

IMPACT OF CORRUPTION ON ACHIEVING SUSTAINABLE DEVELOPMENT GOALS WITHIN AFRICA'S CONSTRUCTION INDUSTRY

Abiola Aderibigbe¹, Nnedinma Umeokafor², Tariq Umar³, and Yog Upadhyay⁴

ABSTRACT

Corruption is prevalent across the construction industry in developing countries. This is due to converging factors such as (a) the sector's requirement for substantial capital investment, (b) government involvement, (c) time pressures to deliver new projects in response to the climate crisis and (d) unharmonised and complex regulatory environments. These factors together with access to lucrative contracts, and the presence of rent-seeking 'gatekeepers' establish that corruption represents a significant challenge in developing countries. This research undertook a critical and analytical review of the literature and found that thus far, corruption remains a threat to the construction of renewable energy assets in Africa. It also found that despite solutions (anti-corruption strategies) proffered by academics, experts, and institutions including the United Nations, Transparency International and the World Bank, these have had minimal impact. Hence, in Africa, challenges to implement sustainable urbanisation via the construction of renewable energy infrastructure persist. Furthermore, it explored if the creation of a binding duty of good faith via legislation harmonised across Africa could have an impact on corruption. This led to the creation of an assessment framework, and recommendations of empirical investigations including whether harmonised legislation across Africa can reduce corruption within its construction industry. To empower the industry to achieve sustainable development goals, this research was produced to advance the understanding of corruption within Africa's construction industry on renewable energy infrastructure. This research also addresses the gap in knowledge regarding the possible and plausible impact of the binding duty of good faith on overcoming corruption within Africa's construction industry.

Keywords: Africa; Construction Industry; Corruption; Good Faith; Renewable Energy.

¹ Abiola Aderibigbe, Faculty of Engineering and Technology, Liverpool John Moores University, UK, abioladeola@live.co.uk

² Dr Nnedinma Umeokafor, Senior Lecture, Faculty of Engineering and Science, University of Greenwich, UK, ned@nnedinmaumeokafor.com

³ Dr Tariq Umar, Senior Lecturer, Architecture and Built Environment, University of West England, UK, tariqumar1984@gmail.com

⁴ Dr Yog Upadhyay, Senior Lecturer in Construction Law, Faculty of Engineering and Technology, Liverpool John Moores University, UK, Y.P.Upadhyay@ljmu.ac.uk

1. INTRODUCTION

The 17 Sustainable Development Goals (SDGs) introduced by the United Nations (UN) in 2015 have been adopted by all its Member States (United Nations [UN], 2015). The SDGs are an urgent call for action for all nations, with Goals 7 (Affordable and Clean Energy) and 9 (Industry, Innovation, and Infrastructure) being directly relevant to the construction industry (Ibid). Yet, despite its adoption, constructing renewable energy assets in developing countries continues to be challenging due to corruption (Rahman, 2020). Converging factors such as (i) government involvement, (ii) pressures to deliver new projects in response to the climate crisis, (iii) unharmonised/complex regulatory environments, (iv) access to lucrative contracts, and (v) the presence of rent-seeking 'gatekeepers' precipitate corruption within developing nations (Rahman, 2020; James, 2022; Sabouri et al., 2023). Moreover, circumstances which produce these factors develop during the inception, construction, and lifecycle of renewable energy assets. These circumstances include (a) challenges in obtaining planning permission/concessions, (b) generation of applicable licenses, (c) government joint venture partnerships, and (d) importing vital/needed equipment and materials into the developing country the project is situated (Sabouri et al., 2023).

Typically, the requirement to obtain permits/licenses creates opportunities for soliciting bribes (James, 2022). Public officials/leaders/politicians act as gatekeepers of permissions, permits, certificates and customs handling; demonstrating 'rent-seeking' behaviour (James, 2022; Moliterni, 2017; Rahman, 2020; Sabouri et al., 2023). For example, tendering bribes to regional leaders to obtain exploration and exploitation licences for natural resources is typical in Indonesia (Adjie, 2020; Rahman, 2020). The same is typical in Africa where public officials are bribed to grant permits/rights. To illustrate, an agent representing CEFC China Energy Company was convicted for presenting bribes to officials from Chad and Uganda to secure oil/energy rights (Transparency International, 2020). In addition, the necessity of navigating political fronts creates further avenues for corruption (Sabouri et al., 2023). An example is when politicians jostle for payment for their political party/group in return for favours; promising that the owner/developer/contractor will not face issues regarding its assets (James, 2022). Public officials, leaders, and politicians also solicit bribes by requesting 'facilitation' payments (i.e., payments made to speed up processes) (ibid). Corruption is a significant barrier to the construction, development, and operation of renewable energy infrastructure. Thus, it remains a threat to the green transition required to attain sustainable urbanisation within Africa. Therefore, this research aims to critically review and analyse corruption globally, as well as in Africa, and its impact on renewable energy infrastructure within Africa's construction industry. It aims to explore the proposition that establishing a binding duty of good faith through harmonised legislation across Africa could positively impact and reduce corruption. This research contributes to advancing the understanding of corruption within Africa's construction industry (on renewable energy infrastructure) and bridges the gap in knowledge regarding the possible and plausible impact of a binding duty of good faith in overcoming corruption within Africa.

2. METHODOLOGY

The literature research methodology (Lin, 2009) was used to produce this research. This involved perusing, reviewing, analysing, sorting, and selecting relevant literature to identify the necessary facts for the research. In the first instance, a bibliometric table was

produced using two of the keywords mentioned above i.e., (i) Corruption, and (ii) Renewable Energy, as search parameters within the ‘Web of Science’ platform. This produced 228 sources from the year 2007-2023 made up of articles, journals and books that were relevant to the topic. Then, a qualitative approach was used with the addition of a third keyword “Africa” to extract relevant, and applicable literature from the bibliometric table to attain an accurate and precise outlook of the state and impact of corruption within Africa’s construction industry (on renewable energy).

In addition to using the bibliometric table, a wide body of sources were consulted and examined. These included reports, writs and sources issued by governments and institutions such as the World Bank, Transparency International, UN, United Nations Development Programme (UNDP), United Nations Office on Drugs and Crime (UNDOC), Extractive Industries Transparency Initiative (EITI), Peace Research Institute Oslo (PRIO), the Economist, as well as various academic sources cited in the literature review and outlined in the references.

3. LITERATURE REVIEW

3.1 CORRUPTION GLOBALLY

In many developing countries, corruption is a major obstacle to social development, economic expansion, and effective governance (Defreitas, 2023). This appears in several ways including bribery, embezzlement, nepotism, and fraud (ibid). The UN (2018) estimates the global cost of corruption to be more than US\$2.6 trillion annually, while 25% of the US\$13 trillion that governments globally expend on public spending is lost to corruption (United Nations Development Programme [UNDP], 2022). In addition, the UNDP considers US\$483 billion to be the tax figure abused by wealthy/high-net-worth individuals and multinational corporations (Ibid). International bribery remains prevalent and thriving because more than half of all international bribery cases are related to public spending (Defreitas, 2023; UNDP, 2022).

According to the 2023 iteration of the Corruption Perceptions Index (CPI) produced by Transparency International, the global levels of corruption have remained unchanged for over a decade (Defreitas 2023; Transparency International, 2023). The CPI which ranks 180 countries and territories around the world for their perceived levels of public sector corruption, revealed that over two-thirds of countries assessed scored below 50 out of 100, strongly indicating that they have serious corruption problems (Transparency International, 2023). The CPI further confirmed that the global average is at 43 whilst most countries have made no progress or declined in the last decade (ibid). Even some countries with high scores on the CPI assessment are considered corruption threats because they have welcomed dirty/illicit/illegal money for decades allowing kleptocrats to increase their wealth, power, and destructive geopolitical ambitions (Transparency International, 2022).

3.2 CORRUPTION IN AFRICA

Africa holds a perception/reputation of high levels of corruption (Amoah et al., 2022; UNDP, 2022). This is also evidenced on the CPI because a lot of African countries on the index were ranked poorly. The African nation of Somalia was ranked the worst on the index (Transparency International, 2023). This was the same in 2021 and 2022 where the average score of sub-Saharan Africa on the CPI was (and remains) 33 out of 100; the

lowest of any region assessed on the index (The Economist, 2022; Transparency International, 2022; Transparency International 2023). Between 2000 and 2015, US\$836 Billion of illegal/corrupt money left Africa i.e., about 3.7% of its GDP (UNDP, 2022). Moreover, it is well documented that governments in Africa are spending 58% less on education and 25% less on health due to corruption (ibid). The cost of corruption is not only financial, paid for by (a) the destruction of human potential, (b) poverty, and (c) inequality (UNDP, 2022; United Nations Office on Drugs and Crime [UNODC], n.d.). To illustrate, in Nigeria an (in) famous bribery matter, involving Shell (an international oil company) deprived Nigerians of over \$1.1 billion (Global Witness, 2017). The money paid out went to corrupt officials instead of the national budget (ibid). prompting the World Bank (2019) to declare that despite the nation's wealth, 50% of Nigerians continue to live in extreme poverty. The Nigeria example demonstrates that political and economic systems are typically utilised by corrupt actors causing the nation's wealth to be redistributed to the least needy (UNDOC, n.d.). Undoubtedly, corruption remains a scourge of modern life in Africa (UNDP, 2022).

3.3 CORRUPTION IN AFRICA'S CONSTRUCTION INDUSTRY/ENERGY SECTOR

In the construction industry, the term 'energy' is typically utilised in the context of generating heat, powering equipment, creating products and materials, transportation etc. (Designing Buildings, 2022). Thus, a reference to the 'energy sector' in the construction industry covers both renewable and non-renewable energy. Renewable energy in this context would include solar thermal energy, geothermal energy, wind energy, biomass, hydropower, etc., while non-renewable energy would include petroleum products, Hydrocarbon gas, natural gas, coal, nuclear energy etc. (Ibid). Corruption is prevalent within the 'energy sector' (of the construction industry) in Africa (Amoah et al., 2022). According to Rimšaitė (2019), corruption in the energy sector is mostly reliant on the location of the resources and the monopoly of political appointees. Acemoglu and Verdier (2000) contend that corruption in public spaces thrives when government agents and officials have self-interest, superior information, and cannot be adequately monitored. Unfortunately, the gatekeeping and rent-seeking behaviour exhibited by African leaders/politicians prove that the description/definition proffered by Rimšaitė, Acemoglu and Verdier, accurately depict African governments and political institutions. Therefore, it can be deduced that achieving sustainable urbanisation via the adoption of renewable energy opportunities is hindered by corruption in Africa (Amoah et al., 2022).

3.4 RENEWABLE ENERGY IN AFRICA AND THE "GREEN CURSE"

Notwithstanding the points made above, it should be noted that Africa has nonetheless witnessed remarkable growth in using renewable energy in recent years (Rahman, 2020). According to Amuakwa-Mensah and Näsström (2022), the wide growth of solar power in Africa has contributed to the overall increasing adoption of renewable energy consumption and investments in developing countries. The authors establish that from 61% in the 1990s, the share of renewable energy consumption in developing countries increased to 71% in the 2000s (Amoah et al., 2022). By 2015 this had increased again to 79% (ibid), which was largely due to the adoption of renewable energy across Africa.

Moreover, the creation and implementation of energy transition policies/legislative frameworks by countries in Africa demonstrate further that renewable energy is embraced (du Preez, 2022). These policies/frameworks tackle, the need for a renewable,

decarbonised, decentralised energy supply which addresses climate change, and the commitments made under the Paris Climate Accords (Accord de Paris). These African countries include Nigeria, Ghana, Egypt, Kenya, Morocco, Tanzania, South Africa, and Uganda (ibid). Unfortunately, analysts and experts have established that the continued growth of the renewable energy sector in Africa has caused a significant increase in corruption, resulting in a 'green curse' (Peace Research Institute Oslo, 2019; Rahman, 2020). Gennaioli and Tavioni (2011) established the “green” or “resource” curse in their study when they found that malfeasance within the renewable energy market is a significant risk for countries characterised by abundant renewable/natural resources and weak (governmental) institutions. The authors demonstrated that public support for renewable energy schemes within the construction industry can be highly vulnerable to corruption and attract rent-seeking, especially in settings with high levels of organised crime (Rahman, 2020). The green curse underscores the fact that corruption continues to manifest itself within Africa’s construction industry (on renewable energy).

4. DISCUSSION: SOLUTIONS PROPOSED TO ADDRESS CORRUPTION (ANTI-CORRUPTION STRATEGIES)

4.1 CLARITY ON ELIGIBILITY REQUIREMENTS

Boamah and Williams (2019) advocate that the first/necessary step to successfully tackling corruption is understanding how corrupt practices benefit stakeholders. In their Kenyan study, they discovered that the Kenyan energy sector was driven by poor planning and an inability to rapidly expand access to the electricity market. Consequently, corruption was used as the ‘problem-solver,’ a means to secure connections to the power grid (Rahman, 2020). This was the issue with a hydropower/hydroelectric project in Tanzania, where the Rufiji Dam project faced controversy due to being constructed on a wildlife reserve (Dalton, 2019). Poor/inadequate planning is a typical/ recurring issue in Africa (Frankfurt School-UNEP Centre, 2020). Thus, in the context of their study Boamah and Williams considered an apt solution to corruption to be about providing clear fee structures, clarity on eligibility requirements for applicable initiatives and designing the rollout system in line with the capacity of engineers (Rahman, 2020). In essence, the authors argued for addressing the ‘root causes’ of corruption rather than focusing exclusively on corrupt symptoms of a deeper malaise (ibid). Although this argument is commendable, there are some significant issues to overcome. Their approach to tackling corruption is limited in scope. It does not consider the external influence of the ‘non-corrupt’ developed nations who according to the CPI continue to accept illicit monies gained from corruption and kleptocrats (Transparency International, 2020). It is likely that to effectively tackle corruption within Africa’s construction industry a harmonised international effort is required. Moreover, corruption also speaks to the behaviour of parties i.e., parties engaging in gatekeeping and rent-seeking behaviour. Therefore, an adequate solution may be needed to consider measures to modify behaviour and practices as opposed to merely clarifying procedures and processes.

4.2 CORRUPTION RISK ASSESSMENT/MAPPING

Corruption risk assessments/mapping has been advanced as an effective strategy to tackle corruption (James, 2022; Rahman, 2020). This strategy involves educating a potential investor/developer/operator on how corrupt practices work in each sector (ibid). The point behind doing this is to ensure individuals are equipped with the knowledge of such

corrupt practices to enable them to adequately conduct business in corrupt nations. The Oxford Institute for Energy Studies conducted this type of exercise by analysing the renewable energy sector in Ethiopia and Kenya (Gordon, n.d.; Rahman, 2020). It discovered that the investment risk profile in each country essentially dictated the type of renewable energy projects being undertaken. To further elaborate, the Oxford assessment found that in Ethiopia, risk primarily occurred at the political and regulatory stage, with hidden barriers to market entry; while gaps in the legislation prevented rapid construction/expansion of private off-grid investments, and the government tended to prefer large utility-scale/on-grid projects (ibid). The Kenya assessment on the other hand revealed that risks to on-grid/physical assets were significantly higher and regulatory gaps fewer. It also revealed that challenges in land access and a high risk of protests also lead to substantial delays to larger on-grid projects, meaning sizeable/physical projects could likely suffer, but off-grid options did not encounter much opposition. Although the identification of project-specific risks is beneficial, this strategy still does not appropriately tackle the fundamental corruption issue, meaning that from the analysis provided, should the need arise to conduct an off-grid project in Ethiopia or an on-grid project in Kenya, corruption would still be a persistent hindrance.

4.3 TRANSPARENCY OF CONDITIONS

Other experts have determined that the transparency of conditions at project design could also be an effective way to tackle corruption in Africa. Sobják (2018) contends that misconduct and mismanagement at the initial phase of a renewable energy project allow for corruption at later project stages. Thus, transparency is key. The importance of transparency is already well documented in the energy sector (Grasso 2017; Grasso, 2020; Lu et al., 2019; Rahman, 2020). Institutions such as the Africa Progress Panel (2015), and the EITI (2018) have echoed similar sentiments regarding the importance of transparency. Yet, African corruption persists.

Ikejemba et al. (2017) conducted a study into failed renewable energy projects in Sub-Saharan Africa and found that corruption during project tender/award was typically decisive in a project's failure. This was because it is hard to enforce rules or sanctions of projects awarded/approved on corrupt or nepotistic grounds. The focus on transparency, community ownership, and shared responsibility by the studies/authors highlight a suggestion that tackling the corruption would suitably be from a culture/practice and behavioural aspect.

4.4 HARMONISED LEGISLATIVE FRAMEWORK BASED ON GOOD FAITH

The introduction of laws/directives/regulations is already established as an effective way to change practices, attitudes, and behaviours (Aderibigbe et al., 2023; Bilz & Nadler 2014). For example, a change in law i.e., the Smoking Ban in developed nations was paramount to stopping people smoking indoors. As a result, in some developed nations, smoking outdoors has become the cultural norm/typical practice. This effect is also demonstrable in the UK construction industry/construction industry. For example, in the UK the introduction of the Environmental Permitting (England & Wales) Regulations 2007, (S.I. 3538 of 2007), and 2010 (S.I 1154 of 2016)) (collectively "the Environmental Regulations") compelled stakeholders within the construction industry to change their attitudes toward environmental awareness (Constructing Excellence, 2007; Wilmott Dixon, 2010). Compliance with the Environmental Regulations in the UK brought about

impactful initiatives. Thus, it stands to reason that the use of a binding legislative framework may be applied to tackle corruption within Africa. Therefore, it is proposed that the introduction of a harmonised legislative framework underpinned by the duty of good faith and binding on African nations regarding the construction, development, and operation of renewable energy assets, could potentially mitigate corruption experienced within the sector. The theoretical framework is summarised in Figure 1.

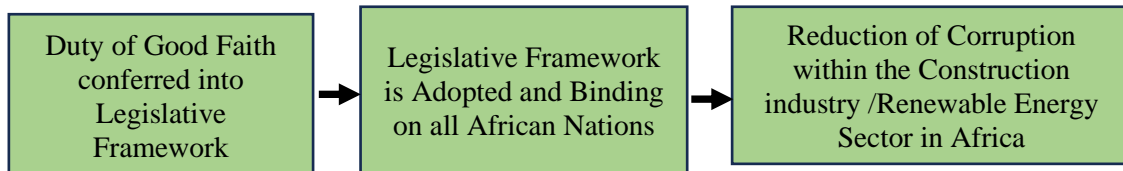


Figure 1: Theoretical framework for research.

Good faith at its core is about transparency, mutual trust, honesty, and fair dealing between stakeholders (Mante, 2018). It closely embraces the precepts and principles derived from the Ikejemba et al. (2017) and Sobjak (2018) studies. Considering that the duty of good faith possesses corresponding principles to the principles highlighted from the studies, it could be argued that the creation of a harmonised duty of good faith adopted by African nations may achieve the same outcome as proposed by these authors/academics, thus fostering an atmosphere of reduced corruption across Africa’s construction industry/renewable energy sector.

5. RECOMMENDATIONS

Drawing on the points covered in this research, the following propositions and hypotheses need empirical investigation: (a) Good faith has an impact on corruption; (b) The realities of creating a harmonised legislative framework underpinned by good faith; (c) Goal-based rules underpinned by good faith within the context of an international legislative framework can contribute towards reducing corruption within the renewable energy sector; (d) The conduct of transparency regarding the process and procedures for the delivery of renewable energy infrastructure projects will improve if a good faith legislative framework is adopted across the continent. The next phase is an empirical study investigating the propositions and hypotheses.

It is recommended that a qualitative approach based on an ontological philosophical belief system is utilised. This would include a further/extensive literature review, document analysis and the use of interviews with renewable energy professionals (at least twelve participants) experienced within Africa’s construction industry. The number of interviews was determined by saturation (Guest et al., 2006; O’Reilly & Parker, 2013). Further, it is recommended that the interviews explore the professional’s: (a) experience with corruption in Africa, (b) experience with the impact of corruption on renewable energy construction/infrastructure projects, (c) understanding of the duty of good faith, as well as their views on the creation of a legal duty harmonised across African nations. Upon completion of the interviews, the following produced framework is recommended which may assist in assessing and interpreting interview responses:

Negative Impact on Corruption: An answer which demonstrates an apathy or outright rejection of a potential impact of a harmonised duty of good faith and/or a reluctance to acknowledge or consider any potential potency upon renewable energy construction projects in Africa. In addition, the answer would consider the application of such

harmonised legislation to mean more 'red' tape, and 'unnecessary' or complex processes and/or procedures.

No Impact on Corruption: An answer which demonstrates that the participant expects that even if such legislation was introduced, actions within Africa's construction industry would continue as 'status quo'.

Marginally Positive Impact: An answer where a participant expects not much of a difference in status quo but concurrently admits that such harmonised legislation would make a 'slight' difference.

Positive Impact: An answer which demonstrates a total acceptance of the potential impact of a harmonised legislation underpinned by good faith with consideration of substantial potential potency on renewable energy construction projects in Africa.

6. LIMITATIONS

Legislation and legislative frameworks have limitations, including difficulties in interpretation if goal-based (Xanthaki, 2005), and may incur general user aversion (Office of the Parliamentary Counsel, 2013). Furthermore, it does not guarantee regulatory success, as it depends on the user's intent and interpretation for compliance (Xanthaki, 2005). Considering the difference in African Nations, proposed binding legislative framework may be difficult to transcribe/adopt into domestic/national laws. Using guidelines/prescriptive legislation has proved to help address this however this could limit innovation (Umeokafor et al., 2020). Nevertheless, the positives of using legislation necessitate the exploration of a new harmonised legislative framework underpinned by good faith binding on African nations. It is poorly understood if and how this will occur. Additionally, good faith can be challenging. Although, legal scholars/practitioners in jurisdictions worldwide generally understand the meaning of good faith (Legatt, 2016), its broad/nebulous nature causes difficulties in defining it. Thus, its application is sometimes subjective (Saintier, 2017). This potential subjectivity may be an issue, as enforcement of such legislative framework may differ from one African nation to the other. Therefore, specific questions such as how and if to objectively define good faith need to be addressed for harmonisation.

7. CONCLUSIONS

This research highlights the need for an empirical study to determine whether a binding duty of good faith established through a harmonised legislative framework will help reduce corruption within Africa's construction industry. Despite associated challenges (such as the achievement of true harmonisation, the implementation of the legislative framework into domestic laws across the continent and the broad and nebulous nature of good faith), this research has highlighted the potential such harmonised legislative framework could have. The findings of the recommended empirical study will further bridge the gap in knowledge regarding the impact of good faith on corruption within Africa's construction industry in renewable energy infrastructure.

8. REFERENCES

Acemoglu, D., & Verdier, T. (2000). The choice between market failures and corruption. *American Economic Review*, 90(1), 194-211. <https://www.aeaweb.org/articles?id=10.1257/aer.90.1.194>

- Aderibigbe, A., Umeokafor, N., & Umar, T. (2023). Constructing for the future: Can the duty of good faith improve payment in the UK construction industry?. In A. Tutesigensi, & C.J. Neilson, (Eds.) *Proceedings of the 39th Annual ARCOM Conference* (pp. 14-23). Association of Researchers in Construction Management. <https://secure.arcom.ac.uk/submissions/40/published/5c951cf7298bd1f0dc839d996f1d8ef3.pdf>
- Adjie, M. (2020, July 17). *Corruption in resources sector in Indonesia may worsen climate crisis*. The Jakarta Post. <https://www.thejakartapost.com/news/2020/07/15/corruption-in-resources-sector-could-worsen-climate-crisis-says-activist.html>
- Africa Progress Panel. (2015). *Power people planet: Seizing Africa's energy and climate opportunities*. Africa progress report. https://reliefweb.int/sites/reliefweb.int/files/resources/APP_REPORT_2015_FINAL_low1.pdf
- Amoah, A., Asiama R.K., Korle, K., & Kwablah, E. (2022). Corruption: Is it a bane to renewable energy consumption in Africa? *Energy Policy*, 16, 112854.. <https://doi.org/10.1016/j.enpol.2022.112854>
- Amuakwa-Mensah, F., & Näsström, E. (2022). Role of banking sector performance in renewable energy consumption. *Applied Energy*, 306(part B), 118023. Retrieved from <https://doi.org/10.1016/j.apenergy.2021.118023>
- Bilz, K., & Nadler, J. (2014) Law, moral attitudes, and behavioural change. In E. Zamir & D. Teichman (Eds.), *The Oxford handbook of behavioural economics and the law* (pp. 241–267). <https://www.law.northwestern.edu/faculty/fulltime/nadler/bilz-nadler-lawmoralattitudespageproofs.pdf>
- Boamah, F., & Williams, A. (2019) 'Kenya powerless': *Corruption in electricity as 'problem-solving' in Kenya's periphery*. CHR Michelsen Institute. <https://www.u4.no/publications/kenyapowerless-corruption-in-electricity-as-problem-solving-in-kenyas-periphery.pdf>
- Constructing Excellence. (2007). *Industry performance report 2007: Based on the UK construction industry key performance indicators*. https://constructingexcellence.org.uk/wp-content/uploads/2014/10/industry_performance-report_kpi2007.pdf
- Dalton, J. (2019, July 27). *Tanzania inaugurates dam that will 'boost power supply but threaten rhino and elephants'*. The Independent. <https://www.independent.co.uk/climate-change/news/tanzania-dam-project-elephant-rhino-selous-game-reserve-a9022966.html>
- Defreitas, L. (2023, April 4). *How corruption in developing countries impacts poverty*. The Borgen Project. <https://borgenproject.org/corruption-in-developing-countries/>
- Designing Buildings. (2022, September 5). *Energy in the construction industry*. https://www.designingbuildings.co.uk/wiki/Energy_in_the_built_environment#:~:text=In%20the%20built%20environment%2C%20the,either%20renewable%20or%20non%2Drenewable.
- du Preez, L.W. (2022, October 24). *Africa: Energy transition policies and regulatory developments light up across the continent*. Baker McKenzie. <https://www.bakermckenzie.com/en/newsroom/2022/10/energy-transition-policies#:~:text=Under%20the%20Renewable%20Energy%20Master,or%20assembling%20renewable%20energy%20resources>
- Extractive Industries Transparency Initiative. (2018, December 19). *What the extractives sector can teach renewables on curbing corruption*. <https://eiti.org/blog-post/what-extractives-sector-can-teach-renewables-curbing-corruption>
- Frankfurt School-UNEP Centre. (2020, June 10). *Global trends in renewable energy investment*. <https://www.fs-unep-centre.org/global-trends-in-renewable-energy-investment-2020/>
- Gennaioli, C. & Tavoni, M. (2011, June 29). *Clean or "dirty" energy: Evidence on a renewable energy resource curse*. Fondazione Eni Enrico Mattei. <https://www.feem.it/en/publications/clean-or-dirty-energy-evidence-on-a-renewable-energy-resource-curse/>
- Gordon, E. (n.d.). *The politics of renewable energy in East Africa*. Oxford Institute for Energy Studies (OIES). Retrieved June 30, 2024 from <https://www.oxfordenergy.org/publications/politics-renewable-energy-east-africa/>
- Global Witness. (2017, April 10). *Shell Knew*. <https://www.globalwitness.org/en/campaigns/oil-gas-and-mining/shell-knew/>

- Grasso, C. (2017, December 15). *The dark side of power: Corruption and bribery within the energy sector*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3343314
- Grasso, C. (2020). The troubled path toward greater transparency as a means to foster good corporate governance and fight against corruption in the energy sector. In S. Goutte & D.K. Nguyen (Eds.), *Handbook of energy finance: Theories, practices and simulations* (pp. 363-393). World Scientific. https://doi.org/10.1142/9789813278387_0016
- Guest, G., Bunce, A. & Johnson, L., (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82. <https://journals.sagepub.com/doi/abs/10.1177/1525822X05279903?journalCode=fmxd>
- Ikejamba, E.C.X., Schuur, P.C., Hillegersberg, J.V., & Mpuan, P.B. (2017). Failures and generic recommendations towards the sustainable management of renewable energy projects in sub-saharan Africa. *Renewable Energy*, 113, 639-647. <https://doi.org/10.1016/j.renene.2017.06.002>
- James, E. (2022, December 8). *How to manage corruption risk in renewable energy projects*. Pinsent Masons. <https://www.pinsentmasons.com/out-law/guides/how-to-manage-corruption-risk-in-renewable-energy-projects>
- Legatt, J. (2016, October 18). *Contractual duties of good faith*. Commercial Bar Association. <https://www.judiciary.uk/wp-content/uploads/2016/10/mr-justice-leggatt-lecture-contractual-duties-of-faith.pdf>
- Lin, G. (2009). Higher education research methodology-literature method. *International Education Studies*, 2(4), 179-181. <https://files.eric.ed.gov/fulltext/EJ1065734.pdf>
- Lu, J., Ren, L., Qiao, J., Yao, S., Strielkowski, W., & Streimikis, J. (2019). Corporate social responsibility and corruption: Implications for the sustainable energy sector. *Sustainability*, 11(15), 4128. <https://doi.org/10.3390/su11154128>
- Mante, J. (2018) Mutual trust and co-operation under NEC 3&4: A fresh perspective. *Construction Law Journal*, 34(4), 231-252. <http://westlaw.co.uk>
- Moliterni, F. (2017, June 16). *Analysis of public subsidiaries to the solar energy sector: Corruption and the role of institutions*. Fondazione Eni Enrico Mattei. <https://www.feem.it/en/publications/analysis-of-public-subsidies-to-the-solar-energy-sector-corruption-and-the-role-of-institutions/>
- Office of the Parliamentary Counsel. (2013, April 16). *When laws become too complex*. <https://www.gov.uk/government/publications/when-laws-become-too-complex/when-laws-become-too-complex>
- O'Reilly, M. & Parker, N., (2013). 'Unsatisfactory saturation': A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13(2), 190-197. <https://doi.org/10.1177/1468794112446106>
- Peace Research Institute Oslo. (2023, December). *Green curses and violent conflicts: The security implications of renewable energy sector development in Africa*. <https://www.prio.org/projects/1878>
- Rahman, K. (2020, October 13). *Anti-corruption in the renewable energy sector*. UP Helpdesk Answer. Transparency International. <https://www.u4.no/publications/anti-corruption-in-the-renewable-energy-sector>
- Rimšaitė, L. (2019). Corruption risk mitigation in energy sector: Issues and challenges. *Energy Policy*, 125, 260-266. <https://doi.org/10.1016/j.enpol.2018.10.066>
- Sabouri, B., Demetriades, L., & Mallela, S.K. (2023, June 7). *The dirty side of going green: Corruption and human rights risks within the clean energy supply chain*. ankura. <https://angle.ankura.com/post/102igdn/the-dirty-side-of-going-green-corruption-and-human-rights-risks-within-the-clean>
- Saintier, S.D.A. (2017). The elusive notion of good faith in the performance of a contract, why still a bête noire for the civil and the common law?. *Journal of Business Law*, 6, 441-460. <https://www.semanticscholar.org/paper/The-elusive-notion-of-good-faith-in-the-performance-Saintier/5f64727443eed32b478c1e1fdf1e5909cc7cce9b>
- Sobják, A. (2018). Corruption risks in infrastructure investments in sub-saharan Africa. *OECD Global Anti-Corruption & Integrity Forum, Paris*, 27-28 March 2018.

- The Economist. (2022, January 25). *Corruption is getting worse in many poor countries: But rich countries have problems too*. <https://www.economist.com/graphic-detail/2022/01/25/corruption-is-getting-worse-in-many-poor-countries>
- Transparency International. (2020). *Exporting corruption. progress report 2020*. <https://www.transparency.org/en/publications/exporting-corruption-2020>
- Transparency International. (2022). *Corruption perceptions index*. <https://www.transparency.org/en/cpi/2022>
- Transparency International. (2023). *Corruption perceptions index*. <https://www.transparency.org/en/cpi/2023>
- Umeokafor, N. (2020). Why copied or transposed safety, health and well-being legislation and standards are impracticable and irrelevant in developing economies. *Policy and Practice in Health and Safety*, 18(1), 41–54. <https://doi.org/10.1080/14773996.2019.1667095>
- United Nations [UN]. (2018, September 10). *Pervasive corruption costs \$2.6 trillion; disproportionately affects 'poor and vulnerable' says UN chief*. United Nations. <https://news.un.org/en/story/2018/09/1018892>
- United Nations Development Programme [UNDP]. (2022, December 6). *The cost of corruption*. Medium. <https://undp.medium.com/the-cost-of-corruption-a827306696fb>
- United Nations Office on Drugs and Crime [UNDOC]. (n.d.). *Effects of corruption*. Retrieved June 30, 2024 from <https://www.unodc.org/e4j/zh/anti-corruption/module-1/key-issues/effects-of-corruption.html>
- Willmott Dixon. (2010). *The impacts of construction and the built environment* (FM-RE-07. #). <https://www.willmottdixon.co.uk/asset/9462/download>
- World Bank. (2019). *Poverty & equity brief – Nigeria*. https://databankfiles.worldbank.org/public/ddpext_download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_NGA.pdf
- Xanthaki, H. (2005). *The limits of legislation as a product*. [Thesis, University College London]. [https://discovery.ucl.ac.uk/id/eprint/1575216/1/Xanthaki The%20limits%20of%20legislation%20as%20a%20product.pdf](https://discovery.ucl.ac.uk/id/eprint/1575216/1/Xanthaki%20The%20limits%20of%20legislation%20as%20a%20product.pdf)