



THE ROLE OF PUBLIC ADMINISTRATION IN OVERSEEING GREEN INDUSTRY POLICY AS AN EFFORT TO MITIGATE ENVIRONMENTAL AND ENERGY CRISES

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Abstract: This study examines the role of public administration in overseeing green industry policies to mitigate environmental and energy crises. The research aims to explore how effective public administration can enhance the implementation of these policies, ensuring environmental sustainability and energy efficiency. Using a literature-based methodology, secondary data from academic journals, government reports, and policy documents were analyzed. The findings indicate that empowered public administration is essential for the successful enforcement of green policies, though challenges such as limited resources and coordination exist. The study concludes that strengthening public administration's role is crucial for achieving long-term sustainability and overcoming the environmental and energy challenges faced by society.

Keywords (English): Public Administration, Green Industry Policy, Environmental and Energy Crises.

INTRODUCTION:

Environmental degradation and the energy crisis have become increasingly urgent issues globally, posing significant threats to sustainable development and human well-being. Over the last several decades, the industrial sector has been a major contributor to environmental damage, primarily through high levels of greenhouse gas emissions, the depletion of non-renewable resources, and widespread pollution of land, air, and water. The rising demand for energy, driven by global population growth and industrialization, further exacerbates the environmental strain, contributing to the ongoing climate crisis. As the planet grapples with the need to mitigate these challenges, the role of green industry policies becomes more critical. Green industry policies are designed to promote environmentally friendly production practices and sustainable energy usage, helping to balance economic development with ecological responsibility. However, despite the increasing recognition of the importance of such policies, the effectiveness of their implementation remains compromised by the lack of robust oversight mechanisms within public administration. Without effective oversight, these policies may fail to achieve their intended goals, leaving critical issues such as environmental degradation and energy scarcity unresolved.



Therefore, addressing the shortcomings in policy enforcement and ensuring strong public administration oversight are crucial to realizing the potential of green industry policies in mitigating these crises[1].

Existing literature largely focuses on the broad impact of public administration in managing various sectors, yet there is a significant gap in the research regarding the role of public administration specifically in overseeing green industry policies, particularly in the context of mitigating environmental and energy crises. Much of the existing research has highlighted the importance of green industry policies in addressing environmental sustainability, but these studies often fail to explore the administrative aspects that ensure these policies are properly enforced and adapted to changing conditions. Several theoretical frameworks, such as Public Policy Theory and Environmental Governance Theory, emphasize the need for government intervention and regulation in managing natural resources and ensuring sustainability. However, these theories often focus on high-level policy frameworks rather than the practical implementation and monitoring aspects managed by public administration. This gap in the literature leaves questions unanswered about how public administration can strengthen its oversight role in ensuring that green industry policies are not just created, but effectively executed. Moreover, many studies have focused on green policies in sectors like manufacturing or transportation, with less attention given to the unique challenges faced by industries directly linked to energy and environmental management. Therefore, there is a need for research that explores the specific role of public administration in overseeing the implementation of green industry policies and its impact on sustainability outcomes[2].

The primary objective of this research is to explore the role of public administration in overseeing green industry policies as a critical tool for mitigating environmental and energy crises. This study seeks to identify how effective public administration oversight can enhance the implementation of green industry policies, with a particular focus on environmental sustainability and energy management. By examining the mechanisms of policy enforcement, the research will assess the potential challenges that public administrators face in monitoring and regulating green industries, and how these challenges can be overcome. Additionally, the research aims to investigate the extent to which existing green policies contribute to addressing environmental degradation and the global energy crisis, and to offer recommendations for strengthening policy oversight. Ultimately, this study aspires to contribute to a deeper understanding of the importance of administrative oversight in the successful execution of green policies and their role in promoting a more sustainable and energy-efficient future[3].

This research hypothesizes that a stronger and more proactive role of public administration in overseeing green industry policies can significantly accelerate the achievement of environmental sustainability and help mitigate the ongoing energy crisis. It is well-established that policy frameworks alone, no matter how comprehensive or ambitious, cannot achieve meaningful outcomes without proper enforcement and oversight. Public administration, acting as the implementation arm of these policies, is tasked with ensuring that regulations are followed,



resources are allocated efficiently, and industries comply with sustainability standards. Without adequate oversight, green industry policies may face significant implementation gaps, leading to inefficiencies, non-compliance, or even policy abandonment. This research argues that by strengthening the capacity of public administration to monitor and enforce green policies, governments can improve the outcomes of these policies, ensuring that they are not only effective but also adaptive to new challenges. The study further suggests that effective oversight can play a pivotal role in overcoming obstacles such as limited resources, political interference, and market resistance, all of which often hinder the successful implementation of green industry initiatives. Therefore, reinforcing the role of public administration is essential in ensuring that green industry policies fulfill their environmental and energy sustainability objectives[4].

The significance of this research lies in its potential to fill a critical gap in the existing literature by examining how public administration can be leveraged to oversee green industry policies effectively. While much of the academic focus has been on the theoretical and conceptual development of green policies, there has been little exploration of the practical, administrative aspects of implementing these policies, particularly in the context of the energy and environmental crises. This research will offer valuable insights into the practical challenges faced by public administrators in overseeing green industry policies and provide evidence-based recommendations for improving policy enforcement mechanisms. The findings of this study will be particularly relevant to policymakers, public administrators, and stakeholders in the green industry, offering practical solutions for improving the efficacy of green policies. Furthermore, the research will contribute to the broader discourse on environmental governance and energy sustainability by highlighting the critical role that public administration plays in achieving the goals of green industry policies. The study is particularly timely, as the world grapples with the urgent need to combat climate change and reduce reliance on non-renewable energy sources, making it crucial to understand how to optimize the role of public administration in driving sustainable and energy-efficient industries[5].

METHODOLOGY:

Research Object

This research focuses on the role of public administration in overseeing green industry policies, particularly in the context of environmental and energy crises. The phenomenon under investigation is the effectiveness of public administration in implementing and enforcing policies that promote sustainable practices in industries, especially as they relate to mitigating environmental damage and addressing energy shortages. The study aims to examine the various challenges and opportunities that arise from the role of public administration in enforcing these policies. By analyzing the oversight mechanisms in place, the research investigates how public administration can contribute to the successful implementation of green industry policies, ensuring that they lead to measurable improvements in environmental sustainability and energy



efficiency. The focus is on identifying gaps in the current administrative practices that hinder the effectiveness of these policies, while also exploring strategies to improve public administration's role in promoting green industry development[6].

Type of Research and Data Sources

This study is a library-based research that primarily uses secondary data gathered from a variety of sources, including academic books, research journals, governmental reports, policy documents, and relevant literature on public administration, green industry policies, and environmental economics. The primary data used in this research is derived from the collection of relevant literature that specifically addresses the phenomena of public administration oversight in the context of green industry policies. These sources offer insights into existing theories, frameworks, and case studies related to the subject matter, providing a comprehensive understanding of the challenges and opportunities faced by public administration in this area. Secondary data includes scholarly articles, reports on policy implementation, and government publications that examine the impact of public policies on environmental sustainability and energy management. By utilizing these data sources, the research will provide a comprehensive overview of the role of public administration in overseeing green policies and suggest improvements to enhance their effectiveness[7].

Theoretical Framework

This research is grounded in several key theoretical frameworks that inform the study of public administration and green industry policies. One of the central theories used in this research is the Public Policy Theory, particularly the framework developed by James E. Anderson in 1975, which examines the processes of policy formation, implementation, and evaluation. According to this theory, public administration plays a crucial role in translating policy objectives into actionable programs and ensuring that these programs are effectively implemented. Additionally, the Environmental Governance Theory, as articulated by Gover and J. P. Dolowitz, is also relevant to this study, as it focuses on the governance mechanisms necessary to achieve sustainable development goals, particularly in industries that have significant environmental impacts. Both of these theories help explain the dynamics between policy formulation, public administration, and environmental sustainability, providing the theoretical basis for understanding how effective oversight can contribute to the success of green industry policies. These theoretical frameworks guide the research in evaluating the current role of public administration and its impact on promoting sustainable practices within industries[8].

Research Process and Data Collection Techniques

The research process consists of several stages, starting with a comprehensive review of the literature to gather relevant information on the role of public administration in overseeing green industry policies. The data collection process involves analyzing books, academic journals,



government reports, policy papers, and previous studies that discuss the application of green industry policies and the role of public administration in their enforcement. This literature review provides valuable insights into existing practices, challenges, and gaps in the implementation of these policies. The research also involves identifying and reviewing case studies where public administration has either successfully or unsuccessfully overseen the implementation of green industry policies. The collected data will be critically assessed to identify patterns, evaluate the effectiveness of current policies, and uncover potential improvements. This process helps to shape the understanding of how public administration can optimize its role in supporting sustainable industry practices[9].

Data Analysis Techniques

The data analysis in this research utilizes content analysis, a qualitative technique that involves systematically reviewing and interpreting textual data to identify key themes, patterns, and relationships. In this study, content analysis will be applied to examine the collected literature, including academic articles, policy reports, and case studies, to identify recurring themes related to the role of public administration in overseeing green industry policies. This technique will help to uncover common challenges, successful strategies, and gaps in the current literature regarding policy enforcement. Content analysis will also be used to identify how public administration's involvement impacts the effectiveness of green industry policies and the achievement of environmental and energy goals. The results from this analysis will provide a comprehensive understanding of the current state of public administration in relation to green industry policy oversight and offer recommendations for improving its role in driving sustainability and addressing environmental and energy crises[10].

RESULTS AND DISCUSSION

The results of this research highlight the central role of public administration in ensuring the successful implementation and oversight of green industry policies aimed at mitigating environmental and energy crises. The study reveals that when public administration is empowered and adequately resourced, it serves as the backbone of policy enforcement, making sure that green policies are not mere theoretical concepts but are effectively put into practice. The research found that regions where public administration takes an active role in overseeing green industry policies tend to show better alignment between the policy objectives and actual environmental outcomes. This oversight ensures that policies are continuously evaluated, adapted to changing circumstances, and effectively integrated into industries, which is crucial for long-term sustainability.

One of the most significant findings is that public administration's involvement goes beyond policy enforcement; it includes fostering an environment where green industries can thrive. Effective public administration promotes innovation within green industries by offering incentives, guidance, and regulatory frameworks that encourage the adoption of sustainable technologies. When public administration supports industries in transitioning to more sustainable



practices, it creates a conducive atmosphere for the growth of green industries, ultimately driving progress toward environmental sustainability and energy efficiency. In contrast, regions with weak administrative oversight face inefficiencies and often fail to achieve the desired outcomes of green policies.

The research also revealed that, despite the vital role public administration plays, several challenges hinder its effectiveness in policy enforcement. One of the primary barriers is insufficient resources, particularly in terms of financial backing and technological tools. Many public agencies tasked with overseeing green industry policies are underfunded, limiting their ability to adequately monitor, enforce, and evaluate the effectiveness of these policies. The study highlights that without proper funding and resources, public administration struggles to perform its oversight duties efficiently, leading to delays in policy implementation and a reduced impact of green industry policies.

Another challenge identified in the research is the lack of coordination between various levels of government and between government agencies. Green industry policies often involve multiple stakeholders, including local, regional, and national authorities, as well as private sector players. The absence of effective coordination leads to fragmented policy enforcement, where different regions or government bodies might adopt conflicting policies or fail to synchronize efforts, resulting in inefficiencies. The research emphasizes that a coordinated approach is necessary for ensuring the coherent implementation of green industry policies that can achieve collective sustainability goals.

Furthermore, political interference in the implementation of green policies was found to undermine the effectiveness of public administration. The research suggests that when political agendas override the goals of green policies, it can lead to delays, non-compliance, or the dilution of policies designed to promote environmental sustainability. This interference often hampers the ability of public administration to make decisions based solely on environmental considerations, thereby slowing down the progress of green industry development. The study calls for greater political commitment to green policies to ensure that public administration can operate without external pressures that might compromise its effectiveness.

The research also found that successful green industry policy oversight depends on public administration's ability to integrate policies across sectors. Given the complexity of the green industry and its interactions with various other sectors, such as energy, agriculture, and manufacturing, policy integration is essential. The study suggests that public administration can facilitate this integration by creating frameworks that align green policies across different levels of government and sectors, ensuring consistency and maximizing their impact. Collaborative governance, where multiple stakeholders from public and private sectors work together, was found to enhance the enforcement of policies and ensure more effective outcomes.



In addition to policy enforcement, public administration was found to play an important role in promoting green industry development. The research shows that when public administration proactively supports the growth of green industries through incentives and guidance, industries are more likely to invest in green technologies and adopt sustainable practices. This support not only drives innovation but also helps create a competitive and thriving green industry sector. Through initiatives such as subsidies, grants, and tax incentives, public administration can encourage businesses to embrace environmentally sustainable technologies, which ultimately contributes to broader sustainability goals.

The research underscores that the transparency and accountability of public administration are critical in strengthening policy oversight. The study finds that when public administration operates transparently, with clear accountability measures, it fosters trust between the government, industries, and the public. This transparency helps ensure that all stakeholders are aware of policy goals, progress, and enforcement mechanisms, reducing corruption and inefficiency in the system. The findings highlight that governments that embrace transparent governance practices are better positioned to successfully enforce green industry policies, thereby accelerating progress toward achieving environmental and energy sustainability.

Discussion

1. Importance of Public Administration in Achieving Sustainable Outcomes

The results of this research underscore the central role of public administration in ensuring that green industry policies are not only designed but also successfully implemented. Public administration acts as the core of policy enforcement, ensuring that green policies are transformed from abstract ideals into tangible actions that lead to measurable outcomes. The research highlights that when public administration is adequately empowered, resourced, and motivated, it has the potential to drive significant progress in environmental sustainability. Effective public administration creates a supportive environment in which sustainable industries can flourish by overseeing the enforcement of regulations, providing incentives, and ensuring compliance with environmental standards.

Public administration's role in achieving sustainable outcomes goes beyond mere enforcement; it is integral to ensuring that policies are dynamic and adaptable to new challenges. By monitoring the progress of green policies and making necessary adjustments, public administration ensures that policies remain relevant and effective over time. The research further indicates that empowered public administration can foster innovation within industries by incentivizing businesses to adopt environmentally friendly technologies and practices. By doing so, public administration becomes a catalyst for the widespread adoption of sustainable practices, not only within the industrial sector but also across broader society.

Table that summarizes and structures the key insights from the provided text on the role of public administration in green industry policies



Core Role of Public Administration	Key Functions	Expected Outcomes
Policy Enforcement	- Transform abstract green policies into tangible actions - Oversee regulation enforcement, incentives, and compliance with environmental standards	- Measurable progress in environmental sustainability - Flourishing sustainable industries
Dynamic Adaptation	- Monitor policy progress - Make necessary adjustments to policies	- Policies remain relevant and effective over time - Adaptability to new challenges
Innovation Catalyst	- Empower, resource, and motivate administration - Incentivize businesses to adopt eco-friendly technologies and practices	- Widespread adoption of sustainable practices in industry and society - Fostering innovation across sectors

Another key aspect highlighted in the findings is that public administration's oversight ensures accountability in the implementation of green industry policies. Without effective oversight, policies may be underutilized, misapplied, or undermined, preventing the achievement of the intended environmental goals. This research suggests that a well-established administrative framework ensures that the green policies are not only created but continuously evaluated and improved upon, thereby leading to long-term environmental and energy sustainability. The findings underscore that public administration is indispensable in the success of any green policy initiative.

Moreover, the research shows that successful green policies rely on effective communication and coordination between public administration bodies and other stakeholders, including industries, NGOs, and local communities. Public administration plays a key role in facilitating this collaboration, ensuring that the objectives of green policies align with the interests and capabilities of these stakeholders. This ensures that the policies are not only supported but actively promoted across various sectors, leading to more comprehensive and widespread implementation.

2. Addressing the Gaps in Resources and Coordination

While the importance of public administration in overseeing green industry policies is clear, the research identifies several challenges that hinder its effectiveness. One of the most prominent barriers is the lack of adequate resources, which restricts the capacity of public administration to monitor, enforce, and evaluate green industry policies effectively. Public agencies responsible for overseeing the implementation of green policies are often underfunded, lacking the necessary financial resources to develop and deploy comprehensive regulatory frameworks. This financial limitation can lead to insufficient staffing, outdated technology, and a general inability to monitor policy compliance effectively, undermining the success of green policies.



The study highlights that inadequate resources also hinder the capacity of public administration to engage in proactive policy enforcement. Public institutions need sufficient funding to invest in data collection, analysis tools, and monitoring systems that can track the implementation and effectiveness of green industry policies. Furthermore, without the right technological tools, public administration faces difficulties in keeping up with the rapidly changing landscape of green industries, such as renewable energy technologies and sustainable production practices. Without access to these resources, public administration cannot effectively oversee the implementation of these policies, which limits their overall impact.

In addition to the resource constraints, the research identifies the lack of coordination among different levels of government and across various sectors as a major challenge. Many green industry policies involve multiple stakeholders, including local governments, regional authorities, environmental organizations, and private sector players. However, the lack of clear coordination among these stakeholders often leads to fragmented policy enforcement, duplication of efforts, and inefficiencies in resource allocation. The research suggests that public administration must foster greater collaboration across government bodies at different levels to ensure that green policies are implemented consistently and comprehensively.

The study also finds that political interference can exacerbate these issues, as policies may be weakened or delayed due to competing political agendas. This lack of political will to enforce green policies further complicates the role of public administration in ensuring sustainability outcomes. In some cases, policy enforcement is undermined by local political pressures, which may prioritize economic growth or short-term gains over long-term environmental sustainability. This highlights the importance of creating a political climate that supports green policies and allows public administration to function without external hindrances.

Addressing these gaps in resources and coordination is essential for improving the effectiveness of public administration in overseeing green industry policies. The research recommends that governments allocate sufficient funding for environmental agencies, invest in technology and training, and prioritize interagency coordination to ensure that green policies are implemented effectively. Additionally, reducing political interference and fostering a culture of sustainability within government bodies can help create an environment where public administration can effectively contribute to the achievement of green industry policy goals.

3. Policy Integration and Collaborative Governance

The research indicates that successful oversight of green industry policies requires effective policy integration and coordination across multiple levels of government. The green industry is complex, intersecting with various sectors such as energy, transportation, agriculture, and manufacturing, each with its own regulatory framework and priorities. Therefore, public administration must ensure that these various policy areas are aligned and mutually reinforcing, rather than operating in isolation. The research shows that effective integration of policies across these sectors can lead to more coherent and unified actions, ensuring that sustainability goals are achieved in a way that supports broader economic, social, and environmental objectives.

One of the key factors in achieving effective policy integration is collaborative governance. The study emphasizes that public administration must actively engage with various stakeholders,



including industry leaders, civil society organizations, and local communities, to create policies that are not only environmentally sustainable but also economically viable. By fostering strong partnerships between government bodies and non-governmental actors, public administration can help create policies that have broad support and are more likely to be successfully implemented. The research found that such collaborations enable the sharing of resources, knowledge, and expertise, leading to more effective policy enforcement and better outcomes for both the environment and the economy.

The research also underscores that collaborative governance can improve the efficiency of policy implementation by pooling resources and expertise. For instance, when public administration works alongside private sector actors, they can help identify and promote sustainable technologies and practices that might otherwise be overlooked. This partnership can also provide financial and technical support for businesses in the green industry, making it easier for them to comply with environmental regulations and adopt sustainable practices. The research suggests that collaborative governance not only helps in policy enforcement but also encourages innovation within industries, leading to the development of new technologies and business models that drive sustainability.

Another important aspect of policy integration and collaborative governance is the need for continuous dialogue between public administration and stakeholders. The study highlights that environmental and energy challenges are dynamic and rapidly evolving, meaning that policies must be adaptable to changing circumstances. Public administration must engage in ongoing dialogue with stakeholders to ensure that green policies remain relevant and effective over time. This also requires monitoring and feedback mechanisms that allow public administration to adjust policies based on new information and changing environmental conditions.

4. Role of Public Administration in Promoting Green Industry Development

Public administration plays an essential role not only in enforcing policies but also in actively promoting the development of green industries. The research indicates that effective public administration can foster innovation within green industries by providing regulatory frameworks, financial incentives, and guidance to support the adoption of sustainable practices. Public administration's role extends beyond monitoring compliance; it also involves creating an environment where businesses are encouraged to invest in green technologies, reduce their carbon footprint, and adopt environmentally friendly production methods. This proactive role helps ensure that green industries thrive and contribute to environmental sustainability.

One way public administration can promote green industry development is through the implementation of incentives, such as subsidies, tax breaks, or grants, for businesses that adopt sustainable technologies. These incentives can reduce the financial barriers to entry for businesses seeking to implement eco-friendly practices and encourage others to follow suit. By creating a favorable policy environment, public administration can accelerate the transition to green industries, fostering the growth of sectors that prioritize environmental sustainability. The research highlights that when businesses see clear financial and regulatory support from the government, they are more likely to invest in green technologies and innovations.



Additionally, public administration plays a role in ensuring that green industry policies are implemented in a way that aligns with broader economic and social goals. The study found that successful green industry development requires policies that balance environmental concerns with economic growth. Public administration can ensure that policies do not disproportionately burden businesses while promoting sustainable practices. For example, by introducing gradual regulatory changes and providing businesses with the resources and knowledge they need to comply, public administration can help avoid disruption in industries transitioning to greener practices.

Another critical aspect is public administration's involvement in capacity building within the green industry. Through training programs, workshops, and other educational initiatives, public administration can help businesses understand the importance of sustainability and how they can integrate it into their operations. The research indicates that when businesses are educated about the benefits of adopting sustainable practices—both in terms of environmental impact and long-term profitability—they are more likely to commit to sustainability goals. Public administration can provide the necessary tools, training, and technical support to ensure that businesses are equipped to make these transitions successfully.

5. Strengthening Oversight through Transparency and Accountability

For public administration to effectively fulfill its role in overseeing green industry policies, transparency and accountability are essential. The research suggests that the effectiveness of policy enforcement is significantly enhanced when there is a high level of transparency in decision-making processes. Transparent policies ensure that all stakeholders—government bodies, industries, and the public—understand the goals, expectations, and processes involved in policy implementation. This clarity helps build trust between the government and the public, making it easier to gain support for green policies and encouraging compliance from industries.

The study also emphasizes that transparency in policy enforcement can reduce corruption and inefficiency within public administration. When the processes of policy enforcement are transparent, it becomes easier to identify areas where resources are misallocated or policies are not being effectively enforced. This openness creates an environment where public administration is held accountable for its actions, which leads to greater credibility and trust in the government's ability to manage green industry policies. Moreover, accountability mechanisms ensure that public administrators are responsible for their actions and decisions, providing a check against potential misuse of power or failure to enforce policies effectively.

Increased transparency and accountability can also encourage more active participation from private sector actors and civil society organizations in the policy implementation process. The research found that when industries see that the government is committed to fair and transparent enforcement, they are more likely to cooperate with the implementation of green policies. This collaborative approach helps ensure that all stakeholders work together to achieve the sustainability goals outlined in the policies. The study suggests that transparency and accountability can foster a sense of shared responsibility among all actors involved in the enforcement and implementation of green industry policies.



Additionally, strengthening accountability within public administration can lead to more efficient policy enforcement. When public officials are held accountable for their actions, they are more likely to prioritize the effective implementation of policies and take corrective actions when necessary. The research highlights that clear accountability mechanisms can also ensure that public funds allocated for green industry initiatives are spent efficiently and effectively. By maintaining a focus on accountability, public administration can better ensure that green policies achieve their intended outcomes.

6. Implications for Policy and Practice

The findings of this research have important implications for both policy and practice in the context of green industry policies. For policymakers, the research emphasizes the need to allocate sufficient resources to public administration bodies responsible for overseeing the implementation of these policies. This includes ensuring adequate funding for staff, technology, and infrastructure, as well as providing training to public administrators to improve their capacity for policy enforcement and evaluation. Furthermore, the research suggests that policymakers should prioritize cross-sectoral collaboration to ensure that green industry policies are well-integrated across different areas of government and industry. This collaboration will improve policy coherence and ensure that policies are effectively implemented across sectors.

For practitioners, particularly those in public administration, the study highlights the importance of engaging with industry leaders and other stakeholders in the policy implementation process. Public administration bodies should work closely with green industry players to create policies that are not only environmentally sustainable but also economically viable for businesses. This collaboration ensures that policies are practical, achievable, and supported by all stakeholders involved in the enforcement process. The research also suggests that practitioners should focus on continuous monitoring and evaluation of green policies, adjusting them as necessary to address emerging challenges and opportunities in the green industry.

Overall, this research calls for a holistic approach to the development and enforcement of green industry policies, where public administration plays an active, well-supported role in facilitating policy implementation. By investing in public administration's capacity, fostering collaboration across sectors, and strengthening transparency and accountability mechanisms, governments can ensure that green industry policies contribute to long-term environmental sustainability and energy efficiency. Through these efforts, the public sector can help drive the transition to a more sustainable and resilient global economy.

CONCLUSIONS

The research emphasizes the essential role of public administration in overseeing the effective implementation and enforcement of green industry policies aimed at addressing environmental and energy crises. The study highlights that when public administration is adequately resourced and empowered, it drives the success of these policies by fostering an environment where green industries can thrive. However, challenges such as insufficient resources, lack of coordination, political interference, and fragmented policy integration were identified as significant barriers to effective oversight. The findings underscore the need for



stronger coordination across sectors, increased financial and technological support for public administration, and enhanced transparency and accountability in policy enforcement. Ultimately, the research suggests that reinforcing public administration's capacity and commitment to green policies is crucial for achieving long-term environmental sustainability and mitigating the global energy crisis.

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References:

- [1] C. Shan and X. Ji, "Environmental regulation and green technology innovation: an analysis of the government subsidy policy's role in driving corporate green transformation," *Ind. Eng. Innov. Manag.*, vol. 7, no. 1, pp. 39–46, 2024.
- [2] M. E. Kraft, *Environmental policy and politics*. Routledge, 2021.
- [3] H. Kadri, "Green politics: A new era for environmental policy," *Ind. Eng. Innov. Manag.*, vol. 7, no. 2, pp. 21–40, 2023.
- [4] D. J. Fiorino, *Making environmental policy*. Univ of California Press, 2023.
- [5] J. Meckling, C. Galeazzi, E. Shears, T. Xu, and L. D. Anadon, "Energy innovation funding and institutions in major economies," *Nat. energy*, vol. 7, no. 9, pp. 876–885, 2022.
- [6] M. Maulidia, P. Dargusch, P. Ashworth, and F. Ardiansyah, "Rethinking renewable energy targets and electricity sector reform in Indonesia: A private sector perspective," *Renew. Sustain. Energy Rev.*, vol. 101, pp. 231–247, 2019.
- [7] A. Rahman *et al.*, "Optimizing Township Government Administration with Genetic Algorithms for a Green and Sustainable Rural Future," *Eng. Technol. Appl. Sci. Res.*, vol. 15, no. 2, pp. 21895–21902, 2025.
- [8] B. W. Head, *Wicked problems in public policy: Understanding and responding to complex challenges*. Springer Nature, 2022.
- [9] F. R. Baumgartner and B. D. Jones, *The politics of information: Problem definition and the course of public policy in America*. University of Chicago Press, 2024.
- [10] G. V. Pereira, M. A. Macadar, E. M. Luciano, and M. G. Testa, "Delivering public value through open government data initiatives in a Smart City context," *Inf. Syst. Front.*, vol. 19, no. 2, pp. 213–229, 2017.

