition: "Am I here to serve a shareholder with a 12% return, or am I here to change the world of energy?" (Head of Low-carbon branch's CSR Sustainability division, August 2024).

> *"I took the job to participate in the energy transition, and now, all my projects are being blocked because they do not fit the 12% rentability objective" (Biogas project developer in Europe, January 2025)*

The communication of CA performance is being revised to: "We no longer communicate in terms of installed capacity, but in terms of developing profitable assets" (Biogas business unit director, corporate headquarters seminar, October 2024). Consequently, the monitoring of the development process for low-carbon solutions is significantly modified, as the absence of numerical objectives hinders the measurement of CA development performance. The routine

inclusion of CA is also slightly adjusted to align with the new profitability focus for renewables. Starting in 2024, town halls and corporate meetings for employees will dedicate less time to presenting and explaining new technologies and services being developed internally, and more time to explaining the new strategy for the profitability of low-carbon activities. Sustainability performance is thus communicated in corporate meetings through examples of successfully implemented projects, such as the installation of a beehive on a biogas plant.

Tableau 3 - Data structure (activities in red are those implied for decoupling CA and strategy)

Examples of activities in the data (first-order concepts)	**Practices (second-order themes)**	**Aggregate dimensions (based on Gond et al., (2018) proposes types of strategifying work)**
Raising CA awareness inside the organization	Communicating strategic meaning	Cognitive coupling
Changing the definition of CA concepts to identify CA with strategy		
Infusing existing strategic artifacts with the 'new' approach to CSR	Colonizing	
Making CSR part of strategy 'official' definition		
Coupling CSR with strategic departments at multi-level		
Implementation of a CSR culture over time		
Unify the CSR definition at top-management level	Shifting normative associations	
Moralize climate change to foster employees' engagement		
Demoralize sustainability to prevent political shifts		
CSR as a business case		
Foster power to CSR divisions	Reverse the domination of CSR activities within the corporation	Relational coupling
Reverse the social ranking of CSR jobs		
Engage employees and ease recruitment		
External recognition of positive impact for employees involved in low-carbon businesses		
Mobilizing ESG frameworks for external rating of CSR implementation into strategy	External legitimacy inside the organization to sustain the CSR	
Benchmark competitors		
Develop partnerships with NGO and international organizations		

	inclusion into strategy	
Boundaries of CSR have cross the HSE department to penetrate corporate strategy department	Move boundaries	
Use hierarchy to demonstrate the influence of the CSR inclusion in strategy		
Reshaping the dashboard to integrate CSR elements	Routinizing new performance measurements	Material coupling
Safety objectives within employee's annual evaluation		
Discuss CSR performance in corporate town hall meetings		
Connecting CSR performance indicators to existing internal and external reports	Plugging CSR in the corporate activity	
Implementation of dedicated management system for CSR activites		
Develop new methodologies to monitor and evaluate the CSR's performance	Adapt internal capabilities to the performance measurement	
Develop KPI to capture CSR performance		

5. CONCLUSION

Limitations and research agenda

From a methodological perspective, this study uses a single-case approach, developing a grounded model to explain CA implementation into strategy. This model must be further tested and developed using other case studies within the energy industry and broader carbon-intensive industries.

The results of this study reveal several tensions in defining what CSR should be as part of the strategy. Drawing on the strategic CSR implementation literature, this study could be extended by applying the paradox approach to examine how these tensions are managed by management at different organizational levels. Additionally, this approach could highlight how individual agency influences the corporate inclusion of CSR into strategy.

The present study focuses on strategy as a process over time, without successfully identifying which parts of the realized CSR inclusion strategy originated from intended or emergent strategies. Furthermore, the lack of identification of ephemeral strategies, defined as

unrealized autonomous strategic behavior (Mirabeau & Maguire, 2014), prevents a complete capture of the CSR inclusion process into strategy. Coupling this empirical study with both theoretical and methodological frameworks, and studying the micro-foundations of CSR over time, will enable a better understanding of how CSR is managed by oil and gas majors, providing insights for policymakers and industrial players.

Moreover, a deeper exploration of the progressive development of organizational culture over time should provide insights for better sustainable inclusion of CSR into strategy. These insights would enable policymakers and civil society to further frame the definition of corporate CSR inclusion into strategy through regulation and protests, which have significantly contributed to PetrolCo's strategic shift towards intensive development of low-carbon businesses within its portfolio.

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ANNEX 1 - Identification of practices, praxis and metrics constituting the institutional work tactics

Time period	**2007-2011**	**2011-2015**	**2015-2017**	**2017-2020**	**2020-2022**	**2022-2024**	**2024-2025**
Climate action system building phase	1° Period: Foundations of the climate action as organizational response		2° Period: Defining the boundaries of the climate action		3° Period: Translating climate action in the organizational identity		4° Period: Finding a new status quo for the climate action
Cognitive coupling					Remuneration package calculation includes ESG criteria		
Objectives being set							
In financial terms					ROACE > 10% for renewables		ROACE > 12%
In safety - KPI	Total Recordable Injury Rate (TRIR) and Lost Time Injury Rate (LTIR) indicators		TRIR benchmark with chemical peers (incl. contractors)		TRIR benchmark with O&G and utilities peers (incl. contractors)		-75% SO2 emissions by 2030 (ref. 2015) <1 mg/l hydrocarbon content in water discharged by 2030
In GHG CO2 eq. Methane	References value for CO2eq emissions (2015)		References value for methane emissions (2020)		Gt CO2e Scope 1+2+3: 351 (2023), 342 (2024) Gt CO2e Scope 1+2: 35 (2023), 34 (2024) -14% carbon intensity of energy products sold by 2024 (ref. 2015), -16,5% realized -50% objectives in 2024, -55% realized (ref. 2020)		Gt CO2e Scope 1+2+3: <400 (2025, 2030) Gt CO2e Scope 1+2: <37 (2025), > -40% (25-30 Gt by 2030) -17% carbon intensity of energy products sold by 2025, -25% by 2030 -60% by 2025, -80% by 2030
In ESG - KPI	Volume of gas flared (-50% by 2014), discharged water quantity				Deforestation ratio SDGs' framework		Quantity of circular feedstocks

					ESG ratings and benchmark with O&G and utilities peers	KPI and benchmark for employee's well-being
Structure	HSE division created and integrated at operational levels		Creation of a branch dedicated to LCA			
People & skills	Centralized		230 employees for human and environmental safety performance at headquarters			
Practices	Safety documentation referential and directives. Safety as part of the project's risk identification in corporate governance (CORISK) Environmental management systems (ISO 14001)				Biodiversity diagnostics for existing production units.	
Praxis	Security Golden Rules Implementation of Safety Moment Annual World Safety Day				Sustainab'all Week (annual) Sustainability Moment	Sustainability Golden rules Project profitability being calculated in a hydrocarbon price modulo a carbon price of $100/tCO2eq
Means - Financing	0,5 bn $/y (5% of total investments)		1,5-2 bn $/y for low-carbon *electricity*		1/3 of annual investments for LCA (4,8 bn$ in LCA over 17,8 bn$ total investments in 2024)	4 bn$ in integrated power (over 17 bn$) in 2025 From 2026: no budget, financing per projects
Strategic diversification process	Diversification strategy-making	First acquisition and development phase	Structuring the diversification in power	Status quo period diversification in power	Intensification of diversification in low-carbon activities and inclusion of further planetary boundaries in the scope of climate action	Rationalizing LCA's development