

When Does ESG Greenwashing Become Criminal Fraud? Corporate Fault and Comparative Liability in ESG Misrepresentation

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ABSTRACT: The growing reclassification of ESG greenwashing from a regulatory compliance issue into a potential form of corporate criminal fraud has underscored the need for a more coherent legal threshold for assessing sustainability-related misrepresentation. Persistent fragmentation across ESG governance, fraud doctrine, and corporate criminal liability scholarship has constrained the development of an integrated framework for determining when ESG-related deception warrants criminal reclassification. This article develops the Comparative Criminal Fraud Threshold Model for ESG Misrepresentation (CCFT-ESG) to clarify when ESG misrepresentation shifts from regulatory misstatement to corporate criminal fraud. A doctrinal-comparative approach was employed through conceptual, interpretative, systematic, historical, and cross-jurisdictional analysis focusing on the United Kingdom, the United States, and the European Union. The analysis examined legal norms, corporate attribution structures, governance failures, and evolving ESG accountability mechanisms within the context of sustainability-related misrepresentation. The findings indicate that ESG misrepresentation should be understood as a continuum of liability ranging from sustainability puffery and negligent disclosure to reckless institutional misrepresentation and intentional ESG-related criminal fraud. Criminal reclassification is not determined solely by the existence of false information, but by the convergence of material falsity, organizational fault, institutional knowledge, legally significant harm or reliance, and the legitimacy of proportionate escalation. The model further demonstrates that these jurisdictions establish distinct yet complementary liability thresholds through fiduciary governance, governance–litigation enforcement, and codified due-diligence accountability. Accordingly, CCFT-ESG provides a more structured analytical framework for distinguishing ordinary governance deficiencies from ESG misrepresentation that has reached a legally blameworthy threshold warranting corporate criminal intervention.

KEYWORDS: ESG misrepresentation; corporate criminal fraud; corporate criminal liability; Organizational Fault Theory; comparative doctrinal analysis; ESG governance

I. INTRODUCTION

The shift of Environmental, Social, and Governance (ESG) misrepresentation, or greenwashing, from a matter of compliance and regulatory violations into a legal issue potentially qualifying as corporate criminal fraud reflects the growing legal significance of sustainability representations within cross-jurisdictional corporate governance. This development indicates that ESG claims are no longer understood merely as reputational communications, but rather as representations capable of affecting economic interests, investor behavior, and corporate accountability when such statements are materially misleading or institutionally endorsed. In the European context, the strengthening of disclosure obligations through the Corporate Sustainability Reporting Directive (CSRD), together with the expanding academic discourse on the potential criminalization of greenwashing, demonstrates the need to broaden legal frameworks so that certain forms of sustainability misrepresentation may be subject to corporate criminal liability, although the CSRD itself does not explicitly mandate criminalization (Nakane, 2024). In parallel, developments in international law further underscore the need for stronger corporate governance and accountability mechanisms in response to environmental and human rights violations, reflecting a transition from compliance-based regulation toward corporate criminal accountability (Kuntz, 2024).

Consistent with the shift of ESG misrepresentation from a compliance issue to a more serious matter of corporate accountability, sustainability-related deception can no longer be adequately understood merely as a compliance failure, because its effects may extend beyond ordinary regulatory breaches and generate substantial economic consequences for markets and investors. Empirical findings indicate that ESG misrepresentation may reduce the cost of capital and increase stock prices through

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reputational effects, but such benefits may reverse into substantial losses when such practices are shown to have intentionally misled investors (Wenjiao et al., 2024). In a broader context, the consolidation of white-collar crime literature emphasizes that corporate misconduct is increasingly positioned as an object of criminal claims, including within cross-border schemes that complicate liability attribution and legal enforcement (Stamevski et al., 2021). Accordingly, greenwashing must be analyzed through a corporate liability framework capable of clearly distinguishing ordinary compliance violations from corporate fraud that reaches a sufficient degree of seriousness to justify criminal intervention. Ultimately, this development reinforces the need for cross-border harmonization of ESG and greenwashing standards, stronger international enforcement cooperation, and more robust domestic legal foundations for determining when sustainability misrepresentation may shift from regulatory misstatement to corporate criminal fraud (Kuntz, 2024).

Despite the increasing demand for harmonized ESG standards and stronger legal foundations, developments in academic scholarship indicate that discourse on ESG governance, fraud doctrine, and corporate criminal liability remains fragmented across separate legal regimes. As a result, no coherent cross-disciplinary framework has yet been established to determine when sustainability misrepresentation may be classified as corporate criminal fraud. Literature on ESG governance has highlighted the need for stronger corporate accountability, including failure to prevent offences and the potential liability of corporate officers, yet such discussions remain more focused on governance and compliance than on reconstructing a corporate criminal threshold for greenwashing (Ahern, 2023). At the same time, corporate attribution theory emphasizes the importance of distinguishing between regulatory offences and fraud, as well as the need for clear attribution mechanisms, such as identification, vicarious liability, and delegation, to assess fault attributable to corporate entities (Balasingam, 2022). However, these frameworks have not been adequately integrated with the institutional, decentralized, and reporting-dependent character of ESG misrepresentation. Therefore, the relationship between greenwashing, fraud doctrine, and corporate criminal liability still requires a more systematic formulation as a foundation for corporate criminal classification.

Based on this conceptual fragmentation, the primary research gap lies in the absence of an integrated doctrinal threshold that connects ESG governance, elements of fraud, and corporate attribution of responsibility to distinguish ordinary greenwashing from forms of misrepresentation possessing a sufficient degree of seriousness to qualify as corporate criminal fraud. This issue becomes increasingly relevant because empirical evidence shows that greenwashing may affect capital costs, investor perceptions, and market legitimacy, yet no legal consensus has emerged that places such practices within the scope of corporate crime without a structured doctrinal framework (Wenjiao et al., 2024). In a regional context, studies on corporate criminal liability for investment-related economic fraud indicate that corporate liability frameworks have evolved, but have not been explicitly connected to the ESG context to establish criminal thresholds for sustainability misrepresentation (Anggriawan & Susila, 2023). Therefore, the central need within the literature is not merely to identify that greenwashing may violate the law, but to formulate a doctrinal threshold model integrating ESG governance effectiveness, misleading disclosure involving deceptive intent, and adequate corporate attribution mechanisms to determine when ESG greenwashing may be reconstructed as corporate criminal fraud (Ahern, 2023).

Building on the need to establish a more coherent doctrinal threshold, this article aims to formulate an analytical model to determine when ESG greenwashing may be classified as corporate criminal fraud within a contemporary corporate accountability regime. Unlike approaches that position ESG misrepresentation solely as a compliance violation or reporting failure, this study argues that the shift from regulatory misstatement toward criminal classification must be examined through a structured framework linking elements of fraud, institutional opportunity, rationalization, and corporate attribution of responsibility. As a primary analytical foundation, this article operationalizes the Fraud Triangle to explain how pressure, opportunity, and rationalization may drive the emergence of ESG misrepresentation within corporate structures, including in cross-border and cross-industry contexts (Xu, 2026). This framework is further complemented by legitimacy perspectives and stakeholder theory to explain how the need to maintain social legitimacy, market expectations, and stakeholder relations may influence misleading ESG reporting practices (Gao & Chen, 2024). Furthermore, through a comparative approach based on incident patterns and cross-jurisdictional analysis, this study evaluates the consistency of applying this framework to assess the risk of greenwashing as a form of corporate misconduct potentially leading to criminal classification (Keresztúri et al., 2024). The theoretical contribution of this article lies in integrating the Fraud Triangle with ESG dimensions to construct a doctrinal model for greenwashing classification while expanding scholarship on governance, oversight, and corporate risk attribution (Wang et al., 2024). Practically, this study offers an analytical framework relevant to regulators, auditors, policymakers, and compliance actors in designing assurance mechanisms, market oversight, and more effective legal and operational instruments for greenwashing prevention (Peng, 2025). Nevertheless, this article also acknowledges that the Fraud Triangle has limitations when used independently to explain

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misrepresentation involving non-financial information, thereby requiring contextualization through other theoretical approaches to ensure that the legal classification of ESG greenwashing does not become overly reductionist (Wenjiao et al., 2024).

To reinforce the limitations of the Fraud Triangle, which primarily focuses on individual motives, this article employs Organizational Fault Theory (OFT) as a principal analytical framework to assess how corporate criminal liability may arise in ESG greenwashing, particularly when fault cannot be reduced to individual conduct but instead develops through institutional failures, weak oversight structures, or fragmented decision-making. Within the context of corporate criminal law, this approach is relevant because ESG disclosures are generally produced through complex institutional processes involving multiple layers of governance, such that the risk of misrepresentation cannot always be explained through traditional models of individual intent. Accordingly, sustainability misrepresentation must be analyzed through patterns of institutional blameworthiness that position organizational fault, the distribution of authority, and supervisory defects as the basis for evaluating corporate criminal liability.

As an elaboration of institutional blameworthiness within corporate criminal liability, OFT is operationalized alongside Fraud Triangle Theory to map sources of organizational fault through the dimensions of pressure, opportunity, and rationalization in the context of ESG greenwashing (Sun et al., 2023). The pressure dimension may arise from performance targets, financial pressures, managerial concentration of power, or external visibility that encourage distortions in sustainability disclosures (Ren et al., 2024). Meanwhile, the opportunity dimension relates to information asymmetry, weak oversight, ESG reporting gaps, and inadequate verification mechanisms, all of which enable greenwashing to develop as a form of institutional failure (Keresztúri et al., 2024). Rationalization, in turn, explains how organizational culture, symbolic legitimacy, and justifications based on corporate interests may normalize sustainability misrepresentation practices. Therefore, the integration of OFT and Fraud Triangle Theory enables a more systematic analysis of the structural roots of ESG greenwashing as a basis for attributing corporate criminal liability (Stelios & Lemonakis, 2023).

Based on the integration of OFT and Fraud Triangle Theory, the subsequent analysis is directed toward the use of the ESG gap, defined as the discrepancy between ESG disclosure and ESG performance, as an indicator for identifying greenwashing, while considering board independence, internal and external oversight, and governance characteristics as factors influencing the opportunity for misconduct (Wenjiao et al., 2024). This framework enables the development of a more systematic corporate criminal fraud classification model to assess when ESG greenwashing may be attributed as corporate fault possessing a sufficient degree of seriousness to justify criminal classification. Nevertheless, this approach also recognizes that the Fraud Triangle has limitations when used independently to explain non-financial disclosures, such that the interpretation of ESG misrepresentation still requires a more contextual theoretical approach to ensure that legal classification is not reduced solely to quantitative indicators (Zheng & Zhang, 2024).

II. RESEARCH METHODOLOGY

This study employs a doctrinal-comparative approach to analyze when ESG greenwashing may be classified as corporate criminal fraud within the framework of corporate accountability. The research design is normative and analytical because it focuses on evaluating legal coherence, doctrinal classification, and the construction of corporate liability thresholds through legal analysis rather than empirical observation of market behavior or enforcement effectiveness. Within this framework, conceptual and comparative approaches are applied to assess the relationship between forms of greenwashing at the corporate, product, and process levels and their potential construction as fraud under corporate law (Nemes et al., 2022). This analysis is supported by the examination of regulations, regulatory guidance, judicial decisions, and oversight practices to identify how legal systems construct classification, fault attribution, and liability boundaries in sustainability-related violations.

Consistent with the doctrinal-comparative approach employed, jurisdictional selection is undertaken on a principled basis according to the relevance of regulatory models and their comparative significance for the classification of ESG greenwashing within the framework of corporate accountability. The European Union is positioned as the primary analytical framework because it provides a relatively systematic regulatory architecture for ESG and greenwashing through the Taxonomy Regulation, SFDR, and UCPD, which is essential for assessing the boundary between regulatory compliance and potential escalation toward corporate fraud (Zukas & Trafkowski, 2022). Comparative analysis is then expanded through a cross-jurisdictional context to understand variations in legal responses to the green transition, financial oversight, and corporate accountability design across different legal regimes (Hulkó et al., 2025). Meanwhile, Indonesia is used as an implementation-oriented context to assess how green taxonomy, green finance, and ESG regulatory adaptation may reveal classification challenges within a developing legal system (Ariyanti et al., 2023). Accordingly, the balanced integration of primary and secondary legal materials enables this methodology to construct a

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more coherent doctrinal classification framework while formulating policy recommendations for addressing ESG greenwashing within the context of corporate accountability (Perales, 2023).

The analytical process in this study is organized through conceptual, interpretative, systematic, comparative, and historical legal reasoning to reconstruct the legal threshold of ESG greenwashing as a form of corporate fraud. The doctrinal-comparative approach is adopted because it enables the integration of legal concept analysis with cross-jurisdictional evaluation in assessing how norms, fault attribution, and corporate liability are constructed within the context of ESG-based fraud (Qamar & Rezah, 2020). The initial stage is conducted through conceptual analysis to distinguish ESG greenwashing from sustainability puffery, negligent reporting, reckless misrepresentation, and criminal fraud, thereby allowing criminal classification boundaries to be formulated more systematically. Subsequently, statutory and case law approaches are employed to examine how legislation, judicial decisions, and legal interpretation shape the application of norms to sustainability-based corporate fraud (Wulandari, 2023).

Furthermore, comparative and historical analysis is used to identify similarities, differences, and developments in legal interpretation that influence the relationship between ESG misrepresentation and the potential escalation toward corporate criminal liability across different legal systems (Khasanah & Lumbanraja, 2022). Through this approach, evaluation is directed toward the construction of fraud thresholds, the attribution of institutional fault, and the transition from regulatory compliance toward the classification of corporate criminal fraud. This normative framework is considered appropriate because it enables legal reconstruction while remaining connected to global ESG dynamics, including issues of criminal sanctions, fiduciary responsibility, and legal system adaptation to developments in sustainability governance (Siregar, 2022). Therefore, the integration of doctrinal, comparative, and historical analysis provides a stronger methodological foundation for evaluating legal coherence while constructing an argumentative threshold model for ESG-related corporate fraud (Sugiyatmo & Saleh, 2024).

III. RESULT AND DISCUSSION

A. *Doctrinal Thresholds Between ESG Greenwashing and Criminal Fraud*

The central doctrinal issue in ESG-based corporate violations does not lie in whether misleading sustainability representations may generate legal consequences, but rather in the legal threshold at which greenwashing must be distinguished from civil misrepresentation or ordinary compliance failures and reclassified as corporate criminal fraud. Scholarship indicates that ESG claims, environmental certifications, eco-labels, and sustainability communications may influence investor decisions, consumer behavior, and corporate accountability, such that ESG misrepresentation cannot be regarded merely as a matter of reputation or transparency (Nygaard, 2023). In this context, the doctrinal frontier lies in distinguishing between misrepresentation that gives rise only to civil liability and fraud that satisfies criminal standards through elements of material falsity, deceptive intent, and more severe legal consequences (Hunter et al., 2023).

At the lowest threshold, sustainability puffery refers to ESG statements that are aspirational, symbolic, or reputational in nature, yet lack a sufficiently specific factual basis to establish material deception. General claims concerning environmental leadership, future sustainability, or ethical commitments typically function as reputational communications rather than legal representations that directly give rise to criminal consequences. So long as no objectively false facts, verifiable statements, or demonstrable legal reliance are present, this category remains outside the scope of criminal fraud. Nevertheless, weak certification systems and sustainability communication structures may still create space for greenwashing when symbolic claims become associated with misleading factual information or generate distorted market perceptions (Nygaard, 2023).

At the next threshold, classification shifts toward negligent ESG reporting and reckless ESG misrepresentation, namely conditions in which misrepresentation is no longer merely symbolic, but begins to involve verification failures or tolerance of inaccuracies capable of affecting the market. At this stage, misconduct may arise through the use of unverifiable eco-labels, selective disclosure, weak verification mechanisms, or tolerance of inaccurate sustainability information. This category is significant because it occupies an intermediate position between ordinary negligence and direct fraud, thereby serving as a transitional zone in assessing the increasing seriousness of corporate liability. Scholarship demonstrates that deceptive marketing, false certifications, and unverifiable sustainability claims may undermine market integrity, investor confidence, and corporate accountability, even though they do not always satisfy the criminal threshold (Bray & Poston, 2024).

At this transitional stage, legal analysis shifts toward the elements of materiality and reliance to determine whether ESG misrepresentation remains within the domain of regulatory disputes or begins to move toward a fraud-based construction. When ESG disclosures are directly connected to investment decisions, market price formation, or risk assessment, their legal consequences are no longer limited to administrative non-compliance or civil liability. In this context, fraud on disclosure and reliance theory become relevant because ESG deception is assessed not solely by the existence of falsity, but also by the extent to

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which such information influences the economic conduct of affected parties. Accordingly, ESG claims that are factual, measurable, and materially significant to investor decision-making may provide an analytical basis for the escalation of more severe legal liability, including toward the classification of corporate fraud (Kang, 2022).

At the highest threshold, classification shifts toward intentional ESG-related criminal fraud, namely circumstances in which false sustainability representations no longer arise merely from negligence or reckless misrepresentation, but are consciously maintained, strategically designed, or exploited to obtain economic benefits, attract capital, or influence markets through deception. At this stage, *mens rea* becomes the determining element in distinguishing regulatory violations from fraud carrying criminal implications. The distinction between civil fraud and criminal fraud depends on the existence of intentional deception, the objective of obtaining unlawful gain, and a higher evidentiary standard than that required in civil disputes (Madaoui, 2023). Therefore, not all greenwashing practices may be criminalized, but ESG misrepresentation that satisfies materiality, deceptive intent, and demonstrable harm possesses a sufficient doctrinal basis for reclassification into the sphere of corporate criminal law.

Beyond the elements of *mens rea* and materiality, the architecture of corporate liability also determines when ESG greenwashing may be attributed to corporate entities as subjects of criminal liability. In this context, the conduct of senior managers, corporate agents, subsidiaries, as well as systematic failures to prevent fraud may extend the line of fault from individual actors toward institutional responsibility. Scholarship on corporate attribution and failure to prevent fraud demonstrates that the boundary between greenwashing and corporate criminal liability is not dichotomous, but is instead formed through the convergence of material falsity, *mens rea*, reliance, legally relevant harm, and corporate attribution mechanisms (Horder, 2025). Accordingly, ESG misrepresentation must be understood as a progressive legal continuum moving from puffery, negligence, and recklessness to corporate criminal fraud as the highest form of escalation in corporate criminal liability (Fellowes & Doelman, 2022).

B. Corporate Fault Attribution in Decentralized ESG Governance

Once ESG greenwashing satisfies the doctrinal threshold of fraud, legal analysis no longer ends at the classification of conduct, but shifts to the question of attribution: whether fault may be assigned to the corporation when misleading sustainability representations arise through decentralized governance structures involving multiple institutional actors. In the modern ESG context, disclosures are often produced through dispersed decision-making networks, rendering liability models based on a single actor increasingly inadequate. Scholarship on decentralized ESG governance indicates that the distribution of responsibility within multi-actor institutional architectures complicates the determination of fault, because accountability no longer rests in a single center of authority, but instead emerges through the relationships among processes, oversight mechanisms, and governance designs that permit such conduct to occur (Chien et al., 2025). Accordingly, the primary doctrinal issue is not merely the existence of deception, but whether sufficiently dispersed institutional failures can justify the attribution of fault to the corporate entity.

The first issue concerns the limitations of classical attribution models that emphasize individual intent or the directing mind doctrine as the primary basis of corporate liability. This approach has increasingly limited explanatory value in the context of ESG reporting because sustainability disclosures are generally produced through layered institutional processes, including internal verification, reporting mechanisms, audits, and governance approvals. Within such structures, fault may arise not solely from a single individual act, but from governance configurations that allow misleading information to be published without adequate control. Scholarship emphasizes that decentralized governance creates dispersed lines of accountability, requiring fault analysis to evaluate how institutional design shapes the allocation of responsibility rather than merely identifying an individual actor (Chien et al., 2025).

The second issue lies in the legal significance of compliance architecture, disclosure quality, and ESG data verifiability in shaping corporate fault attribution. In the ESG context, liability assessment is strongly influenced by whether organizational systems provide adequate mechanisms for oversight, validation, and information traceability. When ESG data cannot be verified, internal oversight is weak, or reporting quality is deficient, the boundary between ordinary governance weakness and institutional fault becomes increasingly significant from a legal perspective. Studies on ESG digital transformation indicate that technology-based transparency, distributed ledger technology (DLT), and auditable reporting systems can enhance data integrity and strengthen decision traceability, thereby facilitating proof of the relationship between governance failure and ESG misrepresentation (Xia et al., 2022). Conversely, opaque, inconsistent, or difficult-to-verify disclosure structures may weaken corporate fault attribution while simultaneously creating greater space for greenwashing.

The third issue concerns distributed knowledge and collective institutional responsibility in constructing corporate fault attribution. In many ESG misrepresentation cases, knowledge of data inaccuracies or legal risks is not concentrated in a single individual, but is distributed among auditors, data managers, governance committees, advisors, and strategic decision-makers.

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Under such conditions, the assessment of corporate fault no longer depends solely on proving individual intent, but also on the existence of organizational systems capable of integrating information, detecting inconsistencies, and correcting potential deception. Scholarship indicates that ESG disclosure quality, governance orientation, and oversight structures directly influence institutional capacity to produce traceable accountability and clearer distributions of responsibility (Helfaya et al., 2023). If information fragmentation is allowed to persist and coordination weaknesses evolve into permanent structural failures, collective institutional responsibility may become a relevant basis for corporate fault attribution.

Nevertheless, the expansion of fault attribution through institutional reasoning must not develop into excessive criminalization of all ESG governance failures. Not every reporting inaccuracy, internal inefficiency, or methodological imperfection may be qualified as a basis for fraud-based liability. The risk of greenwashing becomes legally significant when ESG disclosures function more as reputational signals than as substantively verifiable representations. Scholarship emphasizes that opportunistic disclosure may arise when governance incentives prioritize image-building over genuine ESG implementation, thereby increasing the risk of market deception and distortion of corporate accountability (Sutisman & Noy, 2024). Accordingly, fault attribution must remain limited to circumstances in which structural weaknesses materially contribute to deception, rather than merely reflecting administrative imperfections or ordinary operational deficiencies.

Accordingly, corporate fault attribution in ESG misrepresentation must be understood through institutional responsibility shaped by governance design, disclosure quality, independent verification, and the traceability of decision-making processes. Within decentralized ESG governance architectures, fault may arise from tolerance of unreliable systems, fragmented oversight, or distributed knowledge that fails to be integrated into corrective mechanisms. Therefore, corporate liability cannot be reduced solely to individual intent, but must be assessed based on whether organizational structures materially facilitate deception or permit institutional failures to persist. Scholarship on decentralized ESG governance indicates that fault attribution becomes most defensible when governance, transparency, and verification systems are analyzed as coherently integrated elements within organizational architecture (Chien et al., 2025). Under this framework, corporate liability assessment may be placed on a more proportionate and analytically defensible basis for distinguishing ordinary governance weaknesses from ESG-based corporate fraud.

C. Comparative Liability Thresholds Across the UK, US, and EU

Once corporate fault in ESG misrepresentation can be doctrinally attributed to the corporate entity, legal analysis moves from the issue of attribution to the comparative question of how legal systems determine liability thresholds, forms of escalation, and the legitimacy of intervention against ESG-related deception. Accordingly, the central question is not merely whether ESG deception may generate legal responsibility, but whether the United Kingdom, the United States, and the European Union construct convergent or divergent thresholds in shifting regulatory misstatement toward more severe legal consequences. Scholarship indicates that these three jurisdictions connect ESG accountability with governance, disclosure, and risk management, but through legal architectures that are not identical (Ventura, 2023a).

As a starting point for comparison, the United Kingdom presents a liability model that remains rooted in fiduciary duties and domestic corporate governance, such that ESG accountability thresholds are largely shaped through directors' duties, board oversight, and governance committee structures. Within this framework, ESG failures may evolve into legal exposure when sustainability risks are associated with weak managerial oversight, the long-term interests of the company, or their effects on stakeholders. Although post-Brexit regulatory divergence from the European Union has occurred, cross-border regulatory expectations continue to influence liability thresholds, particularly for corporate entities linked to European markets (Akyildirim et al., 2024). Accordingly, the United Kingdom model reflects a fiduciary governance-based accountability framework that does not rely solely on internal oversight, but also remains adaptive to cross-jurisdictional ESG pressures.

As a comparative counterpart to the United Kingdom model, which is more deeply rooted in fiduciary governance, the United States constructs ESG liability thresholds through a more fragmented legal architecture oriented toward governance and litigation. No single ESG statute exists, and legal exposure therefore develops through a combination of corporate governance controls, securities law, enforcement mechanisms, and market pressures. Within this system, ESG disclosure acquires legal significance when it is connected to investor risk, board accountability, or weaknesses in internal corporate controls that may affect market integrity. Scholarship emphasizes that the United States model remains strong in governance-based oversight, but depends more heavily on a combination of litigation, federal and state rules, and market dynamics than on a more centralized codified approach (Rey, 2022). Therefore, the pathway of escalating liability within the United States system tends to be more selective, case-specific, and not always directly connected to ESG-specific regulatory regimes.

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As the most codified comparative model, the European Union represents a more preventive and structured approach in constructing ESG liability thresholds. Regulatory developments such as the Corporate Sustainability Due Diligence Directive (CSDDD), the Corporate Sustainability Reporting Directive (CSRD), and other disclosure instruments demonstrate that ESG is no longer positioned as a voluntary commitment, but as a governance and due diligence obligation capable of triggering legal consequences. Within this framework, corporate responsibility is extended to value chains, board oversight, and the integrity of sustainability reporting, such that liability thresholds are formed more explicitly through formal regulatory design (Mohammed et al., 2024). Compared with the United Kingdom and the United States, the European Union places greater emphasis on prevention, harmonization, and standardization through integrated disclosure structures and systematically preventive obligations.

When these three legal systems are compared, functional divergence becomes evident in the construction of ESG liability thresholds. The United Kingdom retains a fiduciary accountability logic, the United States emphasizes a governance–litigation hybrid model, whereas the European Union moves toward codified due diligence accountability. Nevertheless, all three demonstrate convergent normative pressures, particularly in strengthening the relationship between governance duties, ESG disclosure, and corporate risk management. In addition, cross-jurisdictional influence, particularly the Brussels Effect, indicates that European Union ESG regulation forms *de facto* standards that also influence corporate practices beyond Europe (Alamillos & Mariz, 2022). Therefore, differences in legal system design do not eliminate the tendency toward partial harmonization in the development of global ESG accountability, although their normative pathways and legal instruments remain distinct.

As a synthesis of this comparison, the analysis demonstrates that the United Kingdom, the United States, and the European Union do not establish identical thresholds in assessing ESG greenwashing or corporate ESG failures, yet each presents complementary liability logics. The United Kingdom strengthens accountability through fiduciary duties, the United States through a combination of governance and litigation, whereas the European Union emphasizes due diligence obligations and more codified disclosure structures. Their comparative significance lies in the fact that no single model is entirely dominant; rather, coherent ESG legal reconstruction requires a synthesis of governance, disclosure, oversight, and escalation legitimacy built through different approaches across jurisdictions. Accordingly, the assessment of corporate fault in ESG matters cannot be determined solely by the existence or absence of deception, but also by how each legal system constructs the relationship between governance, risk, and corporate accountability (Ventura, 2023b).

D. Reconstructing a Comparative Criminal Fraud Threshold Model for ESG Misrepresentation

The preceding doctrinal, attributional, and comparative analyses demonstrate that ESG greenwashing cannot be coherently assessed through fragmented legal approaches that treat deception, institutional fault, and regulatory responses as separate and isolated issues. Accordingly, the central issue is no longer whether ESG misrepresentation may generate legal liability, but rather which legal framework is capable of determining when sustainability-related deception exceeds regulatory non-compliance and moves toward the threshold of corporate fraud. To address this issue, a comparative model is required that is both structured and sufficiently adaptive to capture sectoral, jurisdictional, and governance variations. In this context, the Comparative Criminal Fraud Threshold Model for ESG Misrepresentation (CCFT-ESG) provides an analytical framework that conceptualizes ESG misreporting as a threshold-crossing outcome arising from a latent propensity to misrepresent (Saxena et al., 2024). The model integrates three principal drivers derived from fraud and ESG governance literature, namely external pressure, opportunity embedded within governance and control environments, and organizational rationalization, which collectively explain how ESG deception evolves from technical deviation into a more serious form of blameworthiness (Fitriastuti et al., 2022). Accordingly, the analytical framework no longer depends on a single legal test, but on the convergence of institutional and structural factors that permit more proportionate legal classification.

As the initial element within this model, material falsity functions to distinguish ESG communications that remain aspirational or reputational in nature from representations that are objectively false, misleading, or strategically distorted. ESG literature indicates that greenwashing commonly emerges through a gap between ESG disclosure and actual performance, or a disclosure–performance gap, which may generate concrete consequences for market perception, investor confidence, and governance legitimacy (Ren et al., 2024). Within this framework, legal reclassification cannot rest solely on technical ambiguity or administrative imperfection, but must begin when sufficiently clear material deviation exists to affect legal assessment of the accuracy, integrity, and reliability of sustainability disclosures. Accordingly, material falsity becomes the first analytical threshold in determining when ESG misrepresentation shifts from informational deviation toward more serious legal exposure.

Moving beyond the threshold of material falsity, the next elements in this model are institutional knowledge and organizational fault, which substantively correspond to the dimensions of opportunity and rationalization within CCFT-ESG. ESG deception does not arise solely from individual conduct, but is also embedded within governance structures, oversight weaknesses, organizational

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incentives, information asymmetries, and control mechanisms that enable misrepresentation to be produced or sustained. Scholarship emphasizes that board quality, oversight independence, auditing, and the corporate control environment play significant roles in expanding or limiting opportunities for misreporting (Gidage, 2025). At the same time, managerial rationalization, reputational legitimacy, and compensation incentives may generate internal justifications for ESG deception, such that corporate fault is no longer understood as an isolated technical deviation, but rather as the product of more systemic organizational tolerance (Liu, 2025). Accordingly, these two elements expand the analysis from identifying material falsity to evaluating how organizational structures shape, sustain, or permit ESG deception to develop institutionally.

As a further element of this institutional evaluation, the fourth component of the model is legally significant harm or reliance, which functions to assess whether ESG deception has reached a level of seriousness that justifies stronger legal responses. Scholarship confirms that ESG misrepresentation affects not only information quality, but may also trigger capital misallocation, decision-making distortions, and erosion of market legitimacy and institutional trust (Wenjiao et al., 2024). Within this framework, seriousness is not determined solely by the existence of inaccurate reporting, but by the extent to which such legal or economic consequences materially affect legally protected interests. Accordingly, legally significant harm or reliance becomes an evaluative threshold linking organizational fault with the normative justification for escalating legal liability.

As the concluding element of this model, escalation legitimacy explains when ESG deception warrants movement from corrective responses toward more severe legal intervention. The CCFT-ESG model reinforces this logic through a contextual threshold structure in which the level of violation is influenced by sector, regulatory regime, enforcement intensity, governance quality, and the probability of detection. Within this framework, legal thresholds are not universal, but may shift according to jurisdictional characteristics, oversight capacity, and differing institutional configurations (Stelios & Lemonakis, 2023). This approach preserves legal proportionality by preventing excessive criminalization of tolerable ESG uncertainty, while simultaneously allowing escalation when deception develops in a persistent, strategic manner and becomes embedded within institutional failures. Accordingly, escalation legitimacy serves as a synthesizing element ensuring that the shift from regulatory violations toward more severe legal consequences remains grounded in contextual, proportionate, and doctrinally defensible assessment.

As a synthesis of these cumulative elements, this cumulative-threshold model provides a more coherent structure for determining when ESG greenwashing moves beyond regulatory misstatement toward the classification of corporate fraud. The framework requires convergence among material falsity, external pressure, institutional opportunity, organizational rationalization, significant legal consequences, and proportionate escalation thresholds. Within this construction, ESG misrepresentation is understood as a legal continuum capable of developing from tolerable inaccuracies to reckless institutional misrepresentation, and under certain conditions reaching a threshold of blameworthiness sufficient to justify stronger legal intervention. Accordingly, this model not only addresses fragmentation within ESG, governance, and corporate law scholarship, but also constructs a comparative architecture that more coherently integrates deception, governance, oversight, and the legitimacy of legal responses (Saxena et al., 2024).

IV. CONCLUSIONS

This study aims to formulate an analytical framework for determining when ESG greenwashing may shift from regulatory violations or ordinary misrepresentation toward the classification of corporate criminal fraud within contemporary corporate criminal liability regimes. The analysis demonstrates that ESG misrepresentation cannot be treated as a single legal category, but must instead be understood as a continuum of liability extending from sustainability puffery, negligent ESG reporting, and reckless institutional misrepresentation to intentional ESG-related criminal fraud. This transition is determined not merely by the existence of false information, but by the convergence of material falsity, organizational knowledge, institutional fault, legally significant harm or reliance, and proportionate escalation legitimacy within complex corporate governance contexts.

Building upon this threshold-based construction of liability, this article expands corporate criminal law scholarship through the integration of Organizational Fault Theory, Fraud Triangle Theory, and a cross-jurisdictional comparative approach to develop the Comparative Criminal Fraud Threshold Model for ESG Misrepresentation (CCFT-ESG). The model emphasizes that ESG deception should not be assessed solely through compliance failures or disclosure deficiencies, but through structures of organizational fault that explain how fragmented governance, distributed knowledge, and verification weaknesses may establish the basis for attributing corporate criminal liability. In practical terms, this framework provides a more proportionate evaluative basis for legislators, regulators, prosecutors, auditors, and compliance actors to distinguish ordinary governance weaknesses from ESG deception that has reached a threshold of legal blameworthiness sufficient to justify stronger intervention. Accordingly, the model

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not only strengthens doctrinal development in corporate criminal law, but also offers a more structured analytical framework for assessing legal liability within complex ESG governance systems.

As an extension of this analytical framework, the comparative analysis demonstrates that the United Kingdom, the United States, and the European Union do not construct identical ESG liability thresholds, but instead present complementary legal logics through a combination of fiduciary governance, governance–litigation enforcement, and codified due-diligence accountability. These differences confirm that the assessment of ESG deception cannot rely on a single jurisdictional approach, as each legal system constructs distinct relationships among governance, oversight, and the escalation of corporate liability. Accordingly, the most coherent basis for ESG criminal reclassification does not lie in the superiority of any particular jurisdiction, but in a comparative synthesis that integrates fraud doctrine, corporate attribution, materiality, scienter, and preventive accountability structures into a more unified legal model. Thus, this comparative approach reinforces the argument that corporate criminal liability for ESG misrepresentation requires an evaluative framework that is adaptive, proportionate, and doctrinally consistent.

Nevertheless, the analytical framework developed in this study remains subject to several limitations that constrain its scope of generalization and application. This study is doctrinal-comparative and reconstructive in nature, and therefore does not examine enforcement effectiveness, prosecutorial behavior, or patterns of judicial application in ESG misrepresentation cases. In addition, the proposed model remains interpretive and was developed through comparisons of asymmetrical legal systems, such that its application requires contextual caution that takes into account the regulatory design and institutional capacity of each jurisdiction. Furthermore, the evolving dynamics of ESG regulation may affect the calibration of the legal thresholds constructed in this study. Accordingly, these limitations do not negate the analytical contribution of the model, but underscore the need for adaptive interpretive adjustments in its application to evolving legal contexts.

On the basis of these limitations, future research should test CCFT-ESG through empirical analysis of enforcement practices, litigation patterns, and judicial decisions related to ESG misrepresentation. Such testing is important to assess the extent to which this model is capable of explaining the consistency of corporate fault attribution and the legitimacy of escalating criminal liability in actual legal practice. In addition, further studies are relevant for expanding comparative testing across Asia-Pacific systems, OECD jurisdictions, and hybrid regulatory regimes in order to determine whether this model of corporate criminal liability for ESG deception can be developed more adaptively within increasingly transnational sustainability governance. Accordingly, these future research directions are expected to strengthen the external validity and practical applicability of CCFT-ESG in addressing the evolving dynamics of corporate legal liability.

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