

## A Study of the Challenges in Adoption of Renewable Energy in Nigeria

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**Abstract :** The purpose of this study is to investigate why there is a general lack of successful adoption of sustainable energy in Nigeria. This is particularly important given the current global campaign for net-zero emissions. The 26th United Nations Conference of the Parties (COP26), held in 2021, was hosted by the UK, in Glasgow, where, amongst other things, countries including Nigeria agreed to a zero emissions pact. There is, therefore, an obligation on the part of Nigeria for transition from fossil fuel-based economy to a sustainable net-zero emissions economy. The adoption of renewable energy is fundamental to achieving this ambitious target if decarbonisation of economic activities were to become a reality. Nigeria has an abundance of sources of renewable energy and yet there has been poor uptake and where attempts have been made to develop and harness renewable energy resources, there has been limited success. It is not entirely clear why this is the case. When analysts allude to corruption as the reason for failure for successful adoption of renewable energy or project implementation, it is arguable that corruption alone cannot explain the situation. Therefore, there is the need for a thorough investigation into the underlying issues surrounding poor uptake of renewable energy in Nigeria. This pilot study, drawing upon stakeholders' theory, adopts a multi-stakeholder' perspectives to investigate the influence and impacts of economic, political, technological, social factors in adoption of renewable energy in Nigeria. The research will also investigate how these factors shape (or fail to shape) strategies for achieving successful adoption of renewable energy in the country. A qualitative research methodology has been adopted given the nature of the research requiring in-depth studies in specific settings rather than a general population survey. There will be a number of interviews and each interview will allow thorough probing of sources. This, in addition to the six interviews that have already been conducted, primarily focused on economic dimensions of the challenges in adoption of renewable energy. The six participants in these initial interviews were all connected to the Katsina Wind Farm Project that was conceived and built with the view to diversifying Nigeria's energy mix and capitalise on the vast wind energy resources in the northern region. The findings from the six interviews provide insights into how the economic factors impacts on the wind farm project. Some key drivers have been identified, including strong governmental support and the recognition of the need for energy diversification. These drivers have played crucial roles in initiating and advancing the Katsina Wind Farm Project. In addition, the initial analysis has highlighted various challenges encountered during the project's implementation, including financial, regulatory, and environmental aspects. These challenges provide valuable lessons that can inform strategies to mitigate risks and improve future wind energy projects.

**Keywords :** challenges in adoption of renewable energy, economic factors, net-zero emission, political factors

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