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Sustainability Governance Mechanisms and Financed Emission Mitigation: The Mediating Role of Greenwashing Risk in Islamic Banks

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	<b>Abstract</b>
<p><b>Nabeel Raza</b> Research Scholar, Karachi University Business School, University of Karachi, Pakistan- Email: <a href="mailto:nabeelshaikh234@gmail.com">nabeelshaikh234@gmail.com</a></p> <p><b>Dr. Danish Ahmed Siddiqui</b> Associate Professor, Karachi University Business School, University of Karachi, Pakistan-Email: <a href="mailto:danishsiddiqui@uok.edu.pk">danishsiddiqui@uok.edu.pk</a></p>	<p>This study investigates the impact of sustainability governance mechanisms on emission mitigation financed by Islamic banks and tests whether the greenwashing risk accounts for the relationship. The study is based on stakeholder theory, legitimacy theory, institutional theory, and the Islamic ethical perspective of Maqasid al-Shariah. The study employs panel data of Islamic banks in Pakistan for 45 observations covering bank-years from Refinitiv DataStream and banks' sustainability disclosures. Sustainability governance is done by three channels: sustainability committees, sustainability-linked compensation, and sustainability reporting. The indicators of the financed emission mitigation are a binary indicator that records if the bank has environmental and climate-related criteria in its financing decisions, and indicators of the greenwashing risk are captured through a disclosure-performance gap index. The results show that these three factors, sustainability committees, sustainability-linked compensation, and sustainability reporting, have positive and statistically significant impacts on financing emission mitigation. These study findings also help mitigate the risk of greenwashing, indicating that governance enhances the trustworthiness of sustainable practices. This research adds to the sustainable finance and Islamic banking literature by demonstrating governance structures that minimize the disconnect between ESG disclosure and environmental performance.</p>
<b>Keywords:</b>	Sustainability governance, financed emission mitigation, greenwashing risk, Islamic banking, Pakistan.



**INTRODUCTION** Climate change, environmental degradation, and stakeholder demands for responsible finance are creating an evolving financial system in the world (Anser et al., 2024). Banks play a pivotal role in this transition process as they shape the allocation of capital between sectors, projects, and firms (Farooq & Ahmad, 2023). While banks do not always have a direct impact on large-scale emission sources, their lending and investment choices can either enable the lending of funds to activities that release carbon or to cleaner sources of carbon. The environmental responsibility of financial institutions is not only about their operational emissions but also financed emissions, emissions stemming from banks' lending and investment portfolios. This change has turned financing emission mitigation into an issue for regulators, investors, and society (Saif-Alyousfi & Alshammari, 2025; Destek et al., 2025; Kovachevska-Stefanova & Gockov, 2025; Asser et al., 2025a). Islamic banks, specifically, are of particular interest in this discussion owing to the fact that they are based on moral considerations rooted in Shariah. Islamic finance forbids activities that lead to loss, waste, and harm, discourages undue uncertainty and speculation, and encourages fairness, social benefit, and responsible economic practices. Maqasid al-Shariah is the concept of Islamic Finance, and Sharia-compliant activities are linked to a wider range of Islamic values, including preserving and protecting human life, wealth, society, and environment (Chapra, 2008; Dusuki & Abdullah, 2007). Based on this, Islamic banks are expected to be able to prove their ethical commitment to sustainable development, besides complying with financial regulations. But there are unevenly successful applications of sustainability principles in Islamic banking. Although Islamic banks have the potential to be ethically inclined towards supporting sustainability, their governance structures and their actual practice of financing do not always adequately reflect this potential (Farooq & Zaheer, 2015; Jan et al., 2021). Sustainability governance is one of the important factors that can reinforce the sustainability performance. The banking industry has a few sustainability governance mechanisms, such as board-level or management-level sustainability committees, executive compensation linked to ESG or climate goals, and sustainability reporting systems (Farooq et al., 2023; Anser et al., 2025b; Naeem et al., 2025; Bohio et al., 2025). These can incorporate environmental issues into strategic decision-making, enhance accountability, diminish information asymmetry, and foster financing decisions that factor in climate risk (Khan et al., 2024). When sustainability becomes an integral part of corporate governance and strategy, it can have an impact on organizational processes and long-term performance, according to Eccles, Ioannou, and Serafeim (2014). This governance challenge is even more critical for Islamic banks as sustainability governance needs to coexist with Shariah governance and ethical accountability. However, greenwashing is a great concern, even as ESG frameworks grow in use. The term greenwashing is used to describe misleading or misleadingly large claims about the environment that make it look like there is sustainability, but there isn't (Delmas & Burbano, 2011). Banks can greenwash in banking by issuing sustainability reports, by green financing, or by taking climate responsibility without ceasing to finance environmentally polluting activities. This disclosure–performance gap erodes stakeholder confidence and undermines the impact of sustainability programs (Memon et al., 2025; Mujtaba et al., a). Lyon and Montgomery (2015) suggest that greenwashing is more than just a communication issue, as it can mislead people and make it easier to focus on the wrong issues to improve the environment. Misleading sustainability claims are a special concern for Islamic banks since they contradict ESG accountability and Islamic ethics. Even if an Islamic bank communicates environmental responsibility, but does not consider climate factors while providing financing, it has two aspects of risk of legitimacy, namely loss of social legitimacy and loss of ethical legitimacy (Mujtaba et al., 2025b; Naeem et al., 2026). In the context of legitimacy theory, adopting sustainability practices can be seen as a way to increase social approval, but this adoption can be symbolic unless it is backed by good governance and monitoring (Suchman, 1995; Shahab et al., 2025; Shaikh et al., 2025a). Moreover, according to institutional theory, external pressures can also cause firms to establish formal sustainability structures without making them a part of the decision-making process (DiMaggio & Powell, 1983). Thus, the question of whether sustainability governance is present and whether it serves to minimise the greenwashing risk and enhance environmental outcomes has to be addressed. Focusing on the existing research, most of it has been on ESG disclosure, CSR reporting, financial performance, or stakeholder trust (Sial et al. 2025; Shaikh et al. 2025b). There is less focus on the environmental dimension of financed emission mitigation, particularly in Islamic banking in emerging markets. Further, there is limited research that investigates greenwashing risk as a mediation variable between governance and sustainability performance. This leaves a significant gap in knowledge about whether governance entities actually improve environmental financing decisions or just give the appearance of legitimacy via symbolic disclosure. Hence, the focus of this article is on the effect of the sustainability governance mechanisms on financed emission mitigation in Islamic Banks, while greenwashing risk is a mediator between these two. The study is limited to the Islamic banks of Pakistan as it is an emerging Islamic banking market, where Sustainability governance is still developing, and disclosure practices of ESG are limited. This study has three contributions to make. First, it brings focus away from generalised ESG disclosure and financial performance, towards more direct environmental outcomes and emission mitigation through finance. Secondly, it separates sustainability governance into three individual components: sustainability committees, sustainability-linked compensation measures, and sustainability reporting. Third, it adds a mediating variable of 'greenwashing risk' to account for the relationship between governance mechanisms and environmental performance. The study brings together stakeholder theory, legitimacy theory, institutional theory, and Maqasid al-Shariah in a single, integrated framework for sustainable Islamic banking.



### 1 2. Literature Review and Hypotheses Development

#### 1.1 2.1 Theoretical Foundation

Stakeholder theory provides the first basis for understanding sustainability governance in Islamic banks. Freeman (1984) argues that firms are accountable not only to shareholders but also to a wider set of stakeholders, including customers, regulators, employees, communities, and the natural environment. For banks, stakeholder accountability is particularly important because their environmental influence is often indirect. Through lending and investment, banks can enable either high-emission sectors or sustainable projects. Stakeholders increasingly expect banks to assess climate-related risks and integrate environmental criteria into financing decisions (Krueger, Sautner, & Starks, 2020). The accountability of the stakeholders is strengthened in Islamic banking through religious and moral responsibilities, as Islamic finance is supposed to ensure justice, accountability, and social welfare (Dusuki & Abdullah, 2007).

From a legitimacy theory perspective, the explanation for the adoption of sustainability practices by banks is that these practices can be symbolic. Legitimacy is "the perception that the action of an organization is desired and appropriate within a socially defined system of norms and values" (Suchman, 1995). In order to remain legitimate in the eyes of regulators, investors, and the public, banks can choose to engage in ESG reporting, establish sustainability committees, and develop green financing narratives. Legitimacy seeking can, however, also be the source of "greenwashing" when disclosure is undertaken for perception management rather than for performance improvement. Therefore, legitimacy theory is key to understanding the importance of assessing sustainability governance based on real environmental impacts.

Another explanation for the influence of regulatory, normative, and cultural pressures on organizational behaviour comes from institutional theory. DiMaggio and Powell (1983) contend that organizations tend to become alike in response to coercive, normative, and mimetic pressures. Islamic banks are subject to conventional regulatory pressure, disclosure obligations under ESG principles, and Shariah governance obligations. In some instances, these pressures can help drive the implementation of sustainability governance mechanisms, but in other instances, if enforcement is not stringent, then the mechanism may be adopted in a 'ceremonial' way. Thus, institutional theory emphasizes the importance of separating formal governance adoption from substantive environmental integration.

The Islamic ethical framework brings a normative dimension. Maqasid al-Shariah focuses on the preservation of life, wealth, intellect, faith, and welfare, and modern interpretations have been increasingly linking these goals to environmental protection (Chapra, 2008; Rifat, Toriq, & Ahmed, 2020). Islamic banks should thus harmonise the financing with ethical and environmental goals. But the ethical potential can only be realised with effective processes of sustainability governance that enable real lending and investment to be affected.

#### 2.2 Sustainability Governance and Financial Emission Mitigation

Sustainability governance mechanisms are formal mechanisms and processes within which sustainability is incorporated into organisational decision-making. Sustainability committees can help oversee climate and environmental risk in banks, sustainability-linked compensation can help incentivize managers to view their risk-taking activities from an environmental perspective, and sustainability reporting can bolster transparency and accountability. These mechanisms are supposed to affect the financing of emission reduction projects, including by making banks more aware of environmental risk, steering clear of highly polluting sectors, and promoting green financing.

Banks with more robust governance frameworks are more likely to respond to stakeholder demands for accountability to climate change from a stakeholder perspective. On the institutional side, the mechanisms support banks' compliance with the evolving ESG principles and regulations. Empirical sustainability research also shows that increased governance and sustainability integration positively affect the organization's processes and sustainability performance (Eccles et al., 2014; Minciullo, 2019). The mechanisms used in Islamic banking can facilitate the translation of the Islamic ethic into practice in terms of financing. Thus, the first hypothesis is made:

*H1: Sustainability governance mechanisms have a positive effect on financed emission mitigation.*

#### 1.2 2.3 Sustainability Governance and Greenwashing Risk

Increasing the monitoring and improving the credibility of ESG disclosures can also help to lower greenwashing risk within sustainability governance. Greenwashing is the practice of presenting false information and/or embellishing a company's or organization's environmental performance (Delmas & Burbano, 2011). However, weak governance provides opportunities for symbolic behaviour, as sustainability claims are not adequately verified with actual practices. Good governance, on the other hand, can mitigate the



disclosure-performance gap by introducing internal controls, holding boards accountable, providing incentives for executives, and developing more effective reporting frameworks.

Greenwashing in Islamic banks can be particularly serious, as misinformation about the environment can be against the ethics of Sharia-compliant banking. Governance mechanisms can then serve to ensure social legitimacy and religious-ethical credibility. If governance is merely lip service, though, it can be ineffective to stop greenwashing. The relationship should be negative, as good sustainability governance should decrease opportunistic disclosure and bring together ESG communication and financing decisions. Thus:

*H2: Sustainability governance mechanisms have a negative effect on greenwashing risk.*

### 1.3 2.4 Greenwashing Risk and Financed Emission Mitigation

Greenwashing risk is likely to reduce the effectiveness of financed emission reduction, which manifests as a mismatch between banks' claims and actions. Carbon-intensive banks can release sustainability reports or champion green projects without actually changing their financing practices. Carbon-intensive banks can have sustainability reports or champion green projects without changing their financing practices. This is less than making real progress toward the environment and focuses on image management instead of substantive change. Lyon and Montgomery (2015) describe greenwashing as a reputation management tactic, but not always a successful environmental initiative.

Greenwashing is particularly concerning in Islamic banking due to the fact that the Islamic banking principles of transparency, accountability, and ethical conduct are violated. The higher a bank's greenwashing risk, the less likely they are to incorporate environmental screening into lending and investment processes. Therefore:

*H3: Greenwashing risk has a negative effect on financed emission mitigation.*

### 1.4 2.5 Mediating Role of Greenwashing Risk

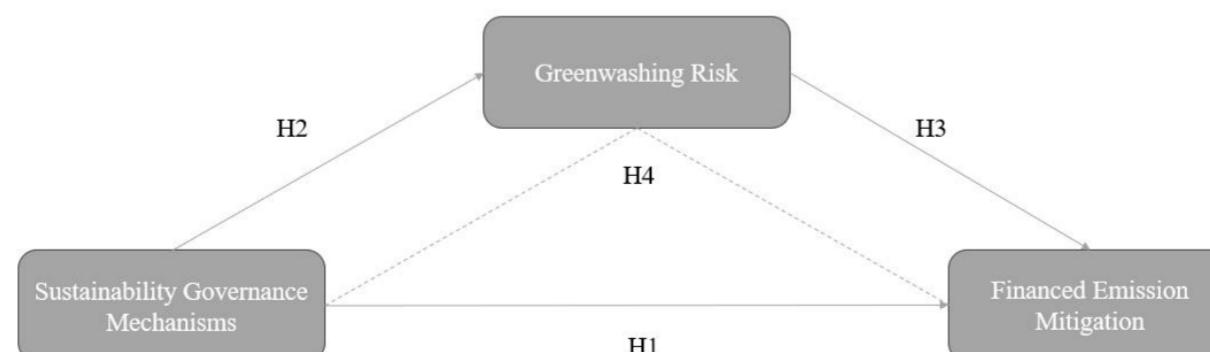
Sustainability governance and financed emission mitigation do not necessarily go hand in hand. Governance mechanisms can contribute to better environmental outcomes since they can decrease the risk of greenwashing. Committees, reporting frameworks, and compensation frameworks, when effective, help narrow the disconnect between ESG disclosures and environmental performance. This lends credibility to sustainability practices and boosts the chances of the criteria in the financing process being climate-related.

On the other hand, when there is a high risk of greenwashing, governance mechanisms could fail to deliver environmental results due to the weak ability to achieve sustainability practices. This mediation argument is based on the three theories: stakeholder, legitimacy, and institutional. Governance alleviates information asymmetry, diminishes symbolic legitimacy-seeking, and enhances institutional accountability. In Islamic banking, it also facilitates the connection between formal ESG practices and Maqasid al-Shariah. Thus:

*H4: Greenwashing risk mediates the relationship between sustainability governance mechanisms and financed emission mitigation.*

## 2.6 Conceptual Framework

The conceptual framework of this study is given below in Figure I.





### 2 3. Methodology

#### 2.1 3.1 Research Design and Data

The study is quantitative and of a panel data design. The deductive approach is suitable as hypotheses were formulated based on existing theories, and secondary data were used to test the hypotheses. Panel data enables the analysis to reflect both cross-sectional differences (between Islamic banks) and time-series differences (between the governance and environmental practices of Islamic banks). It can be used for analyzing bank behavior with time and for controlling for unobserved heterogeneity (Baltagi, 2008).

The data were obtained from Refinitiv DataStream and banks' annual sustainability disclosures. Refinitiv provides standardized ESG, governance, financial, and environmental indicators. The sample consists of Islamic banks in Pakistan with available governance, financial, and sustainability data. The final dataset contains 45 bank-year observations. Although the sample is modest, it reflects the limited availability of ESG and emission-financed data in emerging markets.

##### 2.1.1 3.12 Data Source

The statistics under this paper are acquired through the Refinitiv DataStream, which is the source of information on all financial institutions and ESG-related information globally. The DataStream is very popular in academic research because of its dependability and uniformity in the data collection procedure.

The dataset includes:

- Financial performance indicators
- ESG-related governance variables
- Environmental metrics
- Sustainability disclosures

##### 2.1.2 3.3 Sample Selection

The sample is made up of Islamic banks in Pakistan, which were selected according to their data found in DataStream. This paper has a time range (e.g., 2015-2024) to adequately observe the panel.

The selection criteria are:

- Banks that are Islamic or Shariah-compliant.
- Sustainability and governance data availability.
- Access to financial and environmental indicators.

The final sample is 45 bank-year observations due to the limitation of data, which is in line with the previous studies in emerging markets, where ESG disclosure is poor.

#### 2.2 3.4 Variable Measurement

FEM is the dependent variable. It is measured as a binary indicator equal to 1 if the bank reports the incorporation of environmental risk assessment, climate-related lending restrictions, green financing criteria, or sustainable investment policies into financing decisions, and 0 otherwise. This proxy is used because direct financed-emission numerical disclosures remain limited in Pakistan and other emerging markets.

This is captured by the independent variables, which are connected to sustainability governance mechanisms. Sustainability committee (SUS\_COM) is coded as 1 when the bank has a sustainability, ESG, or board-level committee in place to oversee sustainability. Sustainability-linked compensation (SUS\_COMP): Coded 1 if executive remuneration is linked to ESG, climate, or sustainability targets. Sustainability reporting (SUS\_REP) is coded 1 if the bank issues a sustainability report, an ESG report, an integrated report, and/or a climate-related disclosure.

The mediating variable is greenwashing risk (GW\_RISK). It is a continuous score from 0 to 1 that reflects the difference between the ESG disclosure scores and the environmental performance effectiveness. The higher the score, the more the sustainability claims do not align with the environmental performance. This is a conceptual approach that sees greenwashing as the gap between symbolic disclosure and concrete environmental actions (Delmas & Burbano, 2011).



Return on equity (ROE) and leverage (LEV) are used as control variables. ROE controls for profitability differences, while leverage controls for financial risk and capital structure differences that may affect sustainability behavior.

### 2.2.1 3.5 The regression model is based on hypotheses.

Equation 1 consists of the effect of sustainability governance mechanisms on financed emission mitigation.

$$FEM_{it} = \beta_0 + \beta_1SUS\_COM_{it} + \beta_2SUS\_COMP_{it} + \beta_3SUS\_REP_{it} + \beta_4ROE_{it} + \beta_5LEV_{it} + \epsilon_{it}$$

Equation 2 consists of the effect of sustainability governance mechanisms on greenwashing risk.

$$GW\_RISK_{it} = \beta_0 + \beta_1SUS\_COM_{it} + \beta_2SUS\_COMP_{it} + \beta_3SUS\_REP_{it} + \beta_4ROE_{it} + \beta_5LEV_{it} + \epsilon_{it}$$

Equation 3 is based on the impact of greenwashing risk on financed emission mitigation.

$$FEM_{it} = \beta_0 + \beta_1GW\_RISK_{it} + \beta_2ROE_{it} + \beta_3LEV_{it} + \epsilon_{it}$$

Equation 4 consists of the mediating role of greenwashing risk in the relationship between sustainability governance and financed emissions.

$$FEM_{it} = \beta_0 + \beta_1SUS\_COM_{it} + \beta_2SUS\_COMP_{it} + \beta_3SUS\_REP_{it} + \beta_4GW\_RISK_{it} + \beta_5ROE_{it} + \beta_6LEV_{it} + \epsilon_{it}$$

#### Whereas;

$FEM_{it}$ =Financed Emission Mitigation of firm  $i$  in time  $t$

$SUS\_COM_{it}$ =Sustainability Committee of firm  $i$  in time  $t$

$SUS\_COMP_{it}$ =Sustainability Compensation of firm  $i$  in time  $t$

$SUS\_REP_{it}$ =Sustainability Reporting of firm  $i$  in time  $t$

$GW\_RISK_{it}$ =Greenwashing Risk of firm  $i$  in time  $t$

$ROE_{it}$ =Return on Equity of firm  $i$  in time  $t$

$LEV_{it}$ =Leverage of firm  $i$  in time  $t$

$\beta_0$  = Constant value

### 2.3 3.6 Estimation Technique

Because FEM is binary, panel logit regression is used to test the direct effect of sustainability governance mechanisms on financed emission mitigation. Fixed effects panel regression is used to analyze the effect of governance mechanisms on greenwashing risk. Mediation analysis is conducted through stepwise regression by estimating: first, the effect of governance mechanisms on FEM; second, the effect of governance mechanisms on greenwashing risk; third, the effect of greenwashing risk on FEM; and fourth, the full mediation model including both governance mechanisms and greenwashing risk. Mediation is supported when governance mechanisms significantly influence the mediator, the mediator significantly influences FEM, and the governance coefficients decline after including the mediator.

Diagnostic tests include multicollinearity checks using variance inflation factors, heteroskedasticity tests, autocorrelation checks, and model specification assessment through panel-model selection procedures. The use of secondary data avoids direct interaction with human participants, and all data are taken from authorized databases and published disclosures.

## 3 4. Results

### 3.1 4.1 Descriptive Statistics

The descriptive statistics show that the mean value of FEM is 0.62, indicating that 62% of the bank-year observations report some incorporation of environmental or climate-related criteria into financing decisions. Sustainability reporting has the highest governance adoption mean at 0.67, followed by sustainability committees at 0.56 and sustainability-linked compensation at 0.42. The mean greenwashing risk score is 0.38, with values ranging from 0.05 to 0.82. This suggests that some banks have a substantial gap between ESG disclosure and actual environmental performance.

**Table 1. Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
FEM	45	0.62	0.49	0	1
SUS COM	45	0.56	0.5	0	1
SUS COMP	45	0.42	0.5	0	1
SUS REP	45	0.67	0.47	0	1
GW RISK	45	0.38	0.21	0.05	0.82
ROE	45	0.14	0.06	0.03	0.29
LEV	45	7.85	2.41	3.2	12.6

### 3.2 4.2 Correlation Analysis

The correlation results offer initial support for the desired correlations. The relationships between FEM and sustainability committees (0.41), sustainability-linked compensation (0.36), and sustainability reporting (0.44) are positive. The negative correlations are: Greenwashing risk with FEM (-0.39), sustainability committees (-0.42), sustainability-linked compensation (-0.37), and sustainability reporting (-0.45). The results of these patterns indicate that a better performance of sustainability governance is linked with higher emission mitigation financing and a lower risk of greenwashing.

**Table 2. Correlation Matrix**

Variable	FEM	SUS COM	SUS COMP	SUS REP	GW RISK	ROE	LEV
FEM	1						
SUS COM	0.41	1					
SUS COMP	0.36	0.48	1				
SUS REP	0.44	0.52	0.46	1			
GW RISK	-0.39	-0.42	-0.37	-0.45	1		
ROE	0.21	0.18	0.14	0.2	-0.16	1	
LEV	-0.17	-0.12	-0.15	-0.18	0.22	-0.34	1

### 3.3 4.3 Direct Effects of Sustainability Governance on FEM

A logit regression panel model revealed that all three sustainability governance mechanisms are positive and statistically significant with financed emission mitigation. The coefficient of sustainability committees is 1.215, and they are statistically significant at the 1% level. The coefficient of sustainability-linked compensation is 0.987 and significant at 5%. The sustainability reporting has the highest correlation, 1.348, and is significant at the 1% level. ROE also has a positive effect, while leverage has a negative effect. The results of these findings confirmed H1 and revealed that increasing sustainability governance enhances the possibility of the incorporation of environmental criteria as part of Islamic banks' financing decisions.

**Table 3. Panel Logit Regression: Direct Effects on FEM**

Variable	Coefficient	Std. Error	z-Statistic	Prob.
SUS COM	1.215	0.462	2.63	0.009
SUS COMP	0.987	0.421	2.34	0.019
SUS REP	1.348	0.498	2.71	0.007
ROE	0.842	0.376	2.24	0.025
LEV	-0.114	0.051	-2.23	0.026
Constant	-1.965	0.782	-2.51	0.012



### 3.4 4.4 Sustainability Governance and Greenwashing Risk

The fixed effects panel regression also reveals that the governance mechanisms on sustainability have a significant negative effect on greenwashing risk. The coefficients for sustainability committees are determined to be -0.162, sustainability-linked compensation to be -0.138, and sustainability reporting to be -0.181. All are significant at the 0.05 level. This indicates that better-governed banks are less likely to have significant “ESG disconnect”, that is, to be reporting on environmental outcomes that are not aligned with their environmental disclosures. The findings align with H2 and help to show that governance mechanisms enhance the credibility of sustainability practices.

**Table 4. Fixed Effects Regression: Governance and Greenwashing Risk**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SUS COM	-0.162	0.061	-2.65	0.011
SUS COMP	-0.138	0.058	-2.38	0.022
SUS REP	-0.181	0.064	-2.83	0.007
ROE	-0.094	0.041	-2.29	0.027
LEV	0.028	0.013	2.15	0.036
Constant	0.512	0.147	3.48	0.001

### 3.5 4.5 Greenwashing Risk and FEM

The panel regression analyzing the impact of greenwashing risk has a large negative coefficient on financed emission mitigation. The coefficient of GW\_RISK is -1.784 and significant at the 1 per cent level. This confirms H3 and reveals that the probability of Islamic banks taking environmental criteria into consideration in their financing decisions decreases when their greenwashing risk increases. From a practical standpoint, the absence of alignment between disclosure and environmental performance will result in a lower likelihood of sustainability claims being meaningful in financing emission reductions.

**Table 5. Panel Logit Regression: Greenwashing Risk and FEM**

Variable	Coefficient	Std. Error	z-Statistic	Prob.
GW RISK	-1.784	0.653	-2.73	0.006
ROE	0.716	0.342	2.09	0.037
LEV	-0.098	0.047	-2.08	0.038
Constant	-1.403	0.621	-2.26	0.024

### 3.6 4.6 Mediation Analysis

Mediation mechanisms and greenwashing risk are added to the full mediation model. The risk of greenwashing is negative and substantial, -1.432. The coefficient of the sustainability governance mechanism decreases from the direct-effects model in three aspects: SUS\_COM from 1.215 to 0.764, SUS\_COMP from 0.987 to 0.621, and SUS\_REP from 1.348 to 0.842. Due to the governance coefficients that remained, but are not necessarily zero, the results suggest partial mediation. This confirms that financed emission mitigation is directly and indirectly influenced by sustainability governance, both because of the reduction of the risk of greenwashing.

**Table 6. Full Mediation Model**

Variable	Coefficient	Std. Error	z-Statistic	Prob.
SUS COM	0.764	0.392	1.95	0.051
SUS COMP	0.621	0.361	1.72	0.085
SUS REP	0.842	0.428	1.97	0.049
GW RISK	-1.432	0.602	-2.38	0.017
ROE	0.658	0.331	1.99	0.047
LEV	-0.091	0.044	-2.07	0.039



### Discussion

The results indicate that sustainability governance mechanisms play an important role in the financing of emission reduction in Islamic banks. Sustainability committees, sustainability-linked compensation, and sustainability reporting all raise the likelihood that banks consider environmental or climate considerations in financing. This underscores the fact that governance mechanisms are not just pieces of machinery; they can have an impact on organizational priorities and on the allocation of capital if they are in place properly. This finding is in line with the stakeholder theory, as banks seem to be reacting to the expectations of stakeholders for climate responsibility. It is also consistent with institutional theory in the sense that governance mechanisms enable banks to adapt to new norms and regulatory expectations regarding the environment, social, and governance (ESG) issues (Freeman, 1984; DiMaggio & Powell, 1983).

The coefficient of sustainability reporting in the direct model is the strongest positive coefficient. This implies that reporting can contribute significantly as a tool to put environmental commitments into sight and into measures. But reporting is not enough without credible data and environmental action. The negative effect of governance mechanisms on the greenwashing risk validates the fact that sustainability governance can increase disclosure credibility. Committees enhance monitoring, compensation provides management incentives, and reporting reduces disclosure. These mechanisms work together to lessen the ability of symbolic sustainability claims.

A key finding is that the risk of greenwashing has a negative impact on the financing of emission mitigation. It demonstrates that the likelihood that banks make environmentally responsible financing decisions is less when there is a disclosure-performance gap. This helps legitimacy theory since it means that symbolic legitimacy seeking may detract from actual performance (Suchman, 1995). Sustainability governance will be less effective if banks just make themselves look sustainable, but don't transform their practices. The finding is also consistent with Delmas and Burbano's (2011) perspective on the impact of greenwashing on the integrity of environmental programmes.

The mediation result is the main contribution of the study. Sustainability governance partially mediates the relationship between sustainability governance and emission mitigation financing. This is done in two ways through governance mechanisms. They directly impact financing decisions through formal structures, incentives, and reporting. Second, they can indirectly achieve environmental benefits due to the reduction of the possibility of 'symbolic' sustainability claims. This discovery will help explain the influence of governance on sustainability performance more fully. It also implies that the quality and authenticity of governance are of importance as important as the existence of formal governance mechanisms.

For Islamic banks, this means a lot. Islamic finance is ethically based, and sustainability governance should not be regarded merely as a regulatory matter. It should be related to the objectives of the Shariah and the bigger responsibility of preventing harm and promoting welfare. There is more than an ESG issue here: the practice of greenwashing in Islamic banking is an ethical issue as well because it is a violation of transparency, accountability, and social responsibility. There is a need for Islamic banks to base their sustainability claims on actual financing and make their operations more Shariah-compliant, which can be achieved through strong governance. Strong governance can assist Islamic banks both to prove their sustainability claims upon actual financing and to enhance stakeholder confidence and Shariah-based legitimacy.

### Conclusion and Implications

This study explored the relationship between sustainability governance mechanisms and financed emission mitigation in Islamic banks, considering the role of greenwashing risk as a mediator between the two. The study concluded that sustainability committees, sustainability-based compensation, and sustainability reporting have a positive impact on the mitigation of financed emissions, using panel data for the Islamic banks of Pakistan. The same governance systems also bring down the risk of greenwashing. The relationship between governance and environmental outcomes is partially mediated by greenwashing risk, while the latter has a negative impact on emission mitigation financing.

The results indicate that sustainable governance becomes imperative to make Islamic banks more eco-friendly. But governance should not be limited to symbolic structures. Committees should be given clear authority, and their compensation should be linked to concrete outcomes, and reporting should be supported by reliable data and external assurance. Islamic banks should incorporate environmental screening as a component of their financing policies, encourage financing of green projects, and minimize risk exposure to high-emission industries.



The policy implications are evident. Regulators need to enhance the ESG disclosure framework, mandate better harmonisation of climate reporting, and promote the independent assurance of sustainability disclosures. Islamic banking regulators and Shariah governance bodies should consider environmental responsibility as part of Shariah governance. Following this, this would help ensure that Islamic banks finance in accordance with the demands of sustainability and Islamic ethical ends.

That's not to say the practical implications aren't as important. Islamic banks should develop the capacity of board and management teams to address sustainability, educate staff on climate risk, and align sustainability with business strategy. They should also minimize greenwashing by ensuring that the financing practices are aligned with the ESG commitments that are reported. This can help build stakeholder confidence, lower reputational risk, and help ensure a stakeholder's long-term competitiveness.

There are limitations to this study. It consists of 45 observations from the bank-year, and this is due to data limitations in emerging markets; however, it may limit generalizability. Only Islamic Banks in Pakistan are studied, and conventional banks or Islamic Banks in other jurisdictions are not included. In the absence of detailed data on financed emissions, there are some proxies used to measure emission mitigation and greenwashing risk. The study is recommended to be extended to other countries, make a comparison between Islamic Banks and Conventional Banks, utilize a more direct measure of financed emission, and employ a qualitative or mixed-method design to explore the process of emergence of greenwashing within banking institutions.

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