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Between Substance and Symbolism: How Resources and Organizational Facades Interact in Voluntary Climate Commitments

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ABSTRACT

Firms increasingly disclose their climate action strategies through voluntary initiatives, yet concerns persist about the substantive impact of such disclosures. This study investigates how internal resources interact with organizational facades—symbolic mechanisms designed to reinforce legitimacy to stakeholders—in shaping corporate climate commitments. Using multivariate econometric regressions on a sample of 271 Colombian companies participating in the United Nations Global Compact (UNGC), we assess how governance, information, systems, and technology (GISTe) resources influence reported Climate Action Commitments (CAC) aligned with the Sustainable Development Goals (SDGs). Our results show that governance, information, and R&D resources are most strongly associated with higher CAC and that facades exert significant direct and moderating effects, especially on governance and information. These findings contribute novel empirical evidence to the literature on symbolic corporate environmentalism. Practically, they suggest that firms in weakly regulated contexts may use stakeholder engagement not only to comply symbolically but also to enhance the perceived credibility of their environmental commitments. The study offers valuable insights for policymakers and sustainability advocates aiming to strengthen monitoring mechanisms and reduce the gap between reported and actual climate performance in developing economies.

1 | Introduction

Greenhouse gas (GHG) emissions continue to rise at an alarming pace, with global temperatures projected to increase by 3°C to 5°C by the end of the 21st century, far surpassing pre-industrial levels (UNEP 2020). In response, global efforts, such as the Paris Agreement, seek to limit warming to 1.5°C–2°C to avoid catastrophic consequences, requiring carbon neutrality by 2050–2060 (Meinshausen et al. 2009). Although much of the attention has focused on industrialized nations, emerging economies such as Colombia are crucial players in this agenda. Colombia has pledged to reduce its GHG emissions by 51% by 2030, a notable increase from its earlier 20% target using 1990 as a baseline (Vergara et al. 2021). However, the country's regulatory enforcement remains limited, and market-based mechanisms—such as carbon taxes and emissions offsetting—have only marginally evolved (Congreso de Colombia 2021).

In this context of regulatory fragility, voluntary environmental initiatives have become increasingly important, particularly the United Nations Global Compact (UNGC). Colombian firms show high participation rates in these voluntary programs and rank among the top performers in terms of reported Climate Action Commitments (CAC) (UNGC 2023). Yet the credibility and substantive impact of these commitments have been questioned.

Prior research highlights the prevalence of process-oriented approaches rather than a results-oriented one (Gjølberg 2009) and symbolic strategies—such as impression management, cherry-picking, hyperreality, and greenwashing—that enable firms to appear committed to sustainability without implementing meaningful operational changes (Gardner and Martinko 1988; Boiral et al. 2019; Fox and Hoch 2005; Delmas and Burbano 2011; Bowen 2014).

A central concept in understanding such behavior is that of organizational facades—symbolic fronts erected to signal legitimacy to external stakeholders (Nystrom and Starbuck 1984; Abrahamson and Baumard 2008). Facades can help companies manage stakeholder demands without altering core practices, especially in institutional environments with weak enforcement mechanisms (Cho et al. 2015; Sciulli and Adhariani 2023). These facades represent a form of symbolic corporate environmentalism characterized by emergent, relational, shared, and often powerful symbolic meanings associated with environmental practices, despite lacking a connection to improved substantive material performance (Bowen 2014). These facades are particularly relevant in emerging markets like Colombia, where institutional voids and heterogeneous stakeholder expectations amplify the incentives for symbolic compliance (Aguilera et al. 2019; Kostova and Marano 2019).

While symbolic behavior has been extensively explored, less is known about how companies draw on internal resources to build and sustain these facades (Acuti et al. 2024), especially in the realm of climate action reporting (Chen and Chu 2024). Grounded in the resource-based view (RBV) (e.g., Barney 1991), our study examines how firms leverage a specific set of internal resources—governance, information, systems, and technological capabilities (GISTe)—to support and enhance their CAC, often in ways that are strategic but potentially symbolic. Previous research has documented the role of such resources in achieving environmental capabilities (Backman et al. 2017; Khanra et al. 2022), but no study, as far as we know, has considered how these resources may also contribute to symbolic corporate environmentalism.

Integrating the RBV with the concept of organizational facades provides a complementary theoretical lens. While the RBV typically focuses on resource optimization for competitive advantage, facades highlight the legitimacy-seeking behaviors that shape how resources are externally framed and communicated (Bhandari et al. 2022; Khanra et al. 2022). Therefore, voluntary environmental initiatives may serve both substantive and symbolic purposes (García-Sánchez et al. 2020), requiring a nuanced understanding of how companies manage the intersection of internal resources and external perceptions.

Based on this integration, we propose that firms use GISTe resources not only to improve environmental capabilities but also to construct persuasive facades that enhance the perceived credibility of their CAC. We argue that organizational facades act as a complementary mechanism through which companies use GISTe resources to build legitimacy, signal commitment, and mitigate scrutiny, particularly in the context of voluntary environmental initiatives. Stakeholder engagement, in this sense, is not only a normative response to societal expectations (Henriques and Sadorsky 1999), but also a relational intangible resource used strategically to construct persuasive narratives of sustainability (Freeman et al. 2021).

While the concept of organizational facades has been applied to explain symbolic corporate behavior, its role as a moderating mechanism in the relationship between internal capabilities and climate disclosures remains underexplored. Because of the expected use of organizational facades by Colombian firms, we analyze the moderating effect of organizational facades on the link between internal resources and reported environmental outcomes. Existing literature has primarily focused on the moderating influence of institutional or stakeholder pressures in explaining the divergence between environmental disclosures and actual environmental performance (Chen and Chu 2024; Tashman et al. 2019). Moreover, environmental disclosures in voluntary initiatives are often interpreted as facades themselves—symbolic structures used to project legitimacy without necessarily improving material sustainability performance (García-Sánchez et al. 2020; Murcia 2021). Recent studies suggest that facades can also act as mediating mechanisms, helping organizations secure social legitimacy in ethically sensitive industries (Acuti et al. 2024). Building on these perspectives, our study contributes by explicitly conceptualizing and testing organizational facades as moderators, enhancing the visibility and perceived effectiveness of internal resource deployment in voluntary climate action reporting.

Therefore, the objective of this study is to investigate why some companies in Colombia report high CAC despite limited regulatory enforcement. Using multivariate econometric regressions on a sample of 271 Colombian companies reporting to the UNGC between 2014 and 2019, we examine how GISTe resources interact with organizational facades to shape voluntary climate action disclosures. Our key research question is: How do firms leverage internal resources and organizational facades to report high levels of CAC in the absence of strong regulatory pressure?

By integrating the RBV with the concept of organizational facades, we make two key contributions. At the theoretical level, we propose a novel conceptual framework linking GISTe resources with symbolic environmental actions, offering a more nuanced understanding of how firms pursue sustainability as a strategic asset rather than a substantive commitment (Michelon et al. 2016; García-Sánchez et al. 2020).

Empirically, using data on Colombian firms participating in the UNGC, we identify the most frequently used resources to support CAC and explore their complementarity with organizational facades. We find that governance, information, and stakeholder engagement are particularly influential and often used to construct a socially credible sustainability narrative. Our findings suggest that voluntary environmental initiatives may inadvertently incentivize symbolic behavior when institutional enforcement is weak. This calls for better monitoring mechanisms and stakeholder education to ensure that reported actions reflect real environmental progress.

2 | Theoretical Framework and Hypotheses Development

2.1 | The RBV in Sustainability Research

The RBV is a widely accepted theoretical framework in strategic management and sustainability research. Proposed by Barney (1991), the RBV suggests that firms gain and sustain competitive advantage by developing and leveraging resources that are valuable, rare, inimitable, and non-substitutable (VRIN). This perspective is particularly relevant in the context of environmental sustainability, where companies need to build and maintain specific resources that enable them to manage climate-related challenges and improve long-term environmental performance (Hart and Dowell 2011).

The RBV's strength lies in its ability to explain how a firm's unique resource base—including its organizational competencies, technological capabilities, and managerial knowledge—can lead to superior performance in sustainability initiatives. Backman et al. (2017) and Khanra et al. (2022) highlight the role of such resources in achieving environmental capabilities, such as the ability to reduce GHG emissions or implement energy-efficient production processes.

Furthermore, the RBV provides a holistic perspective on sustainability, linking environmental resources to the firm's long-term strategy. By focusing on resources that are difficult to imitate or substitute, firms can sustain a competitive advantage even in the face of shifting environmental regulations. In addition, the RBV allows for a comparative analysis of the resources required for effective climate action, thus facilitating the identification of the specific resources that companies should leverage to improve their climate-related disclosures and performance (Damert and Baumgartner 2017; Buysse and Verbeke 2003).

While the RBV is powerful in explaining resource-based advantages, it has limitations in addressing the complex, dynamic interplay between internal resources and external pressures. For example, symbolic actions, such as greenwashing or impression management, are not easily explained by the RBV alone, as they often occur when firms are under external pressure to demonstrate environmental commitment without implementing meaningful changes (Delmas and Burbano 2011).

Furthermore, the RBV's focus on internal resources does not fully account for the role of external factors such as institutional voids, cultural expectations, and stakeholder influence, all of which play a crucial role in shaping corporate behavior in emerging markets (Aguilera et al. 2019; Kostova and Marano 2019). This study addresses these gaps by integrating the RBV with the concept of organizational facades, which moderate the relationship between a firm's resources and its reported environmental actions. Thus, while the RBV provides a robust theoretical foundation for understanding the strategic use of internal resources, its limitations are mitigated by supplementing it with theories on symbolic corporate behavior and legitimacy seeking, which better explain the mechanisms of environmental disclosure in contexts of weak enforcement (Acuti et al. 2024; Cho et al. 2015).

2.2 | Hypotheses Development

2.2.1 | Linking RBV With CAC

While the RBV has been extensively applied to understand competitive advantages, there is a growing need to explore the comparative relevance of different resources in the context of climate action, especially across diverse institutional environments (Khanra et al. 2022). Research on this topic remains fragmented, with some studies presenting inconsistent or narrower classifications of resources that do not always align with the RBV framework (Miller and Le Breton-Miller 2021; Littlewood et al. 2018). Other studies offer broader definitions that may or may not be compatible with RBV's theoretical underpinnings (Duque-Grisales et al. 2020; Haque and Ntim 2018). Authors including Buysse and Verbeke (2003), da Cunha Bezerra et al. (2020) and Aragón-Correa et al. (2008) have identified the following as the most relevant resources for fostering environmental proactivity: strategic environmental planning, environmental management based on formal routines, organizational competencies in environmental management, employees' green skills, and green competencies related to production technologies. A more comprehensive framework by Backman et al. (2017) proposed that resources in the context of CAC can be synthesized into governance, information management, systems, and technology (GISTe).

Governance relates to the level of decision-making, hierarchical structure, and specific incentives that shape environmental behavior. Information comprises data tracking systems and the disaggregation of relevant data within the supply chain. Systems are formalized procedures and standardized operating methods for environmental management, and finally, technology encompasses investments in new technologies and innovations that enhance a firm's ability to reduce environmental impact (Backman et al. 2017).

These resources are particularly important for firms involved in voluntary environmental initiatives, such as the UNGC, where participation may signal environmental commitment but can also serve as a strategic move to address stakeholder demands. Damert and Baumgartner (2017) and Buysse and Verbeke (2003) argue that the effectiveness of these commitments depends on aligning a company's available resources with external stakeholder pressures. As such, firms are more likely to pursue higher levels of CAC when these resources are strategically deployed in response to stakeholder expectations.

Despite the limitations of voluntary initiatives in emerging economies, companies that participate in such programs demonstrate a degree of commitment to climate action, even though these actions may not always result in tangible improvements (Aragon-Correa et al. 2020; Berliner and Prakash 2015). This study asserts that firms, especially in emerging markets like Colombia, strategically use GISTe resources to report high levels of CAC. Firms with stronger internal capabilities (as captured by the GISTe resources) will be more likely to report higher levels of CAC. These resources enable firms to align their environmental actions with stakeholder expectations, especially in voluntary contexts where symbolic legitimacy plays a key role (García-Sánchez et al. 2020; Bhandari et al. 2022). Given this

context, we propose the following hypotheses to examine the relationship between GISTe resources and CAC:

Hypothesis 1a. *There is a positive relationship between the use of governance resources and the CAC reported in voluntary initiatives.*

Hypothesis 1b. *There is a positive relationship between the use of information resources and the CAC reported in voluntary initiatives.*

Hypothesis 1c. *There is a positive relationship between the use of systems resources and the CAC reported in voluntary initiatives.*

Hypothesis 1d. *There is a positive relationship between the use of technology resources and the CAC reported in voluntary initiatives.*

2.2.2 | Linking Organizational Facades and CAC

Unlike shareholders, who are considered the residual claimants of a firm's value (Friedman and Miles 2006), stakeholders encompass a broader group of individuals and entities who can influence or be influenced by a company's actions in pursuit of its objectives (Freeman et al. 2021). The perceived legitimacy of a company's behavior is shaped by its relationships with stakeholders, which, in turn, condition the relative strength of institutional constraints (Kostova and Marano 2019).

However, empirical evidence suggests that the influence of stakeholders on corporate environmental action is neither consistent nor uniformly proactive. In many cases, firms engage reactively rather than strategically with environmental demands (Jastram and Klingenberg 2018; Kolk and Pinkse 2007). Proactive behavior is generally limited to a few prominent firms and appears to be less responsive to external actors such as regulators (Buysse and Verbeke 2003).

Nonetheless, several studies indicate that stakeholder and institutional pressures can positively influence environmental practices, particularly when stakeholders have control over critical resources (Kolk and Pinkse 2007), when multiple actors exert pressure simultaneously (Cadez et al. 2019), or when global stakeholders are involved (Schaltegger et al. 2019). Additional factors such as high-level managerial commitment, integrated risk management, and close engagement with end consumers tend to yield stronger environmental responses than regulation alone (Duque-Grisales et al. 2020; Damert and Baumgartner 2017). However, these pressures tend to influence firms' environmental management systems more than their actual environmental outcomes (Gómez-Bolaños et al. 2020).

To manage these complex and sometimes contradictory demands, firms often adopt non-market strategies (NMS)—deliberate actions aimed at influencing the socio-institutional environment to enhance legitimacy and performance (Mellahi et al. 2016; Baron 1995). In emerging economies, where institutional voids prevail, these strategies are particularly common (Marquis and Raynard 2015; Doh et al. 2012). NMS can take the form of corporate political activity (CPA), which seeks to influence public policy (Hillman et al. 2004), or corporate social responsibility (CSR), where firms engage in socially beneficial activities to gain legitimacy (Mellahi et al. 2016).

Voluntary environmental initiatives, such as those promoted under the UNGC, are a key manifestation of CSR. They are often used by firms to assign value to environmental externalities in anticipation of stakeholder recognition (Dorobantu et al. 2017) and as a way to pre-empt or prepare for future regulation (Reid and Toffel 2009). However, these activities can also serve symbolic purposes, acting as a form of insurance against institutional pressures (McDonnell and Werner 2016; Marquis and Raynard 2015).

Support for voluntary initiatives thus reflects not only CSR positioning but also the firm's stakeholder engagement strategy (Mellahi et al. 2016). Yet the quality and authenticity of this engagement remain unclear. For example, Sciulli and Adhariani (2023) argue that stakeholder participation improves legitimacy and transparency, but the nature of this relationship often remains superficial. In this context, Cho et al. (2015) argue that companies construct organizational facades—symbolic fronts designed to reconcile conflicting institutional pressures and maintain external legitimacy.

Initially conceptualized as exaggerated or deceptive representations of organizational practices (Nystrom and Starbuck 1984), organizational facades have evolved to reflect a more nuanced view. Rather than being merely deceptive, they are now understood as strategic relational tools that allow managers to justify decisions, exercise discretion, and secure stakeholder resources (Abrahamson and Baumard 2008). Unlike greenwashing, facades are not unidirectional misrepresentations; they are relational and co-constructed through stakeholder interactions (Gull et al. 2022). Firms do not simply deceive; they shape perceptions through selective presentation of their efforts, seeking legitimacy even when actual performance remains unchanged.

There is still theoretical debate around the role and impact of facades. Some scholars argue they conceal a lack of substantive outcomes (Besio and Pronzini 2014); others see them as tools for minimum compliance (Long and Driscoll 2008), while others believe they offer adaptive flexibility to eventually support more meaningful change (Cho et al. 2015; Baumard 2014). Regardless of interpretation, facades appear to be particularly relevant in voluntary environmental contexts, where symbolic actions are incentivized by institutional weakness and high stakeholder expectations.

In this study, we propose that organizational facades serve not only as symbolic responses to external pressure but also as strategic mechanisms through which companies enhance the credibility of their climate action disclosures. Especially in emerging economies, where enforcement is weak and reputational incentives dominate, facades can act as vehicles for legitimacy by amplifying or embellishing the firm's environmental commitments. Hence, we argue that the use of organizational facades contributes positively to the level of CAC reported in voluntary initiatives, as they help bridge the gap between actual performance and stakeholder expectations.

Hypothesis 2. *The use of organizational facades is positively associated with higher CAC reported in voluntary initiatives.*

Stakeholders increasingly view firms not just as economic entities that generate shareholder returns, but as social systems responsible for creating and distributing value among a wider range of constituents (Stevens et al. 2005). From a RBV perspective, this broader understanding requires firms to consider stakeholder demands in shaping their resource deployment strategies—recognizing that shareholders are no longer the sole residual claimants of the company's outcomes (Barney 2018). Consequently, managers must balance competing interests, ensuring the strategic use of firm resources while also minimizing potential benefit transfers that could weaken stakeholder support.

In the context of voluntary climate action initiatives, such as those promoted by the UNGC, firms report CAC not only as a reflection of internal capabilities but also as a means of managing stakeholder expectations. These disclosures allow companies to signal alignment with social and environmental goals while navigating the reputational risks of weak regulatory enforcement. To do so effectively, firms must leverage both their internal resources and organizational facades—symbolic mechanisms that reinforce legitimacy and frame corporate actions as responsible and forward-looking.

Building on the GISTe resource model (Backman et al. 2017), we argue that organizational facades serve as a moderating mechanism that enhances the visible impact of these resources on CAC. That is, facades do not replace substantive action but amplify the legitimacy and perceived credibility of firms' environmental disclosures. In settings where CSR activities—such as climate mitigation efforts—are not fully internalized, facades help shape stakeholder narratives and highlight organizational alignment with societal expectations (Dorobantu et al. 2017; Barney 2018). By acting as legitimacy filters, organizational facades may strengthen the link between resource deployment and reported climate action by (a) enhancing the perceived authority of governance structures in environmental oversight; (b) increasing the transparency and trustworthiness of information systems; (c) reinforcing the reliability of environmental procedures and routines; and (d) showcasing technological investments as aligned with global climate priorities.

We therefore propose that the use of organizational facades moderates the relationship between each GISTe resource and the level of CAC reported, such that firms with higher symbolic alignment will demonstrate stronger visible outcomes in voluntary initiatives, regardless of substantive change. Therefore, we propose the following hypotheses:

Hypothesis 3a. *Organizational facades positively moderate the relationship between governance resources and CAC reported in voluntary initiatives.*

Hypothesis 3b. *Organizational facades positively moderate the relationship between information resources and CAC reported in voluntary initiatives.*

Hypothesis 3c. *Organizational facades positively moderate the relationship between systems resources and CAC reported in voluntary initiatives.*

Hypothesis 3d. *Organizational facades positively moderate the relationship between technology resources and CAC reported in voluntary initiatives.*

Figure 1 represents our hypothesized model.

3 | Methodology

3.1 | Study Population

Our study comprises the entire population of 271 companies in Colombia that reported Sustainable Development Goals (SDGs) to the UNGC between 2014, when specific information on this initiative first became available, and 2019. The number of companies from emerging economies in the UNGC is remarkable, particularly from Colombia, which ranks ninth on the entire list of economies and third among the 21 emerging economies (UNGC 2023).

Focusing exclusively on a single emerging economy allows us to control for variations in institutional context and mitigate potential selection bias toward larger firms, as identified in prior research (Jastram and Klingenberg 2018). To supplement the UNGC data, we collected additional firm-level information from multiple sources, including ORBIS, corporate websites, and relevant Colombian government regulatory agencies.

3.2 | Variables and Measurements

3.2.1 | Dependent Variable

The CAC variable is selected for two main reasons. First, contributions to GHG reduction are both normatively and empirically interconnected across several SDGs, not just SDG 13, which focuses on "Taking urgent action to combat climate change" (Nerini et al. 2019; Sachs 2012). Focusing solely on SDG 13 risks overlooking other relevant environmental actions that contribute meaningfully to climate mitigation. Second, the CAC data are sourced from the UNGC, where reported environmental outcomes often reflect either symbolic actions or the implementation of pre-existing environmental

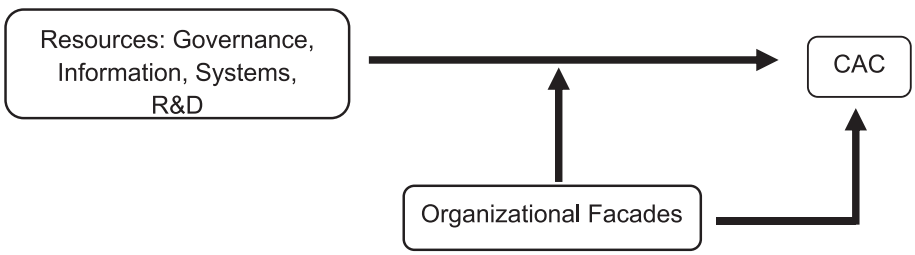

FIGURE 1 | The relevance of the interaction between resources and organizational facades in climate action of voluntary initiatives.

regulations, rather than substantive new efforts (van der Waal and Thijssens 2020).

In this study, the CAC variable is constructed as a standardized continuous measure. Transforming the original binary variable into a continuous one allows for greater variability in capturing firms' behavior, as it reflects different degrees of intensity or commitment to climate action. This approach avoids the information loss typically associated with binary variables and preserves the ordinal relationship among firms, thereby enabling more accurate comparisons across varying levels of engagement. Additionally, penalty parameters are incorporated to adjust for potential biases arising from both missing data—report not submitted—and late entry—number of years in which the firm has not participated—into the UNGC initiative during the study period.

To support the construction and validation of this variable, a survey was conducted between November and December 2019 with 650 environmental sustainability experts across Latin America. The participants included directors of sustainability departments, academics, and officials from environmental ministries. The survey inquired about the relationship between each of the 17 SDGs and climate action, resulting in a response rate of 11%. A scoring system ranging from 1 to 7 was utilized and simple average weights α_j were calculated. The SDGs were subsequently aggregated to obtain the variable CAC* for company i, such that $CAC_i^* = \sum_{ODS=1}^{17} \alpha_j SDG_{ji}$.

Sustainability reporting at UNGC includes four distinct L_i self-assessed "progress levels": Not applicable (0), Learner (1), Active (2), and Advanced (3).[1] These levels are multiplied by CAC* to calculate the average CAC variable in T_i years since the year the company began reporting its commitments to climate action Y_i:

$$Y_i = \sum_{t=1}^{T_i} L_{it} * \sum_{ODS=1}^{17} \alpha_{jt} * SDG_{jit} / T_i$$

Companies have disclosed their commitments from the moment they joined the UNGC, which results in varying timeframes. The company with the most extensive experience in UNGC and the highest Y_i will be prized, with y_i being a normalized continuous variable defined as

$$y_i = CAC = Y_i + \delta\left(T_{i,max} - T_{-i}\right); \text{such that } \delta = \frac{Y_{k,max} - Y_{k,min}}{\sqrt[2]{n}}$$

where $\{Y_{k,min}, Y_{k,max}\}$ corresponds to the maximum and minimum values of Y observed in the population of companies. T_{-i} is a parameter that penalizes the firm for late entry, that is, the number of years it has not reported on UNGC between 2015 and 2019. If the firm joined UNGC in 2019, then $\delta\left(T_{i,max} - T_{-i}\right) = 0$.

3.2.2 | Independent Variables

According to Backman et al. (2017), governance, information management, systems, and technology (GISTe) are the most substantial resources contributing to corporate climate actions, among other less relevant factors (Buysse and Verbeke 2003). Each variable is assigned a value of 1 if the company possesses the resource and 0 otherwise.

Governance is associated with the organization's decision-making level (Backman et al. 2017). Higher governance indicates that the company's climate action decisions are made at a higher hierarchical level. We hypothesize that this level is contingent upon the origin of the company. The "Varieties of Capitalism" (VofC) approach (Hall and Soskice 2001) offers an expanded framework that examines how national institutional structures influence environmental policies and environmental practices of companies. More coordinated economies tend to prioritize long-term sustainability and stakeholder collaboration, while in more liberal economies the focus is typically on market competition and maximizing shareholder value (Jackson and Deeg 2019), which can be externalized to the CAC of a company located in an emerging economy.

We employ the classification of Witt et al. (2018), categorizing enterprises based on their institutional origin as follows: liberal and advanced emerging market economies (LEs), European peripheral economies (PEs) and coordinated and highly coordinated market economies (CEs). Firms originating from emerging or local economies (EEs) are employed as a comparative criterion, with dummy variables assigned a value of zero when the origin is classified as EEs.

Regarding information resources, which comprise data tracking and disaggregation of relevant data in the supply chain, they facilitate the identification of focal GHG emission sources and help reduce production, energy, and pollution costs in supplier selection and management (Dou and Sarkis 2010). Organizations reporting on UNGC disclose whether they possess these resources and strategies for communicating policies and expectations to suppliers and other relevant partners. This variable is assigned a value of 1 when these resources are reported.

Systems include the definition of ex ante targets and the application of ex post verifiers for these targets (Backman et al. 2017). A reliable indicator that the company implements these systems is its participation in other highly recognized voluntary initiatives (Gjølberg 2009), including the Global Reporting Initiative (GRI), the Dow Jones Sustainability Index, FST4Good, Refinitiv, and WBCSD. The GRI is used as a proxy variable for Systems because it facilitates the standardization of sustainability reports and serves as a more dependable benchmark for best practices (Gonçalves et al. 2020; Tsalis et al. 2020; Hedberg and Von Malmborg 2003). Additionally, corporate participation in the other voluntary commitments was not statistically representative.

Concerning the company's investments, which serve as a technology resource for deploying superior capabilities (da Cunha Bezerra et al. 2020), we unfortunately lack information on their magnitudes.[2] Instead, the existence of R&D departments is employed to indicate that the company possesses the infrastructure, equipment, and human resources to potentially enhance its capabilities for developing new products and processes with

reduced GHG emissions. This is achieved, for instance, through the accumulation of knowledge and competencies in these departments (Zollo and Winter 2002).

3.2.3 | Organizational Facades

Organizational facades are classified from a collection of corporate talk, decisions, and actions to a complex organizational structure (Cho et al. 2015). According to Abrahamson and Baumard (2008), they are categorized into rational, progressive, and reputational facades. Rational facades affirm the company's environmental sustainability from the shareholders' perspective. Progressive facades specifically address stakeholder requirements to integrate shareholder value with certain socially demanded environmental improvements. Reputational facades are accounting and rhetorical symbols that unveil socially and legally unacceptable behaviors.

Because stakeholders benefit from reduced information asymmetries and are more empowered, it is in the company's interest to involve them symbolically in its environmental management (Gull et al. 2022; Schaltegger et al. 2019; Bowen 2014).

We propose the variable "Stakeholder engagement" to denote organizational facades, indicating that in the formulation of sustainability reports, this symbolic engagement is presented to society to enhance the company's legitimacy and transparency (Sciulli and Adhariani 2023; Meisinger 2022). This variable encompasses rational and progressive facades as they represent a discourse manifested in a sustainability report through a voluntary commitment, as well as an action consistent with the expectations of shareholders and stakeholders regarding climate action.[3]

The following commitments are reported to the UNGC: (1) the definition of goals, timelines, and metrics on policies, procedures, and activities related to stakeholder engagement and the appointment of personnel responsible for such duties; (2) the public acknowledgment of the company's responsibility for its impact on stakeholders; (3) the formulation of environmental sustainability policies, strategies, and goals in collaboration with key stakeholders; (4) inviting stakeholders to actively participate in the management and resolution of problems and challenges, as well as in evaluating the company's performance; and (5) participation channels established with employees and other stakeholders to address their concerns and respond to their ideas. The variable is assigned a value of 1 if the company reports three or more activities and zero otherwise.

3.2.4 | Controls

While engaging in voluntary initiatives (Fiaschi et al. 2017), companies may be incentivized to allocate their resources towards corporate social irresponsibility (CSI) (Cuervo-Cazurra 2016), defined as corporate actions that contravene certain social expectations held by stakeholders (Armstrong and Green 2013). Hence, this propensity should be controlled (Kölbel et al. 2017). The classification criteria of the United Nations Office on Drugs and Crime (2015) are employed to identify the corporations that were penalized by the Superintendency of Industry and Commerce, the Ministry of Environment and Sustainable Development, the Attorney General's Office, and the Prosecutor's Office in Colombia from 2015 to 2019. Environmental, anti-competition, financial, and labor crimes are included due to their prevalence. The variable is assigned a value of 1 if the company has been sanctioned and a value of 0 otherwise.

We also control for the standard minimum variables required in management research (Bernerth and Aguinis 2016), including size, determined by the number of employees; financial performance, assessed through ROA; and experience, calculated by the company's age. Internationalization must also be considered as the firm may be subject to scrutiny by global stakeholders (Kolk and Pinkse 2007; Ayuso et al. 2006). We contrast the company's status as an exporter and the presence of foreign subsidiaries (Johanson and Vahlne 2009). A binary variable is employed to denote whether the company is an exporter or not, with one representing exporting and zero representing non-exporting. The same applies to the presence or absence of foreign subsidiaries.

We control for the sector rather than technological advances (de Sousa et al. 2020). Additionally, the data are not generalized between polluting and non-polluting industries (Gonçalves et al. 2020). Based on the classification of GHG reduction potential by 2030, as outlined in Colombia's nationally determined contributions to the Kyoto Protocol, the service sector is identified as having the least potential as follows: Services: 0, Transportation: 1, Public utility services: 2, Extraction: 3, Primary: 4, Manufacturing or Production: 5.

Table 1 presents the variables used in the study, descriptive statistics, and the sources of information.

3.3 | Estimation Procedure

The empirical analysis is carried out through multivariate econometric regressions, in the general form: $y_i = x_i'\beta + z_i'D_i\delta + \varepsilon_i$, where y_i corresponds to the standardized dependent variable representing each company's CAC during the study period, x_i is a vector of $k \times 1$ variables for $i = 1, \ldots, n$ firms; $z_i'D_i$ is a vector of interactions constructed based on the independent variables and the organizational facade; ε_i is a random disturbance term such that $E[\varepsilon_i | x] = 0$ and $E[\varepsilon_i^2 | x] = \sigma^2 f(x_i)$.

Given the potential presence of heteroscedasticity, we assume that $E[\varepsilon_i^2 | x] = \sigma^2 f(x_i)$. Consequently, we estimate robust standard errors using the White heteroscedasticity-consistent covariance matrix (Greene 2003). We also conduct Breusch–Pagan tests, which confirmed the rejection of the null hypothesis of homoscedasticity. To ensure the absence of multicollinearity, we examine the Variance Inflation Factor (VIF) for all independent interaction, and control variables across model specifications, confirming that multicollinearity remains low. Finally, we apply Durbin–Watson tests to the residuals, and the results confirm the absence of first-order

TABLE 1 | Variables and information sources.

Variables	Description	Obs	Mean	Std. dev.	Min	Max	Obs
Climate Action Commitments (CAC)	A standardized continuous variable that links the 17 SDGs with climate action	271*	112.62	64.09	0	310	UNGC
Governance LEs	1 if company originates from liberal and advanced emerging market economies, 0 otherwise	271	0.25	0.32	0	1	UNGC, Orbis
Governance PEs	1 if company originates from European peripheral economies, 0 otherwise	271	0.12	0.23	0	1	UNGC, Orbis
Governance CEs	1 if company originates from coordinated and highly coordinated market economies, 0 otherwise	271	0.07	0.17	0	1	UNGC, Orbis
Information	1 if the company reports information resources, 0 otherwise	271	0.9	0.3	0	1	UNGC
Systems	1 if the firm participates and follows GRI standards, 0 otherwise	271	0.51	0.5	0	1	UNGC
R&D	1 if the company reports information resources, 0 otherwise	271	0.32	0.47	0	1	UNGC
Organizational façades	1 if the company reports three or more activities related to stakeholder engagement, 0 otherwise	271	0.46	0.5	0	1	UNGC
Corporate social irresponsibility (CSI)	1 if the company has environmental, anti-competition, financial and labor crimes sanctions, 0 otherwise	271	0.35	0.48	0	1	Datos abiertos Colombia (https://www.datos.gov.co/)
Experience	Age	268	42.68	29.59	4	139	ORBIS, SIC, Datos abiertos Colombia
Size	Number of employees	269	2210.8	6227	4	60,000	ORBIS, SIC, Datos abiertos Colombia
Financial performance	ROA	239	5.3	10.1	−98	37.71	ORBIS, SIC, Colombia open data
Exports	1 if the company is an exporter, 0 otherwise	271	0.24	0.43	0	1	UNGC, Communication in progress (COP), Company Website (WEB)
Subsidiaries	1 if the company has foreign subsidiaries, 0 otherwise	271	0.18	0.39	0	1	UNGC, WEB
Sector 1	1 if the company belongs to the Transportation sector, 0 otherwise	271	0.15	0.36	0	1	ORBIS
Sector 2	1 if the company belongs to the public utility services sector, 0 otherwise	271	0.13	0.34	0	1	ORBIS
Sector 3	1 if the company belongs to the extraction sector, 0 otherwise	271	0.02	0.15	0	1	ORBIS
Sector 4	1 if the company belongs to the primary sector, 0 otherwise	271	0.04	0.19	0	1	ORBIS
Sector 5	1 if the company belongs to the manufacturing sector, 0 otherwise	271	0.23	0.42	0	1	ORBIS

Note: The CAC of each of the 271 companies is built based on each of the 17 SDGs reported in 2014–2019. The benchmarks for Governance is emerging economies (EEs) and for Sector (0) is the services sector.

autocorrelation, thereby supporting the assumption of residual independence.

4 | Results

Table 2 presents the results of the regressions.

In the first model, which estimates the direct effects of internal resources and organizational facades on CAC, resources emerge as the most significant contributors. Specifically, governance structures originating from European PEs, along with R&D and information resources, show a statistically significant and positive influence on CAC. In contrast, systems resources do not demonstrate a significant effect.

The governance effects of firms from LEs are positive but not statistically significant in either model. Meanwhile, governance from CEs exhibits a statistically significant negative effect in the moderated model, indicating that such governance structures

TABLE 2 | Effect of resources and organizational facades on CAC.

Variables	GISTe and facades	GISTe and moderation of organizational facades
Governance LEs	2.64	1.28
Governance PEs	50.54**	9.78
Governance CEs	−10.22	−28.06***
Information	25.73**	19.00*
Systems	−12.18	5.29
R&D	25.94**	27.90*
Organizational facades	17.2**	0.42
Governance LEs*Organizational facades	—	1.16
Governance PEs*Organizational facades	—	84.93**
Governance CEs*Organizational facades	—	72.46
Information*Organizational facades	—	28.46*
Systems*Organizational facades	—	−25.86
R&D*Organizational facades	—	−1.68
CSI	−4.54	−6.00
Experience	0.39**	0.38**
Size	0.01**	0.01***
Financial performance	−0.14	−0.12
Sector 1	−3.3	−6.23
Sector 2	44.34***	44.14***
Sector 3	−23.91	−22.53
Sector 4	2.49	14.89
Sector 5	−2.1	−4.78
Exports	−5.74	6.80
Subsidiaries	−14.98	−8.70
R^2	0.35	0.40
F-statistic	10.46***	9.33***
Durbin–Watson	2.21	2.22
Jarque–Bera	2.32	3.15
Breush–Pagan (*p*-value)	0.076	0.074

*$p < 0.1$.
**$p < 0.05$.
***$p < 0.01$.

may be less effective or even counterproductive in the symbolic framing of climate actions within the UNGC context. Figure 2 depicts the governance effects on CAC.

When interaction terms are introduced in the second model to test for moderating effects of organizational facades, important nuances emerge. The interaction between organizational facades and governance from PEs becomes highly significant, despite the main effect of governance PE becoming insignificant in the presence of the moderator. This suggests that organizational facades amplify the influence of PE-based governance, ultimately exerting the strongest effect on CAC.

Similarly, the interaction between information resources and facades is statistically significant, reinforcing the idea that facades help convert informational capabilities into more persuasive climate action disclosures. These findings underline the strategic role of facades in enhancing the visibility and perceived legitimacy of internal resources. Figure 3 summarizes the moderating effect of the organizational facade on resources.

Despite theoretical expectations, systems resources—as proxied by GRI membership—remain statistically insignificant across both models. Although these systems may indicate the presence of environmental management practices and skilled human capital (Griffiths et al. 2007), they appear insufficient in driving higher levels of CAC reporting.

As anticipated, firm experience and size are both positively and significantly associated with higher CAC levels, although their effects are not large enough to substantially differentiate smaller or less established firms. The negative but non-significant coefficient on ROA indicates no support for the hypothesis that firms with weaker financial performance are more likely to adopt symbolic climate commitments to enhance stakeholder perception or appeal to environmentally conscious consumers.

With respect to internationalization, the non-significant result for export activity suggests that voluntary frameworks like the UNGC may not serve as effective tools for addressing global stakeholder accountability, aligning with prior critiques (Aguilera et al. 2019).

Sectoral analysis reveals that utilities and infrastructure-related industries (Sector 2: water, sanitation, electricity, gas, and telecommunications) have a significantly higher likelihood of reporting ambitious CAC. This finding is notable given that these sectors may have limited technical flexibility to reduce emissions, yet still seek to project leadership in climate action by endorsing high-profile voluntary initiatives (Bagnoli et al. 2023).

Finally, the CSI variable is negative but not statistically significant, indicating no evidence that sanctioned firms are more inclined to mobilize internal resources or facades to compensate for reputational damage or to demonstrate a higher level of environmental commitment.

5 | Discussion

This study set out to explore why firms in an emerging economy like Colombia report high CAC in the context of voluntary initiatives such as the UNGC, despite weak regulatory enforcement. Anchored in the RBV and complemented by the concept of organizational facades, we examined how firms leverage internal resources—namely, governance, information, systems, and technology (GISTe)—and symbolic strategies to shape their environmental disclosures.

The econometric results revealed that internal resources, particularly governance rooted in peripheral economies (PEs), information systems, and R&D capabilities, all of which show a positive and significant association with higher CAC. These findings support the premise that firms in weak institutional environments require distinct resource configurations to both operate effectively and signal environmental legitimacy. This aligns with prior RBV literature, which argues that rare and valuable resources are central to competitive advantage—though our study extends this view to include symbolic signaling in the context of voluntary environmental commitments.

A central insight from our study is the moderating role of organizational facades. Far from being mere symbolic fronts, facades

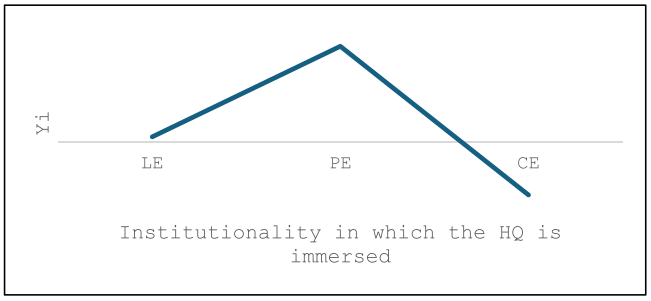

FIGURE 2 | Relationship between Governance associated with the institutional origin of the HQ and CAC.

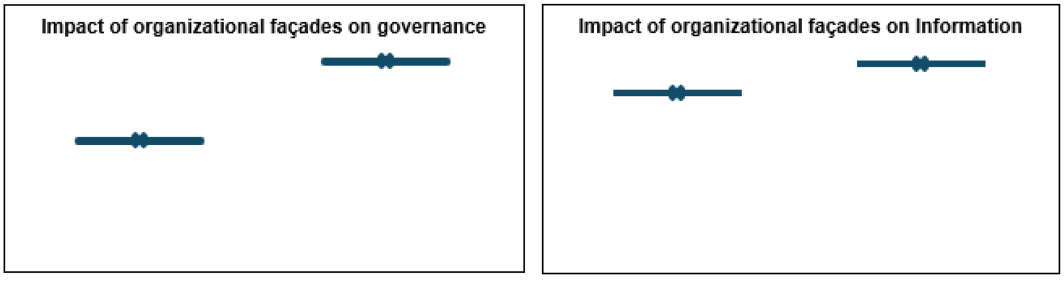

FIGURE 3 | Moderating effect of organizational facades on governance and information resources.

act as relational mechanisms through which firms amplify the perceived value of their internal resources. This is particularly evident in the interaction between facades and governance structures from PEs, where their combined effect significantly enhances CAC. Such firms appear to leverage facades not only to meet stakeholder expectations but also to shape those expectations through carefully curated sustainability narratives. This supports the argument that facades are used strategically to legitimize environmental actions that may not necessarily reflect substantive operational change (Bowen 2014; Abrahamson and Baumard 2008).

Moreover, organizational facades positively moderate the impact of information resources on CAC, reinforcing the strategic use of stakeholder engagement in symbolic reporting. However, this relationship is not without complexity. When stakeholders gain deeper access to climate-related data and governance processes, firms may encounter trade-offs. On one hand, greater transparency can improve internal learning and foster more proactive environmental action. On the other, heightened stakeholder involvement can pressure firms to reveal inconsistencies, leading to reputational risks if information is incomplete, inaccurate, or strategically withheld. This paradox illustrates the fine balance firms must maintain between symbolic signaling and operational credibility.

In some cases, facades may even catalyze internal change. They can help shift leadership models away from purely financial decision-making toward more inclusive approaches that account for long-term risks and stakeholder priorities (Stevelman and Haan 2019). The extent to which facades become transformative rather than symbolic depends largely on the depth and authenticity of stakeholder engagement. As Henriques and Sadorsky (1999) suggest, such engagement may evolve from a facade into a genuine organizational capability when it fosters reciprocal influence and trust between companies and their stakeholders.

Our findings reveal a notable contrast in how governance structures from different institutional origins influence CAC. Governance from CEs shows a statistically significant negative effect, governance from LEs shows a positive but non-significant effect, while governance from peripheral European economies PEs—such as Spain, Portugal, and Greece—has a positive and significant influence on CAC.

This pattern may reflect differing institutional legacies. Firms from CEs often operate under strict regulatory environments focused on substantive environmental performance. However, when these firms engage with symbolic, voluntary initiatives like the UNGC—particularly in weakly enforced host countries like Colombia—their substantive governance structures may not translate effectively, potentially weakening their perceived legitimacy.

LE-based firms, by contrast, may emphasize market-driven, short-term goals over long-term sustainability, making them less inclined to prioritize climate reporting, especially in voluntary and low-enforcement settings.

In the case of firms from European PEs, their home countries often have weaker institutional enforcement and a stronger reliance on symbolic compliance. These firms tend to adopt governance approaches that focus on visibility and stakeholder reassurance. When they expand into emerging markets like Colombia, this symbolic governance model is reinforced. Their governance frameworks, imported from their home offices, help fill local institutional gaps and serve as visible signals of legitimacy. This institutional substitution effect explains why European PE-based governance has the strongest association with CAC: it aligns well with the symbolic nature of voluntary initiatives and the stakeholder expectations in weaker institutional contexts.

The role of information resources emerges as particularly relevant in our analysis. These capabilities support automation, data tracking, and supply chain monitoring—functions that become increasingly valuable as firms transition from symbolic disclosure to actionable climate strategies. Information systems enable the minimization of both costs and environmental impacts, but only when this data is internalized and disseminated to support decision-making. In this context, information serves as a bridge between symbolic reporting and operational change, depending on the firm's intent and capacity to use it substantively.

Technological capabilities, measured through the presence of R&D departments, also show a positive effect. However, their strategic relevance appears conditional upon the broader climate objectives pursued. In firms constrained by limited financial or technological resources—typical of many in emerging markets—management-driven resources such as governance and information may play a more central role than high-investment technologies in supporting climate narratives.

Contrary to theoretical expectations, systems resources—measured through GRI participation—do not exhibit a statistically significant relationship with higher CAC. This finding suggests that although the GRI framework promotes standardization and procedural legitimacy, its process-oriented focus may be insufficient to drive more ambitious or substantive environmental disclosures. As Boiral et al. (2019) highlight, GRI enhances the reliability of reporting through structured formats and auditability. However, it often falls short in incentivizing performance improvements, especially in institutional environments where regulatory oversight is weak. The limitation lies in the design of GRI itself: while it improves the form of disclosure, it does not necessarily influence the substance. Consequently, GRI participation may serve more as a signal of procedural compliance than as a genuine strategic commitment to transformative climate action.

Together, these findings underscore that the relationship between internal resources and climate disclosures is not linear or purely technical. Rather, it is socially constructed, moderated by institutional origin, and strategically managed through symbolic mechanisms such as organizational facades. In this way, stakeholder capitalism and legitimacy-seeking behavior shape not only how resources are used but also how they are presented and perceived within voluntary sustainability frameworks.

6 | Conclusions, Limitations, and Future Research

This research contributes to the literature on symbolic corporate environmentalism by illustrating how firms in emerging economies strategically combine internal resources and organizational facades to report high levels of climate action under voluntary initiatives. In doing so, we extend the RBV by integrating it with the concept of organizational facades, highlighting that environmental sustainability is not solely a matter of developing internal capabilities, but also of managing stakeholder perceptions and legitimacy through symbolic mechanisms (Freeman et al. 2021; Michelon et al. 2016).

Our findings yield two key insights. First, internal resources—particularly governance structures, information systems, and technological capabilities—only translate into higher CAC when accompanied by symbolic framing. This underscores the importance of stakeholder engagement and facade construction in transforming capabilities into credible environmental narratives. Second, organizational facades play a pivotal moderating role, amplifying the effects of specific resources, especially in institutional environments characterized by weak enforcement but strong stakeholder expectations.

These findings suggest that voluntary sustainability frameworks may strategically incentivize symbolic rather than substantive behavior. For policymakers and sustainability advocates, this raises concerns about the reliability of self-reported climate commitments and emphasizes the need for independent verification mechanisms that ensure alignment between disclosed actions and actual environmental outcomes.

Despite its contributions, this research has several limitations. First, the reliance on secondary data and proxy variables (e.g., Governance contingent on the company's origin, GRI membership, presence of R&D departments) may only partially capture the complexity of firms' environmental strategies or the depth of their internal commitment to climate goals. Future research should consider mixed-method approaches—such as interviews or case studies—to distinguish between symbolic compliance and genuine progress.

Second, while we acknowledge the role of governance, our analysis does not fully explore the influence of top management teams and incentive mechanisms on climate decision-making. Future work should investigate how internal leadership structures interact with stakeholder-facing departments and whether senior management actively integrates climate objectives into strategic planning (Aguilera et al. 2019; Berkowitz 2018).

Third, our measurement of technological resources focuses on the existence of R&D departments, potentially overlooking firms that adopt cleaner production processes or engage in carbon offsetting as part of their climate strategy. Additional research should explore how different decarbonization pathways—internal vs. external—affect the symbolic framing of climate disclosures.

Fourth, our conceptualization of stakeholder engagement remains broad. Future studies should identify which stakeholder groups—such as regulators, investors, NGOs, or consumers—exert the most influence on CAC and whether their engagement fosters symbolic or substantive change (Ayuso et al. 2006).

Fifth, the generalizability of our findings is constrained by our focus on Colombia. Emerging markets vary significantly in institutional development, innovation ecosystems, and regulatory enforcement. Comparative cross-country analyses are needed to assess whether the moderating role of facades holds in other institutional contexts (Jamali and Karam 2018).

Finally, the interplay between voluntary climate commitments and existing environmental regulation warrants further exploration. Companies may use voluntary disclosures to "double-count" achievements already mandated by regulation. Future research should disentangle the interdependencies between corporate social responsibility, CPA, and regulatory compliance to better understand firms' proactive and reactive strategies (Lyon et al. 2018).

Nevertheless, despite these limitations, our study advances scholarly understanding at the intersection of RBV, stakeholder theory, and symbolic environmentalism. By highlighting the role of organizational facades as both moderating devices and relational legitimacy tools, we provide a conceptual bridge between internal firm resources and external stakeholder expectations. This integrated perspective offers a more comprehensive explanation of why—and how—firms in emerging economies report ambitious climate commitments under voluntary sustainability frameworks.

Conflicts of Interest

The authors declare no conflicts of interest.

Endnotes

[1] "Not applicable" indicates that no report has been submitted, and a one-year period is permitted under the threat of exclusion. For Active status, a declaration of support from the CEO, a description of actions, and qualitative or quantitative measurement of achievements are required. A Learner is a firm that fails to satisfy all three prerequisites. The status is Advanced if the SDGs are incorporated into the business model and if there is promotion and support from the core business, and evidence of sustainable corporate governance and leadership (UNGC 2023).

[2] Information on innovation rankings and membership of the National Innovation System is also available; however, their coverage is either extremely low or limited to companies pursuing tax incentives. The technological innovation survey is conducted by the National Department of Statistics (DANE), but sectoral averages do not fit the research population.

[3] All companies have sustainability reports, websites and social media accounts suggested as a rational facade. There is information on the adoption of ISO 14001—Environmental Management System (EMS)—and the monitoring of GRI standards. This ISO standard is implemented by all companies, so the required variability is not present either. We employ GRI as a proxy variable for the Systems resource. Using both variables in the regressions is not correct, as GRI membership implies that GRI standards are followed. Auditing and assurance activities, as well as membership in reputational listings, are more closely related to the possibility of preventing greenwashing (Murcia 2021; Testa et al. 2018).

References

Abrahamson, E., and P. Baumard. 2008. "What Lies Behind Organizational Façades and How Organizational Façades Lie: An Untold Story of Organizational Decision-Making." In *The Oxford Handbook of Organizational Decision Making*, eds. G. Gerard, P. Hodgkinson, and W. H. Starbuck, 437–452. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199290468.003.0023.

Acuti, D., M. Bellucci, and G. Manetti. 2024. "Preventive and Remedial Actions in Corporate Reporting Among "Addiction Industries": Legitimacy, Effectiveness and Hypocrisy Perception." *Journal of Business Ethics* 189, no. 3: 603–623. https://doi.org/10.1007/s10551-023-05375-3.

Aguilera, R. V., V. Marano, and I. Haxhi. 2019. "International Corporate Governance: A Review and Opportunities for Future Research." *Journal of International Business Studies* 50, no. 4: 1–42. https://doi.org/10.1057/s41267-019-00232-w.

Aragón-Correa, J. A., N. Hurtado-Torres, S. Sharma, and V. J. García-Morales. 2008. "Environmental Strategy and Performance in Small Firms: A Resource-Based Perspective." *Journal of Environmental Management* 86, no. 1: 88–103. https://doi.org/10.1016/j.jenvman.2006.11.022.

Aragon-Correa, J. A., A. A. Marcus, and D. Vogel. 2020. "The Effects of Mandatory and Voluntary Regulatory Pressures on Firms' Environmental Strategies: A Review and Recommendations for Future Research." *Academy of Management Annals* 14, no. 1: 339–365. https://doi.org/10.5465/annals.2018.0014.

Armstrong, J. S., and K. C. Green. 2013. "Effects of Corporate Social Responsibility and Irresponsibility Policies." *Journal of Business Research* 66, no. 10: 1922–1927. https://doi.org/10.1016/j.jbusres.2013.02.014.

Ayuso, S., M. A. Rodriguez, and J. E. Ricart. 2006. "Responsible Competitiveness at the "Micro" Level of the Firm: Using Stakeholder Dialogue as a Source for New Ideas: A Dynamic Capability Underlying Sustainable Innovation." *Corporate Governance* 6, no. 4: 475–490. https://doi.org/10.1108/14720700610689586.

Backman, C. A., A. Verbeke, and R. A. Schulz. 2017. "The Drivers of Corporate Climate Change Strategies and Public Policy: A New Resource-Based View Perspective." *Business & Society* 56, no. 4: 545–575. https://doi.org/10.1177/0007650315578450.

Bagnoli, L., S. Bertomeu-Sanchez, A. Estache, and M. Vagliasindi. 2023. "Does the Ownership of Utilities Matter for Social Outcomes? A Survey of the Evidence for Developing Countries." *Journal of Economic Policy Reform* 26, no. 1: 24–43. https://doi.org/10.1080/17487870.2021.1997747.

Barney, J. B. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17: 99–120. https://doi.org/10.1177/014920639101700108.

Barney, J. B. 2018. "Why Resource-Based Theory's Model of Profit Appropriation Must Incorporate a Stakeholder Perspective." *Strategic Management Journal* 39, no. 13: 3305–3325. https://doi.org/10.1002/smj.2949.

Baron, D. P. 1995. "Integrated Strategy: Market and Nonmarket Components." *California Management Review* 37, no. 2: 47–65. https://doi.org/10.2307/41165788.

Baumard, P. 2014. "Tearing Down the Façades of Radical Innovation." *Industrial Marketing Management* 43, no. 8: 1324–1334. https://doi.org/10.1016/j.indmarman.2014.09.005.

Berkowitz, H. 2018. "Meta-Organizing Firms' Capabilities for Sustainable Innovation: A Conceptual Framework." *Journal of Cleaner Production* 175: 420–430. https://doi.org/10.1016/j.jclepro.2017.12.028.

Berliner, D., and A. Prakash. 2015. ""Bluewashing" the Firm? Voluntary Regulations, Program Design, and Member Compliance With the United Nations Global Compact." *Policy Studies Journal* 43, no. 1: 115–138. https://doi.org/10.1111/psj.12085.

Bernerth, J. B., and H. Aguinis. 2016. "A Critical Review and Best-Practice Recommendations for Control Variable Usage." *Personnel Psychology* 69, no. 1: 229–283. https://doi.org/10.1111/peps.12103.

Besio, C., and A. Pronzini. 2014. "Morality, Ethics, and Values Outside and Inside Organizations: An Example of the Discourse on Climate Change." *Journal of Business Ethics* 119, no. 3: 287–300. https://doi.org/10.1007/s10551-013-1641-2.

Bhandari, K. R., M. Ranta, and J. Salo. 2022. "The Resource-Based View, Stakeholder Capitalism, ESG, and Sustainable Competitive Advantage: The Firm's Embeddedness Into Ecology, Society, and Governance." *Business Strategy and the Environment* 31, no. 4: 1525–1537. https://doi.org/10.1002/bse.2967.

Boiral, O., I. Heras-Saizarbitoria, and M. C. Brotherton. 2019. "Assessing and Improving the Quality of Sustainability Reports: The Auditors' Perspective." *Journal of Business Ethics* 155, no. 3: 703–721. https://doi.org/10.1007/s10551-017-3516-4.

Bowen, F. 2014. *After Greenwashing: Symbolic Corporate Environmentalism and Society*. Cambridge University Press.

Buysse, K., and A. Verbeke. 2003. "Proactive Environmental Strategies: A Stakeholder Management Perspective." *Strategic Management Journal* 24, no. 5: 453–470. https://doi.org/10.1002/smj.299.

Cadez, S., A. Czerny, and P. Letmathe. 2019. "Stakeholder Pressures and Corporate Climate Change Mitigation Strategies." *Business Strategy and the Environment* 28, no. 1: 1–14. https://doi.org/10.1002/bse.2070.

Chen, P., and Z. Chu. 2024. "Mere Facade? Is Greenwashing Behaviour Lower in Low-Carbon Corporates?" *Business Strategy and the Environment* 33, no. 5: 4162–4174. https://doi.org/10.1002/bse.3701.

Cho, C. H., M. Laine, R. W. Roberts, and M. Rodrigue. 2015. "Organized Hypocrisy, Organizational Façades, and Sustainability Reporting." *Accounting, Organizations and Society* 40: 78–94. https://doi.org/10.1016/j.aos.2014.12.003.

Congreso de Colombia. 2021. "Ley 2169, Por medio de la cual se impulsa el desarrollo bajo en carbono."

Cuervo-Cazurra, A. 2016. "Corruption in International Business." *Journal of World Business* 51, no. 1: 35–49. https://doi.org/10.1016/j.jwb.2015.08.015.

da Cunha Bezerra, M. C., C. F. Gohr, and S. N. Morioka. 2020. "Organizational Capabilities Towards Corporate Sustainability Benefits: A Systematic Literature Review and an Integrative Framework Proposal." *Journal of Cleaner Production* 247: 119114. https://doi.org/10.1016/j.jclepro.2019.119114.

Damert, M., and R. J. Baumgartner. 2017. "Exploring the Determinants and Long-Term Performance Outcomes of Corporate Carbon Strategies." *Journal of Cleaner Production* 160: 123–138. https://doi.org/10.1016/j.jclepro.2017.03.206.

de Sousa, L., A. B. Jabbour, D. Vazquez-Brust, C. J. Chiappetta Jabbour, and D. Andriani Ribeiro. 2020. "The Interplay Between Stakeholders, Resources and Capabilities in Climate Change Strategy: Converting Barriers Into Cooperation." *Business Strategy and the Environment* 29, no. 3: 1362–1386. https://doi.org/10.1002/bse.2438.

Delmas, M., and V. C. Burbano. 2011. "The Drivers of Greenwashing." *California Management Review* 54, no. 1: 64–87. https://doi.org/10.1525/cmr.2011.54.1.64.

Doh, J. P., T. C. Lawton, and T. Rajwani. 2012. "Advancing Nonmarket Strategy Research: Institutional Perspectives in a Changing World." *Academy of Management Perspectives* 26, no. 3: 22–39. https://doi.org/10.5465/amp.2012.0041.

Dorobantu, S., A. Kaul, and B. Zelner. 2017. "Nonmarket Strategy Research Through the Lens of New Institutional Economics: An Integrative Review and Future Directions." *Strategic Management Journal* 38, no. 1: 114–140. https://doi.org/10.1002/smj.2590.

Dou, Y., and J. Sarkis. 2010. "A Joint Location and Outsourcing Sustainability Analysis for a Strategic Offshoring Decision." *International Journal of Production Research* 48, no. 2: 567–592. https://doi.org/10.1080/00207540903175145.

Duque-Grisales, E., J. Aguilera-Caracuel, J. Guerrero-Villegas, and E. García-Sánchez. 2020. "Can Proactive Environmental Strategy Improve Multilatina Level of Internationalization? The Moderating Role of Board Independence." *Business Strategy and the Environment* 29, no. 1: 291–305. https://doi.org/10.1002/bse.2377.

Fiaschi, D., E. Giuliani, and F. Nieri. 2017. "Overcoming the Liability of Origin by Doing No-Harm: Emerging Country Firms' Social Irresponsibility as They Go Global." *Journal of World Business* 52, no. 4: 546–563. https://doi.org/10.1016/j.jwb.2016.09.001.

Fox, E. J., and S. J. Hoch. 2005. "Cherry-Picking." *Journal of Marketing* 69, no. 1: 46–62. https://doi.org/10.1509/jmkg.69.1.46.55506.

Freeman, R. E., S. D. Dmytriyev, and R. A. Phillips. 2021. "Stakeholder Theory and the Resource-Based View of the Firm." *Journal of Management* 47, no. 7: 1757–1770. https://doi.org/10.1177/0149206321993576.

Friedman, A. L., and S. Miles. 2006. *Stakeholders: Theory and Practice*. Oxford University Press.

García-Sánchez, I. M., N. Hussain, S. A. Khan, and J. Martínez-Ferrero. 2020. "Managerial Entrenchment, Corporate Social Responsibility, and Earnings Management." *Corporate Social Responsibility and Environmental Management* 27, no. 4: 1818–1833. https://doi.org/10.1002/csr.1928.

Gardner, W. L., and M. J. Martinko. 1988. "Impression Management in Organizations." *Journal of Management* 14, no. 2: 321–338. https://doi.org/10.1177/014920638801400210.

Gjølberg, M. 2009. "Measuring the Immeasurable?: Constructing an Index of CSR Practices and CSR Performance in 20 Countries." *Scandinavian Journal of Management* 25, no. 1: 10–22. https://doi.org/10.1016/j.scaman.2008.10.003.

Gómez-Bolaños, E., N. E. Hurtado-Torres, and B. L. Delgado-Márquez. 2020. "Disentangling the Influence of Internationalization on Sustainability Development: Evidence From the Energy Sector." *Business Strategy and the Environment* 29, no. 1: 229–239. https://doi.org/10.1002/bse.2360.

Gonçalves, T., C. Gaio, and E. Costa. 2020. "Committed vs Opportunistic Corporate and Social Responsibility Reporting." *Journal of Business Research* 115: 417–427. https://doi.org/10.1016/j.jbusres.2020.01.008.

Greene, W. H. 2003. *Econometric Analysis*. Pearson Education India.

Griffiths, A., N. Haigh, and J. Rassias. 2007. "A Framework for Understanding Institutional Governance Systems and Climate Change: The Case of Australia." *European Management Journal* 25: 415–427. https://doi.org/10.1016/j.emj.2007.08.001.

Gull, A. A., N. Hussain, S. A. Khan, Z. Khan, and A. Saeed. 2022. "Governing Corporate Social Responsibility Decoupling: The Effect of the Governance Committee on Corporate Social Responsibility Decoupling." *Journal of Business Ethics* 185: 1–26. https://doi.org/10.1007/s10551-022-05181-3.

Hall, P. A., and D. Soskice. 2001. "An Introduction to Varieties of Capitalism." In *Debating Varieties of Capitalism: A Reader*, edited by B. Hancké, 21–74. Oxford University Press.

Haque, F., and C. G. Ntim. 2018. "Environmental Policy, Sustainable Development, Governance Mechanisms and Environmental Performance." *Business Strategy and the Environment* 27, no. 3: 415–435. https://doi.org/10.1002/bse.2007.

Hart, S. L., and G. Dowell. 2011. "Invited Editorial: A Natural-Resource-Based View of the Firm: Fifteen Years After." *Journal of Management* 37, no. 5: 1464–1479. https://doi.org/10.1177/0149206310390219.

Hedberg, C. J., and F. Von Malmborg. 2003. "The Global Reporting Initiative and Corporate Sustainability Reporting in Swedish Companies." *Corporate Social Responsibility and Environmental Management* 10, no. 3: 153–164. https://doi.org/10.1002/csr.38.

Henriques, I., and P. Sadorsky. 1999. "The Relationship Between Environmental Commitment and Managerial Perceptions of Stakeholder Importance." *Academy of Management Journal* 42, no. 1: 87–99. https://doi.org/10.5465/256876.

Hillman, A. J., G. D. Keim, and D. Schuler. 2004. "Corporate Political Activity: A Review and Research Agenda." *Journal of Management* 30, no. 6: 837–857. https://doi.org/10.1016/j.jm.2004.06.003.

Jackson, G., and R. Deeg. 2019. "Comparing Capitalisms and Taking Institutional Context Seriously." *Journal of International Business Studies* 50, no. 1: 4–19. https://doi.org/10.1057/s41267-018-0206-0.

Jamali, D., and C. Karam. 2018. "Corporate Social Responsibility in Developing Countries as an Emerging Field of Study." *International Journal of Management Reviews* 20: 32–61. https://doi.org/10.1111/ijmr.12112.

Jastram, S. M., and J. Klingenberg. 2018. "Assessing the Outcome Effectiveness of Multi-Stakeholder Initiatives in the Field of Corporate Social Responsibility–The Example of the United Nations Global Compact." *Journal of Cleaner Production* 189: 775–784. https://doi.org/10.1016/j.jclepro.2018.04.005.

Johanson, J., and J. E. Vahlne. 2009. "The Uppsala Internationalization Process Model Revisited: From Liability of Foreignness to Liability of Outsidership." *Journal of International Business Studies* 40, no. 9: 1411–1431. https://doi.org/10.1057/jibs.2009.24.

Khanra, S., P. Kaur, R. P. Joseph, A. Malik, and A. Dhir. 2022. "A Resource-Based View of Green Innovation as a Strategic Firm Resource: Present Status and Future Directions." *Business Strategy and the Environment* 31, no. 4: 1395–1413. https://doi.org/10.1002/bse.2961.

Kölbel, J. F., T. Busch, and L. M. Jancso. 2017. "How Media Coverage of Corporate Social Irresponsibility Increases Financial Risk." *Strategic Management Journal* 38, no. 11: 2266–2284. https://doi.org/10.1002/smj.2647.

Kolk, A., and J. Pinkse. 2007. "Towards Strategic Stakeholder Management? Integrating Perspectives on Corporate Responses to Climate Change." *Corporate Governance* 7, no. 4: 370–378. https://doi.org/10.1108/14720700710820452.

Kostova, T., and V. Marano. 2019. "Institutional Theory Perspectives on Emerging Markets." In *The Oxford Handbook of Management in Emerging Markets*, edited by R. Grosse and K. Meyer, 99–126. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190683948.013.5.

Littlewood, D., R. Decelis, C. Hillenbrand, and D. Holt. 2018. "Examining the Drivers and Outcomes of Corporate Commitment to Climate Change Action in European High Emitting Industry." *Business Strategy and the Environment* 27, no. 8: 1437–1449. https://doi.org/10.1002/bse.2194.

Long, B. S., and C. Driscoll. 2008. "Codes of Ethics and the Pursuit of Organizational Legitimacy: Theoretical and Empirical Contributions." *Journal of Business Ethics* 77, no. 2: 173–189. https://doi.org/10.1007/s10551-006-9307-y.

Lyon, T. P., M. A. Delmas, J. W. Maxwell, et al. 2018. "CSR Needs CPR: Corporate Sustainability and Politics." *California Management Review* 60, no. 4: 5–24. https://doi.org/10.1177/0008125618778854.

Marquis, C., and M. Raynard. 2015. "Institutional Strategies in Emerging Markets." *Academy of Management Annals* 9, no. 1: 291–335. https://doi.org/10.5465/19416520.2015.1014661.

McDonnell, M. H., and T. Werner. 2016. "Blacklisted Businesses: Social Activists' Challenges and the Disruption of Corporate Political Activity." *Administrative Science Quarterly* 61, no. 4: 584–620. https://doi.org/10.1177/0001839216648953.

Meinshausen, M., N. Meinshausen, W. Hare, et al. 2009. "Greenhouse-Gas Emission Targets for Limiting Global Warming to 2 C." *Nature* 458, no. 7242: 1158–1162. https://doi.org/10.1038/nature08017.

Meisinger, N. 2022. "A Tragedy of Intangible Commons: Riding the Socioecological Wave." *Ecological Economics* 193: 107298. https://doi.org/10.1016/j.ecolecon.2021.107298.

Mellahi, K., J. G. Frynas, P. Sun, and D. Siegel. 2016. "A Review of the Nonmarket Strategy Literature: Toward a Multi-Theoretical Integration." *Journal of Management* 42, no. 1: 143–173. https://doi.org/10.1177/0149206315617241.

Michelon, G., S. Pilonato, F. Ricceri, and R. W. Roberts. 2016. "Behind Camouflaging: Traditional and Innovative Theoretical Perspectives in Social and Environmental Accounting Research." *Sustainability Accounting, Management and Policy Journal* 7, no. 1: 2–25. https://doi.org/10.1108/SAMPJ-12-2015-0121.

Miller, D., and I. Le Breton-Miller. 2021. "Paradoxical Resource Trajectories: When Strength Leads to Weakness and Weakness Leads to Strength." *Journal of Management* 47, no. 7: 1899–1914. https://doi.org/10.1177/0149206320977901.

Murcia, M. J. 2021. "Progressive and Rational CSR as Catalysts of New Product Introductions." *Journal of Business Ethics* 174, no. 3: 613–627. https://doi.org/10.1007/s10551-020-04625-y.

Nerini, F. F., B. Sovacool, N. Hughes, et al. 2019. "Connecting Climate Action With Other Sustainable Development Goals." *Nature Sustainability* 2, no. 8: 674–680. https://doi.org/10.1038/s41893-019-0334-y.

Nystrom, P. C., and W. H. Starbuck. 1984. "Organizational Façades." *Academy of Management Proceedings* 1: 182–185. https://doi.org/10.5465/ambpp.1984.4978761.

Reid, E. M., and M. W. Toffel. 2009. "Responding to Public and Private Politics: Corporate Disclosure of Climate Change Strategies." *Strategic Management Journal* 30, no. 11: 1157–1178. https://doi.org/10.1002/smj.796.

Sachs, J. D. 2012. "From Millennium Development Goals to Sustainable Development Goals." *Lancet* 379, no. 9832: 2206–2211. https://doi.org/10.1016/S0140-6736(12)60685-0.

Schaltegger, S., J. Hörisch, and R. E. Freeman. 2019. "Business Cases for Sustainability: A Stakeholder Theory Perspective." *Organization & Environment* 32, no. 3: 191–212. https://doi.org/10.1177/1086026617722882.

Sciulli, N., and D. Adhariani. 2023. "The Use of Integrated Reports to Enhance Stakeholder Engagement." *Journal of Accounting and Organizational Change* 19, no. 3: 447–473. https://doi.org/10.1108/JAOC-11-2021-0156.

Stevelman, F., and S. C. Haan. 2019. "Board Governance for the Twenty-First Century." *Business Lawyer* 74: 329.

Stevens, J. M., H. Kevin Steensma, D. A. Harrison, and P. L. Cochran. 2005. "Symbolic or Substantive Document? The Influence of Ethics Codes on Financial Executives' Decisions." *Strategic Management Journal* 26, no. 2: 181–195. https://doi.org/10.1002/smj.440.

Tashman, P., V. Marano, and T. Kostova. 2019. "Walking the Walk or Talking the Talk? Corporate Social Responsibility Decoupling in Emerging Market Multinationals." *Journal of International Business Studies* 50: 153–171. https://doi.org/10.1057/s41267-018-0171-7.

Testa, F., O. Boiral, and F. Iraldo. 2018. "Internalization of Environmental Practices and Institutional Complexity: Can Stakeholders Pressures Encourage Greenwashing?" *Journal of Business Ethics* 147, no. 2: 287–307. https://doi.org/10.1007/s10551-015-2960-2.

Tsalis, T. A., K. E. Malamateniou, D. Koulouriotis, and I. E. Nikolaou. 2020. "New Challenges for Corporate Sustainability Reporting: United Nations' 2030 Agenda for Sustainable Development and the Sustainable Development Goals." *Corporate Social Responsibility and Environmental Management* 27, no. 4: 1617–1629. https://doi.org/10.1002/csr.1910.

UNEP, U. 2020. "Emissions Gap Report." UN Environment Programme. https://www.unep.org/interactive/emissions-gap-report/2020/#:~:text=The%20year%202020%20is%20likely,of%20global%20warming%20by%202050.

United Nations Global Compact (UNGC). 2023. "Our Participants." https://www.unglobalcompact.org/what-is-gc/participants.

United Nations Office on Drugs and Crime. 2015. "International Classification of Crime for Statistical Purposes (ICCS) Version 1.0." https://www.unodc.org/documents/data-and-analysis/statistics/crime/ICCS/ICCS_final-2015-March12_FINAL.pdf.

van der Waal, J. W., and T. Thijssens. 2020. "Corporate Involvement in Sustainable Development Goals: Exploring the Territory." *Journal of Cleaner Production* 252: 119625. https://doi.org/10.1016/j.jclepro.2019.119625.

Vergara, W., M. Finch, P. Langer, R. Studart, and S. Keneally. 2021. "Colombia Shows Leadership in the Race Against Climate Change." World Research Institute. https://www.wri.org/insights/colombia-shows-leadership-race-against-climate-change.

Witt, M. A., L. R. Kabbach de Castro, K. Amaeshi, S. Mahroum, D. Bohle, and L. Saez. 2018. "Mapping the Business Systems of 61 Major Economies: A Taxonomy and Implications for Varieties of Capitalism and Business Systems Research." *Socio-Economic Review* 16, no. 1: 5–38. https://doi.org/10.1093/ser/mwx012.

Zollo, M., and S. G. Winter. 2002. "Deliberate Learning and the Evolution of Dynamic Capabilities." *Organization Science* 13, no. 3: 339–351. https://doi.org/10.1287/orsc.13.3.339.2780.