

Corporate Environmental Responsibility and Cultural Contexts: Fostering Pro-Environmental Behaviors in China's mainland and Hong Kong

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Abstract: Corporate Environmental Responsibility (CER) is increasingly recognized as a vital driver of Pro-Environmental Behaviors (PEBs) in both workplace and private settings. This study critically examines CER within the distinct socio-economic and cultural contexts of China's mainland and Hong Kong, exploring how regional differences in regulatory frameworks, economic structures, and cultural values shape the effectiveness of CER initiatives. The research highlights the roles of collective efficacy, organizational commitment, and biospheric values, alongside the spillover effect from workplace behaviors to private life. By integrating the Theory of Normative Conduct (TNC) and the Value-Belief-Norm (VBN) theory, the study provides deeper insights into these dynamics. The findings underscore the need for culturally and economically tailored CER strategies, offering actionable recommendations for policymakers and organizations. The study concludes by emphasizing the importance of ongoing research and practical interventions to further embed sustainability within corporate practices and contribute to the global sustainability agenda.

Keywords: Corporate Environmental Responsibility (CER); Pro-Environmental Behaviors (PEBs); Collective Efficacy; Organizational Commitment; Theory of Normative Conduct (TNC); Value-Belief-Norm (VBN) Theory.

1. Introduction

Corporate Environmental Responsibility (CER) has emerged as a pivotal component in the global drive towards sustainability, influencing Pro-Environmental Behaviors (PEBs) in both workplace and private spheres. This research investigates CER within the distinct socio-economic and cultural landscapes of China's mainland and Hong Kong, two regions that provide contrasting environments for the study of CER due to their divergent regulatory frameworks, economic structures, and cultural attitudes towards environmental management. China's mainland, characterized by rapid industrialization and a government-led approach to environmental management, has increasingly integrated CER into business strategies. Recent policies promoting green technology reflect a significant shift in governmental priorities, motivated by the dual pressures of pollution control and the ambition to lead the global green economy [6]. In contrast, Hong Kong's developed economy and service-based industries operate under a legal system heavily influenced by international norms, where CER is often driven by market forces and corporate governance standards [37]. These differences create a unique opportunity to explore how CER is conceptualized and implemented across these regions and to examine the resulting impact on PEBs. The disparities in CER and PEBs between China's mainland and Hong Kong are shaped by varying levels of economic development, differences in legal and institutional structures, and distinct cultural values that influence organizational behavior and individual environmental consciousness. For example, while China's mainland's top-down regulatory approach fosters compliance at an organizational level, the degree to which these practices are internalized by employees and translated into individual behaviors varies [24]. Conversely, in Hong

Kong, the voluntary adoption of CER practices, driven by competitiveness and reputation, may lead to a stronger internalization of environmental values among employees.

This research seeks to unravel how these factors interact to shape CER and PEBs within businesses and among the workforce in China's mainland and Hong Kong. By comparing the effects of injunctive and descriptive norms related to CER, the study will provide insights into the cultural and economic influences that drive environmental responsibility in different socio-economic settings. The comparative approach aims to deepen understanding of how collective self-efficacy and organizational commitment are influenced by the cultural ethos and regulatory environment, potentially moderating the impact of workers' biospheric values on their pro-environmental behaviors. The findings from this research will offer nuanced perspectives that are essential for developing culturally and economically sensitive strategies to enhance CER and promote PEBs across diverse organizational landscapes. This review will explore key areas, including the relationship between CER and PEBs, the roles of collective efficacy and organizational commitment, the moderating effect of biospheric values, the spillover of workplace behaviors into private life, and the theoretical frameworks applied to these topics. Through a comparative analysis of the literature, this study will identify patterns, contradictions, and gaps, providing recommendations for policy, practice, and future research.

2. Background and Context

2.1. Overview of CER in China's Mainland and Hong Kong

China's mainland and Hong Kong present contrasting yet complementary contexts for the study of Corporate

Environmental Responsibility (CER). China's mainland's rapid industrialization has been accompanied by an increasing emphasis on sustainable development, with CER being integrated into business strategies as a response to both domestic and international pressures. The Chinese government's strong regulatory influence, coupled with a series of recent environmental policies, has pushed businesses to adopt green practices as part of broader national objectives such as ecological civilization. These policies, including the "National Green Development Fund" and mandates for carbon neutrality by 2060, reflect the country's commitment to leading the global green economy [37].

Hong Kong, on the other hand, has a long-standing history of environmental governance influenced by international norms and corporate governance standards. With a service-based economy, the region's approach to CER is more market-driven, with businesses aligning with global standards

to maintain competitiveness and enhance their reputation [32]. The emphasis in Hong Kong is often on voluntary adoption of CER practices, which are viewed as strategic tools for gaining a competitive edge in the international market. This market-driven approach is reinforced by the region's legal system, which supports transparent and accountable corporate practices, creating an environment where CER can flourish.

These differences create a unique opportunity to compare how CER is conceptualized and implemented in these two regions and how it impacts Pro-Environmental Behaviors (PEBs) among employees and the broader society. Figure 1 highlights the sectoral distribution of respondents in both regions, underscoring the predominance of the service sector in Hong Kong and the more diverse industrial representation in China's mainland, which influences the implementation and outcomes of CER initiatives.

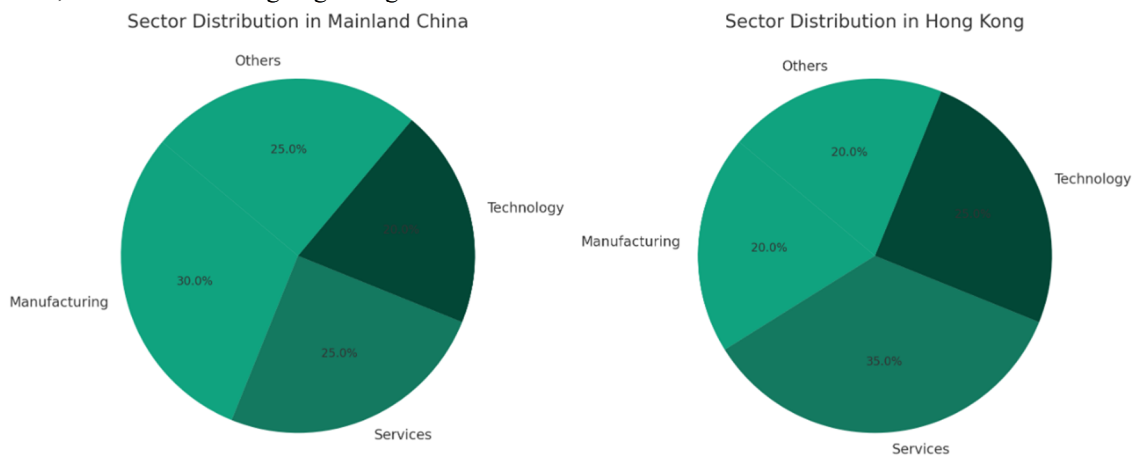


Figure 1. Sector distribution of respondents in both regions

2.2. Corporate Environmental Responsibility (CER) and Pro-Environmental Behaviors (PEBs)

In China's mainland, CER initiatives are predominantly driven by government mandates aimed at achieving national goals for ecological civilization. The government's central role in shaping environmental policies directly influences corporate practices, particularly in state-owned enterprises,

which are encouraged to adopt green practices as part of broader national strategies to combat pollution and promote sustainable development [5]. However, the effectiveness of these top-down approaches in fostering genuine Pro-Environmental Behaviors (PEBs) among employees is debated. While these initiatives often lead to compliance at the organizational level, they do not always translate into meaningful behavioral changes at the individual level, especially when employees do not feel a personal connection to the environmental goals set by their organizations.

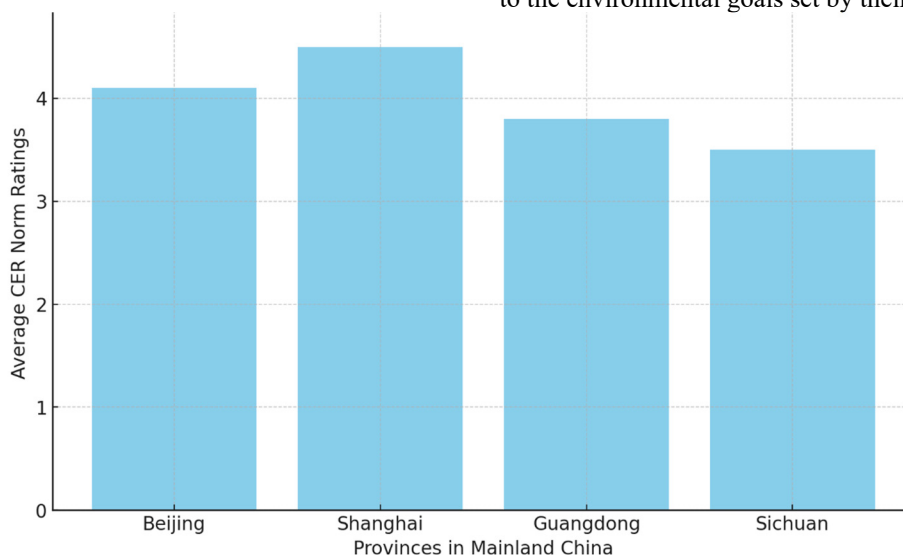


Figure 2. CER Norm Rating across different province in China's mainland (Example only)

Figure 2 above illustrates the variation in CER norm ratings across different provinces in China's mainland, showing how regional differences in governance and corporate commitment influence the perception and implementation of CER. For instance, provinces like Shanghai, with higher CER norm ratings, reflect stronger local governance and a more proactive corporate stance on environmental responsibility. Understanding these regional and contextual differences is crucial for tailoring CER practices to enhance their effectiveness across diverse regions and sectors.

In contrast, Hong Kong's approach to CER is more closely aligned with global standards and is heavily influenced by market forces and stakeholder expectations. CER practices in Hong Kong are often voluntarily adopted by businesses as strategic measures to enhance competitiveness and reputation in the international market. The region's service-oriented economy means that CER efforts are typically focused on reducing waste, improving energy efficiency, and promoting sustainability within service delivery processes [15]. The alignment with global environmental norms and the emphasis on corporate governance create a different dynamic in Hong Kong, where employee engagement in PEBs may be driven more by individual commitment and the organization's environmental culture rather than by external mandates. This self-regulated approach can lead to a stronger internalization of CER values among employees, potentially resulting in a more profound and lasting impact on their behaviors both in the workplace and in their private lives.

3. Theoretical Foundations and Case-Based Insights into CER

3.1. Collective Efficacy and Organizational Commitment

Collective efficacy and organizational commitment are vital components in the effective implementation of Corporate Environmental Responsibility (CER) and the promotion of Pro-Environmental Behaviors (PEBs) within organizations. Research consistently shows that when

employees believe in their collective ability to make a meaningful impact, they are more likely to engage in behaviors that support environmental sustainability [17]. Organizational commitment, particularly affective commitment—where employees feel an emotional attachment to their organization—has been strongly correlated with higher levels of PEBs. This connection underscores the importance of fostering a workplace culture that emphasizes shared environmental goals and values.

A notable example of collective efficacy and organizational commitment in action is seen in Huawei Technologies Co., Ltd. in China's mainland. Huawei has successfully integrated environmental responsibility into its corporate culture, driven by strong leadership that promotes collective action among its employees. The company's "Green Energy" project, for instance, has thrived due to the high level of organizational commitment, where employees collectively feel responsible for contributing to the company's environmental goals [35]. This case illustrates how a shared sense of purpose can drive the successful implementation of CER, leading to significant environmental outcomes. In Hong Kong, Swire Pacific Limited serves as a compelling case study of how organizational commitment influences PEBs. Swire Pacific has implemented a comprehensive CER strategy, which includes initiatives like energy efficiency programs, waste reduction, and sustainable supply chain management. The company's strong commitment to environmental sustainability is reflected in the behaviors of its employees, who actively participate in corporate green initiatives. This commitment is further bolstered by the company's alignment with global sustainability standards, which not only enhances employee engagement in PEBs but also reinforces the company's reputation as a leader in sustainable business practices. Figure 3 provides a comparative analysis of CER norms, collective efficacy, and organizational commitment between Mainland China and Hong Kong, showcasing how these factors interact within different cultural and economic contexts.

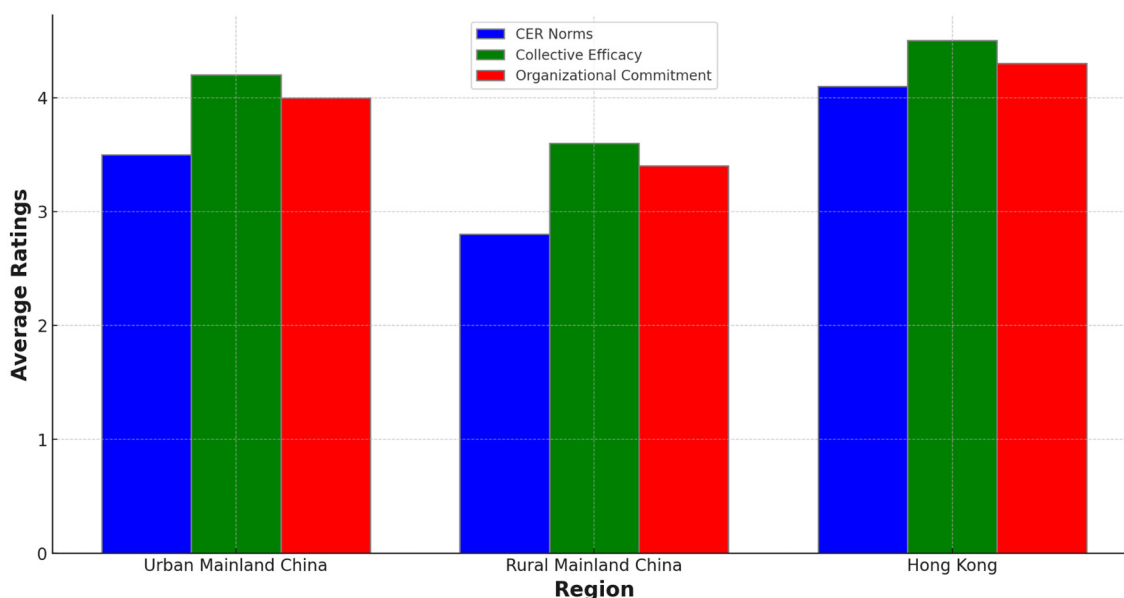


Figure 3. Comparative results of CER Norms, collective efficacy, and organizational commitment

3.2. Biospheric Values as Moderators

Biospheric values, which reflect an intrinsic concern for the environment, play a crucial moderating role in the relationship between Corporate Environmental Responsibility (CER) norms and Pro-Environmental Behaviors (PEBs). Individuals with strong biospheric values are more inclined to internalize CER norms and translate them into tangible pro-environmental actions, both within the workplace and in their private lives [18]. In China's mainland, where collectivist cultural values are predominant, the influence of biospheric values is often amplified when they align with strong CER norms. For instance, a study conducted among state-owned enterprises (SOEs) in Beijing revealed that employees who held strong biospheric values were significantly more likely to participate in environmental initiatives promoted by their organizations. This suggests that when CER is deeply embedded within the organizational culture, employees with high biospheric values emerge as key drivers of PEBs, acting as catalysts for broader organizational change. In contrast, Hong Kong's more individualistic culture presents a different dynamic. In this context, biospheric values are particularly crucial for the voluntary adoption of PEBs [7]. A case study of Cathay Pacific Airways illustrates this point, where employees with strong environmental values actively engage in the company's sustainability programs, such as waste reduction and carbon offset initiatives. This case underscores the importance of aligning CER with employees' personal values to foster sustainable behaviors, particularly in environments where external mandates are less influential. The voluntary nature of CER practices in Hong Kong highlights the role of individual commitment in driving environmental responsibility, showing that when employees' personal values resonate with corporate environmental goals, the resulting PEBs are more deeply internalized and sustained over time [25].

3.3. Spillover Effect: Workplace to Private Life

The spillover effect refers to the phenomenon where behaviors encouraged or learned in the workplace extend into private life, thereby amplifying the impact of Corporate Environmental Responsibility (CER) initiatives. This effect is particularly significant in the context of CER, as it suggests that organizational efforts to promote sustainability can have broader societal impacts beyond the immediate workplace [1]. In China's mainland, the spillover effect is often observed in regions where CER is strongly enforced by local governments. For example, in Shanghai, where companies are mandated to adhere to stringent environmental regulations, employees frequently carry the environmentally responsible behaviors they adopt at work into their personal lives [34]. This spillover is driven by the alignment of workplace norms with broader societal values, reinforcing the adoption of PEBs beyond the workplace. The strong regulatory framework in such regions not only fosters compliance within organizations but also encourages individuals to adopt sustainable practices in their personal lives, thereby creating a culture of environmental responsibility that permeates both professional and private spheres. In contrast, the spillover effect in Hong Kong is more individualized, influenced by the voluntary nature of CER practices. Employees at companies like CLP Holdings Limited, which has a strong focus on renewable energy, often adopt similar energy-saving practices at home [12]. This

suggests that when employees are genuinely committed to their company's environmental goals, the positive behaviors fostered at work can extend into their private lives, creating a wider impact on society. The voluntary and market-driven approach to CER in Hong Kong allows for a more personalized internalization of environmental practices, where employees are motivated by both their personal values and the organizational culture. This individualized spillover highlights the potential for CER initiatives to inspire broader societal change, particularly when employees are empowered to take ownership of environmental practices both at work and at home [32].

4. Integrating Theoretical Frameworks with Strategic Applications of CER

4.1. Understanding the Influence of Norms and Values Theory of Normative Conduct (TNC) and Value-Belief-Norm (VBN) Theory

The Theory of Normative Conduct (TNC) and the Value-Belief-Norm (VBN) theory are instrumental in understanding how Corporate Environmental Responsibility (CER) norms influence Pro-Environmental Behaviors (PEBs) within organizations. These theories highlight the complex interplay between social norms, individual values, and environmental behaviors, offering a comprehensive framework for analyzing CER's impact in diverse cultural settings.

TNC, developed by Cialdini and colleagues, posits that social norms significantly shape individual behaviors. These norms are categorized into injunctive norms (what is socially approved) and descriptive norms (what is commonly practiced). In collectivist cultures like China's mainland, injunctive norms established by governmental policies play a critical role in influencing PEBs. Here, the collective expectation to adhere to environmental standards aligns individual behaviors with broader organizational and societal goals. This alignment is often facilitated by strong governmental influence, where compliance with environmental regulations becomes a social imperative within organizations. For example, in state-owned enterprises, the government's environmental mandates set clear injunctive norms that employees are expected to follow, thereby reinforcing CER practices.

On the other hand, VBN theory, proposed by Stern and colleagues, connects individuals' values, beliefs, and norms to their environmental behaviors. This theory is particularly relevant in understanding PEBs in contexts where individualistic values prevail, such as in Hong Kong. According to VBN theory, individuals with strong biospheric values—those who inherently prioritize environmental protection—are more likely to engage in PEBs. In Hong Kong, where market-driven forces and individual commitment to sustainability are more pronounced, VBN theory provides a framework for understanding how personal values drive environmental behavior. Employees in Hong Kong are often motivated by a personal commitment to sustainability rather than external mandates, making the internalization of CER norms more dependent on their alignment with individual beliefs and values.

To illustrate the connection between these theoretical frameworks and practical outcomes, the following model can

be used to represent the process by which biospheric values and social norms influence workplace energy conservation

behaviors.

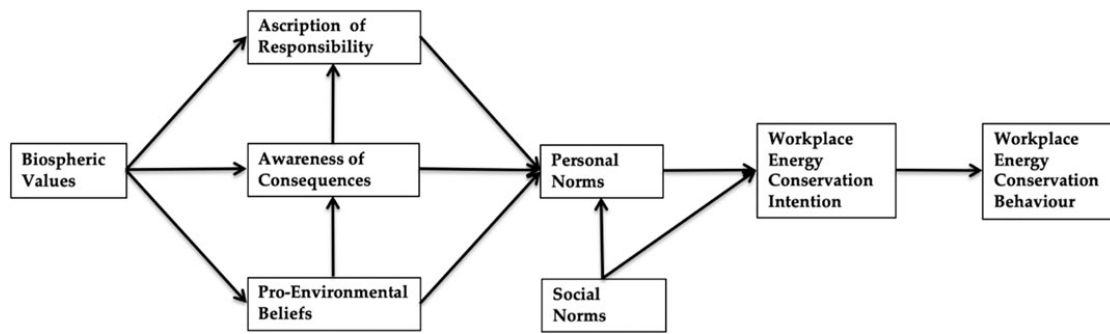


Figure 4. Conceptual Model of the Influence of Biospheric Values and Social Norms on Workplace Energy Conservation Behavior [33]

Figure 4 visually represents the flow from biospheric values to workplace energy conservation behavior. It starts with biospheric values, which enhance awareness of environmental consequences and the ascription of responsibility. These cognitive processes then influence personal norms, which are also shaped by social norms. The resulting personal norms lead to the intention to conserve energy at work, which ultimately manifests as actual energy conservation behavior. This model supports the integration of TNC and VBN theories, showing how values and norms translate into concrete environmental actions within the workplace. The integration of TNC and VBN theories allows for a nuanced understanding of how CER is internalized by employees in different cultural contexts. In China's mainland, where collectivism and government influence are dominant, TNC explains how social norms can align individual behaviors with organizational goals. In contrast, VBN theory is more applicable in Hong Kong's individualistic context, where personal values play a crucial role in driving PEBs. This theoretical integration highlights the importance of culturally tailored approaches to CER, where strategies are designed to resonate with the prevailing social norms and values within each region. Understanding these dynamics is crucial for developing effective CER initiatives that not only comply with regulatory requirements but also foster genuine environmental responsibility among employees.

4.2. Strategic Applications of CER in Different Cultural Contexts and Their Impact on PEB Manifestation

The theoretical insights from TNC and VBN theories can be applied to conduct a strategic analysis of how CER and PEBs manifest differently in China's mainland and Hong Kong. This analysis explores key patterns, contradictions, and factors influencing the distinct outcomes in these regions. Although both regions have experienced positive impacts of CER on PEBs, the mechanisms driving these outcomes differ significantly due to distinct cultural, regulatory, and economic contexts. In China's mainland, CER and PEBs are largely shaped by the government's influential role and the prevailing collectivist culture. The top-down approach, reinforced by strong regulatory frameworks and societal norms, promotes a uniform adoption of sustainable practices across organizations [10]. CER in China is often seen as part of a broader national agenda, with state-owned enterprises (SOEs) frequently leading the charge. These organizations exemplify how government mandates translate into comprehensive environmental initiatives that employees are expected to

follow, aligning individual behaviors with organizational goals. This centralized approach to CER ensures that environmental responsibility is deeply integrated into business operations, contributing to more consistent and widespread PEBs.

In contrast, Hong Kong's approach to CER is more market-driven, emphasizing individualistic values that shape how employees perceive and engage in PEBs. The region's approach to sustainability is characterized by voluntary rather than prescriptive practices, with businesses adopting CER initiatives to enhance their global competitiveness and reputation. This market-oriented strategy encourages a different type of engagement with PEBs, where employees are motivated by personal commitment and organizational culture rather than external mandates. Companies like Swire Pacific exemplify this approach, leveraging global sustainability standards to drive internal environmental programs [11]. This alignment with international practices reflects the importance of integrating CER with corporate governance in a way that resonates with Hong Kong's business environment. Case studies such as Huawei in China's mainland and Swire Pacific in Hong Kong illustrate these contrasting approaches. Huawei's success in incorporating CER into its corporate strategy is largely due to the collective cultural values and strong governmental support within its organizational structure. Conversely, Swire Pacific's achievements in environmental sustainability are closely tied to its alignment with global standards and the voluntary nature of its CER practices, which align with the individualistic culture of Hong Kong [26].

4.3. Evaluating Methodological Approaches to Theoretical and Strategic Application of CER

It is essential to assess how effectively these frameworks and strategic analyses can bring out their intended impacts. The integration of the Theory of Normative Conduct (TNC) and Value-Belief-Norm (VBN) theory provides a strong foundation for analyzing how social norms and personal values shape environmental behaviors in different cultural settings. TNC is particularly relevant in China's mainland, where government-driven injunctive norms align individual behaviors with broader organizational goals, leading to a more uniform adoption of CER practices [36]. On the other hand, VBN theory is well-suited to Hong Kong's individualistic context, where personal values significantly influence the internalization of CER norms and the voluntary engagement in PEBs. The strategic analysis presented

highlights how these theories manifest in practice, with China's mainland's top-down approach resulting in widespread, consistent adoption of CER, while Hong Kong's market-driven approach fosters more individualized, value-driven engagement [19]. This evaluation demonstrates the benefits of these methodologies in tailoring CER strategies to resonate with the cultural and economic contexts of each region, thereby enhancing their effectiveness in promoting sustainable behaviors.

However, there are limitations to consider. The reliance on these frameworks may oversimplify the complexity of environmental behaviors, especially in diverse and dynamic contexts. The theories may not fully capture the nuances of how conflicting norms and values interact within organizations, potentially leading to gaps in understanding the full impact of CER initiatives. To address these challenges, future research should incorporate longitudinal studies to assess the long-term effects of CER strategies and mixed-methods approaches to provide a deeper, more nuanced understanding of how CER norms are internalized by employees [30]. Additionally, sector-specific analyses could uncover industry-specific challenges and best practices, particularly in service-oriented economies like Hong Kong. Employing advanced statistical techniques, such as Structural Equation Modeling (SEM) or Multilevel Modeling (MLM), would further refine the analysis by capturing the complex relationships between individual, organizational, and regional factors [27]. Ethical considerations, especially regarding data privacy and informed consent, should be rigorously upheld to ensure the credibility of the findings and maintain participant trust. To sum up, while the proposed methodologies offer significant potential for enhancing CER's impact on PEBs, their effectiveness depends on careful application and continual refinement to address the unique cultural and economic dynamics of China's mainland and Hong Kong. By doing so, future research can provide more accurate, actionable insights that contribute to the global sustainability agenda.

5. Strategic Recommendations for Policy Implementation and Organizational Practice

5.1. Targeted Regulations and Visible Examples

Policymakers play a crucial role in promoting Corporate Environmental Responsibility (CER) by establishing regulations that not only enforce sustainable practices but also highlight successful case studies that can serve as benchmarks for other organizations. China's "National Green Development Fund" is a prime example of how targeted regulations can be paired with visible success stories to drive widespread adoption of green practices [22]. This fund incentivizes companies across various industries to adopt sustainable practices by providing financial support and recognizing exemplary initiatives, such as the green transformation of the steel industry in Hebei Province. This dual approach—combining regulatory enforcement with the promotion of success stories—normalizes sustainable practices by illustrating their practicality and economic benefits. By publicizing these successful transformations, governments can make the adoption of CER practices less daunting for organizations that might view sustainability as a

complex or expensive challenge. Moreover, this transparency fosters trust in regulatory frameworks, encouraging a broader cultural shift toward sustainability [31]. As more companies see the tangible benefits of adopting CER, such as cost savings and enhanced reputation, sustainability becomes increasingly embedded as a core business objective across industries.

5.2. Aligning CER with Organizational Values

For Corporate Environmental Responsibility (CER) to be effective and enduring, it must be deeply integrated into the core values and mission of an organization. Companies like Patagonia serve as excellent examples of how aligning CER with organizational values can lead to more genuine and sustained engagement in Pro-Environmental Behaviors (PEBs). Patagonia's approach to sustainability is comprehensive, embedding environmental responsibility into every aspect of its operations, from product design to supply chain management [13]. A key element of Patagonia's success is its "Environmental Internship Program," which allows employees to work with environmental groups while retaining their full salary. This program not only aligns with the company's broader environmental mission but also resonates with the personal values of its employees, fostering a sense of shared purpose. When employees perceive their personal values reflected in the company's mission, their commitment to sustainability initiatives intensifies, resulting in higher participation rates and more innovative solutions for reducing the company's environmental footprint [4]. This alignment transforms CER from a corporate mandate into a shared organizational ethos, creating a culture where environmental responsibility is a natural extension of the company's identity.

5.3. Incentivizing Sustainable Practices

To effectively drive the adoption of Corporate Environmental Responsibility (CER), organizations should implement incentive structures that reward sustainable behavior. Unilever's approach to linking employee bonuses directly to the achievement of sustainability goals is a powerful example of how financial incentives can align personal and corporate priorities. By tying financial rewards to environmental outcomes, Unilever ensures that sustainability is not just a corporate objective but a personal priority for each employee [38]. This strategy has led to significant environmental improvements, including the achievement of zero waste to landfill across its global manufacturing sites. Such incentives motivate employees to actively engage in sustainability efforts, embedding environmental goals into their daily work routines. Moreover, by making sustainability a key measure of success within the performance evaluation process, companies can foster a culture where environmental responsibility is viewed as integral to professional achievement. This approach not only drives broader organizational impacts but also contributes substantially to global environmental objectives.

5.4. Public-Private Partnerships for Greater Impact

Collaboration between the public and private sectors significantly amplifies the impact of Corporate Environmental Responsibility (CER) initiatives. The Singapore Green Plan 2030 serves as an exemplary model, uniting government agencies, businesses, and civil society to

pursue ambitious sustainability goals. Programs like the "Sustainable Manufacturing Programme," where the government provides funding and support for companies to innovate and reduce their carbon footprint, demonstrate the power of these partnerships. This collaborative approach ensures that both public goals and private sector capabilities are aligned, driving substantial environmental progress. By facilitating the scaling of successful initiatives across industries, these partnerships contribute to a widespread societal shift towards sustainability. Furthermore, public-private collaborations provide a platform for sharing best practices and innovations, enabling businesses to adopt proven strategies that have been tested and refined through government-supported programs. The Green Plan 2030 serves as a model for how other regions can harness the power of public-private partnerships to achieve their sustainability targets, demonstrating the potential for these collaborations to deliver transformative environmental outcomes.

6. Conclusion

This study has demonstrated the pivotal role of Corporate Environmental Responsibility (CER) in shaping Pro-Environmental Behaviors (PEBs) within both the workplace and private spheres, particularly in the culturally and economically diverse regions of China's mainland and Hong Kong. The findings reveal that while government mandates in China's mainland effectively drive CER adoption at the organizational level, the extent to which these practices are internalized by employees varies significantly. This variability underscores the complexity of translating top-down directives into genuine behavioral change among workers, especially in a collectivist culture where compliance may not always equate to personal commitment. In contrast, Hong Kong's market-driven approach to CER, which aligns with global standards, tends to foster more voluntary and intrinsic engagement in PEBs. This is largely driven by individual commitment to environmental sustainability and a corporate culture that emphasizes the importance of these values. The case studies of Huawei in China and Swire Pacific in Hong Kong illustrate the critical role of collective efficacy and organizational commitment in achieving meaningful environmental outcomes. These examples highlight how a strong organizational culture, coupled with leadership that prioritizes environmental goals, can significantly influence employee behavior and drive the success of CER initiatives.

Moreover, the study highlights the moderating role of biospheric values, which are deeply ingrained in individuals' concern for the environment, and how these values can amplify the effectiveness of CER, particularly in settings where these values align with organizational goals. The spillover effect, where pro-environmental behaviors in the workplace extend into private life, is also a crucial finding. This effect is especially pronounced when CER is embedded within the organizational culture and resonates with employees' personal values, leading to a broader societal impact.

In conclusion, this research underscores the need for culturally tailored CER strategies that integrate collective efficacy, organizational commitment, and biospheric values to enhance their effectiveness. It also highlights the potential of public-private partnerships, like those exemplified by Singapore's Green Plan 2030, in amplifying the impact of CER initiatives. As the global sustainability agenda continues to evolve, it is imperative that businesses and policymakers

develop strategies that are not only effective within their specific cultural and economic contexts but also capable of fostering a deeper, more intrinsic commitment to sustainability among individuals.

Moving forward, ongoing research and practical interventions will be crucial in supporting this global sustainability agenda. Future studies should delve deeper into the spillover effects of CER, exploring how these behaviors can be further encouraged and sustained over time. Additionally, the role of digital tools and platforms in enhancing CER initiatives offers a promising area for exploration, particularly in how these technologies can be leveraged to drive engagement, track progress, and scale successful practices across different regions and industries. By understanding and leveraging the unique cultural contexts of regions like China's mainland and Hong Kong, businesses and policymakers can develop more effective strategies that not only promote environmental responsibility but also contribute to a more sustainable future on a global scale.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Competing Interests

The authors declare no conflict of interest.

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