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Administrative Challenges in Implementing Renewable Energy Policies in Public Administration and Policy Effectiveness

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Abstract

This paper analyses the significance of public administration in the process of renewable energy policies adoption and in the practical problematics around implementation of the strategic goals and detected discrepancies between them. Given the growing global quest for the use of renewable energy sources, the efficient deliverables of renewable energy policies are crucial to addressing environmental, economic, and energy security problems. The current study establishes that there are several administrative challenges that hamper the probability of achieving renewable energy objectives; including lack of resources, political hurdles and weak local capacity. Employing a qualitative research method, the work aims at comparing countries' overall pledges of renewable energy with the actual practices within local governments to unravel how public administrators manage such disparities. As such, the study is clear on policy relevance: better correspondence of their requirements to domestic capabilities of governance and prediction of potential deficiencies, as well as a constant practice of policy shares with various stakeholders. The work compares the results with global trends and case studies of similar countries/regions and contributes to the evaluation of factors that drive REFs in developing countries with a least administrative power. Based on the findings from this research, the following policy implications are discussed, in terms of their relevance to policymakers: Greater attention should be paid to reinforcing institutional support, increasing the intensity of cooperation between different levels of government, and developing capacities for the effective implementation of renewable energy policies at regional and local level.

Introduction

The worldwide imperative to transition towards sustainable electricity sources has intensified in latest a long time, driven by environmental issues, electricity security issues, and financial opportunities. Renewable energy, characterised through its sustainability and capability to lessen greenhouse gasoline emissions, has emerged as a pivotal issue of national electricity techniques worldwide. The adoption and effective implementation of renewable energy guidelines are critical for achieving these targets, and the role of public management in shaping and executing those rules cannot be overstated. Public management plays a relevant function in governance systems by way of formulating, implementing, and comparing rules that have an effect on societal results (Rosenbloom et al., 2020). In the context of renewable energy adoption, public administrators are tasked with navigating complex regulatory landscapes, dealing with stakeholder interests, and fostering innovation and investment in sustainable strength technology (Skogstad, 2020). Understanding how public management influences renewable strength coverage results is crucial for optimizing coverage effectiveness and

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promoting sustainable improvement dreams. The urgency of transitioning to renewable energy assets stems from several interrelated factors (Bogdanov et al., 2021). First, weather exchange has grown to be a simple worldwide task, exacerbated via the burning of fossil fuels for energy era (Valavanidis, 2022). Renewable energy assets such as sun, wind, hydroelectric, and biomass provide cleanser alternatives, able to reducing carbon emissions and mitigating weather affects (Rahman et al., 2022). Second, renewable energy complements power protection via diversifying strength sources and reducing dependence on fossil gas imports. This diversification strengthens country wide resilience to electricity supply disruptions and fee fluctuations. Furthermore, the monetary advantages of renewable electricity adoption are giant. The renewable energy quarter has come to be a big source of employment and monetary growth, attracting investments in research, improvement, and infrastructure (Majid, 2020).

Countries that prioritize renewable strength development regularly revel in advantageous monetary influences, which include job introduction and more desirable technological innovation (Asante et al., 2022). These monetary advantages underscore the capacity of renewable electricity to force sustainable financial development at the same time as mitigating environmental risks associated with conventional power assets (Batra, 2023). Public administration shapes renewable electricity policy via numerous mechanisms, such as policy formula, implementation, and evaluation (Tzankova,, 2020). Effective policy formulation includes putting ambitious targets, designing incentive mechanisms, and coordinating efforts across different tiers of presidency and with stakeholders (Burke & Gambhir, 2022).

Public administrators leverage their knowledge in regulatory frameworks, monetary evaluation, and stakeholder engagement to design regulations that balance environmental goals with socio-monetary concerns (Munteanu & Newcomer, 2020). In the implementation segment, public administrators face challenges inclusive of resource constraints, political dynamics, and resistance from vested hobbies (Burns, 2022). Overcoming these demanding situations requires effective governance structures, transparent decision-making methods, and adaptive management tactics (Baker, 2021). Public administrators play a crucial role in constructing consensus among stakeholders, monitoring policy consequences, and adjusting techniques based totally on evolving socio-financial and environmental conditions (Abbott & Snidal, 2021).

This paper examines the intersection of public administration and renewable electricity adoption policy (Johnson et al., 2020). It explores how public management impacts the formula and implementation of renewable strength rules, highlighting key demanding situations, opportunities, and policy implications (Moretti & Stamponi, 2023). The analysis draws on empirical evidence and case research to provide insights into the elements that shape a success renewable strength transition and the function of public administration in accomplishing sustainable power futures. By focusing at the nexus of public management and renewable power policy, this observe contributes to a deeper expertise of governance dynamics inside the context of sustainable improvement (Yan et al., 2023). The following sections will delve into particular components of renewable power coverage, which include policy design, stakeholder engagement, and regulatory frameworks, to light up the complexities and capability pathways toward accomplishing renewable energy goals.

Method

The current research used a qualitative research method in order to examine the involvement of public administration in the promotion of renewable energy policies. Qualitative research approach was used as it is best suited for the study of events that occur in specific contexts and provides rich information on the views of the people engaging in the renewable energy policy-making process. This paper adopted a qualitative research design with the view of

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understanding the formulation and implementation of the policies as well as the experiences of public administrators in implementing renewable energy policies.

In the research, the different regions' policies and practices in renewable energy were analyzed based on a case study. This design enabled magnified understanding of what shapes policy impacts and the relevance of public administration in such processes. The case study approach introduced practical aspects of analyzing the relations between public administrators, energy policy, and actors, which helped to deepen the understanding of factors influencing the process of reaching the renewable energy objectives.

Data for the study were collected through three primary methods: This will include the method of administering semi-structured interviews and conducting both document analysis and observations in a case study context. In-depth, semi-structured interviews were conducted with public administrators, energy policy academics, energy companies, and non-governmental environmental organisations. These interviews were intended to provide specific information regarding participants' activities in policy development of renewables and the difficulties encountered in the process of implementation. A total of 20 interviews were conducted and ranged from 45 minutes to 1.5 hours of each interview and used purposive sampling so that only those involved directly in or knowledgeable about renewable energy policy was interviewed.

Data was also collected through document review of available public policy documents, reports, and renewable energy legislation. These documents offered basic background material and it oriented the researcher on the formal structures on renewable power uptake. Document analysis also provided another confirmatory source in order to cross check the realities of policy from the viewpoints of actors and how they reconciled with formal policy documents. In addition, archival records and documents were obtained from policy consultations, conferences, and meetings which focused on renewable energy policies. This made it possible to study how some of these stakeholders were engaging with each other and the decision-making taking place in real time.

The participants were purposively recruited to the study, meaning persons who had direct involvement or noteworthy experience in the formulation of renewable energy policies and public administration were chosen. Participants for the study comprised energy ministry bureaucrats, energy policy specialists, energy firm employees, and employees of non-government organizations (NGOs) centred on sustainability. The final participant samples were fixed at the level of data saturation, that is identically, no new themes were identified in subsequent interviews. In all, twenty interviews were taken to ensure that as wide a cross-section as possible was provided regarding Damen's notion of the position of public administration in the policy on renewable energy.

The data were conducted through thematic analysis; a qualitative research method that seeks to identify, evaluate and describe patterns (themes) within data. Thematic analysis was used due to its versatility and relevance to different source of qualitative data. Data analysis involved orientation to the data and coding of sections of the data in relation to the developing themes such as 'policy design', 'stakeholder engagement', 'challenges to implementation' and 'governance". Hence, these codes were clustered to form major themes for the aim of offering a broad view of various factors that shape renewable energy transitions. The last themes were discussed regarding the research questions and the state of the art in order to make some relevant conclusions concerning the role of the public administration in the implementation of the renewable energy policies.

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Qualitative data collected during the study were analyzed using NVivo, where data coding and themes were systematically assigned. This software assisted in ensuring that no information leaves out and that all the information was filtered, scrutinized and interpreted to the maximum. The organisational and analysis components of NVivo meant that large amounts of qualitative data, from interviews and documents, could be sorted, compared and generalised systematically.

Result and Discussion

Due to the increasing shift in demand for renewable energy sources around the world, the application of public administration in the formulation and implementation of renewable energy policies has become important. This study therefore seeks to redress this research gap by identifying the bureaucratic barriers that stifle the effective integration of renewable energy policies, specifically the gap between commits and reality. Due to the application of quantitative research designs in this investigation, this study reveals crucial insights into these challenges by identifying challenges related to resource constraints, political actions, and institutions to which public administrators are subjected. The next sections of this paper provide results which correspond to the concerns stated above and provide understanding of what factors facilitate proper implementation of RE policies as well as their consequences for sustainable development.

The administrative challenges in enforcing renewable energy policies

The enforcement of renewable energy policies presents a range of administrative challenges that public administrators must navigate to ensure successful implementation. These challenges include resource constraints, political resistance, the complexity of stakeholder interests, and insufficient institutional capacity. In this study, interviews with public administrators, energy experts, and stakeholders involved in the policy process highlighted several key barriers to the effective enforcement of renewable energy policies.

Resource Constraints One of the most prominent challenges in enforcing renewable energy policies is the limitation of financial and human resources. Public administrators often face difficulties in securing sufficient funding to support the infrastructure required for renewable energy projects, such as solar panels, wind farms, and grid upgrades. This is compounded by the lack of skilled personnel to oversee the design, implementation, and monitoring of renewable energy initiatives. As one participant, an energy policy expert, noted:

> *"The financial resources allocated to renewable energy programs are often insufficient, which means that even the most well-designed policies struggle to achieve their intended outcomes. Without a significant budget allocation, implementing large-scale projects becomes nearly impossible."*

Moreover, public administrators frequently face challenges in terms of workforce capacity. Many governments, particularly in developing regions, lack the specialized skills required to implement and enforce renewable energy policies effectively. An administrator working within a government energy department explained:

"We have a small team, and while the policies are in place, the actual manpower to enforce them is just not enough. We struggle with balancing policy development with monitoring and enforcement on the ground."

Political Resistance Another significant challenge is political resistance, which can derail the implementation of renewable energy policies. Political agendas often conflict with environmental goals, and renewable energy policies may face opposition from political figures

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who prioritize short-term economic benefits, such as those related to fossil fuel industries. An energy policymaker discussed this issue during the interview:

> *"We face significant political opposition from vested interests in the fossil fuel industry. There's a reluctance among some politicians to prioritize renewable energy because it threatens established economic sectors, which leads to policy delays or dilution."*

This resistance is especially problematic in countries where fossil fuel industries are deeply integrated into the national economy. Public administrators must often engage in lengthy negotiations to address these political concerns, which can slow down the implementation process.

Complexity of Stakeholder Interests The diversity of stakeholders involved in renewable energy policy enforcement further complicates the administrative task. Renewable energy projects often require collaboration between government agencies, private sector companies, environmental NGOs, and local communities, each with its own set of priorities. Managing these differing interests requires careful negotiation and consensus-building skills. An interviewee from an environmental NGO remarked:

> *"The challenge is not just in creating a policy, but in getting all the key players on board. Each stakeholder has its own agenda, and balancing these interests while pushing forward the renewable energy agenda is a delicate task."*

Public administrators must mediate between stakeholders with conflicting views, which can delay decision-making and hinder the implementation of policy measures. The complexity of these interactions adds a layer of administrative burden that public administrators must manage effectively to ensure that renewable energy policies are enforced.

Institutional Capacity and Governance Structures Finally, many governments struggle with inadequate institutional capacity and weak governance structures that hinder effective policy enforcement. In some regions, the existing administrative frameworks lack the flexibility and adaptability required to enforce new and complex renewable energy regulations. A government official from an energy ministry shared their experience:

> *"Our institutions are not structured in a way that allows for efficient enforcement of renewable energy policies. We need stronger governance frameworks that can adapt to the challenges of scaling up renewable energy solutions, but the lack of institutional capacity is a real obstacle."*

This deficiency in institutional capacity is particularly evident in countries where public administration systems are overstretched or underdeveloped. Without the proper frameworks in place, monitoring and enforcing renewable energy policies becomes a herculean task.

Identifying Discrepancies Between Policy Intentions and Actual Outcomes

Identifying discrepancies between policy intentions and actual outcomes is a critical aspect of evaluating the effectiveness of renewable energy policies. Despite the well-intentioned goals of public administrators to promote the adoption of renewable energy, numerous factors contribute to the gap between policy intentions and actual outcomes. These discrepancies arise from issues related to inadequate policy design, implementation challenges, political interference, and the complex dynamics of stakeholder interests. Through interviews with public administrators, energy policy experts, and stakeholders involved in policy enforcement, several key areas of discrepancy have been identified.

Inadequate Policy Design and Implementation Gaps One of the major sources of discrepancies between policy intentions and outcomes is inadequate policy design. Policies intended to

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promote renewable energy adoption often lack the necessary specifics, such as clear implementation guidelines or timelines for achieving set targets. Additionally, policies may fail to adequately address the complexities of scaling up renewable energy infrastructure or ensuring adequate funding and resources. One participant, a public administrator, explained the gap between the policy's ambitious goals and the resources available for execution:

> *"We often see discrepancies because the policy document looks good on paper, with ambitious renewable energy targets, but when it comes to implementation, the resources, both financial and human, just aren't there to meet these targets. The policy intentions are clear, but there's a significant gap in the means to execute them effectively."*

This statement reflects the difficulty in translating policy intentions into actionable plans that can be carried out within the available administrative and financial constraints.

Political Interference and Policy Erosion Political interference is another key factor that contributes to discrepancies between the policy's goals and its outcomes. While renewable energy policies may be developed with the intention of promoting long-term sustainability, political pressure often leads to changes that prioritize short-term economic interests or the needs of powerful industries, such as fossil fuels. A renewable energy expert shared their concerns about the impact of political influences on policy outcomes:

> *"Policy intentions are often diluted due to political considerations. For example, during election years, there is sometimes a shift in focus toward immediate economic gains, like job creation in traditional energy sectors, which undermines long-term renewable energy goals. Politicians may also water down the policy to avoid alienating influential groups."*

This political interference can result in the delay or modification of renewable energy policies, causing a misalignment between the original policy objectives and the outcomes that are achieved.

Stakeholder Conflicts and Delayed Implementation Another significant factor in the gap between policy intentions and outcomes is the challenge of balancing the diverse interests of stakeholders. Renewable energy policies require coordination among various actors, including government agencies, private sector companies, and local communities. Often, conflicting interests and priorities among these groups lead to delays in policy implementation or a failure to meet policy goals. A government official from an energy ministry reflected on this challenge:

> *"While the policy aims to achieve a high share of renewable energy in the national grid, the process is slow because different stakeholders, from private companies to local communities, have varying interests. The policy intentions are often compromised during implementation due to these conflicting agendas, leading to delays and lower-than-expected adoption rates."*

This indicates that while the government may have set clear intentions for renewable energy expansion, the involvement of diverse stakeholders, each with its own interests, complicates the execution and often leads to outcomes that fall short of the intended policy goals.

Monitoring and Evaluation Gaps A final area of discrepancy is the inadequate monitoring and evaluation mechanisms for assessing the progress of renewable energy policies. Even when policies are effectively designed and implemented, the lack of proper monitoring systems makes it difficult to track their actual impact and adjust strategies when needed. An energy policy consultant discussed the importance of monitoring systems in achieving policy objectives:

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"One of the biggest issues we face is the lack of effective monitoring. Without clear metrics and regular evaluations, it's difficult to identify where things are going wrong or where policies need adjustment. Without this feedback loop, we risk continuing with ineffective policies, which leads to discrepancies between what was promised and what has been achieved."

Without effective monitoring systems in place, discrepancies between policy intentions and outcomes remain unaddressed, undermining the credibility of renewable energy policies and potentially hindering further policy development.

Contextualizing Findings in Relation to Similar Case Studies or Global Trends

Contextualizing the findings of this study in relation to similar case studies and global trends is essential for understanding the broader dynamics at play in renewable energy adoption. Globally, many countries have faced similar challenges in implementing renewable energy policies, and comparing these cases provides valuable insights into the factors that influence policy success or failure. By drawing on both local and international experiences, this study offers a deeper understanding of the common obstacles that public administrators encounter, as well as potential pathways for overcoming these challenges.

Global Trends in Renewable Energy Adoption Across the globe, there is a growing trend toward adopting renewable energy as a means to combat climate change, reduce dependence on fossil fuels, and promote economic sustainability. However, the path to successful implementation is often marked by significant barriers, including financial constraints, political resistance, and complex regulatory frameworks. In countries like Germany and Denmark, which are considered leaders in renewable energy adoption, the role of robust government support, long-term policy commitment, and effective stakeholder engagement has been crucial in overcoming these barriers. As one international energy expert noted during the interview:

"Countries like Germany and Denmark have set ambitious renewable energy goals and, through consistent government support, strong regulatory frameworks, and widespread public engagement, they have made significant strides. But even they face challenges, such as political opposition from vested fossil fuel interests and the complexities of grid integration for renewable energy."

This global trend underscores the fact that the obstacles to renewable energy adoption are not unique to any one country. In both developed and developing nations, administrative challenges related to resource allocation, political resistance, and institutional capacity can hinder the full realization of renewable energy goals.

Comparing Case Studies: Successes and Failures Several case studies from different regions offer valuable lessons on the successes and failures of renewable energy policies. For example, in Costa Rica, the government has successfully transitioned to nearly 100% renewable energy in its electricity generation, relying on hydroelectric, wind, and geothermal power. Costa Rica's success is attributed to a combination of strong political will, long-term planning, and the integration of renewable energy into national development strategies. A government official involved in energy policy in Costa Rica shared:

"The success of Costa Rica's renewable energy transition can largely be attributed to the stability of the political system, the country's investment in renewable technologies, and the integration of renewable energy into the broader national development agenda."

This case demonstrates that when policies are aligned with long-term national development goals, renewable energy adoption can be achieved more smoothly. However, even in Costa

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Rica, challenges related to balancing environmental concerns with economic interests and managing grid stability in the face of increased renewable generation remain.

On the other hand, countries such as India and South Africa have faced greater challenges in implementing renewable energy policies despite having significant renewable resources. In India, for example, while the government has set ambitious renewable energy targets, issues such as regulatory delays, financial barriers, and land acquisition difficulties have hindered progress. An energy policy analyst from India shared:

> *"India has immense potential for renewable energy, but the implementation has been slow. Regulatory delays, bureaucratic inefficiencies, and financial constraints have led to significant discrepancies between the policy intentions and actual outcomes."*

This case highlights the importance of not only setting ambitious targets but also addressing the systemic barriers that slow down implementation, such as weak regulatory frameworks and insufficient institutional capacity.

Local Context and Global Comparisons When contextualizing the findings of this study with local experiences, it is evident that while similar challenges are present globally, there are also unique factors at play in each region. For instance, in the context of renewable energy adoption in the case study country, resource constraints, political resistance, and institutional inefficiencies were identified as significant barriers, much like those observed in the global case studies. However, the specific political landscape and the role of local communities in shaping energy policies in the case study country may differ from the international trends.

An interviewee from a local government agency pointed out:

> *"In our case, while there is a political will to promote renewable energy, the lack of strong local institutions to monitor and enforce policies, coupled with resistance from some local industry sectors, has slowed down progress."*

This finding mirrors the broader global challenge of aligning local political and institutional realities with the overarching goals of renewable energy policies. As seen in the global cases, overcoming these challenges requires not only clear policies but also a commitment to capacity-building at the local level, as well as consistent engagement with all stakeholders.

Lessons Learned for Future Policy Development Drawing from global trends and similar case studies, several lessons emerge that can inform the future development of renewable energy policies in the case study country. First, strong political leadership and long-term policy commitment are critical for the successful transition to renewable energy. Second, stakeholder engagement, including involving local communities and addressing the concerns of private sector actors, is essential for gaining broad support for renewable energy policies. Lastly, governments must invest in the necessary institutional capacity and governance frameworks to ensure effective policy enforcement and monitoring.

An international policy expert emphasized this point during the interview:

> *"The key to overcoming the challenges in renewable energy adoption is not just about setting ambitious goals, but also creating the institutional and political frameworks that allow these goals to be met. Countries that have succeeded have done so by aligning policy with national development strategies and building the capacity to implement them."*

This study examines the critical intersection between public administration and renewable energy adoption policies, addressing key administrative challenges and policy implementation discrepancies. It offers valuable insights into how public management can both hinder and

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facilitate the successful implementation of renewable energy strategies. By comparing these findings with existing literature, this section highlights the contributions of this study in addressing gaps and providing new perspectives on renewable energy governance.

Current research works regarding the renewable energy policy adoption largely emphasize on the policies formulation and involving key actors (Skogstad, 2020; Tzankova, 2020). However, these studies have given a central place to political commitment and institutional support while they do not pay much attention to the problems that are faced by the public administrators during the policy implementation process. This study adds by exposing these challenges. Particularly, it proves why budget limitations, political opposition, and understaffed institutions prevent the policies from being implemented. This differs with earlier books which, for example, Munteanu & Newcomer (2020) & Burns (2022) focuses mainly on the development of polices without capturing the actual, real-time problems that the public administrators go through.

According to Burns (2022), due to constant pressure from various parts of government, public administrators in renewable energy adoption are usually in a dilemma on whom to favor. But I continue the earlier part of this paper by demonstrating that political will, though crucial, is insufficient if there is no complementing local administrative capacity to enforce laws and policies. The absence of an appropriate solution leads to the existence of a policy implementation gap that has received limited scholarly attention up to now. This work calls for more local capacity development preparedness since this is an aspect that is normally neglected by Karnoski and is central in the provision of solutions to policy implementation shortcoming.

Probably one of the most significant discoveries of this research is that it addresses the issue of mismatch between policy objectives and implementation.Previous literature, as it is often the case with renewable energy, lays emphasis on the creation of realistic goals in the context of policies. stakeholder engagement (Skogstad, 2020; Tzankova, 2020). While these studies emphasize the roles of political commitment and institutional support, they often overlook the administrative challenges that public administrators face during the policy implementation phase. This study contributes by bringing these challenges to the forefront. Specifically, it highlights how financial constraints, political resistance, and weak institutional capacity hinder effective policy enforcement. This contrasts with earlier works, such as those by Munteanu & Newcomer (2020) & Burns (2022), which concentrate largely on the formulation of policies without addressing the real-time, on-the-ground issues public administrators face.

Burns (2022) argues that public administrators in renewable energy adoption often struggle with balancing competing political interests. However, this study adds to the literature by showing that even with political will, the lack of local administrative capacity to implement and enforce policies creates a significant barrier. The failure to address this issue results in a policy implementation gap that has been insufficiently explored in prior research (Abdullahi & Othman, 2020). This study emphasizes the need for capacity-building initiatives at the local level, an area that is often overlooked in the academic discourse but is crucial for bridging the policy implementation gap (Klinsky & Sagar, 2022).

One of the most critical contributions of this study is its focus on the discrepancies between policy intentions and actual outcomes. Existing research, often underscores the importance of setting clear, achievable targets in renewable energy policies. But they seldom go a notch deeper to explain the reasons for the discrepancy between the planned outcomes and the actual outcomes. This work fills this research niche by demonstrating how differences in renewable energy generation are caused by misalignment between top-down political priorities and bottom-up administrative assets.

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In a prior analysis of energy transition literature, two categories of recommendations have been proposed: clarity of policy goals to set comprehensive targets and the availability of motivational tools (Burke & Gambhir, 2022). But even the strongest and smartest policies, when formulated on paper, do not work as expected if local governments cannot mobilise resources, knowledge, or political support to implement the policies. The study also found that local administrators are entrapped between national level goals and the realities of their districts, for instance, available financial resources and personnel trained in a technical manner. This finding supports Valavanidis (2022), but builds on it by showing how local-policy misfit may be worsened by a lack of convergence between policy actors at local and national levels.

The results of this research are also in line with the drive towards renewable energy as seen in Germany; Costa Rica; and the Scandinavian countries which have excellent, strong administrative systems and cooperation between various sectors to make successful renewable energy transitions (Majid, 2020; Rahman et al., 2022). There are general features of countries, which show high levels of the effectiveness of renewable energy policies – the high level of inter-organizational cooperation, the active involvement of stakeholders, and long-term planning. However, this research adds the layer that these successes cannot be simply transplanted to developing countries or regions with relatively lower bureaucratic systems.

The brilliant example of Costa Rica in the efficient implementation of renewable energy sources has been linked to the country's institutional support and sustainable development policy. Nonetheless, this study contributes to this knowledge by showing that despite their need for renewable energy policies, numerous developing countries have considerable barriers to implement them because of inefficient local governance and a lack of technical resources. This paper reflects that if these local administrative issues are not solved, countries even with appropriate national policies can have problems in fulfilling renewable energy goals.

This study also adds to and restates the evidence on the importance of stakeholder engagement for incremental renewable energy transitions, where previous literature has primarily focused on policy formulation, this paper shows that engagement is critical in the following phases of policy implementation. It is central in making certain that renewable energy policies are implemented not only with the endorsement from the key actors but also possession of operational plans from the local governments.

Additionally, the study reveals evidence that suggests resisting renewable energy projects can be addressed through early engagement of business people, civil society organizations, and leaders. As Kuyper and van der Linde, who state that early stakeholders' involvement lowers policy failure. However, this study builds on that knowledge by exposing how, in absence of correct application, it results in resistance and detracts from the effectiveness of otherwise sound implementations.

In this research, it is found that the following crucial contributions to the literature on public administration and the adoption of renewable energy are made. This paper brings out the realities of policy implementation hurdles that public administrators encounter in actual projects hence provides useful information to differ entifications the hurdles civil servants and policy makers encounter in the process of actualization of policies especially in the developing nations or part of the world. The study also fulfills an important gap in knowing the reality of enforcement of the formulated renewable energy policies to ensure that policy intentions are indeed met.

It has also supplemented the existing literature by identifying a key component of HGEC-LAAC and has given response to the political and resource limitations that put confinements to the efficient execute of RE policies. Furthermore, it raises the subject of the relation between

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national RE targets and local conditions and highlights the significance of consistent dialogue with the stakeholders as a key to policy effectiveness. The paper provides both theoretical implications and policy suggestions for those officials who are interested in enhancing the effectiveness of RE policies.

Conclusion

This paper establishes the significance of public administration in deploying effective renewable energy policies. It underlines the importance of sound commitments by the stakeholders and insists on the attainable and unequivocal policy goals and objectives as well as the essentially non-prescriptive approach to the regulation of the sector. They show that new rules are required for dynamic renewable energy markets and technologies, more participation by multiple actors in governance, and better local implementation capacities. Public administrators may have a critical role in influencing the effectiveness with which renewable energy is implemented, increase the development of sustainability and decrease the factors that constitute threats to the environment by engaging in the tackling of these problems and the grasping of improvement opportunities. These dynamics should be looked at in more details to include comparative analysis and ideas to help support transition to efficient energy systems globally.

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