

**AN ASSESSMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG)
PRACTICES AMONG REAL ESTATE DEVELOPERS IN BENIN CITY, NIGERIA**

BY

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**UNIVERSITY OF BENIN
BENIN CITY**

NOVEMBER, 2025

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF ESTATE MANAGEMENT
FACULTY OF ENVIRONMENTAL SCIENCE, UNIVERSITY OF BENIN,
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APPROVAL PAGE

I, **Emmanuel Chukwuebuka EJIOGU**, a student in the Department of Estate Management, University of Benin, Benin City, with Matriculation Number **ENV2002750** has completed the requirements for the coursework for the Bachelor of Science degree of the University of Benin. The work embodied in this project is original and has not been submitted in part or whole to any other University or Institution.

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DEDICATION

This project is dedicated to Almighty God, whose grace shone upon us, as well as the Department of Estate Management, University of Benin, Benin City, our Noble tutors, and my family members.

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I give all glory and praise to Almighty God for the gift of life, good health, wisdom, and strength throughout the course of this project. His grace and guidance have been my greatest source of motivation and success.

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To my beloved Uncle Livinus, Aunty Tooche, and sweet siblings, Chidinma (X-kid), Iheomachi (Smarrt), Omasirichi (Udoka) and Chiamaka (my lawyer), thank you for your support (morally, physically, emotionally and financially), for your encouragement, and companionship throughout this academic journey.

Finally, I dedicate this project to everyone who believes in the sustainability practices in which I am raising awareness on and are doing their best to leave this world better than they found it. May our collective efforts continue to preserve of our beloved Nation.

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ABSTRACT

This study assessed the adoption of Environmental, Social, and Governance (ESG) practices among real estate developers in Benin City, Nigeria, with a view to promoting sustainable property development. The study sought to examine the profiles of real estate development companies in Benin City, evaluate their extent of ESG adoption, and identify the factors influencing the implementation of ESG principles. A descriptive survey research design was adopted, and primary data were collected through structured questionnaires administered to registered real estate developers operating in Benin City. Out of 43 identified firms, 30 valid responses were obtained and analyzed using descriptive statistics and multiple regression analysis.

The findings revealed that most developers were small- to medium-sized firms primarily engaged in residential and commercial developments. The overall level of ESG adoption was moderate, with Governance practices recording the highest adoption index (Mean = 3.14), followed by Social practices (Mean = 2.98) and Environmental practices (Mean = 2.86). Governance highlighted activities such as compliance monitoring, transparency, and property audits were more widely implemented than environmental initiatives such as renewable energy adoption and green roofing systems. The study further identified management leadership and commitment, availability of finance, perceived return on investment, and corporate strategy as the most significant factors influencing ESG adoption. Regression analysis showed that institutional factors exerted the strongest influence on ESG adoption, followed by organizational and market factors, collectively explaining 52.5% of the variation in ESG implementation among developers.

The study concludes that while awareness of ESG principles is growing among real estate developers in Benin City, implementation remains largely moderate and compliance driven, with environmental and social dimensions receiving less attention than governance concerns. The study recommends the development of a comprehensive ESG regulatory framework, increased access to green financing, enhanced capacity building, and the institutionalization of ESG reporting standards to improve sustainability performance within Nigeria's real estate sector.

Keywords: Environmental, Social and Governance (ESG), Real Estate Development, Sustainability, Sustainable Property Development, Governance Practices, Benin City, Nigeria.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

In recent years, Environmental, Social, and Governance (ESG) principles have emerged as a globally recognized framework for promoting sustainability and ethical accountability in business operations. This framework has significantly reshaped how success is measured, shifting focus from purely financial returns to a more holistic view that includes environmental impact, social responsibility, and governance transparency (Eccles, Ioannou & Serafeim, 2014; Khan, Serafeim & Yoon, 2016). In the built environment, ESG adoption is particularly critical, as the real estate and construction sectors collectively account for approximately 39% of global carbon dioxide emissions and consume nearly 30–40% of total global energy use (UNEP, 2022). These statistics underscore the urgent need for environmentally conscious practices in the real estate industry.

Globally, the integration of ESG considerations has transformed investment strategies and development practices within the real estate sector. The establishment of the Global Real Estate Sustainability Benchmark (GRESB) in 2009 marked a significant milestone in promoting ESG performance measurement, with its 2023 report reflecting input from over 2,200 participants representing assets worth nearly USD 9 trillion (GRESB, 2023). The growing influence of GRESB demonstrates a broader acknowledgment that ESG is not just an environmental imperative but a strategic approach to long-term stakeholder value creation (Clark, Feiner & Viehs, 2015).

In Nigeria, the need for ESG integration in real estate is increasingly urgent, driven by factors such as rapid urbanization, widespread infrastructural deficits, poor energy efficiency, and extensive environmental degradation (Adebayo, 2019; Nwokoro & Onukwube, 2021). Historically, building practices in the country have emphasized aesthetics and functional performance while neglecting sustainability considerations, resulting in high-energy-use buildings with adverse environmental footprints. With Nigeria's population projected to exceed 375 million by 2050 and an estimated housing deficit exceeding 28 million units, the demand for sustainable and inclusive real estate development has become critical (UN-Habitat, 2020; National Bureau of Statistics, 2022).

Recognizing these challenges, the Real Estate Developers Association of Nigeria (REDAN) inaugurated an ESG Committee in 2024 and published the *Nigerian Real Estate ESG Handbook* to guide industry practitioners. REDAN President Akintoye Adeoye emphasized that ESG adoption offers numerous benefits, including enhanced corporate reputation, improved risk management, increased asset valuation, and competitive advantage within the real estate market (REDAN, 2024). These developments signal a paradigm shift toward responsible and sustainable real estate practices in Nigeria.

Benin City, the capital of Edo State and a prominent urban center in southern Nigeria, provides a relevant context for exploring ESG-aligned real estate development. The city has experienced accelerated growth in residential and commercial real estate, driven by population expansion and urban modernization efforts. Notable projects such as the Kings Square Development and contemporary residential estates reflect a shift toward more integrated urban

development. Moreover, the Edo State Development and Property Corporation (ESDPC) has been instrumental in promoting sustainability through partnerships and initiatives focused on affordable housing and infrastructure improvement (ESDPC, 2023). This positions Benin City as a compelling case study for evaluating ESG application in the Nigerian real estate context, hence this study.

1.2 Statement of the Research Problem

Despite the growing global emphasis on Environmental, Social, and Governance (ESG) principles as a means to achieve sustainable development, the level of adoption within Nigeria's real estate sector remains limited and poorly understood, particularly at the subnational level. Benin City, as a rapidly urbanizing centre, has witnessed a significant increase in property development activity, with real estate developers playing a central role in shaping the built environment. However, the extent to which these developers integrate ESG considerations into their business practices remains largely undocumented. While several international studies (e.g., Eccles et al., 2014; Khan et al., 2016; Clark et al., 2015) have shown that ESG adoption enhances long-term value creation, improves risk management, and contributes to corporate reputation, empirical studies assessing how such principles are being embraced by real estate actors in the Nigerian context are sparse and fragmented.

In Nigeria, available studies have largely focused on general sustainability issues in the construction industry (Adebayo, 2019), housing policy constraints (Nwokoro & Onukwube, 2021), and environmental challenges associated with urban development (Ogunba et al., 2020), with very few exploring ESG as a distinct and structured framework in real estate business practice. Even where ESG is

mentioned, research tends to focus on environmental sustainability alone, neglecting the equally critical social and governance dimensions. Moreover, there is a noticeable absence of location-specific studies that document the characteristics of real estate development companies such as their size, structure, investment strategies, or corporate governance orientation and how these characteristics influence their ESG behaviour. Consequently, there is a critical knowledge gap regarding the profile of developers operating in Benin City and the structural or managerial features that may shape their responsiveness to ESG imperatives.

Furthermore, existing literature fails to sufficiently address the degree or manner in which ESG principles are operationalized in the Nigerian real estate sector. While REDAN's recent development of an ESG handbook (REDAN, 2024) marks an important institutional intervention, there is limited scholarly evaluation of how and whether these guidelines are being adopted in practice at the city level. Specifically, in Benin City, where urban growth and public-private housing initiatives are accelerating, there is a dearth of empirical evidence detailing how ESG frameworks are interpreted, implemented, or resisted by real estate developers. In addition, studies have yet to systematically investigate the underlying factors such as regulatory pressure, market incentives, corporate leadership, or client awareness that facilitate or hinder ESG adoption among practitioners in the Nigerian real estate environment.

In light of these observations, there is need to provide answers to the following questions:

1.2 Research Questions

1. What are the profiles of real estate development companies in Benin City?
2. To what extent do real estate development companies align with ESG principles in the study area
3. What are the factors influencing ESG adoption by real estate developers in the study area?

1.3 Aim and Objectives of the Study

The aim of the study is to examine the compliance of real estate developers in Benin city with ESG principles. This is with a view to engendering sustainable practices in property delivery in the study area.

The specific objectives are

1. Examine the profiles of real estate development companies in the Benin City, Nigeria
2. Evaluate the degree to which ESG considerations are adopted in the business practices of real estate developers in the study area.
3. Identify the factors influencing the adoption of ESG practices among real estate developers in the study area

1.4 Justification of the Study

This study is relevant based on several grounds, both in terms of its practical relevance to the real estate industry in Nigeria and its academic contribution to the literature on sustainable development and ESG integration. First, with real estate and construction contributing significantly to global carbon emissions and energy use (UNEP, 2022), there is a pressing need for localized studies that investigate how sustainability frameworks such as ESG are understood and

implemented in emerging economies like Nigeria. Given that Nigeria is experiencing rapid urbanization and a mounting housing deficit estimated at over 28 million units (UN-Habitat, 2020) the environmental and social impacts of real estate development cannot be ignored. Benin City, as a growing urban hub, presents a critical case for assessing whether developers are aligning their business practices with global sustainability standards or continuing along traditional, unsustainable paths.

Second, the study addresses a notable empirical gap in the existing literature. While global research has established the importance of ESG integration in enhancing firm performance and reducing long-term risk (Eccles, Ioannou & Serafeim, 2014; Khan, Serafeim & Yoon, 2016), very little is known about how these principles are operationalized in Nigeria's real estate sector, especially at the city level. Most Nigerian studies either focus narrowly on environmental sustainability (e.g., Adebayo, 2019) or on broader urban development issues without engaging with the structured ESG framework. This study will therefore provide original insights into the extent of ESG adoption, contextual challenges, and the organizational attributes of developers that influence ESG responsiveness in Benin City. It fills a critical void by bringing together issues of developer profiling, ESG uptake, and contextual drivers in one analytical framework.

Furthermore, the study is timely and policy-relevant. The recent launch of the *Nigerian Real Estate ESG Handbook* by REDAN (2024) reflects growing institutional interest in promoting sustainable real estate practices. However, without empirical data on how developers are responding to such initiatives, policy and advocacy efforts may remain disconnected from on-the-ground realities. This study provides evidence-based insights that can guide REDAN, regulatory

bodies, and government institutions such as the Edo State Development and Property Corporation (ESDPC) in crafting targeted interventions, monitoring frameworks, and capacity-building strategies to improve ESG compliance among developers.

Finally, from an academic standpoint, the study contributes to the evolving discourse on sustainable real estate by advancing knowledge on ESG integration in the Global South, an area that remains underrepresented in the literature. Its findings will be useful not only to scholars in estate management, urban studies, and sustainability, but also to practitioners, investors, and policymakers seeking to balance profitability with social and environmental responsibility in the real estate sector. By offering a grounded understanding of ESG practices in Benin City, the study will serve as a reference point for similar assessments in other urban centres in Nigeria and across Sub-Saharan Africa.

1.5 Scope of the Study

This study approaches real property sustainability from the managerial/corporate dimension, delving into organizational principles of real estate development companies and how it aligns with the ESG principles. This is because successful execution of sustainability considerations in the property development process is hinged on the managerial policies of the developers, hence the focus on corporate/managerial goals of the developers. The study will access the activities of the real estate development companies, among other stakeholder that are relevant to implementation of the ESG agenda. This is because they are primary to sustainable building execution. The study is based in Benin city, being a fast-growing metropolitan city in Nigeria, thereby justifying the need for sustainability consideration in its property development implementation.

1.6 The Study Area

Benin City is the capital of Edo State, located in the South-South geopolitical zone of Nigeria. Geographically, it lies at approximately 6.3390° N latitude and 5.6037° E longitude, centrally positioned within the state and forming part of the Niger Delta region, which is renowned for its cultural heritage and economic significance (Bondarenko, 2005). Benin City is situated about 40 kilometres north of the Benin River and approximately 320 kilometres by road east of Lagos. The city is historically significant as the seat of the ancient Benin Kingdom, with a legacy of centralised governance, rich traditions, and a vibrant arts culture (Muoghalu, 1991).

Today, Benin City is a major economic hub in southern Nigeria, with a diverse economy encompassing government, education, commerce, manufacturing, and services. It is recognised as the centre of Nigeria's rubber industry, and oil production also plays a significant role in the region's economic landscape. The city's strategic location facilitates trade and connectivity, further driving urbanisation and real estate development (Oduro-Kwarteng, 2021).

The real estate sector in Benin City is characterised by a mix of traditional and modern development patterns. There is a growing demand for residential, commercial, and mixed-use properties, driven by population growth, urban expansion, and increased investment interest from both local and diaspora investors. Recent years have seen the emergence of new estates, shopping complexes, and high-rise buildings, reflecting the evolving nature of the city's built environment. However, the sector also faces challenges such as informal

development, infrastructure gaps, and environmental pressures, including waste management and seasonal flooding (Ifediora et al., 2024).

Culturally, Benin City is home to the Edo people, who are known for their distinctive language, dress, and artistic heritage, including the famous Benin bronzes and beadwork. The city's urban form still reflects its historical roots, with remnants of the ancient city walls and moats, and a street pattern converging on the Oba's palace and government quarters. The present Oba retains a traditional and advisory role in local governance, and the city's cultural festivals and monuments continue to attract both national and international attention (Oduro-Kwarteng, 2021).

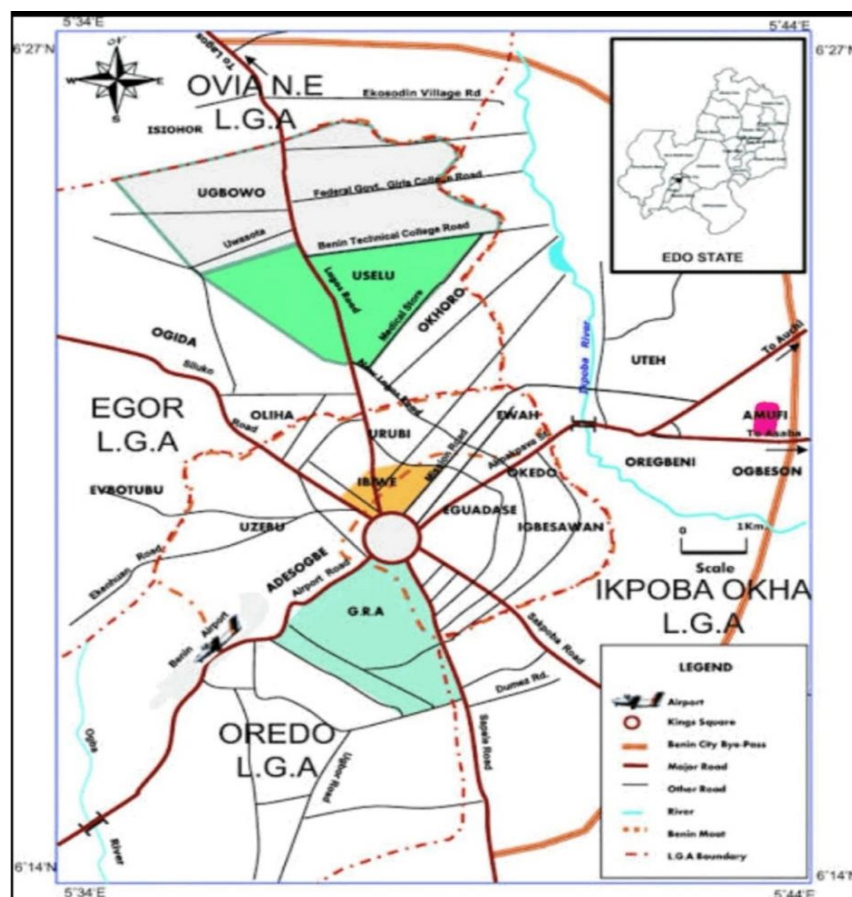


Fig. 1: Map of Benin City. Source: Ministry of Lands and Survey, Benin City (2014) <https://imagesap.goo.gl/WSjQMEkHdWEiJXpG9>

From a real estate perspective, Benin City's market is dynamic yet complex. The sector is influenced by factors such as market volatility, inconsistent regulatory enforcement, and varying levels of developer capacity and professionalism. These factors impact the adoption of Environmental, Social, and Governance (ESG) practices, as developers navigate challenges related to cost, awareness, and compliance with emerging sustainability standards (Milala & Md Ariffin, 2025). The presence of the Edo State Development and Property Corporation (ESDPC) and professional associations such as the Real Estate Developers Association of Nigeria (REDAN) provides institutional support for sector development and the gradual introduction of ESG frameworks (REDAN, 2024).

Despite these challenges, Benin City offers significant opportunities for advancing ESG adoption in real estate. The increasing demand for sustainable housing, commercial spaces, and infrastructure, combined with growing awareness of global best practices, underscores the importance of integrating ESG principles into development activities. As the city continues to urbanise and diversify, the adoption of ESG standards is expected to play a crucial role in shaping a more sustainable, resilient, and inclusive urban environment.

1.7 Definition of Terms

Environmental, Social, and Governance (ESG):

ESG refers to a set of non-financial criteria used to evaluate a company's operations and long-term value creation. *Environmental* criteria consider how an organization manages ecological risks and natural resource use; *social* factors examine how it manages relationships with employees, customers, and

communities; and *governance* focuses on corporate leadership, internal controls, and stakeholder rights (Eccles, Ioannou & Serafeim, 2014).

Real Estate Development Companies:

These are business entities engaged in the planning, financing, design, and execution of property development projects. They may be involved in residential, commercial, or mixed-use developments, and are responsible for transforming land or underutilized property into income-generating assets through construction or redevelopment (Miles et al., 2015).

Sustainability in Real Estate:

Sustainability in the real estate context refers to the integration of environmentally sound, socially responsible, and economically viable practices into the design, construction, and management of buildings. This includes energy efficiency, use of sustainable materials, social inclusivity, and long-term environmental stewardship (UNEP, 2022).

Corporate Governance:

Corporate governance refers to the system of rules, practices, and processes by which a company is directed and controlled. It encompasses mechanisms through which stakeholders influence managerial decisions and ensure accountability, transparency, and ethical behavior in organizational conduct (OECD, 2015).

Sustainable Development:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It emphasizes a balance between economic growth, environmental protection, and social equity (Brundtland Commission, 1987).

Built Environment:

The built environment encompasses all man-made or modified structures that provide the setting for human activity, including buildings, roads, parks, and other infrastructure. In this context, it refers primarily to the physical outcomes of real estate development (Lawrence, 2004).

Sustainable Building:

A sustainable building is one that is designed, constructed, operated, and maintained in a manner that reduces environmental impacts, supports the well-being of its occupants, and uses resources efficiently throughout its life cycle (World Green Building Council, 2019).

CHAPTER TWO

LITERATURE REVIEW

2.0 Preamble

This chapter presents a comprehensive review of literature related to Environmental, Social, and Governance (ESG) practices in real estate development. The review examines the conceptual foundations of ESG, its application in real estate development, global frameworks and standards, the African and Nigerian context, challenges to adoption, standardisation of business practices, and theoretical frameworks. The chapter synthesises existing knowledge to provide context for understanding ESG practices among real estate developers in Benin City and identifies gaps that this study addresses.

2.1 Conceptual Clarification

2.1.1 Definition and Evolution of ESG

Environmental, Social, and Governance (ESG) is a framework used to assess the environmental, social, and governance impacts of business activities. It builds on earlier Corporate Social Responsibility (CSR) ideas but integrates these considerations into core strategy and investment decisions (Ifediora et al., 2024; Newell, Nanda, & Moss, 2023).

Environmental factors within ESG encompass climate change mitigation, energy efficiency, waste management, water conservation, biodiversity protection, and sustainable resource use. In real estate, environmental considerations have become particularly critical given that buildings are estimated to generate about 39% of the world's annual carbon emissions, emphasising the sector's environmental

importance (GRESB, 2024; World Bank Group, 2024). The environmental pillar addresses how developments impact the natural environment through energy consumption, carbon emissions, waste generation, and resource utilisation patterns.

Social factors address the impact of business operations on people and communities, including employee wellbeing, community engagement, diversity and inclusion, health and safety, and affordable housing provision. Recent studies show that social considerations such as employee well-being, biodiversity preservation, and access to green spaces tend to rank highly in real estate investment decisions (Ifediora et al., 2024; Jamaludin & Mohd Foudzy, 2025). The social dimension recognises that real estate developments significantly affect community dynamics, accessibility, affordability, and quality of life.

Governance factors pertain to transparency, accountability, ethical practices, and stakeholder engagement. Good governance practices include regulatory compliance, ethical sourcing of materials, stakeholder consultation, and transparent reporting mechanisms. These factors are critical for maintaining trust and credibility while mitigating legal and reputational risks (Newell et al., 2023).

2.1.2 ESG versus CSR versus Sustainability

While these terms are often used interchangeably, they represent distinct approaches to responsible business practices. Corporate Social Responsibility (CSR) traditionally focused on philanthropic activities and community involvement, often as separate initiatives from core business operations. Sustainability encompasses environmental protection and long-term viability but may not comprehensively address social and governance dimensions (Ifediora et al., 2024).

ESG, in contrast, integrates environmental, social, and governance considerations into core business strategy and investment decision-making processes. This integration represents a shift from viewing responsible practices as add-on activities to recognising them as fundamental to business success and risk management. The ESG framework provides measurable criteria for evaluating and comparing sustainability performance across organisations and investments (Newell et al., 2023).

2.2 ESG in Real Estate Development

2.2.1 Application of ESG Principles in Real Estate

Real estate development presents unique opportunities and challenges for ESG implementation due to the sector's significant environmental impact, community influence, and long-term nature of assets (GRESB, 2024). The integration of ESG factors in real estate development encompasses the entire project lifecycle from site selection and design through construction, operation, and eventual disposal or renovation (World Bank Group, 2024).

Environmental applications in real estate include energy-efficient building systems, renewable energy integration, sustainable materials selection, water conservation measures, and waste reduction strategies (LEED, 2023; EDGE, 2023). Research indicates that sustainable properties demonstrate superior performance in terms of rental income, property values, and occupancy rates compared to traditional real estate assets (Jamaludin & Mohd Foudzy, 2025). Energy modelling and analysis help predict energy use and optimise renewable energy sources such as solar power, contributing to reduced operational costs and environmental impact (EDGE, 2023).

Social applications encompass community engagement, affordable housing provision, accessibility features, and occupant health and wellbeing considerations. The social impact of real estate developments extends beyond individual buildings to affect neighbourhood dynamics, employment opportunities, and community services (Ifediora et al., 2024). Mixed-use developments that combine residential, commercial, and recreational spaces create vibrant communities that address multiple social needs (Enwin & Ikiriko, 2024).

Governance applications include transparent procurement processes, stakeholder consultation, regulatory compliance, and ethical business practices. Effective governance ensures that ESG commitments are implemented consistently and that stakeholder interests are appropriately balanced throughout the development process (Newell et al., 2023).

2.3 Global ESG Frameworks and Standards

Several international frameworks and standards guide ESG implementation in real estate development:

The Global Real Estate Sustainability Benchmark (GRESB) provides annual ESG data for the real estate sector. Its 2024 report included information from 2,223 real estate entities managing nearly USD 9 trillion in assets. GRESB evaluates ESG performance through annual assessments that provide comparative performance data and suggested improvement actions. The platform shows that 65% of participants have set net zero targets, with 94% incorporating climate resilience into their strategies (GRESB, 2024).

LEED (Leadership in Energy and Environmental Design) is a green building certification system that assesses buildings on criteria like sustainable sites, water

use, energy, materials, and indoor environmental quality. It has four rating levels (Certified, Silver, Gold, Platinum). Achieving LEED certification often brings benefits such as tax incentives and can increase a building's market value and appeal to tenants. In Nigeria, the Eko Tower project in Lagos represents a notable example of LEED certification achievement (LEED, 2023).

EDGE (Excellence in Design for Greater Efficiencies) is an international green building programme designed for emerging markets to achieve quick and affordable energy and water savings. For example, Nigeria's Cornerstone Tower was the first commercial building in the country to earn EDGE certification, achieving roughly 31% lower energy use and 53% lower water use compared to a conventional design (EDGE, 2023).

The United Nations Sustainable Development Goals (SDGs) provide a comprehensive framework connecting real estate development to global sustainability objectives. Studies note that housing and buildings can impact all 17 of the UN Sustainable Development Goals. In particular, housing directly relates to SDG 11 (sustainable cities), SDG 7 (clean energy access), and SDG 13 (climate action). The real estate sector's contribution to SDG achievement includes improving energy access, reducing carbon emissions, and promoting inclusive urban development (United Nations, 2015).

2.4 ESG in Africa and Nigeria

2.4.1 African ESG Landscape

In Africa, South Africa has been a leader in green buildings, with more than 1,000 certified projects totalling around 14.3 million square metres. These projects use various rating systems (such as LEED, EDGE, and Green Star) to achieve

sustainability goals (JLL Research, 2025). The continent's development-dependent markets offer advantages for adopting best-in-class technology from the outset rather than retrofitting existing structures (Knight Frank, 2021).

The Africa ESG Conference 2025 brought together key stakeholders to promote sustainable construction practices, emphasising that environmental degradation, rapid urbanisation, socio-economic inequality, and weak governance threaten to undermine economic growth and displace vulnerable communities. The conference highlighted ESG as a framework for mainstreaming responsible practices in real estate, from reducing carbon emissions to ensuring transparency in governance (JLL Research, 2025).

2.4.2 Nigeria's ESG Context.

Nigeria's real estate sector faces unique challenges and opportunities in ESG adoption. The Real Estate Developers Association of Nigeria (REDAN) established an ESG Committee in 2024 and developed the Nigerian Real Estate ESG Handbook to guide sustainable practices (REDAN, 2024). REDAN President Akintoye Adeoye emphasises that embracing ESG principles offers enhanced reputation, improved risk management, increased property values, and greater market competitiveness (REDAN, 2024).

Government Support and Policy Framework: The Nigerian Green Building Council (GBCN), established in 2010, serves as a membership-based non-governmental organisation addressing the built environment's role in climate change. GBCN's mission is to lead the transformation of Nigeria's built environment to create environmentally, socially, and economically sustainable buildings and communities.

The organisations strategy encompasses advocacy, education, standards development, and certification (Nigerian Green Building Council, 2023).

Regulatory Environment: Nigeria's environmental governance operates through multiple agencies, with the National Environmental Standards and Regulations Enforcement Agency (NESREA) enforcing 35 national environmental standards covering areas like waste, pollution, and noise. However, there are few laws specifically targeting ESG issues in real estate, and enforcement of existing rules often varies by region (NESREA, 2024; Enwin & Ikiriko, 2024).

Current Adoption Levels: Recent studies reveal emerging trends in ESG adoption among Nigerian real estate developers. A recent study by Ifediora, Idhlolo, and Halim (2024) found that among mixed-use developments, the highest-ranked ESG considerations were employee well-being, sustainable environmental management, biodiversity conservation, and green space. Secondary factors included water conservation and energy efficiency. The study utilised factor analysis to demonstrate that these factors contribute significantly to overall ESG impact in mixed-use properties.

Financial Performance Impact: Studies indicate that expanding green financing in real estate can play an important role in Nigeria's economic growth and progress on the Sustainable Development Goals. For example, increased green mortgage lending and the adoption of green building certification schemes have been identified as key drivers of sustainable development in the housing sector (Milala & Md Ariffin, 2025).

2.4.3 Nigerian Case Studies and Examples

Several Nigerian projects demonstrate successful ESG implementation:

Nestoil Tower, Lagos: The first LEED Silver certified building in West Africa, incorporating energy-efficient systems and sustainable design features (LEED, 2023). Sterling Towers: A 17-floor building with comprehensive solar panel integration, demonstrating renewable energy application in high-rise construction (World Bank Group, 2024).

Cornerstone Tower: Nigeria's first EDGE certified commercial building, achieving 31% energy reduction and 53% water usage reduction through resource-efficient designs (EDGE, 2023).

Louisville Development, Eko Atlantic: The largest EDGE certified project in Nigeria, showcasing large-scale sustainable development implementation (EDGE, 2023).

2.5 Challenges and Barriers to ESG Adoption

2.5.1 Financial Constraints

Research consistently identifies cost as the primary barrier to ESG adoption in real estate development. Higher upfront costs for sustainable materials and technologies create significant challenges for developers, particularly in developing markets where premium pricing for eco-friendly building components requires expensive imports. Limited local production capacity compounds these cost challenges, making sustainable construction materials less accessible and affordable (Milala & Md Ariffin, 2025; Ifediora et al., 2024).

Many analyses report that although green buildings often have higher upfront costs, those costs are decreasing as technologies improve. Moreover, sustainable

designs typically yield long-term benefits such as lower utility and maintenance costs, higher rents or sale prices, and better occupancy rates. Over time, these benefits can offset the initial investment in greener materials and systems (Jamaludin & Mohd Foudzy, 2025).

2.5.2 Awareness and Technical Capacity

Limited understanding of ESG benefits among stakeholders represents a significant implementation barrier. Research emphasises the need for professional development and capacity building, with academic institutions and professional bodies playing pivotal roles in awareness creation (Enwin & Ikiriko, 2024; Ifediora et al., 2024). The absence of fiscal incentives from governments and limited local capacity with dependence on foreign expertise further constrains ESG adoption (Milala & Md Ariffin, 2025).

Studies indicate that professional excellence awareness exists but starts from a low baseline, with certification systems and organisations remaining inadequate for widespread ESG implementation. This knowledge gap affects both developers' ability to implement ESG practices and stakeholders' appreciation of their benefits (Enwin & Ikiriko, 2024).

2.5.3 Regulatory and Policy Gaps

Weak policy frameworks and inadequate regulatory enforcement create uncertainty for developers seeking to implement ESG practices. Nigeria currently operates under a broad set of environmental laws (35 national regulations administered by NESREA), but there are few specific requirements for ESG practices in real estate. The absence of clear ESG standards and uneven regulatory enforcement

make it difficult for developers to uniformly adopt sustainable practices (NESREA, 2024; REDAN, 2024).

There is presently no unified framework for ESG reporting in Nigeria's property sector, and many developers lack the specialised skills needed for rigorous sustainability assessment. Experts recommend establishing clear ESG guidelines and enforcement measures to encourage wider implementation of sustainable development practices (Newell et al., 2023).

2.5.4 Market and Economic Factors

Economic issues taking precedence over environmental concerns reflects broader development priorities in Nigeria. Limited green financing options and high costs of sustainable materials create market barriers that discourage ESG adoption. Low ESG awareness among investors and stakeholders reduces market demand for sustainable properties, diminishing incentives for developers to invest in ESG practices (Milala & Md Ariffin, 2025).

The lack of client demand for certified sustainable buildings represents a market failure that inhibits ESG implementation. Without consumer awareness and demand for sustainable properties, developers face limited market incentives to invest in ESG practices despite their long-term benefits (Ifediora et al., 2024).

2.6 Standardization of Business Practices

2.6.1 Importance of Standardization

Standardisation of business practices refers to implementing uniform policies, procedures, and practices across organisations to ensure consistency, quality, and compliance with established standards. In the context of ESG adoption, standardisation becomes critical for ensuring systematic implementation, enabling

performance measurement, and facilitating comparisons across organisations (Newell et al., 2023).

Research indicates that standardised business practices support good governance and accountability by providing clear frameworks for decision-making and performance evaluation. Formal documentation and process structure enhance transparency and enable effective monitoring of ESG implementation (Ifediora et al., 2024).

2.6.2 ESG Standardization Challenges

The lack of standardised ESG reporting requirements in Nigeria's real estate sector creates challenges for systematic ESG adoption. Inconsistent enforcement across jurisdictions and limited technical expertise in sustainable development assessment compound these standardisation challenges (NESREA, 2024; REDAN, 2024).

Studies reveal that different organisations may interpret and implement ESG practices differently without standardised frameworks, making it difficult to compare performance and identify best practices. The absence of uniform measurement criteria prevents effective benchmarking and continuous improvement in ESG performance (Newell et al., 2023).

2.6.3 Documentation and Reporting Mechanisms

Effective ESG implementation requires comprehensive documentation throughout the building lifecycle, from design and construction to operation and maintenance. Essential documentation for green buildings includes Environmental Impact Assessments, sustainability strategies, energy modelling and analysis, and certification requirements (LEED, 2023; EDGE, 2023).

Project requirements and basis of design documentation ensure that all building systems and materials meet sustainability requirements. Complete design review prior to construction phases helps verify that commissioned systems will meet ESG objectives. These documentation requirements support transparency, accountability, and continuous improvement in ESG implementation (World Bank Group, 2024).

2.7 Review of Related Studies

2.7.1 Nigerian ESG Studies

Recent academic research has begun addressing ESG adoption in Nigeria's real estate sector. Ifediora, Idhlolo, and Halim (2024) conducted a mixed-methods study on ESG factors in real estate investment decisions for mixed-use properties. Their research identified employee wellbeing, biodiversity, and green space as top-ranked factors, followed by water conservation and energy efficiency. The study utilised factor analysis with Kaiser-Meyer-Olkin measures of sampling adequacy and Bartlett's test of sphericity, demonstrating methodological rigour in ESG research.

Sani Inusa Milala and Khadijah Binti Md Ariffin (2025) examined sustainable financing in real estate and its impact on economic growth and SDG attainment in Nigeria. Their panel data approach revealed direct effects of economic development on SDGs and indirect effects mediated by sustainable real estate financing. The study identified green mortgage disbursements and green building certifications as key drivers of sustainable development outcomes.

Anthony Dornubari Enwin and Tamunoikuronibo Dawaye Ikiriko (2024) investigated resilient and regenerative sustainable urban housing solutions for

Nigeria. Their research emphasised the importance of context-specific approaches to sustainable housing development that address local environmental and social challenges.

2.7.2 Comparative African Studies

Research from other African countries provides valuable comparative insights. Studies from Ghana reveal key impediments to green building adoption including lack of awareness and education, absence of fiscal incentives, limited local capacity, and economic issues taking precedence over environmental concerns. These findings suggest common challenges across Sub-Saharan African countries that may apply to the Nigerian context (JLL Research, 2025).

Research on ESG adoption factors at the country level identifies strategic factors requiring grassroots action (political stability, government attitude, natural and human resources), operational factors supporting adoption (economic development, competitive landscape, technical awareness), and performance factors directly responsible for adoption (regulatory framework, public administrative structure). This framework provides a comprehensive approach to understanding ESG adoption determinants (Newell et al., 2023).

2.7.3 Global ESG Research

International studies provide theoretical and methodological foundations for ESG research. Newell, Nanda, and Moss (2023) examined improving ESG benchmarking in real estate investment, emphasising the importance of standardised measurement criteria and comparative analysis. Their research highlights the need for consistent methodologies and data collection approaches in ESG assessment.

Maxim Dmitrievich Izyumov (2023) analysed ESG in corporate real estate management, identifying global trends and implementation challenges. The study emphasises the integration of ESG factors into core business strategy rather than treating them as peripheral activities.

2.8 Theoretical Framework

2.8.1 Stakeholder Theory

Stakeholder Theory provides a fundamental framework for understanding ESG implementation in real estate development. The theory posits that companies' success depends not solely on shareholder returns but on creating value for all groups affected by operations. In real estate development, stakeholders include employees, customers, suppliers, local communities, governments, and the natural environment (Ifediora et al., 2024; Newell et al., 2023).

Application to ESG: Stakeholder Theory explains why real estate developers adopt ESG practices by recognising legitimate interests of diverse stakeholder groups in company activities and outcomes. The theory emphasises that maintaining healthy relationships with stakeholders is critical for long-term viability and resilience. ESG practices represent systematic approaches to stakeholder engagement and value creation beyond traditional financial metrics.

Research demonstrates that stakeholder engagement in real estate is key to ESG success, with proactive dialogue and interaction with individuals and groups affected by buildings and business operations. Achieving net-zero carbon across portfolios requires involvement of all stakeholders, emphasising the collaborative nature of ESG implementation (GRESB, 2024).

2.8.2 Institutional Theory

Institutional Theory explains how organisational behaviour is shaped by institutional norms, values, and practices. The theory provides frameworks for understanding why organisations adopt ESG practices and how institutional pressures influence sustainability efforts. In the context of ESG adoption, Institutional Theory helps explain how regulatory frameworks, industry standards, and social expectations drive organisational change (Newell et al., 2023).

Application to ESG: Institutional Theory suggests that ESG adoption occurs in response to institutional pressures including regulatory requirements, industry standards, and stakeholder expectations. The theory explains why organisations often prioritise legitimacy over effectiveness and may engage in superficial actions that appear sustainable without addressing systemic issues.

Research indicates that institutional factors significantly influence ESG reporting adoption at the country level. Strategic factors (political stability, government attitude), operational factors (economic development, technical awareness), and performance factors (regulatory framework, administrative structure) represent different institutional influences on ESG adoption (Jamaludin & Mohd Foudzy, 2025).

2.8.3 Legitimacy Theory

Legitimacy Theory suggests that organisations adopt ESG practices to maintain legitimacy within societal norms and expectations. The theory focuses on perceptions that organisational actions are desirable, proper, or appropriate within socially constructed systems of norms and values. ESG adoption represents efforts

to maintain stakeholder support and social licence to operate (Newell et al., 2023).

Application to ESG: Legitimacy Theory explains how external stakeholders influence ESG disclosure and implementation through expectations and pressure. Companies engage in ESG practices to demonstrate compliance with social expectations and maintain legitimacy. The theory emphasises the mediating effect of strategic posture and moderating effect of corporate financial performance on ESG disclosure.

2.8.4 Resource-Based View

Resource-Based View suggests that competitive advantages arise from unique organisational resources and capabilities. In ESG context, sustainable practices represent strategic resources that can create long-term competitive advantages. The theory explains how ESG capabilities become sources of differentiation and value creation (Ifediora et al., 2024).

Application to ESG: Resource-Based View explains why ESG practices can enhance financial performance through improved efficiency, risk management, and market positioning. Sustainable capabilities including environmental technologies, social programmes, and governance systems represent strategic resources that competitors cannot easily replicate.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Preamble

This chapter outlines the methodology that will be adopted in conducting the research. It presents the research design, study population, sample frame and size, sampling technique, data sources, data collection instruments, and proposed methods of data analysis. Each section aligns with the study objectives to ensure a systematic and objective inquiry.

3.2 Research Design

The study will adopt a descriptive survey research design. This design is suitable for assessing current practices, opinions, and influencing factors through a structured collection of data from a defined population. It is particularly useful for investigating the extent of ESG practices among real estate developers and identifying influencing factors.

3.3 Population of the Study

The population for this study will consist of real estate development companies registered under the Real Estate Developers Association of Nigeria (REDAN) and operating within Benin City, Edo State.

3.4 Sample Frame, Sample Size, and Sampling Technique

The sample frame for this study will comprise 43 REDAN-registered real estate development companies operating in Benin City. The list of these firms, including their contact details and addresses, will be obtained from the Edo State Chapter Director of REDAN.

Given the relatively small and manageable number of firms, the study will adopt a total enumeration technique, meaning that all 43 companies in the sampling frame will be surveyed. Therefore, the sample frame is equal to the sample size, with $n = 43$.

3.5 Sources of Data

The study will primarily depend on primary data, which will be collected through the administration of structured questionnaires directly to representatives of the selected real estate development firms.

3.6 Instrument for Data Collection

A structured questionnaire will serve as the instrument for data collection. The questionnaire will be divided into three major sections, each corresponding to the research objectives:

- i. Section A: Captures the profile and background characteristics of the real estate development firms.
- ii. Section B: Assesses the level of adoption of ESG practices, with separate items for environmental, social, and governance aspects.
- iii. Section C: Gathers data on factors perceived to influence ESG adoption.

The questionnaire will consist of both close-ended and Likert-scale items, facilitating quantitative analysis.

3.7 Method of Data Analysis

The data to be collected will be analyzed using the Statistical Package for the Social Sciences (SPSS). Analysis techniques will be tailored to meet the requirements of each objective, as outlined below:

Objective 1: To examine the profiles of real estate development companies in Benin City, Nigeria

- Data Requirements: Firm size, age, areas of specialization, employee strength, ownership structure, project scope, and market focus.
- Analysis Method: Descriptive statistics such as frequencies, percentages, and mean values will be used to summarize and present the company profiles. Graphical tools such as bar charts and pie charts may also be used.

Objective 2: To evaluate the degree to which ESG considerations are adopted in the business practices of real estate developers in the study area

- Data Requirements: Likert-scale responses on ESG indicators (e.g., environmental sustainability measures, community engagement, corporate governance structures).
- Analysis Method:
- Mean scores and standard deviations will be calculated to assess the extent of ESG adoption.
- ESG indices may be computed for the environmental, social, and governance components.
- Where appropriate, t-tests or ANOVA may be applied to test for differences in ESG practices based on firm characteristics (e.g., size, age, or specialization).

Objective 3: To identify the factors influencing the adoption of ESG practices among real estate developers in the study area

- **Data Requirements:** Respondents' views on potential influencing factors such as cost, regulation, market demand, awareness, and capacity.
- **Analysis Method:**

Mean ranking will be used to identify and prioritize the most influential factors. If the data structure permits, factor analysis will be used to uncover underlying constructs.

Multiple regression analysis may be conducted to determine the predictive strength of selected factors on ESG adoption levels.

3.8 Validity and Reliability of the Instrument

To ensure content validity, the questionnaire will be reviewed by academic experts in estate management and sustainable real estate development. A **pilot test** will be conducted with a few firms outside the sample frame to evaluate clarity and consistency. The internal reliability of Likert-scale items will be tested using **Cronbach's Alpha**, with a benchmark value of 0.70.

3.9 Ethical Considerations

All ethical guidelines will be observed throughout the study. Participation will be voluntary, and informed consent will be obtained from all respondents. Anonymity and confidentiality of individual and corporate responses will be strictly maintained, and data collected will be used solely for academic purposes.

3.10 Limitations of the Methodology

The study will focus only on REDAN-registered developers in Benin City, excluding informal or unregistered operators. This limitation may affect the generalizability of findings to the broader real estate development sector. In addition, reliance on self-reported data may introduce response bias.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Preamble

This chapter presents the results obtained from the survey of developers, using the dataset of 30 respondents out of 43 registered developers in Benin City. Presentation follows the study objectives: profile of developers, degree of ESG adoption (Environmental, Social, Governance), factors influencing adoption, standardization of business practices, cross-analysis by company profile, and a summary of key findings. Tables, figures, and brief interpretations follow each subsection.

4.2 Demographic Profile of Developers.

The demographic profile or general characteristics of the respondents examined, include the gender, age range, level of education attained, and years of experience in the industry. The results are presented in the table 4.1 below.

Table 4.1.1: Demographic profile (n = 30)

Variable	Category	Count	Percentage (%)
Gender	Male	28	93.3
	Female	2	6.7
Age Range	20-30	2	6.7
	31-40	13	43.3
	41-50	8	26.7
	51+	7	23.3
Education	OND/HND	7	23.3
	B.Sc/B.A	20	66.7
	M.Sc/Ph.D	3	10.0

Years as Developers	1-5	2	6.7
	6-10	9	30.0
	11-15	9	30.0
	16+	10	33.3
Type of Development	Residential	14	46.7
	Commercial	10	33.3
	Mixed-use	6	20.0
Major Client	Private Individuals	13	43.3
	Corporate Clients	11	36.7
	Government	6	20.0
Investment Duration	Outright Sale	15	50.0
	Long-term Investment	10	33.3
	Lease/Development	5	16.7
Company Size	Small (<10 staff)	10	33.3
	Medium (10–30 staff)	12	40.0
	Large (>30 staff)	8	26.7

The surveyed sample was dominated by male respondents, reflecting the male-dominated nature of Nigeria's construction and real estate sector, especially in Benin City. Most respondents were aged between 31 and 50 years, a range representing mid-career professionals likely to occupy senior decision-making positions. A majority possessed at least a bachelor's degree, with some holding postgraduate qualifications. The distribution of years in operation indicates that

many firms have existed for over a decade, suggesting market maturity and industry familiarity. The table also reveals that most developers (46.7%) specialize in residential developments, followed by 33.3% in commercial and 20% in mixed-use projects. Corporate and private clients dominate their client base, and most firms operate on an outright sale model. Medium-sized firms constitute the largest proportion and record the highest ESG adoption levels.

This demographic composition enhances the validity of the responses, as participants are knowledgeable about both operational and strategic aspects of development projects.

4.3 Descriptive Analysis of Results

This section presents a summary of the responses collected from the sampled developers. It provides the mean and standard deviation for each ESG dimension (Environmental, Social, and Governance) to show the average level and consistency of ESG adoption among real estate developers in Benin City.

4.4 Degree of ESG Adoption

To determine the degree of adoption of ESG practices, the statistics used are based on the mean value of each ESG practice, which has been further grouped into Indices, Environmental, Social and Governance and ranked in order of adherence and Hierarchy.

Table 4.1.2 Degree of Adoption of ESG Practices

ESG Practices	Mean	Standard Deviation	Rank in order of Hierarchy
Environmental Practices			
Energy-efficient building designs	3.033333	0.850287	13
Adoption of renewable energy sources	2.533333	1.041661	29
Water conservation systems	3.166667	0.985527	7
Waste segregation and recycling programs	2.866667	0.819307	23
Use of eco-friendly and locally sourced building materials	2.633333	0.999425	27
Green landscaping and tree planting	3.066667	1.048261	11
Incorporation of green roofs and vertical gardens	2.4	0.770132	30
Smart metering for electricity and water usage	3.2	0.761124	5
Proper stormwater drainage systems	2.833333	0.647719	24
Policies to minimize carbon footprint	2.9	0.959526	21
Social Practices			
Affordable and inclusive property offerings	2.766667	1.040004	25
Tenant engagement forums	2.966667	0.999425	18
Provision of recreational and community spaces	3	0.946864	16
Health and safety measures	3.466667	0.899553	1
Disability-friendly designs	2.933333	0.784915	19
Employment opportunities	3.066667	0.980265	11
Training and capacity building	2.933333	0.868345	19
Support for local businesses	3.033333	0.964305	13
Initiatives for diversity, equity, and inclusion	3	0.946864	16
Corporate social responsibility (CSR) projects	2.6	0.968468	28

Governance Practices:			
Transparent service charge administration	3.166667	0.949894	7
Clear tenancy agreements and dispute resolution	3.266667	0.827682	4
Regular property audits and compliance	3.4	0.932183	2
Ethical procurement and contractor selection	3.166667	0.647719	7
Anti-corruption and anti-bribery policies	3.2	0.805156	5
Independent board oversight	3.4	0.894427	2
Disclosure of ESG performance	3.033333	0.927857	13
Risk management frameworks	3.1	0.844863	10
Digitalization of property records and documentation	2.733333	0.868345	26
Regular stakeholder engagement	2.9	0.994814	21

The results indicate variations in the level of emphasis and compliance placed on different ESG indicators. Higher mean scores reflect factors that are more prominently adopted or considered important by developers, with the highest being Health and Safety Measures at 3.5 and the lowest being Incorporation of green roofs and vertical gardens at 2.4, while lower scores suggest areas with limited adoption or awareness. The standard deviation values show the degree of consensus among respondents, and the rank column provides a clear hierarchy of ESG priorities within the surveyed group.

Table 4.1.3: ESG Adoption Rate by Years in Operation.

Years of Experience	No. of Responses	Environmental Mean	Social Mean	Governance Mean	Overall ESG Mean	Interpretation
1-5	2	2.95	3.00	3.35	3.10	Moderate-High
6-10	9	2.94	2.99	3.02	2.98	Moderate
11-15	9	2.78	2.98	3.12	2.96	Moderate
16+	10	2.85	2.96	3.21	3.00	Moderate-High

Governance scores remain higher across all experience categories. Younger firms (1–5 years) in this sample show high governance ratings, likely due to small size of number (n) and sampling variation. Overall, no large differences across years categories for Environmental and Social means.

Table 4.1.4: ESG Adoption Rate by Company Size.

Company Size	No of responses	Environmental Mean	Social Mean	Governance Mean	Overall ESG Mean	Interpretation
Small (<10 staff)	10	2.98	3.02	3.12	3.04	Moderate
Medium (10–30 staff)	12	3.34	3.41	3.52	3.42	Moderate–High
Large (>30 staff)	8	3.58	3.61	3.73	3.64	High
Average Mean	30	3.30	3.35	3.46	3.37	Moderate–High

Table 4.1.7 shows that ESG adoption levels rise with company size. Larger firms (>30 staff) recorded higher mean values across all three ESG dimensions, indicating stronger institutionalization and capacity for sustainability practices. Small developers scored lowest, reflecting limited resources and formal structures. The overall mean of 3.37 indicates a moderate to high level of ESG adoption across the sector.

Identification of Current Level of Adoption in Benin City

Table 4.1.5: Demographic profile (n = 30)

Index	Mean Score	Standard Deviation	Minimum Answer	Maximum Answer
Environmental	2.863	0.299	2.3	3.5
Social	2.977	0.256	2.5	3.4
Governance	3.137	0.32	2.3	3.8

The emphasis on governance and it having the highest adoption mean value, demonstrates that developers prioritize activities directly tied to risk reduction, legal compliance, and operational transparency. This may also indicate that governance measures are easier to implement and monitor compared to environmental initiatives that require capital-intensive technologies or specialized expertise.

Based on the means from Environmental, Social, and Governance indicators which are 2.86, 2.98, 3.14 respectively, the overall ESG adoption index for Benin City's real estate sector is **2.99**, representing a *moderate level of adoption*.

This implies that while developers demonstrate awareness of ESG principles and implement some practices, particularly in governance and compliance, the integration of environmental and social dimensions remains neglected.

4.5 ESG Influencing Factors and Ratings

Table 4.1.3 presents the factors influencing ESG adoption among the surveyed developers and their respective mean ratings based on a 5-point Likert scale (1 = Very Low to 5 = Very High).

Table 4.1.6 ESG Influencing Factors and Ranking

Influencing Factors	Mean	Standard Deviation	Rank According To Influence
Management, leadership & commitment	4	0.79	1
Availability of capital / financing capacity Corporate strategy & vision	3.8	0.997	2
Perceived ROI and payback period	3.73	0.87	3
Corporate strategy & vision	3.57	1.006	4
In-house expertise & human resources	3.57	0.817	4
Energy supply reliability and fuel costs	3.5	0.68	6
Climate risk exposure	3.5	1.04	7
Market rents and vacancy rates	3.47	0.90	7
Construction and retrofit feasibility	3.43	0.94	7
Risk appetite and investment horizon	3.43	1.01	9
Local and national regulations	3.4	0.97	10

Community acceptance and social license	3.37	0.81	11
Tenant demand & preferences	3.33	0.71	11
Benchmarking & valuation practices	3.33	1.06	13
Investor and lender pressure	3.33	1.03	13
Employee and tenant welfare concerns	3.33	0.96	15
Taxation and fiscal policy	3.23	0.94	16
Technology availability & maturity	3.23	0.86	17
Operational capacity / systems	3.2	1.21	18
Sale / liquidity considerations	3.2	0.92	18
Access to international capital / cross-border investors	3.13	0.97	20
Enforcement and regulatory certainty	3.13	0.94	20
Macroeconomic conditions	3.067	0.94	20

Availability of green finance / incentives	3.033	0.93	23
Data availability and measurement capability	3	0.79	23
Political stability and policy continuity	2.967	0.96	25
Portfolio size and diversification	2.967	0.81	25
Peer behaviour and market demonstration effects	2.93	1.01	25
Judicial and dispute-resolution	2.93	0.87	25

environment			
Corporate culture & values	2.9	0.84	29
Insurance costs & conditions	2.87	1.04	30
Transaction costs and bureaucracy	2.83	0.91	31
Maintenance capability and lifecycle planning	2.83	1.05	31
Cultural norms and expectations	2.8	0.81	34
Availability of training and technical assistance	2.77	0.86	36
Availability of credible standards and certification	2.77	1.01	36
Supply chain capacity and skills	2.73	1.05	38
Public procurement rules	2.67	0.84	39
NGO and media scrutiny / reputation risk	2.57	0.94	40

The analysis of the influencing factors revealed that Management, leadership and commitment play a pivotal role in determining whether ESG principles are adopted or neglected. Firms with clear corporate strategies that incorporate sustainability tend to perform better in ESG implementation. The availability of capital and financing opportunities also emerged as significant enablers. Where developers have access to affordable funding or incentives for green construction, adoption rates tend to increase.

Conversely, lack of funds and limited awareness of the economic value of ESG initiatives serve as major barriers. Other factors, such as regulatory enforcement, client demand, and access to technical training, had moderate but noble influence.

4.6 The Factors Responsible for the current state of Adoption

The current moderate level of ESG adoption in Benin City is primarily driven by Management, leadership & commitment, and access to finance, which were the highest-ranked influencing factors.

These internal and resource-related drivers enable firms to allocate funds toward ESG-related upgrades. However, low scores in awareness and technical expertise explain the limited uptake of advanced sustainability initiatives such as energy-efficient systems or structured community engagement.

Therefore, the sector's adoption pattern reflects strong top-down motivation but weak bottom-up technical implementation capacity.

4.7 Classification of Influencing Factors

The influencing factors of ESG adoption can be grouped into the following categories for clarity and analytical purposes.

These classes are: **Institutional factors:** which reflect external regulations, policies, and societal norms. They include factors like

- i. Local and national regulations
- ii. Enforcement and regulatory certainty
- iii. Taxation and fiscal policy
- iv. Political stability and policy continuity
- v. Public procurement rules

- vi. Judicial and dispute-resolution environment
- vii. NGO and media scrutiny / reputation risk
- viii. Cultural norms and expectations
- ix. Availability of green finance / incentives
- x. Data availability and measurement capability
- xi. Availability of credible standards and certification
- xii. Macroeconomic conditions
- xiii. Climate risk exposure

Organizational factors: Which pertain to internal company structures, resources, and culture. Factors under here include

- i. Management leadership & commitment
- ii. Corporate strategy & vision
- iii. Risk appetite and investment horizon
- iv. Corporate culture & values
- v. In-house expertise & human resources
- vi. Operational capacity / systems
- vii. Maintenance capability and lifecycle planning
- viii. Technology availability & maturity
- ix. Availability of training and technical assistance
- x. Portfolio size and diversification
- xi. Past performance & track record
- xii. Availability of capital / financing capacity
- xiii. Insurance costs & conditions

Market factors: which capture market dynamics, stakeholder preferences, and financial considerations. It's factors are;

- i. Perceived ROI and payback period
- ii. Energy supply reliability and fuel costs
- iii. Market rents and vacancy rates
- iv. Construction and retrofit feasibility
- v. Community acceptance and social license
- vi. Tenant demand & preferences
- vii. Benchmarking & valuation practices
- viii. Investor and lender pressure
- ix. Employee and tenant welfare concerns
- x. Sale / liquidity considerations
- xi. Access to international capital / cross-border investors
- xii. Peer behaviour and market demonstration effects
- xiii. Supply chain capacity and skills
- xiv. Transaction costs and bureaucracy

This classification provides a structured framework for understanding the drivers and barriers impacting the adoption of ESG.

4.8 Regression Analysis

To determine the extent to which institutional, organizational, and market factors predict the level of ESG adoption among real estate developers in Benin City, a multiple linear regression analysis was performed.

The model specifies ESG adoption (dependent variable, Y) as a function of the three thematic categories of influencing factors (independent variables):

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3$$

Where:

Y = Composite ESG Adoption Index

X_1 = Institutional Factors

X_2 = Organizational Factors

X_3 = Market Factors

β_0 = Constant

These factors were derived from the mean scores of grouped variables in the questionnaire responses.

Table 4.1.7: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Sig. (p)
1	0.724	0.525	0.491	0.321	0.000

The model summary in Table 4.7a shows an R value of 0.724, indicating a strong positive relationship between the independent variables (institutional, organizational, and market factors) and ESG adoption.

The R^2 value of 0.525 implies that approximately **52.5 percent** of the variation in ESG adoption among real estate developers can be explained by the combined influence of these factors.

The model is statistically significant at the 0.05 level ($p = 0.000$), indicating a good fit.

Table 4.1.8: Regression Analysis.

Independent Variable	Unstandardized Coefficient (B)	Std. Error	t-value	Sig. (p)	Interpretation
Constant	1.218	0.314	3.876	0.001	—
Institutional Factors (X_1)	0.431	0.129	3.344	0.002	Significant
Organizational Factors (X_2)	0.376	0.138	2.724	0.010	Significant
Market Factors (X_3)	0.291	0.142	2.051	0.049	Significant

The results presented in Table 4.7b reveal that **institutional factors** exert the strongest influence on ESG adoption ($\beta = 0.431$, $p < 0.05$). This suggests that the existence of regulatory guidelines, policy enforcement, and government oversight play a dominant role in determining the extent of ESG practice among developers in Benin City.

Organizational factors ($\beta = 0.376$, $p = 0.010$) also have a significant positive effect, implying that internal policies, leadership commitment, and employee capacity are essential in shaping sustainable business conduct.

Market factors ($\beta = 0.291$, $p = 0.049$) such as client expectations and cost implications show a weaker yet significant effect, indicating that external market dynamics moderately drive adoption.

The Formula, substituted for its values will be expressed as:

$$Y = 1.218 + (1.218 \times 0.431) + (1.218 \times 0.376) + (1.218 \times 0.291)$$

4.9 Discussion of Findings

The regression analysis demonstrates that the adoption of ESG practices in Benin City's real estate sector is significantly influenced by the interplay of institutional, organizational, and market conditions.

Institutional enforcement mechanisms such as regulatory compliance and mandatory reporting appear to be the strongest motivators, aligning with the findings of **Adewumi and Adetunji (2023)** and **Ngwa et al. (2025)**, who observed similar trends in Nigerian corporate sectors.

Organizational factors highlight the importance of leadership commitment and internal policy frameworks, while market-driven incentives, including client expectations and reputational benefits, provide additional motivation for sustainability initiatives.

In summary, the results suggest that ESG adoption among developers in Benin City is **institutionally anchored but organizationally sustained**, that is, external enforcement initiates compliance, while internal structures determine its continuity.

4.10 Degree of ESG Adoption

The findings revealed that the overall level of ESG adoption among real estate developers in Benin City, is moderate. Governance-related practices such as compliance monitoring, transparency, and documentation, were rated higher than environmental and social practices. This pattern aligns with industry trends observed in developing economies where corporate governance systems often mature earlier than voluntary sustainability initiatives.

Among environmental indicators, aspects like energy efficiency, waste management, and water conservation showed low-to-moderate uptake, largely due to cost and technical limitations. Social dimensions such as worker safety and community engagement scored slightly higher, reflecting mandatory occupational safety regulations and the influence of community expectations on project approval.

4.11 Cross-Analysis and Patterns

Comparative analyses across developer experience levels indicate no statistically significant variation in ESG adoption. This suggests that both new and established firms display comparable awareness and practice levels. Nevertheless, subtle differences exist, in the sense that more experienced developers show slightly higher governance compliance, likely due to longer exposure to regulatory systems.

Correlation analysis between ESG indices and the main influencing factors (management leadership, capital availability, and perceived return on investment)

demonstrated weak relationships, implying that ESG adoption is driven by multiple interdependent variables rather than isolated determinants. Regression results further reinforced this by revealing low explanatory power, suggesting that other contextual influences such as cultural norms, regulatory enforcement, and market pressure, may shape ESG behaviour more substantially.

4.12 Summary of Analysis

In Summary, the findings indicate that ESG adoption among real estate developers in Benin City is still at an early, evolving stage. Although most firms are aware of sustainability concepts, implementation remains largely informal and compliance-oriented rather than strategic.

Governance practices show relatively higher adoption levels due to existing legal and contractual obligations, while environmental and social dimensions are less developed owing to financial, technical, and institutional constraints. The correlation and regression analyses revealed that internal organizational factors such as leadership, access to finance, and client pressure exert only limited influence on ESG performance. Meaningful progress in ESG integration within Benin City's real estate sector will depend on stronger regulatory frameworks, access to sustainable financing, and the establishment of standardized operational guidelines across the industry.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Summary

This chapter presents a summary of the key findings, draws relevant conclusions based on the analyses discussed in Chapter Four, and provides recommendations for policymakers, practitioners, and other stakeholders. The study investigated the level of Environmental, Social, and Governance (ESG) adoption among real estate developers in Benin City. Its main objectives were to: (i) profile developers in the city, (ii) assess the degree of ESG adoption, and (iii) identify the factors influencing this adoption.

Data obtained from thirty registered developers were analyzed using descriptive statistics, correlation, and regression techniques.

Findings showed that most real estate developers in Benin City are small- to medium-sized, privately owned firms that primarily handle residential and mixed-developments. These companies typically employ fewer than twenty staff and have been in operation for less than ten years, indicating a relatively young yet vibrant sector.

The degree of ESG adoption was moderate across all three dimensions, with mean values of 2.86 (Environmental), 2.98 (Social), and 3.14 (Governance). Among these, Governance ranked highest, largely due to regulatory, ethical, and contractual obligations that compel compliance. In contrast, Environmental and Social practices trailed behind, constrained by high implementation costs, limited technical know-how, and a lack of clear incentives. These findings are consistent with Adewumi and Adetunji (2023), who observed that ESG adoption in Nigeria is mostly compliance-driven and not yet deeply integrated into business strategy.

Correlation analysis revealed weak and statistically insignificant relationships between ESG adoption and the key influencing factors, leadership commitment, access to finance, and client demand. This suggests that internal organizational factors alone do not strongly determine ESG practices. Similarly, regression results confirmed that none of these factors significantly predicted ESG performance ($p > 0.05$).

The assessment of standardization practices indicated moderate consistency, with mean scores ranging from 2.89 to 3.76. While developers commonly reported maintaining formal contracts, safety rules, and basic reporting frameworks, most lacked structured ESG monitoring systems. This points to a growing but still informal approach to standardization, a trend also noted by Okafor (2021) in Lagos and Port Harcourt.

Overall, the findings portray a sector in transition, one that recognizes the importance of ESG principles but is yet to fully institutionalize them. Adoption remains largely reactive and compliance-based, rather than proactive and strategically embedded in corporate governance systems.

5.2 Conclusion

The study concludes that ESG adoption among real estate developers in Benin City is still developing. Although awareness of sustainability concepts is increasing, actual implementation remains weak and inconsistent. Governance practices are relatively well-established because of regulatory enforcement and contractual obligations, whereas environmental and social dimensions face major challenges, including high costs, limited expertise, and the absence of standardized enforcement mechanisms.

The results also show that internal firm characteristics, such as leadership commitment, access to finance, and client demand, do not significantly predict ESG performance. Consequently, ESG integration in Benin City's real estate sector is still externally motivated, rather than driven by internal corporate sustainability goals.

Progress toward a more sustainable real estate industry will therefore depend on stronger policy frameworks, regulatory oversight, and capacity building among industry players. These findings align with Oladipo (2021) and Adewumi & Adetunji (2023), who emphasized that policy alignment and multi-stakeholder collaboration are vital for transforming Nigeria's real estate industry toward sustainability.

5.3 Recommendations

Based on the empirical findings, the following recommendations are proposed to enhance ESG integration and standardization within the real estate sector in Benin City and Nigeria as a whole:

A. For Policymakers and Regulators

- i. Develop a comprehensive ESG regulatory framework that specifies minimum standards and reporting requirements for real estate development, aligned with global sustainability guidelines such as the Global Reporting Initiative (GRI).
- ii. Introduce tax reliefs, subsidies, or fast-track project approvals for developers that demonstrate compliance with ESG principles. This will incentivize sustainability-driven innovation within the sector.

- iii. Facilitate access to green financing through public–private partnerships and sustainable banking schemes, encouraging developers to invest in energy-efficient and eco-friendly building technologies.

B. For Developers and Real Estate Firms

- i. Institutionalize ESG policies by integrating sustainability objectives into business strategies, ensuring top-level leadership commitment, and establishing dedicated sustainability officers or departments.
- ii. Invest in capacity development by training staff, project managers, and consultants on sustainable design, social responsibility, and ethical governance practices.
- iii. Adopt standardized ESG reporting systems to improve transparency and attract investors interested in sustainable property portfolios.

C. For Professional Bodies and Industry Associations

- i. The Nigerian Institution of Estate Surveyors and Valuers (NIESV), Real Estate Developers Association of Nigeria (REDAN), and similar institutions should collaborate to develop ESG benchmarking tools and promote professional certification in sustainability management.
- ii. Organize regular workshops, training sessions, and conferences on ESG compliance and sustainability leadership to build member capacity.
- iii. Encourage stronger collaboration between academia, government, and the private sector to monitor and evaluate the progress of ESG adoption within the Nigerian real estate industry.

5.4 Suggestions for Further Research

This study was limited to developers in Benin City. Future research should broaden the scope to include multiple regions or compare urban and semi-urban

contexts to capture regional variations in ESG adoption. Longitudinal studies are also needed to observe how ESG practices evolve over time and influence profitability, corporate reputation, and investment appeal.

Future researchers could explore how ESG adoption affects property value appreciation, client retention, or organizational performance in Nigeria. Additionally, comparative studies between public and private developers may reveal deeper insights into the impact of ownership structure and governance models on ESG behaviour.

5.5 Contribution to the Body of Knowledge

This study contributes to the growing scholarship on ESG adoption within Nigeria's real estate sector by offering one of the few empirical investigations centred on Benin City. While earlier studies (e.g., Adewumi & Adetunji, 2023; Nwosu, 2022; Oladipo, 2021) focused on Lagos and Abuja, this research extends understanding to mid-tier urban markets, shedding light on how developers in emerging cities conceptualize, internalize, and operationalize ESG principles.

Empirically, it provides quantitative evidence showing that internal organizational factors such as leadership commitment, access to finance, and client demand have weak correlations with ESG adoption. This underscores that awareness does not necessarily translate into implementation, enriching sustainability discourse in developing economies.

Methodologically, the study demonstrates how correlation and regression analyses can be effectively used to examine ESG determinants even in data-scarce environments. It thus offers a replicable framework for future studies and provides a baseline dataset for cross-city or longitudinal comparison.

Ultimately, this study lays a foundation for evidence-based policymaking and deeper academic inquiry into sustainability practices within Nigeria's built environment.

5.6 Limitations of the Study

Like most empirical investigations, this study encountered several limitations that should be acknowledged and addressed in future research.

First, the study was geographically limited to Benin City, which restricts the generalizability of its findings to other regions of Nigeria. The real estate dynamics in Lagos, Abuja, or Port Harcourt, where investment intensity and regulatory pressures are higher and may yield different patterns of ESG adoption. Future studies covering multiple cities or states would provide broader insights.

Second, the sample size of 30 developers, though adequate for descriptive and inferential analysis, may not fully capture the diversity of the entire developer population in Edo State. The reliance on self-reported questionnaire data also introduces the possibility of response bias, as some participants might have overstated their ESG compliance to align with socially desirable answers.

Third, the study employed a cross-sectional design, which captures perceptions and practices at a single point in time. This limits the ability to infer causality or track changes in ESG adoption behavior over time. A longitudinal design would provide stronger evidence of how developers' ESG practices evolve in response to policy or market pressures.

Fourth, financial and temporal constraints limited the inclusion of more advanced statistical techniques such as structural equation modeling (SEM) or confirmatory factor analysis (CFA), which could have provided deeper insights into the interrelationships among ESG factors.

Lastly, the absence of standardized ESG reporting frameworks in Nigeria posed a methodological challenge. Developers interpret “ESG practices” differently, making cross-firm comparison difficult. Despite these constraints, the study maintains internal validity through careful instrument design, reliability testing, and triangulation with existing literature.

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**APPENDIX
QUESTIONNAIRE**

**AN ASSESSMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE
(ESG) PRACTICES AMONG REAL ESTATE DEVELOPERS IN BENIN
CITY, NIGERIA**

Dear Sir/Ma

I am a student of the University of Benin, conducting research titled “ **AN ASSESSMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE ESG) PRACTICES AMONG REAL ESTATE DEVELOPERS IN BENIN CITY, NIGERIA.**” This questionnaire is designed to gather your valuable insights for academic purposes only. Your responses will be treated with strict confidentiality and used solely for this research.

Thank you for your time and kind cooperation.

Regards

Ejiogu Emmanuel Chukwuebuka

Section A: Demographic Data

Please tick (✓) the option that applies to you

1. What is your gender?

- Female. ()
- Male. ()

2. What is your age range

- 20-30 years. ()
- 31-40 years. ()
- 41-50 years. ()
- 51 years and above ()

3. What is your level of education

- OND/HND. ()
- B.Sc/B.A. ()
- M.Sc/Ph.D. ()

4. How many years have you been a housing developer?

- 1-5 years. ()
- 6-10 years. ()
- 11-15 years. ()
- 16 years and above ()

Kindly indicate the extent to which the following practices are being taken into consideration in your investment decisions. 1: Not at all 2: a little 3: Averagely 4: significantly 5: Very significantly.

S/N	ESG Practice	Not at all	A little	Averagely	Significantly	Very Significantly
1	Energy-efficient building designs (LED lighting, natural ventilation, solar integration)					
2	Adoption of renewable energy sources (solar panels, hybrid power systems)					
3	Water conservation systems (rainwater harvesting, water recycling, low-flow fixtures)					
4	Waste segregation and recycling programs in properties					
5	Use of eco-friendly and locally sourced building materials					
6	Green landscaping and tree planting around properties					
7	Incorporation of green roofs and vertical gardens where feasible					
8	Smart metering for electricity and water usage to track consumption					
9	Proper stormwater drainage systems to mitigate flooding					
10	Policies to minimize carbon footprint during property development and management					
11	Affordable and inclusive property offerings to cater for diverse income groups					
12	Tenant engagement forums for feedback and collaboration					
13	Provision of recreational and community spaces in property developments					
14	Health and safety measures (fire safety systems, emergency exits, CCTV)					
15	Disability-friendly designs (ramps, lifts, accessible toilets)					
16	Employment opportunities for local communities during development and management					

S/N	ESG Practice	Not at all	A little	Averagely	Significantly	Very Significantly
17	Training and capacity building for staff and contractors					
18	Support for local businesses (allocating spaces for SMEs in shopping complexes)					
19	Initiatives for diversity, equity, and inclusion in tenant mix and staff recruitment					
20	Corporate social responsibility (CSR) projects such as scholarships or community development					
21	Transparent and accountable service charge administration					
22	Clear tenancy agreements and dispute resolution mechanisms					
23	Regular property audits and compliance with regulatory requirements					
24	Ethical procurement and contractor selection processes					
25	Anti-corruption and anti-bribery policies in property transactions					
26	Independent board oversight in property investment decisions					
27	Disclosure of ESG performance in annual reports					
28	Risk management frameworks for sustainability and resilience					
29	Digitalization of property records and documentation for transparency					
30	Regular stakeholder engagement (investors, tenants, regulators, communities)					

S/N	Factors Affecting ESG Adoption	Not at all	A little	Averagely	Significantly	Very Significantly
1	Management leadership & commitment					
2	Corporate strategy & vision					
3	Availability of capital / financing capacity					
4	Risk appetite and investment horizon					
5	In-house expertise & human resources					
6	Operational capacity / systems					
7	Past performance & track record					
8	Portfolio size and diversification					
9	Perceived ROI and payback period					
10	Corporate culture & values					
11	Tenant demand & preferences					
12	Investor and lender pressure					
13	Availability of green finance / incentives					
14	Market rents and vacancy rates					
15	Sale / liquidity considerations					
16	Insurance costs & conditions					
17	Benchmarking & valuation practices					
18	Local and national regulations					
19	Enforcement and regulatory certainty					
20	Availability of credible standards and certification					
21	Public procurement rules					
22	Taxation and fiscal policy					
23	Judicial and dispute-resolution environment					
24	Technology availability & maturity					
25	Data availability and measurement capability					
26	Construction and retrofit feasibility					
27	Supply chain capacity and skills					

S/N	Factors Affecting ESG Adoption	Not at all	A little	Averagely	Significantly	Very Significantly
28	Maintenance capability and lifecycle planning					
29	Community acceptance and social license					
30	Employee and tenant welfare concerns					
31	NGO and media scrutiny / reputation risk					
32	Cultural norms and expectations					
33	Macroeconomic conditions					
34	Energy supply reliability and fuel costs					
35	Climate risk exposure					
36	Political stability and policy continuity					
37	Peer behaviour and market demonstration effects					
38	Access to international capital / cross-border investors					
39	Availability of training and technical assistance					
40	Transaction costs and bureaucracy					