



THE APPLICATION OF ENVIRONMENTAL SOCIAL GOVERNANCE IN PROPERTY VALUATION IN NIGERIA

Anthony I. ANKELI¹, Nurudeen A. BELLO² and Mohammad B. NUHU³

1. Department of Estate Management and Valuation, Federal Polytechnic Ede, Nigeria

2. Department of Estate Management, University of Ilorin, Nigeria

3. Department of Estate Management and Valuation, Federal University of Technology,
Minna, Nigeria

Corresponding email: thonyankeli@gmail.com

ABSTRACT

Purpose: *The rising need for the integration of Environmental, Social, and Governance (ESG) principles into real property valuation has become an issue of global concern, but its usage and adoption in the Nigerian valuation context remains underexplored.*

Design/methodology/approach: *The paper therefore examines the growing relevance of ESG considerations in property valuation practices within the context of the Nigerian real estate market subsector. Mixed research method was adopted and both inference and descriptive statistical tool were employed to analyze how valuers in Nigeria are responding to the demand of sustainable development (SDG) principle through community impact, sustainability, and governance factors, the study highlights both emerging practices and prevailing gaps.*

Findings: *Data from estate valuers, regulatory frameworks, and stakeholder perspectives reveal that while awareness is increasing, ESG integration is often inconsistent due to limited institutional framework/support and professional training.*

Research limitations/Implications: *The limitations to the current research work include the non-cooperative attitude of most estate surveyors and valuers in divulging comprehensive information on their knowledge of ESG in valuation reporting and their willingness to adopted ESG concept in valuation practice.*

Practical implications: *The study recommends the inclusion of ESG metrics in valuation standards, alongside capacity-building initiatives for practitioners.*

Originality/value: *This research contributes to a more sustainable and socially responsible valuation approach in Nigeria, aligning local practice with international trends.*

Keywords: Environmental Social Governance, property valuation, sustainability, Nigeria, professional practice.

¹ Email: kesj@kasu.edu.ng

1.0 INTRODUCTION

The integration of Environmental, Social, and Governance (ESG) principles into property valuation has emerged in recent time as a key concern in both developed and emerging markets. These principles emphasized social impact, sustainability, ethical governance, and the offering of a broader perspective beyond the conventional real estate physical and financial attributes. As the global real estate industry continue to revolutionize by responding to the changing climate, stakeholder expectations, and regulatory demands, investment decisions are steadily and increasingly been influenced by ESG factors and by extension, the real property valuation models' valuers adopt (Sayce et al., 2010; RICS, 2021).

In the Nigerian context of valuation practice, ESG principles adoption in property valuation remains is presently at its immaturity stage. The conventional real property valuation approaches still control and largely shaped valuation practices in the country as location, physical condition, and market comparable are often emphasized and given much priorities, while such variables as community impact, sustainability performance, or governance-related risks are overlooked or under-emphasized. Hence, Olaleye & Aluko (2015) and Akinjare et al., (2012) are of the view that, the current gap between the global valuation trends and local practices presents a fundamental challenge for the Nigeria's real estate sector, particularly in the current era of environmental vulnerabilities, social inequality, and governance-related concerns.

Issues as carbon footprint, energy efficiency, land use compliance and environmental risk exposures are all tagged issues of environmental considerations in real property valuation. Nigeria, like many other sub-Saharan African nations, are facing rising environmental threats in form flooding, erosion, desertification and other impactful climate change factors that negatively or positively influences property values and investment risk. Despite the graveness of effect of these factors on property values and investment risk, valuers in the developing nations rarely quantified or systematically incorporated them into their valuation processes. Aluko (2011) and Nubi (2003) has observed that, properties located in flood-prone areas like Lagos or Port Harcourt may suffer value depreciation, but such environmental risks are often overlooked or excluded from valuation assumptions.

Environmental issues as accessibility, displacement, and the well-being of tenants in relation to occupiers' health and safety; the condition of labourers during construction work as well as the other broader impact of properties on the communities constitute the social dimension of ESG. In Nigeria, issues of rapid urbanization rate, poverty, escalating slum formation and informal settlements, poor urban planning and illiteracy level raise crucial questions of equity, justice and inclusiveness in real property valuation judgments. However, Ibem and Aduwo (2015) observed that, the social value of real estate assets, especially in underprivileged areas, is largely unmeasured and underreported in current valuation frameworks. Furthermore, governance, which is the third pillar of the principle, dwells on transparency, compliance with planning regulations or policies, land tenure system and security, ethical principles and practices among developers, property owners, and valuers. The weak institutional framework, opaque land administration, and cases of professional malpractice and misconducts have hindered the full integration of governance metrics in real property valuations in Nigeria (Ajibola et al., 2011). Although professional bodies as the Nigerian Institution of Estate Surveyors and Valuers (NIESV) have adopted codes of conduct, but the holistic implementation of the codes remains a major challenge. Therefore, the need for the rebranding of the national valuation model or the

The Application of Environmental Social Governance in Property Valuation in Nigeria.

rethinking of the property valuation processes in the country through the integration of the ESG model has become urgent and no longer negotiable. It is important to note that investors, both local and international, are increasingly becoming sophisticated and wiser in their business interactions, hence are beginning to demand for a more transparent and sustainable process in their real estate portfolios. Additionally, RICS (2021) observed that financial institutions and insurers are beginning to factor ESG risks into lending and underwriting decisions. As such, valuers who fail to reflect ESG considerations risk producing outdated or misleading valuations, undermining investor confidence and longterm property performance.

The crux of this paper is to explore the extent to which valuers in Nigeria are currently integrating ESG principles in property valuation practices in the country. The study investigates the level of ESG awareness among Nigerian valuers, institutional policy frameworks supporting ESG adoption, and the challenges hindering its effective integration. Through this examination, the study aims to bridge the observable gaps between global best practices and the local professional environment, offering policy and practical recommendations for sustainable valuation practice in Nigeria's real estate market subsector.

2.0 LITERATURE REVIEW

2.1 *The environmental, social, governance and awareness in valuation practice*

Globally, the Environmental, Social, and Governance (ESG) variable integration into real property valuation has become a typical area of academic and professional discourse. This is basically driven by the growing demand for sustainable and ethically grounded real estate investment practices. Evidence abounds in literature where the shift from conventional valuation models, that focuses purely on location, market comparable and the property's physical attributes, to the contemporary model that is more holistic in approach and account for environmental performance, social impact, and corporate governance (Lorenz & Lützkendorf, 2011; Sayce et al., 2010). The paradigm shift does not only alter the way real estate assets are assessed, but also redefining the role of valuers in delivering credible and future-proof advice that is sustainable and acceptable to all.

The environmental factors often considered in valuation, that is, the environmental component of ESG relates to the assessment of factors as carbon emissions, energy efficiency, flood risks, building materials, and climate resilience. Several earlier studies have highlighted the consequence of environmental sustainability on property values. Fuerst and McAllister (2011) found that commercial buildings with green certifications like LEED or BREEAM often command rental and capital value premiums. This "green premium" stems from operational cost savings, reputational benefits, and enhanced tenant satisfaction.

It is however in the public domain that the integration of environmental data into real property valuation report is minimal in the Nigerian context. Aluko (2011) maintained that despite the prevalent of flooding, land degradation and other environmental risks in Nigerian cities as Lagos, Ibadan, and Port Harcourt, valuers seldom integrate such risks into their assessments. This gap arises from inadequate environmental data, lack of awareness, and weak institutional frameworks that do not mandate ESG compliance in property assessment standards. Furthermore, Nubi and Omirin (2006) affirmed that many valuers still operate under obsolete assumptions, thereby neglecting the long-term environmental liabilities of real properties. Despite the growing exposure to climatic factors and other associated risks, particularly in cities in the coastal zone, real property valuation reports continue to show short-term market trends rather than sustainable value. The implication is that numerous investment decisions made by stakeholders are based on fractional or misleading information, thus exacerbating environmental and financial vulnerabilities. The social dimensions of ESG in property valuation includes the safety, displacement issues, accessibility, affordability and health implications and how real estate affects individuals and communities. According to UNHabitat (2020) valuation practice

globally is beginning to reflect the social impact of real estate development, especially in urban regeneration projects and affordable housing schemes. The internalization of social metrics into real property valuation reporting in the context of the Nigerian valuation practice is still at its emerging stage. Ibem and Aduwo (2015) found that urban housing developments oftentimes neglect to reckon with the well-being of community or her inclusive growth. For instance, the non-consideration or capturing of social dislocations in valuation reports, especially, where the low-income families at the peri-urban areas are displaced without fair compensation or alternative housing provisions. Olaleye and Aluko (2015) however, observed a technical disconnect between the economic value allotted to properties and their social utility. A high-end commercial real property development sited in a socially vulnerable neighbourhood may in a short term boost the market values of properties in that neighbourhood but could in the long run contribute to gentrification and eventual displacement. Without a framework for measuring such impacts, valuers are unable to provide a comprehensive view of a property's value to society. The lack of basic tools and professional training capacity that can enable the Nigerian estate surveyors and valuers to integrate social metrics/components as cultural importance, the local employment generation and community satisfaction into their valuation reports is a major hinderance. This further exposes the lack of full utilization of the social implications of real property development and the broader inadequacies or gaps existing in valuation education and valuation regulation in the country. The governance aspect of valuation practice in ESG includes the policy framework or regulatory compliance, transparency, ethical standards, and institutional accountability. Governance to the valuers also denote adherence to professional code of conducts, accurate and fair reporting, and the disclosure of conflicts of interest. According to RICS (2021), organizations as the Royal Institution of Chartered Surveyors (RICS) and the International Valuation Standards Council (IVSC) have begun to include governance indicators in their valuation guidance worldwide.

However, in the context of Nigeria valuation practice, issues of governance in the real estate subsector are particularly incisive. Ajibola et al. (2011) noted that, the weak land administrative systems, non-transparent land title registration, and professional misconduct undermine the credibility of valuation practice and reporting. The Nigerian Institution of Estate Surveyors and Valuers (NIESV) has tried targeted at address issues of this nature through her ethical code of conduct, thus far, the full implementation and enforcement remain inconsistent and gradually becoming a mirage. In line with this, Adebayo and Akinjare (2013) opined that valuation reporting in Nigeria frequently lack transparency in their methodology and assumptions, hence, limiting their usefulness to clients and regulators. Inappropriate governance practices do not only affect the confidence of investors but also obscure the risks and opportunities associated with real estate assets. Without strong governance, the integration of ESG into valuation becomes superficial or tokenistic. Akinjare et al. (2012) conducted a study on the awareness of ESG among practicing estate surveyors and valuers in Nigeria and found a mix of increasing interest and institutional inactiveness. The study revealed the acknowledgement of the importance of ESG by several valuers, while few of the valuers applied the ESG principles in practice. The main barriers included lack of training, absence of local guidelines, and pressure to conform to client expectations rather than ethical or sustainable standards. Ogunba and Ajayi (2007) emphasized that valuation education in Nigeria remains largely traditional, focusing on the cost, income, and market approaches without incorporating sustainability or ESG frameworks. As a result, new graduates enter the profession with limited exposure to these emerging global standards.

Several previous literatures exist that supports international and local best practices on the integration of ESG metrics in valuation practice globally. ESG principles in property valuation is often seen as a mean to improve sustainability, transparency and long-term value. RICS (2021) publication on “Sustainability and ESG in commercial property valuation” outlines

The Application of Environmental Social Governance in Property Valuation in Nigeria.

specific metrics and methodologies for valuers to adopt. Likewise, the UNEP Finance Initiative (2020) offers guidance for financial institutions on embedding ESG into real estate decision-making. Translating these practices into the Nigerian environment requires contextual adaptation. Issues such as informality in land markets, infrastructural deficits, and limited access to reliable data hinder the adoption of ESG-aligned valuation methods. This calls for not only regulatory reform but also capacity building for valuers and broader stakeholder engagement requires a deliberate effort to reform valuation standards, strengthen professional ethics, and build institutional support for ESG-driven real estate practices.

3.0 THE STUDY AREA

The study focused on three major Nigeria urban centers, that is Lagos, Abuja, and Port Harcourt. The rationale for the choice of these cities is due to their active and vibrant property markets, high level concentration of professional estate surveyors and valuers, and the varying environmental, social and governance contexts. The selected urban centers represent a crosssection of Nigeria's socio-economic diversity and urbanization challenges.

4.0 METHODOLOGICAL APPROACH

Mixed-methods research design was used for the study. The method involves the combination of both quantitative and qualitative research approaches to investigate the extent of Environmental, Social, and Governance (ESG) integration in property valuation practice in Nigeria. The approach was considered most appropriate to obtain a holistic understanding of the perceptions of estate valuers, the place of institutional support, and practical challenges associated with ESG applications.

The target population for the study who constituted the study respondents are the registered estate surveyors and valuers practicing in the study areas, who are members of the Nigerian Institution of Estate Surveyors and Valuers (NIESV) and Estate Surveyor and Valuers Registration Board of Nigeria (ESVARBON). This group was selected for the study due to the central role they play in property valuation and management, advisory services, and real estate investment decisions across the country.

The study adopted purposive sampling technique for the identification of professionals who are actively involved in real property valuation. A total of 150 respondents were selected across the cities used for the study. In the selection process, the study ensures adequate representation of valuers in the private practice, public sector agencies, and academic institutions with at least five years of post-qualification experience. The sample size was guided by Cochran's formula for finite populations as adopted by Ankeli et al., (2025) and adjusted for a finite population of less than 10,000. The formula used is presented as:

$$n = \frac{z^2 p(1-p)}{e^2} \quad (1)$$

where: n = sample size, z = 1.96, p = 0.5 and e = 0,05. Then, the adjusted formula is

$$nf = \frac{n}{1 + \frac{n}{N}} \quad (2)$$

nf = Adjusted sample size

N = Total population of respondents

Primary data collected and used for the study were through structured questionnaires and semi-structured interviews. The questionnaire was designed to capture valuers' perceptions on the awareness, attitudes, and practices regarding ESG principles application in property valuation

in the study areas. This approach is consistent with Kothari (2019), who observed that, surveys provide a systematic way of data gathering on the attitudes and perceptions of the respondents across a broad population. The questionnaire consisted of five sections covering demographic data, knowledge of ESG components, valuation practices, perceived challenges, and institutional support. The researcher further conducted an in-depth interview with 12 key informants, who are principal partners, senior surveyors (representatives of valuation firms), officials of NIESV and ESVARBON. The interviews provided significant insights into the regulatory environment, practical constraints, and recommendations for improving ESG integration in property valuation practice.

Other secondary data were sourced from academic literature, policy documents, NIESV guidelines, international valuation standards and existing property market reports. These sources helped contextualize the findings and compare Nigerian practices with global trends.

Both descriptive and inferential statistics were used for the analysis of the data collected. Thematic content analysis was adopted in the analysis of the qualitative data collected. Responses from the interview were transcribed, coded, and grouped into emerging themes related to ESG awareness, institutional gaps, valuation challenges, and professional readiness. This provided depth to the quantitative findings and allowed for triangulation of results. The questionnaire was however pre-tested through pilot survey outside the study locations to test its validity, the feedback provided the bases for the necessary adjustments made. Content validity was established by aligning the questionnaire items with relevant literature and ESG frameworks. Cronbach's Alpha was conducted and a reliability coefficient of 0.78 was obtained; hence, indicating an acceptable level of internal consistency. Independent researcher was contacted to review the interview transcripts to ensure objectivity and credibility of the analysis.

5.0 PRESENTATION AND DISCUSSIONS OF RESULTS

Findings of the study revealed a mixed results of ESG integration in property valuation practices across the study location (Lagos, Abuja, and Port Harcourt). Data collected regarding the respondents' demographic profile, the growing awareness of Environmental, Social, and Governance (ESG) component among estate surveyors were presented and analyzed and discussed based on the various specific headings.

5.1 Demographic Profile of Respondents

The survey questionnaires were administered on 150 registered estate surveyors, that is, 50 respondents for each of the locations of Lagos, Abuja and Port Harcourt respectively. The demographic breakdown is presented in Table 1.

Table 1: Demographic Profile of the Respondents

Category	Lagos (N = 50)	Abuja (N = 50)	Port Harcourt (N = 50)	Total	% Rate
Gender					
Male	45	35	40	120	80
Female	05	15	10	30	20
Total	50	50	50	150	100
Age Group					
18 – 30	15	20	17	52	35
31 – 45	25	27	23	75	50
46 + years	10	03	10	23	15
Total	50	50	50	150	100
Prof. Qualification					

The Application of Environmental Social Governance in Property Valuation in Nigeria.

FELLOW	04	03	02	09	06
ANVIS+ RSV	41	44	47	132	88
ANVIS	05	03	01	09	06
Total	50	50	50	150	100

Source: Field Survey (2025)

Table 1 revealed that, 120 (80%) of the respondents selected for the study across the study locations are predominantly male estate surveyors, whose ages falls between 18 to 45years thereby constituting 85% of the total respondents. These groups are young and highly talented professionals with about 94% fully registered. The findings of the study are congruent with earlier study of Darko & Chan (2017) which argued that younger, educated professionals as more likely to be aware of sustainability initiatives.

5.2 Awareness and Understanding of ESG Principles

Furthermore, the survey evaluates the rate of ESG principles awareness and established that 75% of the respondents are familiar with ESG metrics but rarely apply them in their valuation reporting. Only 25% of the respondents reported active inclusion of ESG principles in valuation reporting. Table 2 report the findings on ESG awareness.

Table 2: Awareness and Understanding of ESG Principles

Group	Frequency	% Rate
Familiar with ESG concept but not incorporating it	112	75
Actively Incorporating ESG Metrics in Valuation Reports	38	25
Total	150	100

Source: Field Survey (2025)

The awareness and integration level of ESG metrics in valuation reports was measured through the responses of the respondents to the questions on awareness level. About 75% of the estate surveyors that responded to the questions are aware of the ESG concepts but barely incorporate it in their valuation reports. While those that that actively incorporate ESG metrics in their valuation reports constituted about 25% of the total respondents. This negate the submissions of Ebekozen, Ogunsemi and Akinade, (2022), who are of the opinion that inadequate awareness of sustainability issues is a leading barrier to sustainable construct in developing nations; However, the findings of the study align with the findings by Akinjare et al. (2012), who discovered an increasing but limited awareness of ESG among Nigerian estate surveyors. Ogunba and Ajayi, (2007) attributed the gap between awareness and practice particularly in the real estate surveying and valuation profession to inadequate professional training and the absence of formal valuation standards mandating ESG integration. It is possible to be aware of an issue but lack the will power to implement the concept. This study, however, advocated the need for a more effective ESG metrics and training initiatives for estate surveyor.

The interviews conducted revealed that perception of most valuers on ESG principles. The is seen as an emerging trend mainly relevant to international investors or projects funded by foreign organizations. One of the senior estate surveyor and valuer interviewed noted that: *“Most clients focus on traditional factors like location and market demand. ESG considerations are seen as optional extras, not essential to valuation outcomes.”*

This points to the prevailing mentality that undervalues ESG's significance in valuation reporting; hence, corroborate the earlier position of Olaleye and Aluko (2015) on the lag in sustainability acceptance and application.

5.3 Environmental Factors and Property Valuation

The study found that environmental risks as flood vulnerability, pollution, and energy inefficiency are rarely quantified or considered in valuation reports in Nigeria.

Table 3: Environmental Challenges and Property Valuation

Environmental Factors	Frequency	%Rate	Rank
Flood vulnerability or climatic risk	15	10	3 rd
Environmental pollution,	22	15	2 nd
Energy inefficiency	25	17	1 st

Source: Field Survey (2025)

Only 25 estate surveyors out of the 150 surveyors representing 17% considered environmental vulnerability or climate risk in their assessments; thus, ranking 1st among the other factors ranked. This finding is consistent with Aluko (2011), who documented the minimal importance valuers currently attached to environmental risks factors in Nigerian valuation practices despite escalating ecological and other similar threats. More so, issues of environmental and technical expertise accessibility have been the concern and challenges of valuers in Nigeria. This practical constraint echoes the observations of Nubi and Omirin (2006) about the lack of institutional support for environmental risk assessment.

5.4 Social Metrics Considerations in Valuation

The qualitative data gathered show the weak integration of social factors in valuation practice among Nigerian valuers. Only 12 valuers across the study locations representing 8% of the respondent incorporate social components in their valuation practice. Hence, social factors incorporation as one of the pillars of ESG into valuation reporting in Nigeria seems to be one of the weakest ESG pillars. It was further observed that the valuers that reported the inclusion of community impact, displacement risks, or social equity concerns in their reports are the experienced and very active valuers around real property valuation practice. This aligns with the assertions of Ibem and Aduwo (2015), who reported the neglect of social sustainability in property valuation exercise in Nigeria.

However, interview conducted suggested the consideration of social components in areas extrinsic in the professional realm of estate valuers but look more important to such professionals as urban planners or social workers. Nevertheless, the non-integration of social impact assessment into valuation procedures in the country leads to noncomprehensive property valuation reporting, especially in informal and rapidly expanding peri-urban settlements where social vulnerabilities are pronounced.

5.5 Governance and Professional Ethics

The respondents acknowledged the fact that issues relating to governance plays a significant role and as well pose strong barrier to the effective integration of ESG consideration in real property valuation practice. The interview conducted revealed that reasonable numbers of respondents cited inconsistent policy frameworks and weak valuation standards enforcement

The Application of Environmental Social Governance in Property Valuation in Nigeria.

mechanism as a primary challenge exacerbating ESG principal incorporation into valuation practice. This finding confirmed the assertion Ajibola et al. (2011), that weaknesses around institutional and the lack of transparency often undermines valuation credibility and reliability. Other areas pointed out by the respondents during the interview are the need for professional training and ethics. The near absence of this has often made some valuers to fall or admit to undue client demand/pressure by producing inflated valuations. This factor has helped to engender the compromising the integrity of valuation reports; sustained what Adebayo and Akinjare (2013) in the findings of their study the ethical dilemmas in the Nigerian valuation practice.

5.6 Barriers/Challenges to ESG Integration into Valuation Practice

The outcome of the survey conducted on ESG integration, and the impeding factors are presented in Table 4.

Table 4: Barriers to ESG Integration into Valuation Practice in Nigeria

Barrier	Frequency	%Rate	Rank
Financial Constraints	145	97	3 rd
Lack of governmental incentives	120	80	4 th
Limited access to environmental and social data	148	99	1 st
Regulatory and Policy gaps	100	67	5 th
Low Awareness and ethical pressures	92	61	6 th
None inclusion of ESG training in curriculum	148	99	1 st

Source: Field Survey (2025)

The most influencing challenges or barrier to the integration of ESG principles in valuation practice in Nigeria are limited access to environmental and social data, and the non-inclusion of ESG training in schools' curriculum. 148 of the respondents representing 99% of the response rate affirmed these assertions; hence, ranking 1st barrier or challenging factors. This further align or sustained the argument of Ogunba and Ajayi (2007) who advocated the need for reforming valuation education in Nigeria. Financial constraints as high initial costs and lack of incentives are also major factors ranking 3rd and 4th respectively. The study found that the least influencing factors, though a significant factor, is the low-level awareness and ethical pressure which ranked 6th barriers.

6.0 CONCLUSION AND RECOMMENDATIONS

The recognition of ESG principles as an integral part of contemporary property valuation globally and the increasing call for its integration into modern day valuation practice call for serious concern. Despite the relevance of ESG in modern real property valuation, its full integration into the Nigerian valuation practice remains limited and inconsistent. Earlier scholars have suggested that the challenges of ESG integration could be addressed through education and enlightenment campaign, transparent, and socially responsible valuation practices among other factors.

In order not to undermine the professional integrity of Nigerian valuers, this study recommended the need for an urgent deliberate action targeted at reforming the real estate surveying and valuation education in Nigeria. More so, to meet up with the current international best practices, our institutional framework and policy guideline must be reevaluated.

REFERENCES

- Adebayo, M. A., & Akinjare, O. A. (2013). Ethical issues in Nigerian property valuation practice. *Journal of African Real Estate Research*, 1(1), 23–32.
- Ajibola, M. O., Ojo, O., & Igbinosa, O. (2011). Estate surveyors and valuers perception of environmental risks in property valuation in Lagos, Nigeria. *Journal of Sustainable Development*, 4(4), 246–256.
- Akinjare, O. A., Oluwole, M., & Oloyede, S. A. (2012). Environmental challenges of real estate valuation practice in Nigeria. *International Journal of Sustainable Development*, 5(3), 12–20.
- Aluko, B. T. (2011). Sustainable housing development and functionality of planning laws in Nigeria: The case of Lagos state. *Journal of Sustainable Development and Planning*, 6(1), 105–116.
- Ankeli, I. A., Adebowale, A. P., Okoh, G. F., & Sonibare, K (2025). Green Building Certifications and Sustainable Development in Osogbo, Nigeria: The Issues and Challenges. *International Journal of Real Estate (IJRE)*, 1(2), 160-176
<https://doi.org/10.5281/zenodo.15575705>
- Ebekozien, A., Ogunsemi, D. R., & Akinade, O. O. (2022). Green building in Nigeria: A pathway to sustainable development in the construction industry. *Construction and Building Materials*, 315, 125073. <https://doi.org/10.1016/j.conbuildmat.2021.125073>
- Fuerst, F., & McAllister, P. (2011). The impact of energy performance certificates on the rental and capital values of commercial property assets. *Energy Policy*, 39(10), 6608–6614. <https://doi.org/10.1016/j.enpol.2011.08.027>
- Ibem, E. O., & Aduwo, E. B. (2015). Urban housing and social sustainability in Nigeria: The need for paradigm shift. *Housing and Society*, 42(2), 58–75.
<https://doi.org/10.1080/08882746.2015.11764596>
- Lorenz, D., & Lützkendorf, T. (2011). Sustainability and property valuation: Systematisation of existing approaches. *Building Research & Information*, 39(3), 231–247. <https://doi.org/10.1080/09613218.2011.560105>
- Nubi, T. G., & Omirin, M. M. (2006). Urban land use planning and the challenge of environmental degradation. *Journal of the Nigerian Institution of Town Planners*, 19(1), 1–15.
- Ogunba, O. A., & Ajayi, C. A. (2007). The response of Nigerian valuers to a contemporary statutory valuation requirement. *Property Management*, 25(2), 158–168. <https://doi.org/10.1108/02637470710735153>
- Olaleye, A., & Aluko, B. T. (2015). Sustainability and its impact on property valuation: A literature review. *Proceedings of the NIESV Annual Conference*. Royal Institution of Chartered Surveyors (RICS). (2021). *Sustainability and ESG in commercial property valuation and strategic advice*. <https://www.rics.org>
- Sayce, S., Sundberg, A., & Clements, B. (2010). Is sustainability reflected in commercial property prices? *Journal of Sustainable Real Estate*, 2(1), 1–24.
- United Nations Environment Programme Finance Initiative (UNEP FI). (2020). *Rethinking real estate: ESG to the rescue?* United Nations Environment Programme.
- United Nations Human Settlements Programme (UN-Habitat). (2020). *World Cities Report 2020: The Value of Sustainable Urbanization*. <https://unhabitat.org>

