



## RESEARCH ARTICLE OPEN ACCESS

# Exploring the Human Face of Engaged Environmental Strategies: The Role of Chief Executive Officer and Human Capital in Peruvian Firms

Javier Amores-Salvadó<sup>1</sup>  | Remy Michael Balarezo-Nuñez<sup>2</sup> | Gregorio Martín-de Castro<sup>1</sup>  | Cristian González-Zubieta<sup>3</sup>

<sup>1</sup>Management Department, Complutense University of Madrid, Madrid, Spain | <sup>2</sup>Business Policy Department, University of Piura, Piura, Peru | <sup>3</sup>Management Department, San Pablo CEU University, Madrid, Spain

**Correspondence:** Javier Amores-Salvadó ([jamores@ccee.ucm.es](mailto:jamores@ccee.ucm.es))

**Received:** 7 May 2024 | **Revised:** 18 December 2024 | **Accepted:** 2 January 2025

**Funding:** This work was supported by the Spanish Ministry of Economy and Competitiveness (Project ECO2015-65251-P). Spanish Ministry of Science, Innovation and Universities (Project PID2020-117564GA-I00). Banco Santander-UCM (Project PR26/16-15B-1).

**Keywords:** CEO environmental commitment | emerging economies | engaged environmental strategy | green human capital | mediation

## ABSTRACT

In emerging economies characterized by the absence of strong national regulatory institutional forces, the role of private initiative through companies and entrepreneurs is highly relevant and has a prominent role in addressing environmental problems. This work aims to improve the understanding of the role of two key human-based organizational factors, such as CEO environmental commitment and green human capital (GHC), on the effective implementation of corporate environmental strategies seeking to integrate and engage market and non-market stakeholders. Our empirical research was carried out in a sample of 86 Peruvian firms operating in different industries through in-depth interviews and questionnaires. Our results show the importance of CEO environmental commitment on the implementation of engaged environmental strategies, as well as the mediating and essential role of GHC in this relationship. We contribute to the literature debate by providing theory and empirical insights on the drivers of corporate environmentalism in developing countries, highlighting the importance of the human-based internal organizational factors as driving forces of corporate environmentalism.

## 1 | Introduction

There is consensus among Organizations & Natural Environment scholars that through the design and implementation of environmental strategies, firms integrate environmental protection into their strategy process (Martín-de Castro, Amores-Salvadó, and Díez-Vial 2023) engaging many stakeholders who share ecological concerns (Hart 1995; Aragón-Correa and Sharma 2003; Sharma and Vredenburg 1998).

According to the survey about firms' environmental strategies benefits (Milanese et al. 2022), 86% of respondents agreed with customer relationship benefits, 85% highlighted them as the basis of competitive advantage, and 79% remarked reinforced

stakeholders' relationships. However, the same respondents showed that 20% never had implemented an environmental strategy, and only 8% had changed their business models. Among the reasons is a lack of understanding of environmental strategies by the company's employees and managers (Milanese et al. 2022).

The effective implementation of an environmental strategy requires the commitment, action, and engagement of different internal stakeholders, in a human-based view of environmental strategies, such as advanced green human resource management practices, top management, and CEO support and leadership (Portocarrero, Winkler, and Pearce 2023; Papagiannakis and Lioukas 2018; Renwick, Redman, and Maguire 2013) and

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2025 The Author(s). *Business Strategy and Development* published by ERP Environment and John Wiley & Sons Ltd.

ultimately, the commitment of the entire organization. To frame this research, we use the natural resource-based view (NRBV from now on) (Hart 1995; Sharma and Vredenburg 1998; Christmann 2000), to explore the role of CEO's features and beliefs and the construction of green human-capital competencies for the implementation of environmental strategies. As Molina-Azorín (2014) highlighted, individuals matter and complement collective action toward environmental sustainability aimed to engage not only the conventional but also the less conventional stakeholders.

Green human capital (GHC) can be defined as the knowledge, trainee, experience, and motivation of a firm's workers related to environmental issues (Boiral 2002; Henriques and Sadorsky 1999; Ramus and Steger 2000; Chen 2008; Renwick, Redman, and Maguire 2013; Paillé et al. 2014; Chen et al. 2015). Indeed, the implementation process of environmental strategies is human-capital intensive (Obeidat, Al Bakri, and Elbanna 2020), where employees at all organizational levels need to develop advanced environmental competencies to put their knowledge, expertise, and commitment at the service of a successful implementation. It requires the integration of key environmental principles and issues in the mind of organizational employees, going beyond pure rhetoric or ideology (Montiel, Gallo, and Antolin-Lopez 2020; Jamali, El Dirani, and Harwood 2015). Accordingly, literature has highlighted the key role of individuals, such as CEOs and employees in general, in the environmental realm (Bansal and Roth 2000). Jointly with employees, top management environmental commitment understood as "the degree to which an organization's senior members are regarded as stewards of the natural environment" (Haldorai, Kim, and Garcia 2022, 2) is particularly important.

In addition, Organizations & Natural Environment literature suggests that the role of the CEO is especially relevant as the main orchestrator of environmental-oriented organizational capabilities (Grewatsch and Kleindienst 2018), putting into action its leadership and power (Wang et al. 2023) and new organizational purpose and commitment toward environmental sustainability (Montiel, Gallo, and Antolin-Lopez 2020; Hoffman 2021; Contractor et al. 2019). As Sharma (2000) highlighted, their environmental commitment is critical in the effective implementation of successful environmental strategies (Sharma 2000).

Nevertheless, the evidence collected and the theoretical implications exploring the importance of the human-side implementation of environmental strategies have been carried out and contextualized in developed economies, with a lack of generalization to developing economies (Morris et al. 2023). We cover this research gap by exploring the role of a human-based implementation of environmental strategies in the context of developing economies (Jamali and Karam 2018), characterized by the co-existence of weak national institutions and complex and dynamic economies, highlighting the role of individuals in continuous adaptation to changing contexts. Then, this work aims to explore, both theoretically and empirically, the role of CEO green commitment and GHC in the implementation of engaged environmental strategies in the context of the developing economy of Peru. Emerging economies contexts highlight the importance of studying the decision-makers of environmental

strategies because of the important steward role they have in the absence of functioning or reliable formal institutions (Hamann et al. 2017; Yin and Jamali 2016).

We contribute to the Organizations & Natural Environment literature in three ways: First, by exploring how firms develop and implement environmental strategies in developing countries; second, by delving into the human side of environmental strategies we show the role played by CEO's environmental commitment and the mediating and essential role played by GHC on corporate environmentalism; and finally, we highlight the importance of environmentally oriented resources and capabilities to explain the process of implementation of environmental strategies (Hart 1995; Aragón-Correa 1998; Darnall, Henriques, and Sadorsky 2010; Shevchenko, Lévesque, and Pagell 2016).

The remainder of this paper is structured as follows: Section 2 presents the theoretical approach and the main assumptions of this work. Section 3 introduces the hypotheses' development. Section 4 focuses on research methodology. Section 5 is devoted to highlighting the main empirical results of this research. Finally, Section 6 shows the discussion and Section 7 the conclusions, limitations, and future research avenues.

## 2 | Theoretical Approach: Main Assumptions

As the NRBV tenets argue, the environmental response of firms is linked to the creation of resources and capabilities (Hart 1995; Sharma and Vredenburg 1998) which, ultimately, can become the foundation of their competitive advantage.

Firms articulate their environmental response through the implementation of environmental strategies that can be understood as "the corporate proactive behaviour by which the firm integrates environmental protection into their strategy process through stakeholders' engagement and the appropriate environmental management of its resources and capabilities with the main aim of responding to the climate emergency by minimizing its environmental risks and improving its environmental performance and competitive advantage" (Martín-de Castro, Amores-Salvadó, and Díez-Vial 2023, 18).

Following this broad definition, companies have a great deal of discretion in environmental strategies implementation, which will depend on their resources and capabilities and their order of priorities, as they should prioritize integration with their stakeholders, environmental performance, economic performance, and other organizational outcomes (Sherazi et al. 2023; Naranova-Nassauer 2021; Berchicci and King 2007; Bansal and Gao 2006).

Therefore, the implementation of environmental strategies is a challenging task for firms as it involves top management commitment, the development of employees' environmental capabilities, and the undertaking of communication and collaboration efforts with stakeholders, which are part of the implementation process (Maxwell et al. 1997).

Drawing on the above-mentioned natural resource-based insights, we focus on what we call "engaged environmental

strategies” or those environmental strategies that deliberately seek to integrate market and non-market stakeholders taking the environmental factor as the main linking factor. Indeed, in certain circumstances and certain contexts, companies give priority above all else to shaping the operating context in which the operations are to be developed, adapting to the demands of their stakeholders to obtain legitimacy, a license to operate or to exercise their institutional influence (Hoffman 1999; Delmas and Toffel 2008).

This type of environmental strategy is particularly necessary in contexts with fragile institutional support where companies must get down on the playing field, make themselves understood, be known, and ultimately gain the trust of the main players in their environment (Jamali and Karam 2018; Hamann et al. 2017; Jamali, El Dirani, and Harwood 2015).

For firms deploying engaged environmental strategies, they must obtain and develop key resources (Hart 1995) and capabilities (Sharma and Vredenburg 1998; Aragón-Correa and Sharma 2003) to overcome organizational barriers and promote sustainability beyond the value chain.

Among the key resources that firms can develop and combine to implement strategies aimed at engaging stakeholders in the pursuit of environmental objectives are the environmental commitment of the CEO and the environmental-oriented human capital. The environmental commitment of the CEO is the necessary individual impetus and the green or environmental-oriented human capital is the firm collective effort on the path to sustainability. To these two resources, we will devote our attention in the next lines.

## 2.1 | The Importance of CEO's Environmental Commitment and Green Human Capital in the Implementation of Environmental Strategies

Top management plays a fundamental role in the implementation of environmental strategies (Maxwell et al. 1997; Belenzon, Shamshur, and Zarutskie 2019; Zhang et al. 2020).

It is unlikely that the implementation of environmental strategies will be successful if it does not have the necessary impetus from top management and a clear and committed environmental stance. Through his/her environmental commitment, the values that the CEO transmits to the rest of the organization and beyond, serve as an impulse, reference, and guide (Montiel, Gallo, and Antolin-Lopez 2020; Obeidat, Al Bakri, and Elbanna 2020; Kim et al. 2017). CEO environmental commitment highlights the importance of the individual-firm level connection in the search for corporate sustainability (Aguinis and Glavas 2012; Molina-Azorin 2014; Cooper et al. 2017; Akhtar et al. 2018; Linder and Foss 2018).

Therefore, since top management actions are the expressions of their individual values and concerns (Bansal and Roth 2000), to understand how firms develop and deploy their environmental resources and capabilities to implement environmental strategies (Hart 1995; Sharma and Vredenburg 1998), it is essential to understand individuals and managers' underlying

environmental commitment (Contractor et al. 2019; Montiel, Gallo, and Antolin-Lopez 2020).

However, the implementation of firms' environmental strategies will not depend only on top management commitment. It also depends on how the individual resources are managed, joined, mixed, and exploited (Mårtensson and Westerberg 2016) in the pursuit of corporate environmental sustainability goals. In this sense, as the NRBV view suggests and the empirical evidence shows, proactive environmental strategies arise from environmental capabilities (Sharma and Vredenburg 1998; Christmann 2000; Strauss, Lepoutre, and Wood 2017; Mousavi, Bossink, and van Vliet 2019) or “organizational abilities or skills that enable firms to improve their performance on environmental issues” (Lee and Klassen 2008, 574).

A large part of the company's environmental capabilities lies in GHC. As previously defined, the concept of GHC adds value to the human capital concept, reflecting a firm's orientation toward proactive environmental strategies, including various specific human practices related to environmental activities and being more external stakeholder-oriented (aiming to improve firms' environmental/social performance) than human capital, which mainly focuses on improving organizational performance or profit (Chen, Ngaiatedema, and Li 2018).

GHC helps organizations to align their strategy with the natural environment (Yong et al. 2019), facilitates connection to external stakeholders, and leads to superior environmental performance and competitive advantage (Aftab et al. 2023; Hart 1995). As the new research evidence highlights, employees are important players in “greening” the organization (Portocarrero, Winkler, and Pearce 2023; Saeed et al. 2019) and the success of the implementation of firms' environmental strategies will largely depend on how the employees of how employees internalize the importance of the environmental protection (Banerjee 1998).

As we propose, both CEO environmental commitment and GHC play an important role in the implementation of engaged environmental strategies.

## 3 | Hypotheses Development: The Road to Engaged Environmental Strategies

It is recognized in the literature that stakeholder management comes first and foremost from top management (Reynolds and Yuthas 2008) and that top management commitment and community engagement are closely linked (Dobelet al. 2014). Therefore, top management largely determines the type and intensity of the relationships of the company with its stakeholders.

CEO's environmental commitment constitutes a powerful vehicle for driving environmental strategies and the connection between the environmental awareness of top management and the implementation of engaged environmental strategies based on the collaboration with multiple stakeholders (Sharma and Vredenburg 1998).

This connection between CEO environmental awareness and engaged environmental strategies is significant in the case of

emerging economies, which are often subject to sudden changes and where the absence of a solid institutional supporting framework (Kaufmann and Kraay 2023) makes the leading role of the environmentally committed CEO indispensable for the proper implementation of environmental strategies that seek to integrate market and non-market stakeholders, taking the environmental factor as the main linking factor.

Indeed, it is in these changing and institutionally uncertain environments where environmentally committed CEOs exert the most influence and where CEOs' environmental commitment is more effective in driving and promoting engaged environmental strategies to gain stakeholder support and make firms more strongly embedded in their social and natural environment (Ortiz-de-Mandojana and Bansal 2016).

Therefore, based on the above-highlighted importance of the connection between CEO's environmental commitment and green stakeholder management, we propose the following hypothesis:

**H1.** *There is a direct and positive relationship between the CEO's environmental commitment and the development of engaged environmental strategies.*

One of the main postulates of the NRBV is that as firms try to become more environmentally responsible, they should carry out activities and practices that are human capital-intensive (Hart 1995; Obeidat, Al Bakri, and Elbanna 2020; Boiral, Heras-Saizarbitoria, and Brotherton 2019). Thus, for a firm willing to introduce environmental concerns in its strategy, its human capital should be furnished with the necessary knowledge, expertise, and motivation to implement environmental strategies (Gond et al. 2017; Kim et al. 2017).

In this sense, it is the company's employees with their green tacit knowledge who handle rich and enormous amount of stakeholder information (Grewatsch and Kleindienst 2018) and ultimately deal with suppliers, and distributors, collaborate with local communities or execute on the ground the directives of top management to build green organizational capabilities (Boiral, Heras-Saizarbitoria, and Brotherton 2019). The firm's employees also convey to stakeholders the importance of natural environment respect (Banerjee 1998), which is extremely important in the context of emerging economies with weak, and sometimes non-existent, national institutions.

Therefore, firms seeking to develop engaged environmental strategies in these contexts should rely on their employees' knowledge, skills, and experience (Shevchenko, Lévesque, and Pagell 2016; Shen and Zhang 2019). Consequently, we hypothesize the following:

**H2.** *There is a direct and positive relationship between green human capital and the development of engaged environmental strategies.*

CEO's environmental commitment, as expression of those CEO's green personal values (Bansal and Roth 2000), generate example and inspiration to all organizational members (Anderson and Bateman 2000; Egri and Herman 2000; Boiral, Cayer, and

Baron 2009). The CEO's environmental commitment makes visible to employees the importance of making a fundamental change in business philosophy and helps create the right organizational context on which employees' environmental capabilities are developed (Sharma and Vredenburg 1998). In this sense, top management facilitates the environmental learning among employees helping them to internalize environmental issues (Banerjee 1998) and CEO's green impetus is essential not only to share the environmental values among firm's employees but also to create the organizational incentives to develop the skills that will enable them to implement environmental initiatives (Banerjee 2001). Thus, we propose the following hypothesis:

**H3.** *There is a direct and positive relationship between CEO's environmental commitment and green human capital.*

Green transformational leaders nurture the company's environmental vision to stimulate the entire organization toward the implementation of environmentally proactive strategies (Vesal, Siahtiri, and O'Cass 2022) and the presence of an active and environmentally committed CEO together with the existence of environmental resources and capabilities is strongly related to the environmental response of the firm (Andersén, Jansson, and Ljungkvist 2020).

The creation of environmental capabilities is a collective task and the resource orchestration (Sirmon et al. 2011) that follows the CEO's environmental actions also must be taken into consideration. Indeed, there is an intermediate process that leads to the engaged environmental strategy the firm executes (Muller, Judd, and Yzerbyt 2005) in which firms' GHC plays a crucial role.

As suggested, the visible commitment of senior management is a key factor in the implementation of environmental strategies (Maxwell et al. 1997) and while managers guide, design, formulate, and carry out the environmental management aims and priorities, the employees play an essential role executing and carrying out the real implementation of environmental activities and practices on which the engaged environmental strategies rely (Sendlhofer 2020; Shen and Zhang 2019). They interact and share the firm's environmental values with the stakeholders, provide opportunities of dialogue with them, and contribute to shape the operating context of the firm (Maxwell et al. 1997). Thus, our hypothesis is as follows:

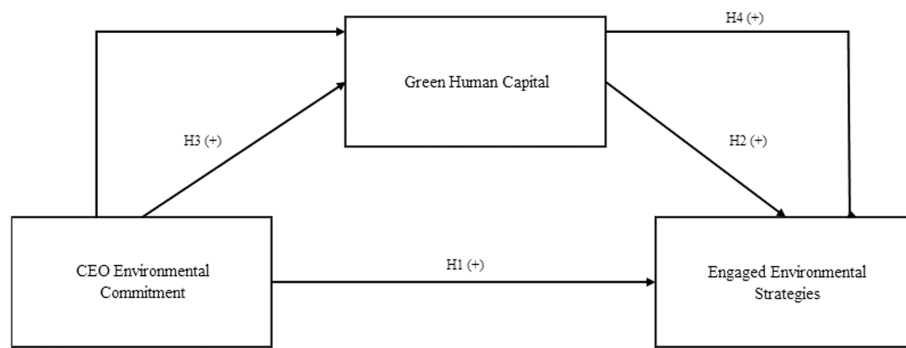
**H4.** *Green human capital positively mediates the relationship between CEO's environmental commitment and engaged environmental strategies.*

Figure 1 below shows the theoretical model.

## 4 | Methods

### 4.1 | Population, Sample and Data Gathering

Setting our study in an emerging economy context represents an element of novelty because of the peculiar characteristics, such as culture or the competitive and institutional environment, compared to developed economies (Yin and Jamali 2016). In this sense, we empirically test our hypothesis in Peru. We



**FIGURE 1** | Theoretical model.

selected this setting because, like many emerging economy countries, Peru faces many environmental (Tounés, Tornikoski, and Gribaa 2019) and institutional challenges according to the World Bank's Worldwide Governance Indicators (Kaufmann and Kraay 2023). In this sense, environmental policies had just been recently introduced in the country, environmental issues have been gaining importance in Peruvian society, and finally, Peru has been a pioneering country in Latin America, integrating the Paris Agreement with its domestic law system. Also, only a few studies have been carried out in emerging economies, especially in Peru (Natividad 2022).

As most emerging economies, Peru suffers from low access to figures and databases, especially environmental ones. Given that most of the firms are privately held, in line with other studies that have been set in this type of under-explored emerging economy context, we have also used surveys to obtain information about the variables under analysis (Aftab et al. 2023; Saeed et al. 2019; Meyer et al. 2009). To set up our questionnaire, we used Bloom et al. (2015) methodology, especially in the environmental strategy section. Here, it is worth mentioning that the original questionnaire was in English. We translated all English items into Spanish and Back to English, as Brislin (1986) recommended, to ensure the content clarity of the survey.

In the summer of 2016, a pre-test was performed to improve and check the content validity of the scales with the help of 6 academics and 16 experts from different Peruvian industries and chambers. A revised version of the questionnaire was obtained and then used to test our hypothesis. The study population was made up of medium to large firms (more than 100 employees) in Peru from the following industries: agribusiness, energy, oil and gas, mining, textile, food industry, chemical, fishery, electricity, metal mechanic, plastic, transport, and construction. The target population consisted of 903 firms.

To obtain high-quality data, via email, we surveyed two managers from each firm (Xiao et al. 2022; Hoskisson et al. 2000; Aragón-Correa, Martín-Tapia, and Hurtado-Torres 2013): a top executive (CEO, Owner or Vice-president) and middle-level manager (e.g., environmental or operations manager). Therefore, for each firm, we considered two respondents from different positions to avoid common variance bias.

During the next months of September–November 2016, and sending every week a reminder, we only obtained 10 valid answers (both CEO and environmental/operations manager).

**TABLE 1** | Population and sample by type of industry.

Industry	<i>N</i>	<i>n</i>
Construction	193	11
Agroindustry	148	18
Mining	112	7
Transport	81	6
Metalmechanics	80	13
Textile	65	2
Plastic	54	3
Fishing	48	3
Food	46	8
Hydrocarbon	38	8
Energy	26	3
Chemical	11	3
Wood	1	1
Total	903	86

Because of the low response rate, afterward, we decided to hire IPSOS –PERU (an international market research company) to apply the survey to the defined population. They started the survey process in January of 2017 and ended in December 2017 reaching 86 valid questionnaires' and obtaining a response rate of 9.48% (Table 1). Because this is one of the very scarce studies of this type carried out in Peru, we considered a response rate between 7% and 10% (60–90 firms) as satisfactory. Therefore, the obtained response rate is acceptable because of the difficulties it presents this type of study in such contexts (Christmann 2000). Also, other studies using surveys in emerging economies had a similar response rate (Hamann et al. 2017; Meyer et al. 2009).

To verify the reliability and representativeness of our sample of 86 firms, we made a *t*-test in SPSS to check the population mean. We compared the sample and population considering the firm's size (measured by the logarithm of number of employees) and firm's age (measured as the number of years since firm's foundation) (Table 2). The results showed that there were no significant statistical differences between the population and sample according to the firm's size ( $p=0.306^*$ ) or firm's age ( $p=0.170^*$ ).

**TABLE 2** | Representative statistics.

Statistic	Sample firm size	Population firm size	Sample firm age	Population firm age
Mean	768.73	586.79	25.1	22.45
Median	256	252	19.9	19.2
Mode	115	108	12.4	19.4
Standard Deviation	1640	1146.31	17.75	15.46

**TABLE 3** | Factorial analysis results for CEO environmental commitment and green human capital.

	Component	
	CEO environmental commitment (GCEO)	Green human capital (GHC)
CEO willingness to share environmental achievements and practices (GCEO1): “The CEO of my company has the predisposition to communicate the environmental practices and achievements to all the collaborators of my company”	0.913	,233
CEO environmental vision (GCEO2): “The CEO of my company provides a clear vision on environmental preservation that is followed by all my company’s collaborators”	0.937	,365
CEO attitude for internal environmental collaboration (GCEO3): “Firm’s CEO is trying to get workers and managers to collaborate and join forces to achieve environmental goals”	0.917	0.388
Environmental training (GHC1): “In our company we make important efforts so that all the collaborators of the organization receive environmental training”	0.494	0.698
Environmental reward (GHC2): “In our company we make important efforts to recognize the best environmental initiatives by our partners through our system of remuneration and incentives”	0.376	0.671
Experience and skills (GHC3): “The level of experience and environmental skills of my company’s human capital is higher than that of my competitors”	0.125	0.860
Human capital participation in environmental issues (GHC4): “Most of the staff are actively involved in environmental initiatives”	0.374	0.744
% variance explained	42.413	36.695
% cumulative variance	42.413	79.107
Cronbach’s $\alpha$	0.959	0.830

Note: Extraction method: analysis of main components. Rotation method: Varimax with Kaiser. The rotation has converged in 3 iterations.

Source: Self-elaboration from data of the study.

## 4.2 | Measurement of Variables

We used Likert scale (1–7) (López-Gamero and Molina-Azorín 2016) to measure the variables of our research model and consider as control variables the size of the firm and the industry (due to the wide variety of industrial types we created a dummy variable that took the value (1) in the case of primary industry and (0) in the case of non-primary industry).

Before starting the regression analysis to study the relationship between the variables of the research model, we first performed an exploratory factorial analysis to show empirical evidence that the selected items are grouped in dimensions and therefore, reflect the independent and dependent variables of the research

model. We decided to use the method of main components to extract the factors because it is the most adequate method to resume most of the original information (variance) in a minimum number of factors (Hair et al. 2004). Finally, we used the VARIMAX rotation to avoid possible multicollinearity in between the extracted factors assuring the independence between them (Hair et al. 2004).

We first performed the factor analysis to identify the items that make up the variables under analysis; GHC (Delgado-Ceballos et al. 2012; Rueda-Manzanares, Aragón-Correa, and Sharma 2008; Chen 2008), and CEO environmental commitment (GCEO) (Chen and Chang 2013; Robertson and Barling 2013) (Table 3) and measured them in a statistic way. Before carrying

out the factor analysis, we carried out the KMO and Bartlett determinant test to assure that a factor analysis can be made. The KMO statistic was 0.887, and the Bartlett statistic was 477.623 ( $p^{**} < 0.001$ ), showing that the factor analysis could be implemented. From the results, we can say that the two factors explain in a joint manner 79.107% of the total variance with a reliability of 0.959 (GCEO) and 0.830 (GHC) that are above the minimum of 0.7 (Nunnally 1978).

The two factors show coherence with the theoretical items considered from the literature review and their load factors are above 0.7 (Hair et al. 2004). Therefore, the results show that they reflect the main aspects of the selected theoretical constructs.

A second factor analysis was carried out to identify and construct our dependent variable engaged environmental strategy (EES). We selected different items that reflect this type of environmental strategy accordingly to our literature review. The results showed four items that builds the engaged environmental strategy construct (Table 4). These are environmental actions related to suppliers' policies (González-Benito and González-Benito 2005), cooperation with external stakeholders, such as NGOs, government local communities, distributions channels that are environmentally friendly (Sharma and Vredenburg 1998), and recovery of ecosystems (Bansal 2005). The construct engaged environmental strategy explains 66.161% of the total variance, accomplished the reliability of the scale, and reflected the items found in the literature review. The factor loading of the items was above 0.7, and the reliability was above 0.8 (Hair et al. 2004).

## 5 | Results

In line with other significant contributions in the organizations and environment realm that follow the NRBV logic (Klassen and Whybark 1999; Christmann 2000), we have carried out a multiple regression analysis to test the hypotheses of our research. Table 5 provides the correlation matrix and the descriptive statistics resulting from our analysis, and Table 6 shows the results of the regressions made in each model.

Six linear regression models were taken into consideration. EES was considered the dependent variable in the first four models, and GHC was considered the dependent variable in the last two. Firm size and industry were the control variables, and only industry showed the existence of a slight and statistically significant relationship with EES in Model 1. In none of the remaining

models did either industry or firm size show statistically significant relationships.

Model 0 depicts the regression with only the control variables. The statistical  $F$ -value does not show the existence of a significant linear relation, and therefore firm size and industry do not have any statistically significant effect on EES. Model 1 includes the independent variable green CEO commitment (GCEO), and Model 2 includes the second variable, GHC. When treated separately, both GCEO and GHC show a statistically significant linear relation on EES according to their statistical  $F$ -values, as depicted respectively in Model 1 and Model 2. In addition,

**TABLE 4** | Factorial analysis results for engaged environmental strategies.

	<b>Component</b>
	<b>Engaged environmental strategies (EES)</b>
EES_1: "In our company we have made important efforts to apply a policy of suppliers and purchasing with the purpose of acquiring environmentally friendly inputs"	0.795
EES_2: "At my company we seek collaboration with local communities, government agencies and competitors in order to improve environmental standards and practices"	0.816
EES_3: "In my company we distribute our products using environmentally friendly channels and means of transportation"	0.861
EES_4: "In my company we carry out the restoration and rehabilitation of ecosystems and natural habitats where our operations have had an influence"	0.779
% variance explained	66.161
% cumulative variance	66.161
Cronbach's $\alpha$	0.826

**TABLE 5** | Correlation matrix.

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Size (LOGSIZE)	1	0.215*	0.125	0.150	0.093
Industry (INDUST)	0.215*	1	-0.004	0.115	0.183
CEO env. commitment (GCEO)	0.125	-0.004	1	0.696**	0.294**
Green human capital (GHC)	0.150	0.115	0.696**	1	0.372**
Engaged environmental strategies (EES)	0.093	0.183	0.294**	0.372**	1

\*Correlation is significant at the 0.05 level (bilateral).

\*\*Correlation is significant at the 0.01 level (bilateral).

**TABLE 6** | Regression results.

	Engaged environmental strategies (EES)				Green human capital (GHC)	
	M0	M1	M2	M3	M4	M5
Constant	−0.459	−0.257	−0.178	−0.165	−0.796	−0.319
LOGSIZE	0.056	0.017	0.009	0.005	0.131	0.040
INDUST	0.171	0.181*	0.141	0.149	0.086	0.109
GCEO		0.293***		0.093		0.691***
GHC			0.354***	0.289**		
R	0.191	0.348	0.398	0.403	0.172	0.707
R <sup>2</sup>	0.037	0.121	0.158	0.163	0.030	0.499
R <sup>2</sup> adjusted	0.013	0.089	0.128	0.121	0.006	0.481
Typical error	0.99329007	0.95454494	0.93407254	0.93734444	0.99688205	0.72038287
Durbin watson	1.704	1.605	1.571	1.563	2.056	2.011
F	1.576	3.763**	5.141***	3.936***	1.266	27.264***

\*\*\* $p < 0.01$ .\*\* $p < 0.05$ .\* $p < 0.10$ .

Model 1 shows the existence of a slightly statistically significant effect of industry on EES. Model 3 depicts the full model in which the control variables (industry and firm size), GCEO, and GHC are included. In this model, GHC shows a statistically significant linear effect on EES, highlighting its importance and giving support to hypothesis H2. In addition, since the full model (Model 3) does not depict the existence of a linear relation of GCEO on EES but the single model with GCEO does (Model 1), hypothesis H1 is partially supported. Furthermore, Durbin–Watson's values in models 1, 2, and 3 indicate that the residuals are independent.

Model 4 depicts the linear regression with industry and firm size as independent variables and GHC as the dependent variable. The results and the statistical  $F$ -value do not show the existence of a statistical linear relation between control variables and GHC in Model 4. In addition, Model 5 depicts a linear regression including industry, firm size, and GCEO as the independent variables and GHC as the dependent variable. As the  $F$ -value shows, Model 5 reports that GCEO has a significant effect on GHC, giving support to H3.

In summary, the above linear regressions provide statistical support for hypotheses H2 and H3 and partial support for hypothesis H1. This means that for the given sample, the statistical results show the existence of a linear relationship between the CEO's environmental commitment and GHC as well as a linear relationship between GHC and the development of engaged environmental strategies. All this, taking into consideration the partial support for the relationship between the CEO's environmental commitment and the development of engaged environmental strategies (H1), highlights the fundamental role played by GHC in the implementation process of engaged environmental strategies, reinforcing the hypothesis of mediation exerted by human capital as proposed in hypothesis H4. A summary of the hypotheses considered is shown in Table 7.

**TABLE 7** | Hypotheses summary.

Hypothesis	Description	Support
H1	There is a direct and positive relationship between CEO's environmental commitment and the development of engaged environmental strategies	Partially supported
H2	There is a direct and positive relationship between Green Human Capital and the development of engaged environmental strategies	Supported
H3	There is a direct and positive relationship between CEO's environmental commitment and Green Human Capital	Supported
H4	Green human capital positively mediates the relationship between CEO's environmental commitment and engaged environmental strategies.	Supported

The above statistical evidence highlights the importance of GHC in the implementation of engaged environmental strategies and raises interesting questions that will be addressed below.

## 6 | Discussion

This research aims to improve, in the context of the emerging economies, the understanding of the role of two key human-based organizational factors, such as CEO environmental commitment and GHC, on the effective implementation of corporate environmental strategies. We focus on the implementation of

what we call engaged environmental strategies, characterized by deliberately seeking to integrate market and non-market stakeholders taking the environmental factor as the main linking factor.

The results obtained are interesting and add new arguments to the organizations and natural environment literature. First, the findings support only partially the driving role of CEO environmental commitment in the development of engaged environmental strategies. This result adds nuances and complement other environmental studies that highlight the importance of CEOs in greening the firm (Bansal and Roth 2000; Chin, Hambrick, and Treviño 2013; Arena, Michelon, and Trojanowski 2018; Mazutis and Eckardt 2017). Although previous contributions remark the importance of CEO environmental commitment in an emerging economy context referring to its institutional voids and lack of institutional enforcement (Davila, Rodriguez-Lluesma, and Elvira 2018; Zou et al. 2019), our results suggest that CEO environmental commitment is not the most powerful vehicle to turn engaged environmental strategies into real. In this sense, firm managers operating in these contexts perceive that although the CEO impetus is an important factor, the implementation of engaged environmental strategies depends primarily on the GHC the firm can build and accumulate.

The above argument leads directly to the second finding of this research, which is the mediating role that GHC plays in the implementation of engaged environmental strategies. Following the above insights, our analyses show that GHC is essential to explain the underlying process that enables the connection between CEO environmental commitment and the environmental strategies of this kind. In this sense, as the NRBV tenets suggest, the more advanced environmental strategies are human intensive (Hart 1995; Jamali, El Dirani, and Harwood 2015), and the learning capabilities, the skills, the training, and the knowledge of employees play a fundamental role (Walls, Phan, and Berrone 2011; Kim et al. 2017). In the context of emerging economies, where previous literature has emphasized that environmental proactivity comes from the management rather than from the institutions, our research suggests that not only the management but also the joint effect of environmentally committed managers and employees with environmental skills is critical to the success of environmental strategies. GHC is the one that mainly can establish the right conditions to maintain relationships with suppliers, distributors, and customers. Equipped with their environmental skills and knowledge, employees know how to interact with local communities and analyze the impact of the firm's activities on the ground. In short, it is the firms' employees who can ultimately set the right conditions to engage stakeholders and get them to place the respect for the natural environment at the heart of their activities.

## 7 | Conclusions, Limitations, and Future Research Avenues

Our work contributes to explore the role of a human-based implementation of environmental strategies in the context of developing economies (Jamali and Karam 2018). While firms' green

knowledge and skills in developed contexts and multinational organizations are usually tailored and present a great uniformity under a "green championship" logic (Aboelmaged and Hashem 2019), in developing economies organizational GHC has greater variability, must be specifically customized to local needs and acquires great relevance. This work contributes to shed some light in that sense.

Indeed, this work contributes to reinforce the role of the human factor in the implementation of environmental strategies. We provide additional evidence that individuals are important to explain the collective corporate sustainability phenomena, especially in those emerging economies contexts like Peru where the development of more advanced environmental capabilities is needed (Barney and Felin 2013; Aftab et al. 2023) and where the implementation of environmental strategies is not so dependent on formal measures (Räsänen, Meriläinen, and Lovio 1995).

Our work also contributes to highlighting the importance of environmentally oriented resources and capabilities to explain the process of implementation of environmental strategies (Hart 1995; Aragón-Correa 1998; Darnall, Henriques, and Sadowsky 2010; Shevchenko, Lévesque, and Pagell 2016). As suggested, GHC is fundamental to the deployment of engaged environmental strategies. As such, it contributes to build a permanent environmental knowledge base on which to sustain a potential competitive advantage that is difficult for competitors to access. In this sense, organizational green capabilities are essential to shape the operating context (Maxwell et al. 1997) in which the firm can better exploit stakeholder relations to adapt to local needs.

The conclusions of this work have several theoretical and practical implications. Among the theoretical implications is the fact that managers of companies operating in these contexts do not find the role of the CEO commitment as essential as the literature suggests in the implementation of environmental strategies. While they consider the CEO's commitment to be important in developing contexts, what they really consider indispensable is the role played by the GHC that resides in the firms' employees. This fact reveals the existence of a certain distance between the CEO's drive and the strategies that are finally put into practice, which calls into question the CEO's preponderant role in these contexts. On the contrary, it is the employees who have the appropriate knowledge to implement environmental strategies and adapt them to the context, which suggests that together with standardized human resources management procedures, the environmental experience of human capital and its involvement on local environmental issues also make the difference.

Our empirical insights also possess practical implications. Managers from Peru and developing countries in a more general context, committed to proactive corporate environmentalism should develop engaging environmental strategies based on trusted and deep collaboration with external stakeholders from their value chain, such as suppliers and distributors, and local communities. In doing that, it is not enough to possess green personal values and beliefs but to furnish the firm's employees with the necessary green knowledge, abilities, and commitment

to perform well in the environmental arena, by building strong environmental capabilities based on trusted and deep collaboration and learning with external firms' stakeholders. Finally, our research shows a very interesting practical insight in the case of Peruvian firms: There are significant synergies in combining green CEO's and human capital knowledge, capabilities, and commitment to implement stakeholders' engaged environmental strategies.

## 7.1 | Limitations

This work is not without limitations. The empirical fieldwork carried out in Peru possesses some methodological limitations, due to the national context and the private nature of most companies included in the study. First, the main constructs under study have been measured through perceptual Likert scales obtained from questionnaires, which introduce subjectivity and certain bias (Heo et al. 2022). Nevertheless, to avoid common method bias, we administered two questionnaires by company having two respondents by case. Also, exploratory factor analysis and Conbrach's Alpha carried out offer validity and reliability to our measures (Hair et al. 2004). Second, although the response rate of our work (9.48% response rate) is acceptable in these contexts (Christmann 2000), the work would undoubtedly be improved with higher response rates and larger samples that would provide more consistency to the results obtained. Third, our fieldwork has been carried out in Peru, which reduces the generalization of our results to other emerging countries from Latin America, and specially Africa of Asia.

## 7.2 | Future Research Avenues

In this sense, future research opportunities that allow to explore the role of the firm's green intellectual capital and resource orchestration (Asiaei et al. 2022) in the deployment of this kind of environmental strategies would help to enrich the literature in this field.

To have more robust results, future research should consider extending our empirical setting to other countries from Latin America, such as Colombia, Brazil, Mexico, Argentina, or Chile. Also, a greater sample would lead researchers to explore quantitatively more complex relations between CEO's commitment, GHC, and other organizational capabilities in developing proactive and engaged environmental strategies. In the same vein, future investigations would benefit from longitudinal quantitative studies using international databases with validated objective indicators. Finally, another avenue of future research would be derived from in-depth qualitative business cases to explore complex and tacit relationships among internal organizational capabilities and proactive environmental strategies.

Furthermore, future research opportunities in the realm of environmental micro foundations in emerging economies could explore other related factors such as the influence of CEO career horizon hypothesis (Ortiz-de-Mandojana, Bansal, and Aragón-Correa 2019) to investigate whether CEOs that are near to retirement are more prone to invest in more proactive and long-term

objectives. In this sense, other research avenues that develop the concept of socioemotional wealth (Berrone et al. 2010) to illustrate the concept of the vital legacy and moral obligation of the individuals to the natural environment would add valuable insights to the microfoundations literature.

### Author Contributions

All the authors listed above have contributed to its conception and its complete development.

### Acknowledgments

This work was supported by the Spanish Ministry of Economy and Competitiveness under Grant [Project ECO2015-65251-P]; Spanish Ministry of Science, Innovation and Universities under Grant [Project PID2020-117564GA-I00]; and Banco Santander-UCM under Grant [Project PR26/16-15B-1]. The authors would like to thank the Department of Organizational Behavior, Strategy and Ethics Department of Universidad de Piura (UDEP) for its financial support and the research assistant Verushka Gutierrez for her work and dedication.

### Conflicts of Interest

The authors declare no conflicts of interest.

### Data Availability Statement

Data available on request.

### References

- Aboelmaged, M., and G. Hashem. 2019. "Absorptive Capacity and Green Innovation Adoption in SMEs: The Mediating Effects of Sustainable Organisational Capabilities." *Journal of Cleaner Production* 220: 853–863. <https://doi.org/10.1016/j.jclepro.2019.02.150>.
- Aftab, J., N. Abid, N. Cucari, and M. Savastano. 2023. "Green Human Resource Management and Environmental Performance: The Role of Green Innovation and Environmental Strategy in a Developing Country." *Business Strategy and the Environment* bse.3219: 1782–1798. <https://doi.org/10.1002/bse.3219>.
- Aguinis, H., and A. Glavas. 2012. "What we Know and Don't Know About Corporate Social Responsibility: A Review and Research Agenda." *Journal of Management* 38, no. 4: 932–968. <https://doi.org/10.1177/0149206311436079>.
- Akhtar, P., Z. Khan, J. G. Frynas, Y. K. Tse, and R. Rao-Nicholson. 2018. "Essential Micro-Foundations for Contemporary Business Operations: Top Management Tangible Competencies, Relationship-Based Business Networks and Environmental Sustainability." *British Journal of Management* 29, no. 1: 43–62. <https://doi.org/10.1111/1467-8551.12233>.
- Andersén, J., C. Jansson, and T. Ljungkvist. 2020. "Can Environmentally Oriented CEOs and Environmentally Friendly Suppliers Boost the Growth of Small Firms?" *Business Strategy and the Environment* 29, no. 2: 325–334. <https://doi.org/10.1002/bse.2366>.
- Anderson, L. M., and T. S. Bateman. 2000. "Individual Environmental Initiative: Championing Natural Environmental Issues in U.S. Business Organizations." *Academy of Management Journal* 43, no. 4: 548–570. <https://doi.org/10.2307/1556355>.
- Aragón-Correa, J. A. 1998. "Strategic Proactivity and Firm Approach to the Natural Environment." *Academy of Management Journal* 41, no. 5: 556–567. <https://doi.org/10.2307/256942>.
- Aragón-Correa, J. A., I. Martín-Tapia, and N. E. Hurtado-Torres. 2013. "Proactive Environmental Strategies and Employee Inclusion: The

- Positive Effects of Information Sharing and Promoting Collaboration and the Influence of Uncertainty." *Organization & Environment* 26, no. 2: 139–161. <https://doi.org/10.1177/1086026613489034>.
- Aragón-Correa, J. A., and S. Sharma. 2003. "A Contingent Resource-Based View of Proactive Corporate Environmental Strategy." *Academy of Management Review* 28, no. 1: 71. <https://doi.org/10.2307/30040690>.
- Arena, C., G. Michelon, and G. Trojanowski. 2018. "Big Egos Can Be Green: A Study of CEO Hubris and Environmental Innovation." *British Journal of Management* 29, no. 2: 316–336. <https://doi.org/10.1111/1467-8551.12250>.
- Asiaei, K., N. Bontis, R. Alizadeh, and M. Yaghoubi. 2022. "Green Intellectual Capital and Environmental Management Accounting: Natural Resource Orchestration in Favor of Environmental Performance." *Business Strategy and the Environment* 31, no. 1: 76–93. <https://doi.org/10.1002/bse.2875>.
- Banerjee, S. B. 1998. "Corporate Environmentalism: Perspectives From Organizational Learning." *Management Learning* 29, no. 2: 147–164. <https://doi.org/10.1177/1350507698292002>.
- Banerjee, S. B. 2001. "Managerial Perceptions of Corporate Environmentalism: Interpretations From Industry and Strategic Implications for Organizations." *Journal of Management Studies* 38: 489–513. <https://doi.org/10.1111/1467-6486.00246>.
- Bansal, P. 2005. "Evolving Sustainably: A Longitudinal Study of Corporate Sustainable Development." *Strategic Management Journal* 26: 197–218. <https://doi.org/10.1002/smj.441>.
- Bansal, P., and J. Gao. 2006. "Building the Future by Looking to the Past: Examining Research Published on Organizations and Environment." *Organization & Environment* 19, no. 4: 458–478. <https://doi.org/10.1177/1086026606294957>.
- Bansal, P., and K. Roth. 2000. "Why Companies Go Green: A Model of Ecological Responsiveness." *Academy of Management Journal* 43, no. 4: 717–736. <https://doi.org/10.2307/1556363>.
- Barney, J. B., and T. Felin. 2013. "What Are Microfoundations?" *Academy of Management Perspectives* 27, no. 2: 138–155. <https://doi.org/10.5465/amp.2012.0107>.
- Belenzon, S., A. Shamshur, and R. Zarutskie. 2019. "CEO's Age and the Performance of Closely Held Firms." *Strategic Management Journal* 40, no. 6: 917–944. <https://doi.org/10.1002/smj.3003>.
- Berchicci, L., and A. King. 2007. "11 Postcards From the Edge: A Review of the Business and Environment Literature." *Academy of Management Annals* 1, no. 1: 513–547. <https://doi.org/10.5465/078559816>.
- Berrone, P., C. Cruz, L. R. Gomez-Mejia, and M. Larrazza-Kintana. 2010. "Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family-Controlled Firms Pollute Less?" *Administrative Science Quarterly* 55, no. 1: 82–113. <https://doi.org/10.2189/asqu.2010.55.1.82>.
- Bloom, N., C. Propper, S. Seiler, and J. Van Reenen. 2015. "The Impact of Competition on Management Quality: Evidence From Public Hospitals." *Review of Economic Studies* 82, no. 2: 457–489. <https://doi.org/10.1093/restud/rdu045>.
- Boiral, O. 2002. "Tacit Knowledge and Environmental Management." *Long Range Planning* 35, no. 3: 291–317. [https://doi.org/10.1016/S0024-6301\(02\)00047-X](https://doi.org/10.1016/S0024-6301(02)00047-X).
- Boiral, O., M. Cayer, and C. M. Baron. 2009. "The Action Logics of Environmental Leadership: A Developmental Perspective." *Journal of Business Ethics* 85, no. 4: 479–499. <https://doi.org/10.1007/s10551-008-9784-2>.
- 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>.
- Brislin, R. W. 1986. "The Wording and Translation of Research Instruments." In *En Cross-Cultural Research and Methodology Series, Vol. 8. Field Methods in Cross-Cultural Research*, 137–164. Thousand Oaks, CA: Sage Publications, Inc.
- Chen, F., T. Ngniatedema, and S. Li. 2018. "A Cross-Country Comparison of Green Initiatives, Green Performance and Financial Performance." *Management Decision* 56, no. 5: 1008–1032. <https://doi.org/10.1108/MD-08-2017-0761>.
- Chen, Y., G. Tang, J. Jin, J. Li, and P. Paillé. 2015. "Linking Market Orientation and Environmental Performance: The Influence of Environmental Strategy, Employee's Environmental Involvement, and Environmental Product Quality." *Journal of Business Ethics* 127, no. 2: 479–500. <https://doi.org/10.1007/s10551-014-2059-1>.
- Chen, Y. S. 2008. "The Positive Effect of Green Intellectual Capital on Competitive Advantages of Firms." *Journal of Business Ethics* 77, no. 3: 271–286. <https://doi.org/10.1007/s10551-006-9349-1>.
- Chen, Y. S., and C. H. Chang. 2013. "Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk." *Journal of Business Ethics* 114: 489–500. <https://doi.org/10.1007/s10551-012-1360-0>.
- Chin, M. K., D. C. Hambrick, and L. K. Treviño. 2013. "Political Ideologies of CEOs: The Influence of Executives' Values on Corporate Social Responsibility." *Administrative Science Quarterly* 58, no. 2: 197–232. <https://doi.org/10.1177/0001839213486984>.
- Christmann, P. 2000. "Effects of «Best Practices» of Environmental Management on Cost Advantage: The Role of Complementary Assets." *Academy of Management Journal* 43, no. 4: 663–680. <https://doi.org/10.2307/1556360>.
- Contractor, F., N. J. Foss, S. Kundu, and S. Lahiri. 2019. "Viewing Global Strategy Through a Microfoundations Lens." *Global Strategy Journal* 9, no. 1: 3–18. <https://doi.org/10.1002/gsj.1329>.
- Cooper, S. C. L., P. Stokes, Y. Liu, and S. Y. Tarba. 2017. "Sustainability and Organizational Behavior: A Micro-Foundational Perspective." *Journal of Organizational Behavior* 38, no. 9: 1297–1301. <https://doi.org/10.1002/job.2242>.
- Darnall, N., I. Henriques, and P. Sadorsky. 2010. "Adopting Proactive Environmental Strategy: The Influence of Stakeholders and Firm Size: Environmental Strategy, Stakeholders, and Size." *Journal of Management Studies* 47, no. 6: 1072–1094. <https://doi.org/10.1111/j.1467-6486.2009.00873.x>.
- Davila, A., C. Rodriguez-Lluesma, and M. M. Elvira. 2018. "Engaging Stakeholders in Emerging Economies: The Case of Multilatinas." *Journal of Business Ethics* 152, no. 4: 949–964. <https://doi.org/10.1007/s10551-018-3820-7>.
- Delgado-Ceballos, J., J. A. Aragón-Correa, N. Ortiz-de-Mandojana, and A. Rueda-Manzanares. 2012. "The Effect of Internal Barriers on the Connection Between Stakeholder Integration and Proactive Environmental Strategies." *Journal of Business Ethics* 107: 281–293. <https://doi.org/10.1007/s10551-011-1039-y>.
- Delmas, M. A., and M. W. Toffel. 2008. "Organizational Responses to Environmental Demands: Opening the Black Box." *Strategic Management Journal* 29, no. 10: 1027–1055. <https://doi.org/10.1002/smj.701>.
- Dobele, A. R., K. Westberg, M. Steel, and K. Flowers. 2014. "An Examination of Corporate Social Responsibility Implementation and Stakeholder Engagement: A Case Study in the Australian Mining Industry: An Examination of CSR Implementation and Stakeholder Management." *Business Strategy and the Environment* 23, no. 3: 145–159. <https://doi.org/10.1002/bse.1775>.
- Egri, C. P., and S. Herman. 2000. "Leadership in the North American Environmental Sector: Values, Leadership Styles, and Contexts of Environmental Leaders and Their Organizations." *Academy of Management Journal* 43, no. 4: 571–604. <https://doi.org/10.2307/1556356>.

- Gond, J.-P., A. El Akremi, V. Swaen, and N. Babu. 2017. "The Psychological Microfoundations of Corporate Social Responsibility: A Person-Centric Systematic Review: Micro-CSR: A Systematic Review." *Journal of Organizational Behavior* 38, no. 2: 225–246. <https://doi.org/10.1002/job.2170>.
- González-Benito, J., and O. González-Benito. 2005. "Environmental Proactivity and Business Performance: An Empirical Analysis." *Omega* 33, no. 1: 1–15. <https://doi.org/10.1016/j.omega.2004.03.002>.
- Grewatsch, S., and I. Kleindienst. 2018. "How Organizational Cognitive Frames Affect Organizational Capabilities: The Context of Corporate Sustainability." *Long Range Planning* 51, no. 4: 607–624. <https://doi.org/10.1016/j.lrp.2017.03.004>.
- Hair, J. F., R. E. Anderson, R. L. Tatham, and W. C. Black. 2004. "Análisis Multivariante." <https://documat.unirioja.es/servlet/libro?codigo=320227>.
- Haldorai, K., W. G. Kim, and R. F. Garcia. 2022. "Top Management Green Commitment and Green Intellectual Capital as Enablers of Hotel Environmental Performance: The Mediating Role of Green Human Resource Management." *Tourism Management* 88: 104431.
- Hamann, R., J. Smith, P. Tashman, and R. S. Marshall. 2017. "Why Do SMEs Go Green? An Analysis of Wine Firms in South Africa." *Business & Society* 56, no. 1: 23–56. <https://doi.org/10.1177/0007650315575106>.
- Hart, S. L. 1995. "A Natural-Resource-Based View of the Firm." *Academy of Management Review* 20, no. 4: 986. <https://doi.org/10.2307/258963>.
- 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/10.2307/256876>.
- Heo, C. Y., B. Kim, K. Park, and R. M. Back. 2022. "A Comparison of Best-Worst Scaling and Likert Scale Methods on Peer-To-Peer Accommodation Attributes." *Journal of Business Research* 148: 368–377. <https://doi.org/10.1016/j.jbusres.2022.04.064>.
- Hoffman, A. J. 1999. "Institutional Evolution and Change: Environmentalism and the U.S. Chemical Industry." *Academy of Management Journal* 42, no. 4: 351–371. <https://doi.org/10.2307/257008>.
- Hoffman, A. J. 2021. *Management as a Calling: Leading Business, Serving Society*. Stanford: Stanford University Press.
- Hoskisson, R. E., L. Eden, C. M. Lau, and M. Wright. 2000. "Strategy in Emerging Economies." *Academy of Management Journal* 43, no. 3: 249–267. <https://doi.org/10.2307/1556394>.
- Jamali, D., A. M. El Dirani, and I. A. Harwood. 2015. "Exploring Human Resource Management Roles in Corporate Social Responsibility: The CSR-HRM Co-Creation Model." *Business Ethics: A European Review* 24, no. 2: 125–143. <https://doi.org/10.1111/beer.12085>.
- Jamali, D., and C. Karam. 2018. "Corporate Social Responsibility in Developing Countries as an Emerging Field of Study: CSR in Developing Countries." *International Journal of Management Reviews* 20, no. 1: 32–61. <https://doi.org/10.1111/ijmr.12112>.
- Kaufmann, D., and A. Kraay. 2023. "Worldwide Governance Indicators, 2023 Update." Accessed March 12, 2024. [www.govindicators.org](http://www.govindicators.org).
- Klassen, R., and D. C. Whybark, 1999. "The Impact of Environmental Technologies on Manufacturing Performance." *AMJ*, 42: 599–615, <https://doi.org/10.5465/256982>.
- Kim, A., Y. Kim, K. Han, S. E. Jackson, and R. E. Ployhart. 2017. "Multilevel Influences on Voluntary Workplace Green Behavior: Individual Differences, Leader Behavior, and Coworker Advocacy." *Journal of Management* 43, no. 5: 1335–1358. <https://doi.org/10.1177/0149206314547386>.
- Lee, S.-Y., and R. D. Klassen. 2008. "Drivers and Enablers That Foster Environmental Management Capabilities in Small- and Medium-Sized Suppliers in Supply Chains." *Production and Operations Management* 17, no. 6: 573–586. <https://doi.org/10.3401/poms.1080.0063>.
- Linder, S., and N. J. Foss. 2018. "Microfoundations of Organizational Goals: A Review and New Directions for Future Research: Microfoundations of Organizational Goals." *International Journal of Management Reviews* 20: S39–S62. <https://doi.org/10.1111/ijmr.12154>.
- López-Gamero, M. D., and J. F. Molina-Azorin. 2016. "Environmental Management and Firm Competitiveness: The Joint Analysis of External and Internal Elements." *Long Range Planning* 49, no. 6: 746–763. <https://doi.org/10.1016/j.lrp.2015.12.002>.
- Mårtensson, K., and K. Westerberg. 2016. "Corporate Environmental Strategies Towards Sustainable Development: The Foundation of an Effective Environmental Strategy." *Business Strategy and the Environment* 25, no. 1: 1–9. <https://doi.org/10.1002/bse.1852>.
- Martín-de Castro, G., J. Amores-Salvadó, and I. Díez-Vial. 2023. "Framing the Evolution of the "Environmental Strategy" Concept: Exploring a Key Construct for the Environmental Policy Agenda." *Business Strategy and the Environment* 32: 1308–1333. <https://doi.org/10.1002/bse.3190>.
- Maxwell, J., S. Rothenberg, F. Briscoe, and A. Marcus. 1997. "Green Schemes: Corporate Environmental Strategies and Their Implementation." *California Management Review* 39, no. 3: 118–134. <https://doi.org/10.2307/41165902>.
- Mazutis, D., and A. Eckardt. 2017. "Sleepwalking Into Catastrophe: Cognitive Biases and Corporate Climate Change Inertia." *California Management Review* 59, no. 3: 74–108. <https://doi.org/10.1177/0008125617707974>.
- Meyer, K. E., S. Estrin, S. K. Bhaumik, and M. W. Peng. 2009. "Institutions, Resources, and Entry Strategies in Emerging Economies." *Strategic Management Journal* 30, no. 1: 61–80. <https://doi.org/10.1002/smj.720>.
- Milanese, S., M. Eikelenboom, C. Stella, and S. Decadri. 2022. *Overcoming the Challenges to Sustainability*. Brussels, Belgium: Arthur D Little. Accessed March 23, 2024. [www.adlittle.com](http://www.adlittle.com).
- Molina-Azorin, J. F. 2014. "Microfoundations of Strategic Management: Toward Micro–Macro Research in the Resource-Based Theory." *BRQ Business Research Quarterly* 17, no. 2: 102–114. <https://doi.org/10.1016/j.brq.2014.01.001>.
- Montiel, I., P. J. Gallo, and R. Antolin-Lopez. 2020. "What on Earth Should Managers Learn About Corporate Sustainability? A Threshold Concept Approach." *Journal of Business Ethics* 162, no. 4: 857–880. <https://doi.org/10.1007/s10551-019-04361-y>.
- Morris, S., R. V. Aguilera, G. Fisher, and S. M. B. Thatcher. 2023. "Theorizing From Emerging Markets: Challenges, Opportunities, and Publishing Advice." *Academy of Management Review* 48, no. 1: 1–10. <https://doi.org/10.5465/amr.2022.0527>.
- Mousavi, S., B. Bossink, and M. van Vliet. 2019. "Microfoundations of companies' Dynamic Capabilities for Environmentally Sustainable Innovation: Case Study Insights From High-Tech Innovation in Science-Based Companies." *Business Strategy and the Environment* 28, no. 2: 366–387. <https://doi.org/10.1002/bse.2255>.
- Muller, D., C. M. Judd, and V. Y. Yzerbyt. 2005. "When Moderation Is Mediated and Mediation Is Moderated." *Journal of Personality and Social Psychology* 89, no. 6: 852–863. <https://doi.org/10.1037/0022-3514.89.6.852>.
- Naranova-Nassauer, A. 2021. "Stakeholder relations of sustainable banks: Community benefit above the common good." *Business Ethics, the Environment & Responsibility* 32: 96–110. <https://doi.org/10.1111/beer.12377>.
- Natividad, G. 2022. "La empresa en el Perú (1.a ed.)." Fondo de Cultura Económica del Perú S.A.
- Nunnally, J. C. 1978. *Psychometric Methods*. 2nd ed. New York, NY: McGraw-Hill.

- Obeidat, S. M., A. A. Al Bakri, and S. Elbanna. 2020. "Leveraging "Green" Human Resource Practices to Enable Environmental and Organizational Performance: Evidence From the Qatari Oil and Gas Industry." *Journal of Business Ethics* 164, no. 2: 371–388. <https://doi.org/10.1007/s10551-018-4075-z>.
- Ortiz-de-Mandojana, N., and P. Bansal. 2016. "The Long-Term Benefits of Organizational Resilience Through Sustainable Business Practices: The Long-Term Benefits of Sustainable Business Practices." *Strategic Management Journal* 37, no. 8: 1615–1631. <https://doi.org/10.1002/smj.2410>.
- Ortiz-de-Mandojana, N., P. Bansal, and J. A. Aragón-Correa. 2019. "Older and Wiser: How CEOs' Time Perspective Influences Long-Term Investments in Environmentally Responsible Technologies: Time Perspective and Environmental Investments." *British Journal of Management* 30, no. 1: 134–150. <https://doi.org/10.1111/1467-8551.12287>.
- Paillé, P., Y. Chen, O. Boiral, and J. Jin. 2014. "The Impact of Human Resource Management on Environmental Performance: An Employee-Level Study." *Journal of Business Ethics* 121, no. 3: 451–466. <https://doi.org/10.1007/s10551-013-1732-0>.
- Papagiannakis, G., and S. Lioukas. 2018. "Corporate Environmental Management: Individual-Level Drivers and the Moderating Role of Charismatic Leadership: Corporate Environmental Management." *European Management Review* 15, no. 4: 475–489. <https://doi.org/10.1111/emre.12134>.
- Portocarrero, F. F., A.-L. P. Winkler, and J. L. Pearce. 2023. "Broadening Our Understanding of Human Resource Management for Improved Environmental Performance." *Business & Society* 62, no. 1: 14–53. <https://doi.org/10.1177/00076503211053250>.
- Ramus, C. A., and U. Steger. 2000. "The Roles of Supervisory Support Behaviors and Environmental Policy in Employee «Ecoinitiatives» at Leading-Edge European Companies." *Academy of Management Journal* 43, no. 4: 605–626. <https://doi.org/10.2307/1556357>.
- Renwick, D. W. S., T. Redman, and S. Maguire. 2013. "Green Human Resource Management: A Review and Research Agenda\*. Green Human Resource Management." *International Journal of Management Reviews* 15, no. 1: 1–14. <https://doi.org/10.1111/j.1468-2370.2011.00328.x>.
- Reynolds, M., and K. Yuthas. 2008. "Moral Discourse and Corporate Social Responsibility Reporting." *Journal of Business Ethics* 78, no. 1–2: 47–64. <https://doi.org/10.1007/s10551-006-9316-x>.
- Robertson, J. L., and J. Barling. 2013. "Greening Organizations Through Leaders' Influence on Employees' pro-Environmental Behaviors." *Journal of Organizational Behavior* 34: 176–194. <https://doi.org/10.1002/job.1820>.
- Rueda-Manzanares, A., J. A. Aragón-Correa, and S. Sharma. 2008. "The Influence of Stakeholders on the Environmental Strategy of Service Firms: The Moderating Effects of Complexity, Uncertainty and Munificence\*." *British Journal of Management* 19: 185–203. <https://doi.org/10.1111/j.1467-8551.2007.00538.x>.
- Saeed, B. B., B. Afsar, S. Hafeez, I. Khan, M. Tahir, and M. A. Afridi. 2019. "Promoting employee's Proenvironmental Behavior Through Green Human Resource Management Practices." *Corporate Social Responsibility and Environmental Management* 26, no. 2: 424–438. <https://doi.org/10.1002/csr.1694>.
- Sendlhofer, T. 2020. "Decoupling From Moral Responsibility for CSR: Employees' Visionary Procrastination at a SME." *Journal of Business Ethics* 167, no. 2: 361–378. <https://doi.org/10.1007/s10551-019-04174-z>.
- Sharma, S. 2000. "Managerial Interpretations and Organizational Context as Predictors of Corporate Choice of Environmental Strategy." *Academy of Management Journal* 43, no. 4: 681–697. <https://doi.org/10.2307/1556361>.
- Sharma, S., and H. Vredenburg. 1998. "Proactive Corporate Environmental Strategy and the Development of Competitively Valuable Organizational Capabilities." *Strategic Management Journal* 19, no. 8: 729–753. [https://doi.org/10.1002/\(SICI\)1097-0266\(199808\)19:8<729::AID-SMJ967>3.0.CO;2-4](https://doi.org/10.1002/(SICI)1097-0266(199808)19:8<729::AID-SMJ967>3.0.CO;2-4).
- Shen, J., and H. Zhang. 2019. "Socially Responsible Human Resource Management and Employee Support for External CSR: Roles of Organizational CSR Climate and Perceived CSR Directed Toward Employees." *Journal of Business Ethics* 156, no. 3: 875–888. <https://doi.org/10.1007/s10551-017-3544-0>.
- Sherazi, K., P. Zhang, F. Ghazanfar, and Q. T. A. Khan. 2023. "Why Is Institutional Pressure Insufficient to Develop Green Innovation in Manufacturing Firms? The Role of Green High-Performance Work Systems and Managerial Environmental Concern." *Journal of Environmental Planning and Management* 1-26: 1–26. <https://doi.org/10.1080/09640568.2023.2295225>.
- Shevchenko, A., M. Lévesque, and M. Pagell. 2016. "Why Firms Delay Reaching True Sustainability: Firms Delaying in Reaching True Sustainability." *Journal of Management Studies* 53, no. 5: 911–935. <https://doi.org/10.1111/joms.12199>.
- Sirmon, D. G., M. A. Hitt, R. D. Ireland, and B. A. Gilbert. 2011. "Resource Orchestration to Create Competitive Advantage: Breadth, Depth, and Life Cycle Effects." *Journal of Management* 37, no. 5: 1390–1412. <https://doi.org/10.1177/0149206310385695>.
- Strauss, K., J. Lepoutre, and G. Wood. 2017. "Fifty Shades of Green: How Microfoundations of Sustainability Dynamic Capabilities Vary Across Organizational Contexts." *Journal of Organizational Behavior* 38, no. 9: 1338–1355. <https://doi.org/10.1002/job.2186>.
- Tounés, A., E. T. Tornikoski, and F. Gribaa. 2019. "The Formation of Environmentally Friendly Intentions of SME Owner-Managers in an Emerging Country: The Case of Tunisian's Textile–Clothing Industry." *Organization & Environment* 32, no. 4: 528–554. <https://doi.org/10.1177/1086026618764267>.
- Vesal, M., V. Siahtiri, and A. O'Cass. 2022. "Do Senior Managers Hold the Keys to Unlock Innovation and Environmental Sustainability?" *Industrial Marketing Management* 103: 83–96. <https://doi.org/10.1016/j.indmarman.2022.03.010>.
- Walls, J. L., P. H. Phan, and P. Berrone. 2011. "Measuring Environmental Strategy: Construct Development, Reliability, and Validity." *Business & Society* 50, no. 1: 71–115. <https://doi.org/10.1177/0007650310394427>.
- Wang, H., S. Wang, J. Wang, and F. Yang. 2023. "Does Business Strategy Drive Corporate Environmental Information Disclosure?" *Journal of Environmental Planning and Management* 66, no. 4: 733–758. <https://doi.org/10.1080/09640568.2021.2002278>.
- Xiao, Z., X. Chen, M. C. Dong, and S. Gao. 2022. "Institutional Support and firms' Entrepreneurial Orientation in Emerging Economies." *Long Range Planning* 55, no. 1: 102106. <https://doi.org/10.1016/j.lrp.2021.102106>.
- Yin, J., and D. Jamali. 2016. "Strategic Corporate Social Responsibility of Multinational Companies Subsidiaries in Emerging Markets: Evidence From China." *Long Range Planning* 49, no. 5: 541–558. <https://doi.org/10.1016/j.lrp.2015.12.024>.
- Yong, J. Y., M.-Y. Yusliza, T. Ramayah, and O. Fawehinmi. 2019. "Nexus Between Green Intellectual Capital and Green Human Resource Management." *Journal of Cleaner Production* 215: 364–374. <https://doi.org/10.1016/j.jclepro.2018.12.306>.
- Zhang, L., S. Ren, X. Chen, D. Li, and D. Yin. 2020. "CEO Hubris and Firm Pollution: State and Market Contingencies in a Transitional Economy." *Journal of Business Ethics* 161, no. 2: 459–478. <https://doi.org/10.1007/s10551-018-3987-y>.
- Zou, H., X. Xie, G. Qi, and M. Yang. 2019. "The Heterogeneous Relationship Between Board Social Ties and Corporate Environmental Responsibility in an Emerging Economy." *Business Strategy and the Environment* 28, no. 1: 40–52. <https://doi.org/10.1002/bse.2180>.