

Bridging Sustainability Gap: Opportunities and Barriers for Green Public-Private Partnerships in Zimbabwe

Sylvester Marumahoko

Zimbabwe Open University, Zimbabwe. (Corresponding author: marumahokos@gmail.com)

Abstract

Green Public-Private Partnerships (PPPs) are gaining traction as collaborative mechanisms for advancing sustainable energy goals in developing economies. In Zimbabwe, however, the institutional environment poses both opportunities and constraints to the effective implementation. This study investigates how the regulative, normative, and cognitive pillars of Zimbabwe's institutional landscape influence the development of green PPPs in the energy sector, using Institutional Theory as an analytical lens. A structured survey was administered to 120 purposively selected stakeholders from government agencies, private energy firms, NGOs, and donor organizations in Harare Metropolitan Province. The survey employed a 5-point Likert scale to assess stakeholder perceptions across institutional dimensions. Findings reveal that while there is strong conceptual support for green PPPs, challenges such as weak regulatory enforcement, inter-sectoral mistrust, and a lack of shared sustainability values continue to hinder collaboration. Prior experience with PPPs was identified as a key factor influencing stakeholder readiness to engage. The study recommends policy interventions aimed at fostering trust, aligning institutional norms, and strengthening the regulatory framework to support sustainable energy partnerships.

Key words: Green public-private partnerships, Energy, Opportunities, Barriers, Zimbabwe

Introduction

Zimbabwe faces persistent and deepening energy challenges marked by erratic electricity supply, underinvestment in infrastructure, and a heavy dependence on aging thermal plants and hydropower sources increasingly threatened by climate variability (IEA, 2020; Howells, Dzvimbo, and ZETDC, 2023; Bryant, 2025; Matiashe, 2025). These energy deficits have disrupted industrial

productivity, constrained service delivery, and stifled broader economic development. Paradoxically, Zimbabwe is endowed with abundant renewable energy potential—particularly in solar, small hydropower, and biomass resources that remain largely untapped due to systemic and structural constraints.

In response to growing energy insecurity and global imperatives for sustainable development, Zimbabwe introduced the National Renewable Energy Policy (NREP) in 2019, a framework aimed at scaling up renewable energy adoption and encouraging private sector participation (Minister of Energy and Power Development, 2019; Moyo and Mutasa, 2020; DLA Piper, 2022; Dube and Makumbe, 2022). Among the strategic instruments promoted in the policy are Public-Private Partnerships (PPPs) collaborative arrangements between government entities and private investors designed to finance, construct, and operate critical infrastructure. When aligned with environmental and social objectives, these partnerships evolve into Green PPPs, offering a pathway to close infrastructure investment gaps while advancing climate resilience and long-term sustainability goals.

Despite these ambitions, the practical implementation of Green PPPs in Zimbabwe's energy sector remains limited, fragmented, and slow, with few operational examples to date. This persistent gap between policy intent and actual outcomes suggests that technical and financial constraints alone do not sufficiently explain the underperformance of Green PPPs. Instead, the failure to realize sustainable energy partnerships points to deeper, more systemic institutional barriers.

This study employs Institutional Theory as a conceptual lens to investigate these barriers and opportunities. Institutional theory posits that the success or failure of complex initiatives such as PPPs is shaped not only by market forces or financial viability but by the broader institutional environment in which actors operate (Scott, 2001). This environment consists of three interconnected pillars: regulative, normative, and cognitive institutions (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Scott, 1995; Thornton, Ocasio and Lounsbury, 2012). The regulative dimension includes formal rules, policies, and enforcement mechanisms. The normative dimension reflects the values, expectations, and social obligations that guide organizational behavior. The cognitive dimension captures shared understandings, beliefs, and cultural assumptions. These institutional dynamics spanning formal structures, stakeholder expectations,

and cultural perceptions create both opportunities and constraints that critically influence the success of sustainable energy partnerships.

The significance of this research lies in its contribution to both policy and academic discourse. Practically, the study offers insights for government agencies, energy developers, investors, and development partners seeking to navigate or support PPP initiatives. Strategically, it aligns with Zimbabwe's national development goals including Vision 2030 and the NREP as well as international commitments under frameworks such as the Paris Agreement and the Sustainable Development Goals. Academically, it fills a critical gap in literature at the intersection of sustainability, infrastructure finance, and institutional theory in developing country contexts, particularly within Sub-Saharan Africa. Ultimately, the research aims to support a more resilient, inclusive, and sustainable energy future for Zimbabwe by deepening understanding of the institutional pathways that can unlock the full potential of Green PPPs.

Research Methodology

This study employs a quantitative research design to assess how institutional factors affect the development of green Public-Private Partnerships (PPPs) in Zimbabwe's energy sector. Grounded in Institutional Theory, the study applies the theory's three-pillar framework regulative, normative, and cognitive to evaluate how formal rules, social expectations, and shared beliefs influence stakeholder perceptions of PPP viability.

Data were collected through a structured questionnaire administered to 120 stakeholders in Harare Metropolitan Province. The survey instrument consisted of items grouped under six themes: demographics, regulative institutions, normative influences, cognitive factors, perceived opportunities, and barriers to implementation. Most items utilized a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), allowing for the quantification of stakeholder attitudes and institutional perceptions. Normative questions explored value alignment, collaboration culture, and stakeholder commitment, while cognitive items addressed trust, understanding of PPP mechanisms, and readiness for private sector involvement in green infrastructure projects.

A purposive sampling technique was used to select participants with relevant expertise in PPPs, infrastructure development, energy policy, and sustainability. The sample included respondents

from government bodies, energy companies, donor organizations, NGOs, and academia. Gender distribution was 62% male and 38% female, with strong female participation from NGOs and academic institutions. Over 70% of participants held postgraduate qualifications in fields such as engineering, public administration, and environmental science. Nearly 60% had more than ten years of experience in energy or infrastructure sectors, and 65% had direct involvement in PPPs, particularly in renewable energy initiatives. This expertise provided a well-informed basis for assessing institutional influences on green PPPs.

Analysis and Discussion of Results (or Findings)

This section presents a detailed analysis and discussion of the research findings, structured around the three interconnected pillars of Institutional Theory: regulative, normative, and cognitive institutions. These pillars serve as a conceptual framework for examining the institutional opportunities and barriers affecting the development of green public-private partnerships (PPPs) within Zimbabwe's energy sector. The analysis draws on stakeholder survey responses, interpreted through the lens of each institutional pillar, to explore how regulatory frameworks, social norms, and shared beliefs shape behavior, decision-making, and collaboration across sectors. By aligning the empirical data with Institutional Theory, this section offers critical insights into the institutional dynamics that support or constrain the implementation of green PPPs aimed at addressing energy insecurity and promoting sustainable development in Zimbabwe.

Responses to Regulative Institutions Survey Questions

- 1. Response to the question:** The existing legal and regulatory framework in Zimbabwe provides sufficient support for the development of green energy Public-Private Partnerships?

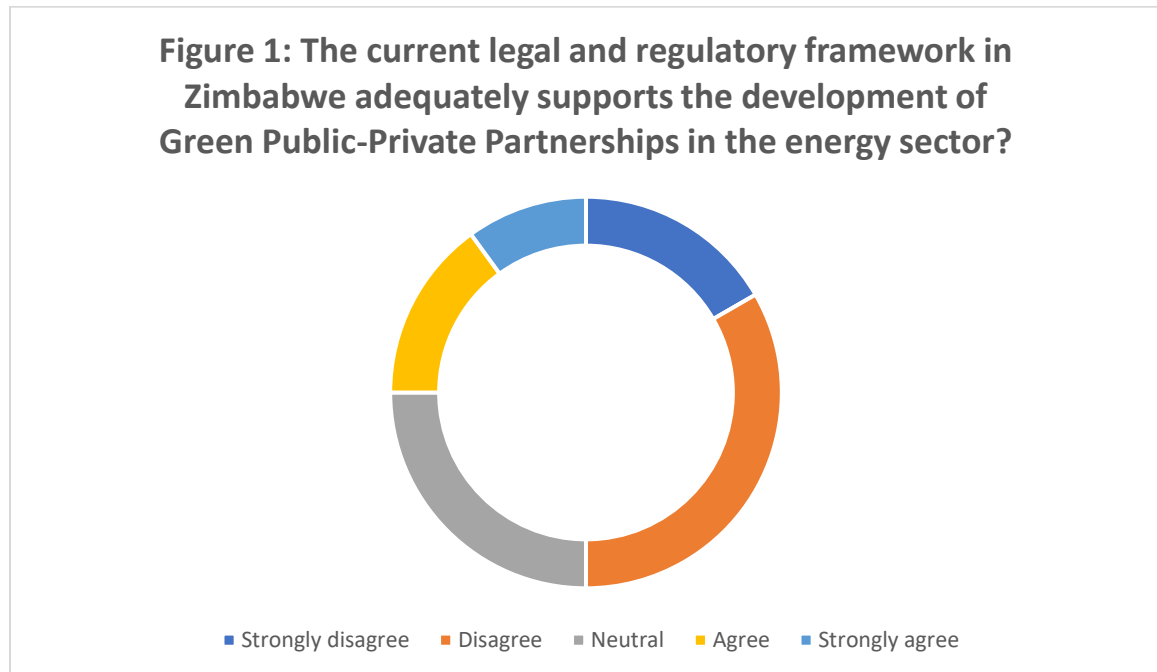
The survey results offer a revealing glimpse into stakeholder perceptions of the current legal and regulatory framework supporting Green Public-Private Partnerships (PPPs) in Zimbabwe's energy sector (See Figure 1). With 50% of respondents either strongly disagreeing or disagreeing with the statement that the existing framework is adequate, there is a clear indication of widespread skepticism. This suggests that many stakeholders perceive the current legal environment as either

outdated, ineffective, or insufficiently supportive of sustainability-focused initiatives. The dissatisfaction may stem from challenges such as bureaucratic inefficiencies, limited enforcement, or the absence of tailored policies that specifically facilitate green energy investments through PPPs.

A significant portion of respondents (25%) selected a neutral position, which introduces an important layer of interpretation. This neutrality may signal a lack of awareness or understanding of the existing regulatory framework, particularly its relevance to green PPPs in the energy sector. It may also reflect a perception that while certain policies or structures are in place, they are either underdeveloped or not being implemented in practice. Such a stance suggests the need for better policy communication and stakeholder engagement to clarify the role and effectiveness of current legal instruments.

Conversely, only 25% of respondents agreed or strongly agreed with the statement, indicating relatively low confidence in the ability of existing policies to enable successful green PPPs. This limited optimism highlights a lack of trust in current government support mechanisms, possibly informed by past experiences or an absence of clear, actionable guidelines. It also underscores the broader challenge of aligning public policy with the specific requirements of green investment, which often demand more flexible, forward-looking, and incentivized regulatory approaches.

Taken together, these responses underscore a pressing need for policy reform, institutional strengthening, and increased stakeholder collaboration. The government may need to review and adapt the current PPP legal framework to explicitly incorporate sustainability goals and green financing principles. Additionally, enhancing policy transparency and building institutional capacity will be crucial in fostering confidence among private sector partners. These steps are essential for bridging the sustainability gap and unlocking the potential of green PPPs as a viable strategy for energy development in Zimbabwe.



Source: Researcher (2025)

2. Response to the question: Procedures for approving and implementing energy PPP projects in Zimbabwe are clear, predictable, and efficient?

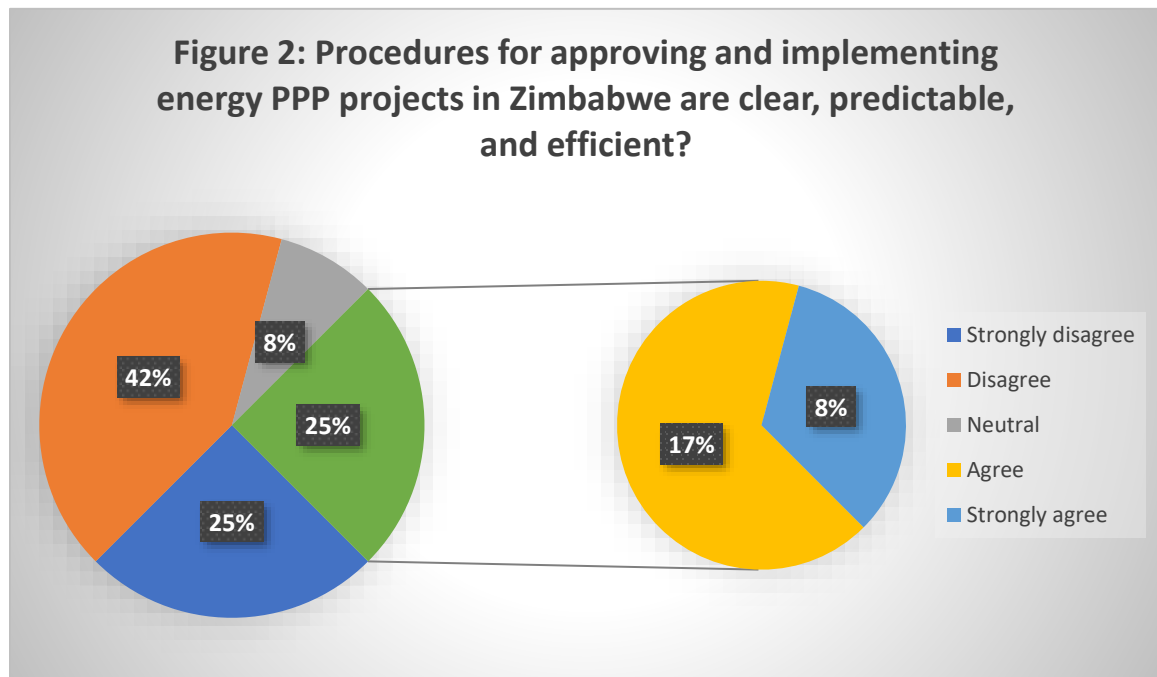
The responses to the statement, “Procedures for approving and implementing energy PPP projects in Zimbabwe are clear, predictable, and efficient,” paint a concerning picture regarding regulatory transparency and administrative efficiency in the context of green energy (PPPs), Public-Private Partnerships (See Figure 2). With 30 respondents strongly disagreeing and 50 disagreeing, a striking 66.7% of the sample expresses dissatisfaction with current procedural clarity and effectiveness. This suggests that the regulatory environment is perceived as opaque, unpredictable, and possibly burdensome, making it difficult for stakeholders to navigate the approval and implementation processes. Such perceptions raise red flags about institutional capacity and the user-friendliness of regulatory systems governing green PPPs in the country.

The low level of confidence in regulatory efficiency can have serious implications for the success of green energy PPPs. Efficient and transparent procedures are foundational for

encouraging long-term private sector investment. When processes are perceived as overly complex, inconsistent, or slow, they introduce risks and uncertainties that deter private actors. This sentiment is reinforced by the limited number of respondents only 25% who indicated agreement or strong agreement with the statement. The results suggest that private entities may struggle with delays, unclear requirements, or shifting regulations when attempting to participate in Zimbabwe's energy PPP projects, particularly those involving sustainable or innovative technologies.

The 8.3% of respondents who selected "neutral" may reflect a lack of direct experience with the procedures or uncertainty about how the system operates in practice. This small portion also indicates that while some stakeholders may not be directly affected, the overwhelming majority who do have experience or insights perceive a lack of procedural integrity. It further emphasizes the importance of not only reforming administrative processes but also improving communication and outreach around existing policies and approval mechanisms. Making processes more transparent and user-oriented could improve perceptions and real-world experiences.

Ultimately, these findings reveal a critical barrier to private sector confidence in Zimbabwe's green energy PPP landscape. Predictability and procedural efficiency are key pillars for attracting and retaining private investment, particularly in high-risk sectors like energy. The strong negative sentiment expressed in the survey indicates a need for urgent regulatory reforms to streamline approval processes, reduce administrative bottlenecks, and build a transparent, rules-based framework. Addressing these issues will not only enhance trust but also stimulate private sector participation, which is essential for bridging Zimbabwe's sustainability gap in the energy sector.



Source: Researcher (2025)

3. **Response to the question:** There is strong enforcement of energy policies and PPP agreements by regulatory bodies such as ZERA?

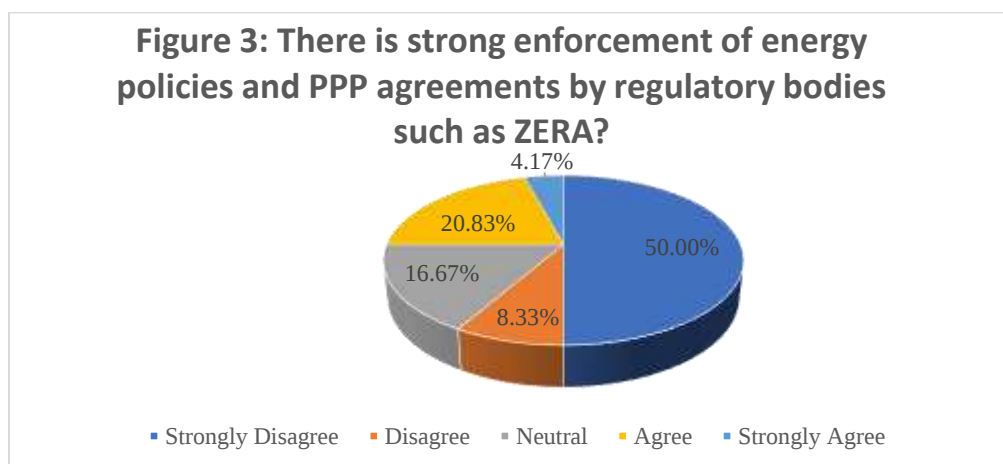
The responses to the statement, “There is strong enforcement of energy policies and PPP agreements by regulatory bodies such as ZERA,” reveal significant concerns about the institutional capacity and credibility of Zimbabwe’s regulatory authorities in the energy sector (See Figure 3). With 70 out of 120 respondents equivalent to 58.3%, indicating disagreement or strong disagreement, there is a prevailing perception that enforcement mechanisms are weak or inconsistently applied. This suggests that key institutions, particularly the Zimbabwe Energy Regulatory Authority (ZERA), may lack the operational effectiveness, authority, or resources required to uphold energy policy standards and ensure compliance with PPP agreements.

Only 25% of respondents expressed agreement or strong agreement, indicating limited confidence in the current enforcement capacity of regulatory institutions. This lack of assurance is critical, as strong enforcement is a cornerstone of functional public-private partnerships, particularly in high-investment sectors like energy. Weak enforcement can lead to contract breaches, implementation

delays, and a lack of accountability all of which undermine trust between public and private stakeholders. When regulatory bodies are perceived as ineffective enforcers, the risk associated with green PPP investments increases, thereby discouraging private sector involvement and jeopardizing project sustainability.

The 20 respondents who remained neutral (16.7%) may reflect either uncertainty about ZERA's actual enforcement performance or a lack of direct experience with how enforcement is carried out. Regardless, the combined effect of low confidence and ambivalence reinforces the need for regulatory agencies to not only strengthen enforcement practices but also to make their oversight roles more visible and transparent. Improved communication about policy implementation, performance tracking, and accountability measures could help build credibility and reshape stakeholder perceptions over time.

These findings underscore a fundamental institutional challenge in Zimbabwe's green PPP framework: the credibility of regulatory enforcement. For green energy PPPs to thrive, institutions like ZERA must be perceived as authoritative, impartial, and consistent in applying the rules. This calls for strategic investments in institutional strengthening, legal empowerment, and capacity-building initiatives aimed at equipping regulatory agencies with the tools and autonomy they need. Enhancing the enforcement capabilities of such bodies will be crucial to boosting investor confidence, ensuring policy compliance, and ultimately narrowing Zimbabwe's sustainability gap in the energy sector.



Source: Researcher (2025)

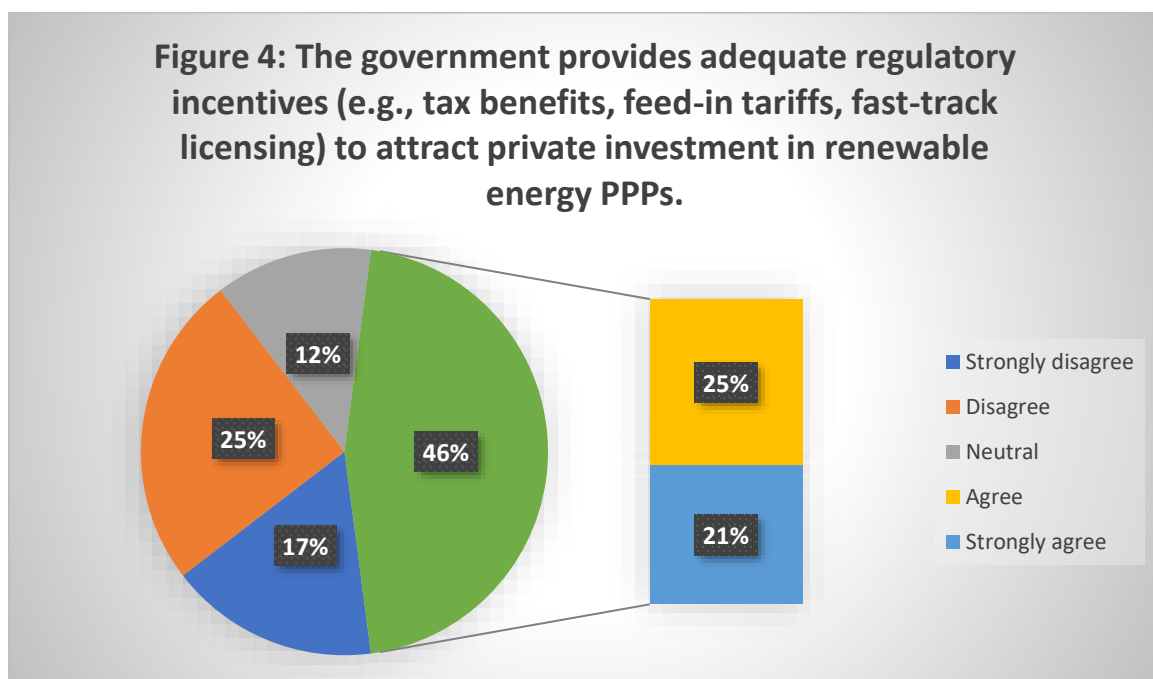
- 4. Response to the question:** The government provides adequate regulatory incentives (e.g., tax benefits, feed-in tariffs, fast-track licensing) to attract private investment in renewable energy PPPs?

The responses to the statement, “The government provides adequate regulatory incentives (e.g., tax benefits, feed-in tariffs, fast-track licensing) to attract private investment in renewable energy PPPs,” present a more balanced but still nuanced view of Zimbabwe’s incentive landscape (See Figure 4). While a combined 55 respondents (45.8%) either agreed or strongly agreed with the statement, a significant 50 respondents (41.7%) disagreed or strongly disagreed. This near-even split suggests that many stakeholders recognize the provision of regulatory incentives, but their adequacy, accessibility, or effectiveness remains contested. The diversity of views points to inconsistency in the application or awareness of such incentives across the energy sector.

The positive responses reflect an encouraging recognition of government efforts to introduce incentives that support renewable energy investments through Public-Private Partnerships. The presence of such tools whether tax breaks, feed-in tariffs, or streamlined licensing demonstrates some level of policy responsiveness to the unique needs of private investors in the clean energy space. For the 25% of respondents who strongly agreed, this likely indicates tangible benefits from government schemes. It also suggests that the policy framework may be improving or at least shows potential in attracting green investments, particularly where such incentives have been effectively communicated or applied.

However, the fact that over 40% of respondents disagreed or strongly disagreed indicates that many stakeholders still perceive significant gaps in the design, delivery, or reliability of these incentives. This may reflect inconsistencies in implementation, limited coverage across technologies or regions, or bureaucratic hurdles that reduce the attractiveness of the incentives in practice. In some cases, private sector actors may find these incentives too weak, delayed, or unclear to justify their investment risk. This reinforces the importance of not just having incentives in place, but ensuring they are well-structured, efficiently administered, and aligned with the evolving needs of investors in the renewable energy space.

The 12.5% of respondents who selected a neutral position may indicate a lack of familiarity with the incentive frameworks or uncertainty about their practical impact. This signals a need for better stakeholder communication and more transparent dissemination of information about available benefits. Overall, while the presence of some regulatory incentives is acknowledged, the mixed responses highlight an opportunity for the Zimbabwean government to enhance and better institutionalize these tools. Strengthening the predictability, accessibility, and implementation of regulatory incentives will be key to fostering greater private sector confidence and unlocking the full potential of green PPPs in the energy sector.



Source: Researcher (2025)

Responses to Normative Institutions-Survey Questions

- Response to the question:** There is a strong alignment between the values of public and private sector stakeholders regarding the importance of sustainable energy development?

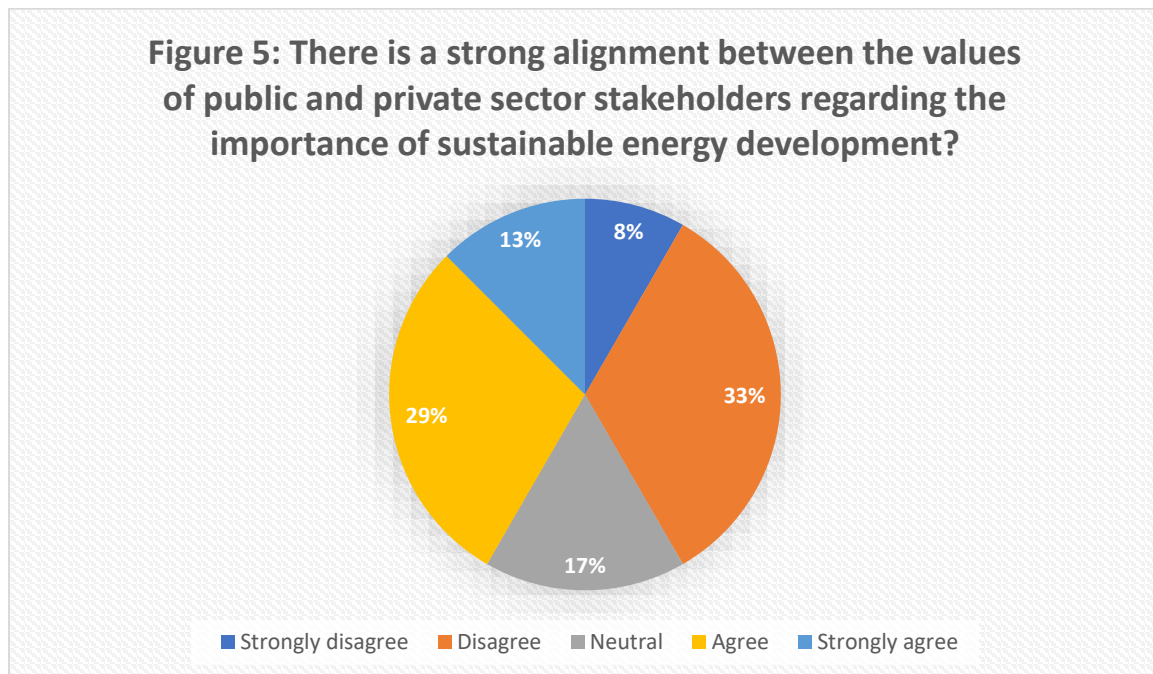
The survey results reveal a significant perception gap among stakeholders concerning the alignment of values between the public and private sectors in promoting sustainable energy development in Zimbabwe (See Figure 5). Out of 120 respondents, only 35 (29.2%) agreed and 15

(12.5%) strongly agreed with the statement, indicating that just over 40% of respondents perceive a positive alignment of values. In contrast, a combined total of 50 respondents (10 strongly disagree and 40 disagree) representing 41.7% expressed a negative view. This near-even split underscores a fragmented perception regarding normative convergence, which is crucial for the cooperative dynamics in public-private partnerships (PPPs).

The high level of disagreement suggests that many stakeholders do not perceive shared normative commitments to sustainability between sectors. This misalignment may stem from differing institutional cultures, policy priorities, or strategic interests between public bodies and private enterprises. Public institutions may prioritize regulatory compliance and public welfare, while private actors could be more driven by profitability and return on investment. Such divergent values can create tension, limit trust, and hinder the momentum of green PPP initiatives, particularly in sectors like energy that require long-term collaboration and joint risk management.

Neutral responses, accounting for 16.7% of the sample (20 respondents), further reflect uncertainty or ambiguity about value alignment. This group may represent stakeholders with limited engagement in PPPs or insufficient visibility into inter-sector dynamics. Their neutrality highlights the need for improved communication and transparency between partners, as well as broader stakeholder involvement in the early stages of green project planning. Normative institutions rely on shared expectations and beliefs; when those expectations are unclear or inconsistent, cooperation tends to weaken, and project cohesion suffers.

Overall, the data illustrate a critical challenge for green PPPs in Zimbabwe's energy sector: the lack of clearly perceived normative alignment across stakeholders. To bridge the sustainability gap, there must be deliberate efforts to foster mutual understanding, co-create sustainability values, and embed these values into both policy frameworks and operational practice. Strengthening normative institutions through stakeholder dialogues, co-designed sustainability goals, and value-based leadership could enhance collaboration and drive momentum for successful green energy partnerships in the country.



Source: Researcher (2025)

2. Response to the question: Stakeholder expectations (e.g., from communities, NGOs, and investors) positively influence collaboration in green public-private energy projects?

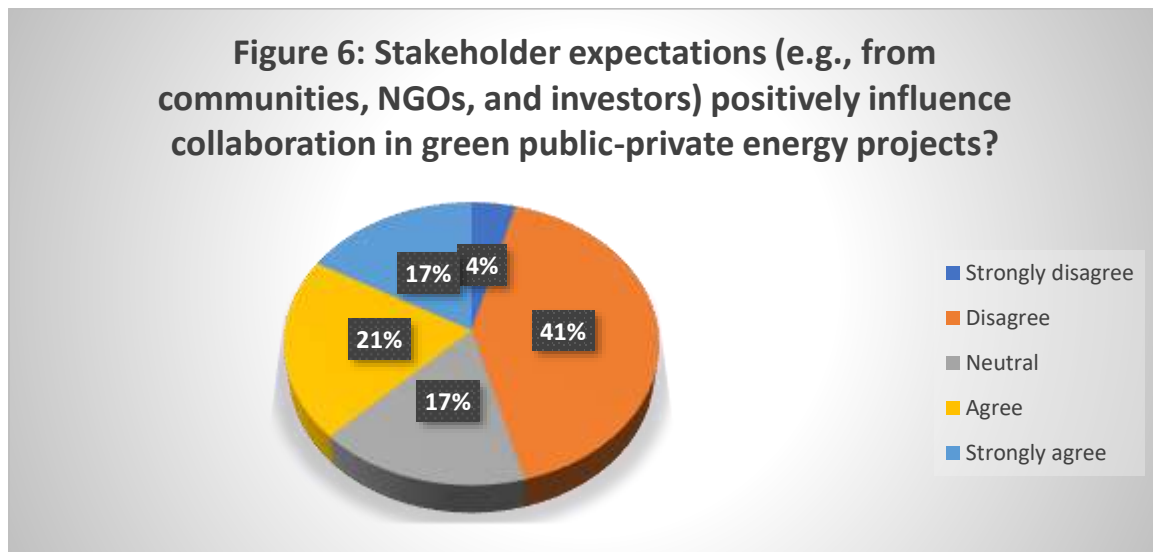
The responses to this question reflect a divided perspective on the influence of external stakeholder expectations on collaboration within green public-private partnerships (PPPs) in Zimbabwe's energy sector (See Figure 6). Out of 120 respondents, 50 (41.7%) disagreed and 5 (4.2%) strongly disagreed with the statement, suggesting that nearly half the participants do not believe that expectations from communities, NGOs, or investors meaningfully drive cooperation. In contrast, 25 (20.8%) agreed and 20 (16.7%) strongly agreed, indicating that slightly over one-third of respondents do perceive a positive role for external normative pressures in facilitating collaborative outcomes.

The predominance of disagreement suggests that many stakeholders may feel that normative pressures from external groups are either too weak or inconsistently applied to influence decision-making or partnership behavior. In Zimbabwe's context, where public-private cooperation in energy projects often faces political, economic, and structural barriers, the voices of civil society, local communities, and even international donors may not be fully integrated into PPP planning or

implementation. This gap could reflect a disconnect between stakeholder engagement strategies and actual influence, pointing to a need for more structured mechanisms that channel stakeholder expectations into practical collaborative frameworks.

The 20 neutral responses (16.7%) reflect a level of uncertainty or disengagement regarding the role of stakeholder expectations. This may indicate that some respondents are not directly exposed to stakeholder feedback or that the influence of these external actors is not clearly visible in their organizational interactions. Normative institutional theory emphasizes the power of shared norms and legitimacy pressures in shaping organizational behavior; thus, ambiguity in this area could suggest an underdeveloped normative institutional environment in which stakeholder voices are present but not impactful.

Overall, the data indicates that while some respondents recognize the value of stakeholder expectations in promoting collaboration, a substantial portion do not view them as effective drivers of cooperation in green PPPs. This has important implications for policy and practice. Strengthening the role of external normative institutions through formalized stakeholder engagement processes, transparent reporting mechanisms, and responsiveness to community and investor concerns could enhance trust and legitimacy. In turn, this could foster more cohesive and inclusive collaboration across sectors, which is essential for bridging the sustainability gap in Zimbabwe's energy landscape.



Source: Researcher (2025)

3. Response to the question: Norms of transparency and mutual accountability are widely upheld by both public and private partners in green energy partnerships?

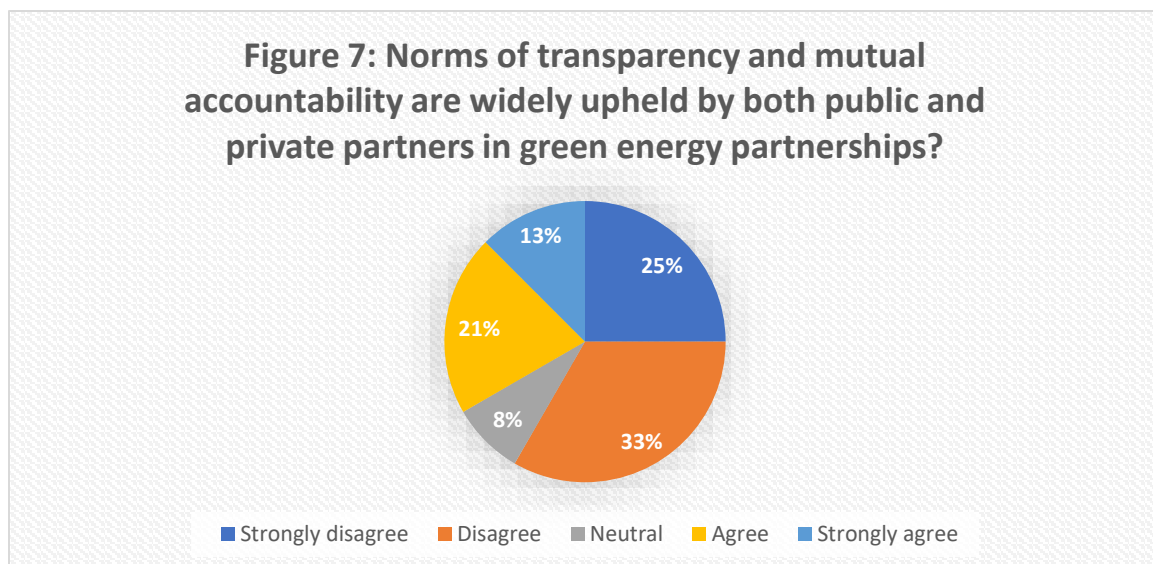
The survey findings reveal a notable skepticism regarding the normative expectations of good governance, specifically transparency and mutual accountability within green public-private partnerships in Zimbabwe's energy sector (See Figure 7). Out of 120 respondents, a majority expressed negative perceptions: 30 respondents (25%) strongly disagreed and 40 (33.3%) disagreed that such norms are widely upheld. This means nearly 60% of stakeholders question the extent to which both public and private partners adhere to expected standards of openness and shared responsibility. These perceptions suggest that normative institutions supporting good governance may be underdeveloped or inconsistently applied, potentially eroding trust between actors and undermining partnership effectiveness.

The relatively small proportion of respondents who agreed (25 or 20.8%) or strongly agreed (15 or 12.5%) with the statement underscores the limited confidence in the institutional culture surrounding green PPPs. When normative frameworks such as those promoting transparency, participatory decision-making, and mutual accountability are not robustly upheld, the willingness of stakeholders to engage in long-term partnerships may diminish. This absence of shared

governance norms can lead to asymmetries in power, information, and responsibility, which can compromise the collaborative ethos that green energy partnerships require.

Neutral responses (10 or 8.3%) were minimal, indicating that most participants held clear opinions on the issue. The data suggests that the perception of weak normative governance structures is not merely due to a lack of information or indifference but is likely grounded in experiential or contextual realities. This divide in stakeholder perceptions could point to uneven experiences across different partnerships, where some may have benefitted from stronger governance frameworks while others encountered opaque or unilateral decision-making processes. Such inconsistencies make it harder to establish sector-wide expectations of conduct and may further discourage private sector involvement in green energy initiatives.

Ultimately, the limited presence of strong normative expectations appears to be a significant barrier to effective cooperation in Zimbabwe's green PPP landscape. Norms act as social contracts that shape behavior beyond formal rules; when these norms are absent or contested, cooperation is weakened. Addressing this gap will require deliberate institutional reforms that embed principles of transparency and mutual accountability into policy frameworks, contractual agreements, and operational practices. Without these reforms, green PPPs risk becoming transactional rather than transformational falling short of their potential to bridge Zimbabwe's sustainability gap.



Source: Researcher (2025)

4. **Response to the question:** A lack of shared sustainability values between partners slows down the momentum of green PPP projects in Zimbabwe's energy sector?

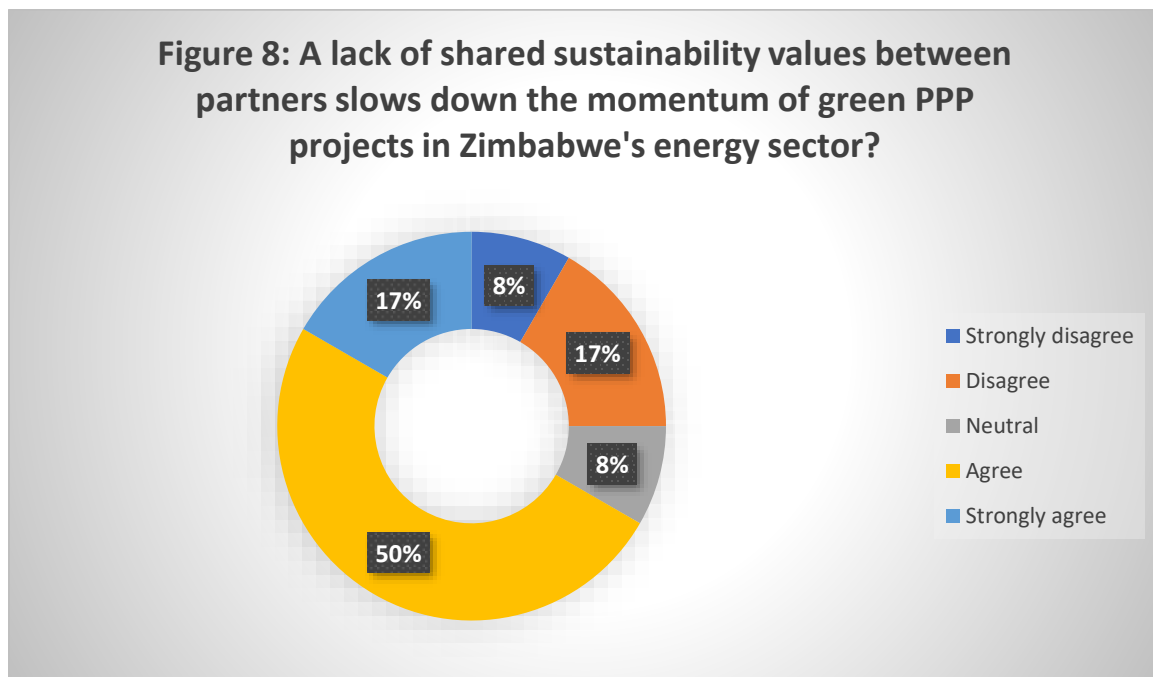
The survey results indicate a strong perception that normative misalignment particularly in sustainability values significantly hinders the momentum of green PPP projects in Zimbabwe's energy sector (See Figure 8). A total of 60 respondents (50%) agreed and 20 (16.7%) strongly agreed that the lack of shared sustainability values between public and private partners slows project progress. This dominant view (66.7% of respondents) underscores a serious concern among stakeholders that conflicting priorities, divergent environmental commitments, or inconsistent definitions of "sustainability" are contributing to delays or inefficiencies in project implementation.

Conversely, only 10 respondents (8.3%) strongly disagreed and 20 (16.7%) disagreed with the statement, suggesting a smaller group of stakeholders do not perceive normative divergence as a major impediment. Meanwhile, 10 respondents (8.3%) were neutral, indicating limited uncertainty or a perception that value misalignment may not be universally applicable across all projects. Nonetheless, the overwhelming majority affirming the issue points to a systemic problem—where collaborative efforts are undermined by incompatible visions for sustainability, often rooted in differing institutional cultures or economic priorities.

These findings suggest that normative misalignment is more than just a theoretical concern; it has practical consequences that are felt throughout the lifecycle of green PPP projects. When partners lack a common understanding of environmental goals, the result is often project delays, misallocation of resources, or diluted impact. Public actors may emphasize regulatory compliance and long-term environmental protection, while private partners may prioritize short-term returns and cost-efficiency. Without harmonization of values, decision-making becomes contested, trust is eroded, and the cooperative synergy necessary for PPP success weakens.

To bridge this normative gap, intentional alignment efforts must be prioritized through stakeholder dialogue, joint planning, and the integration of shared sustainability benchmarks into contractual and operational frameworks. Establishing platforms for value convergence such as codes of conduct, sustainability compacts, or third-party facilitation, can create a common ground from

which both sectors can operate more effectively. Ultimately, fostering a shared normative foundation will not only accelerate the pace of green energy development but also enhance the resilience and legitimacy of PPPs as tools for sustainable transformation in Zimbabwe's energy sector.



Source: Researcher (2025)

3.3 Responses to Cognitive Institutions-Survey Questions

1. **Response to the question:** There is a strong belief among stakeholders that public-private partnerships are an effective model for delivering sustainable energy solutions in Zimbabwe?

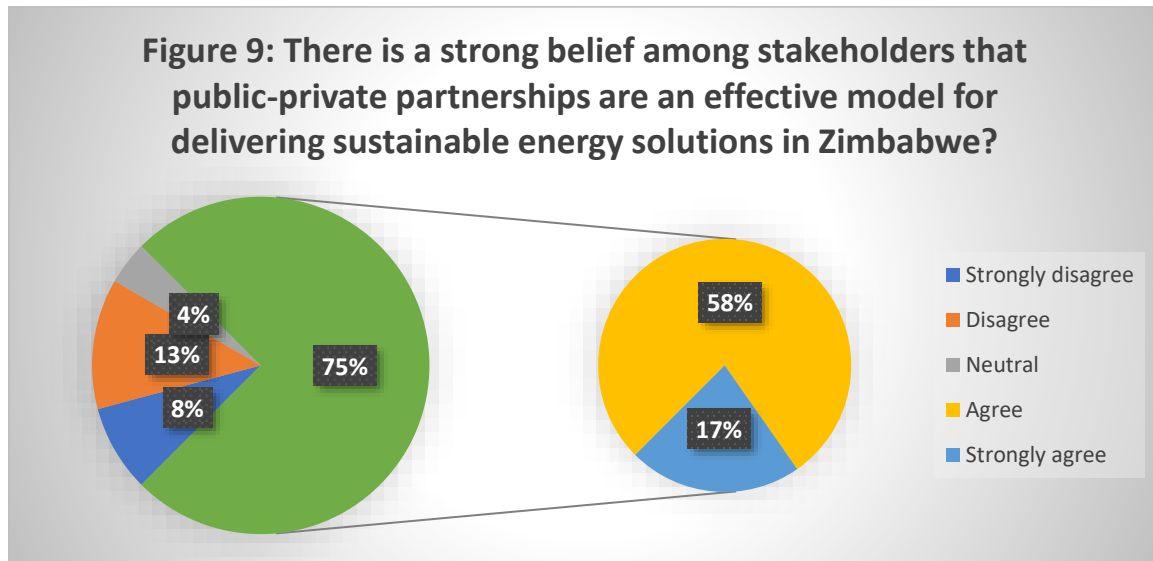
The survey findings suggest a strong and positive cognitive orientation among stakeholders toward the role of public-private partnerships (PPPs) in delivering sustainable energy solutions in Zimbabwe (See Figure 9). Of the 120 respondents, a significant majority 70 (58.3%) agreed and 20 (16.7%) strongly agreed with the statement, indicating that nearly three-quarters of respondents hold a favorable belief in the efficacy of PPPs for green energy implementation. This positive

perception is critical, as it reflects a shared mental model that PPPs can serve as a viable mechanism for advancing sustainability objectives in the energy sector.

Only a small fraction of respondents 10 (8.3%) strongly disagreed and 15 (12.5%) disagreed expressed skepticism regarding the effectiveness of PPPs. These figures suggest that while some doubts remain, they are relatively limited in comparison to the overall positive sentiment. The minimal number of neutral responses (5 or 4.2%) further underscores that stakeholders have relatively clear and defined beliefs on this issue, rather than being uncertain or indifferent. This clarity can be instrumental in shaping policy consensus and mobilizing multi-sectoral commitment around PPP-driven green energy initiatives.

The strong belief in PPP effectiveness as revealed by the data signals a favorable cognitive institutional environment. Such cognitive alignment supports collaborative energy development by reducing ideological friction and reinforcing mutual expectations of success. When stakeholders both public and private share the belief that PPPs are capable of delivering tangible results, it fosters openness to cooperation, risk-sharing, and long-term commitment. This belief also lays the groundwork for smoother negotiation processes and more coordinated project planning, all of which are essential for the success of green PPPs.

However, it is important to recognize that belief alone does not guarantee success. While cognitive institutions shape perceptions and readiness to engage, they must be matched by enabling normative and regulatory frameworks. The positive belief in PPPs must be reinforced through practical evidence such as transparent governance, consistent outcomes, and measurable sustainability impacts to maintain stakeholder confidence over time. If well-leveraged, the current belief system presents a strategic opportunity for Zimbabwe to expand and deepen green PPPs as part of its broader energy transition strategy.



Source: Researcher (2025)

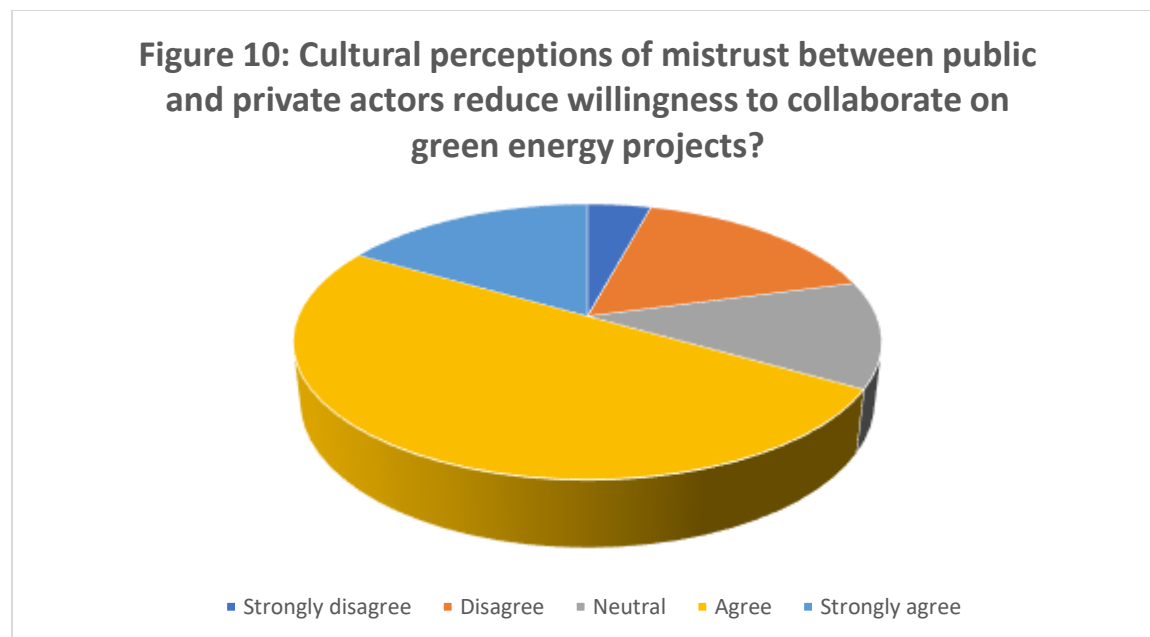
2. **Response to the question:** Cultural perceptions of mistrust between public and private actors reduce willingness to collaborate on green energy projects?

The survey results reveal a strong perception among stakeholders that cultural mistrust between public and private actors hampers collaboration on green energy projects (See Figure 10). A combined 80 out of 120 respondents (66.7%) either agreed (60 or 50%) or strongly agreed (20 or 16.7%) that such mistrust reduces willingness to engage in partnerships. This dominant view highlights the presence of deep-seated cognitive barriers, rooted in historical experiences, perceived institutional failures, or ideological differences, which continue to shape the attitudes and behaviors of key actors in the PPP space.

On the other hand, a smaller but notable group of respondents expressed a more optimistic view. Twenty respondents (16.7%) disagreed and 5 (4.2%) strongly disagreed with the statement, suggesting that for a minority of stakeholders, mistrust is either not prevalent or not perceived as a significant impediment to collaboration. Meanwhile, 15 respondents (12.5%) selected neutral, possibly reflecting uncertainty or varied experiences across different projects. This diversity in responses indicates that while mistrust is widespread, it may not be uniformly experienced or perceived across the energy sector.

Cultural perceptions of mistrust whether based on actual interactions or inherited organizational narratives can significantly impair partnership formation and project progress. When private actors doubt the transparency or commitment of public institutions, or when government entities view private sector motives with suspicion, the result is a reluctance to share information, align objectives, or commit long-term resources. These perceptions shape not only attitudes but also practical decisions, such as risk allocation, negotiation strategies, and stakeholder engagement, ultimately weakening the potential of green PPPs to deliver impactful energy solutions.

To mitigate these cognitive barriers, deliberate efforts must be made to build trust through consistent and transparent engagement, performance-based collaboration models, and inclusive dialogue platforms. Addressing the root causes of mistrust such as inconsistent regulatory enforcement, lack of accountability, and opaque procurement practices can gradually reshape stakeholder perceptions. Cultivating a culture of cooperation grounded in mutual respect and shared sustainability values is essential for unlocking the full potential of PPPs as drivers of green energy transformation in Zimbabwe.



Source: Researcher (2025)

3. Response to the question: Stakeholders generally understand and accept the role of private sector innovation in achieving Zimbabwe's energy sustainability goals?

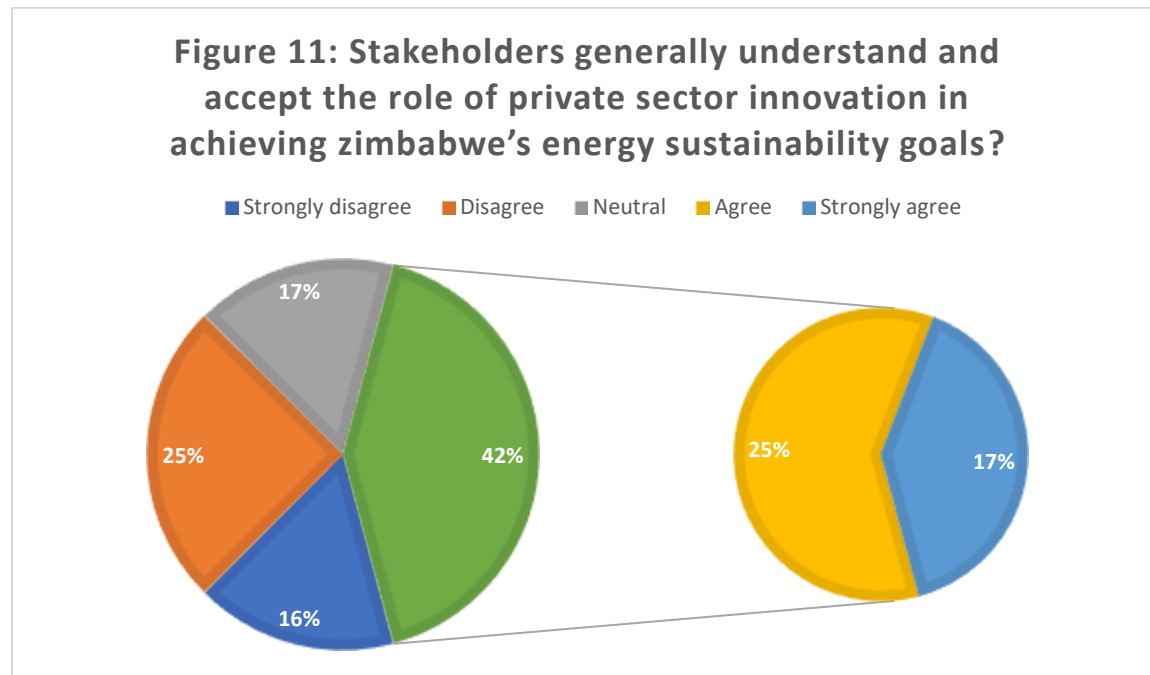
The survey results present a divided view among stakeholders regarding the private sector's role in advancing energy sustainability in Zimbabwe (See Figure 11). While 30 respondents (25%) agreed and 20 (16.7%) strongly agreed that stakeholders generally understand and accept the importance of private sector innovation, a nearly equal proportion expressed the opposite view. Specifically, 20 respondents (16.7%) strongly disagreed and 30 (25%) disagreed with the statement, suggesting that a significant number of stakeholders are either skeptical of or unconvinced by the private sector's contribution to green innovation. The 20 neutral responses (16.7%) further illustrate a lack of consensus or clarity on this issue, reflecting cognitive fragmentation across the stakeholder landscape.

This lack of alignment in mental models may stem from historical dynamics in Zimbabwe's public-private relations. Limited exposure to successful PPP models, distrust of profit-driven motives, or underappreciation of the private sector's technical capacity could all contribute to this hesitancy. Where public institutions have traditionally dominated infrastructure and energy development, the private sector's role may still be viewed with caution or misunderstanding. Such fragmented perceptions can obstruct collaboration, as they create uncertainty about the roles, expectations, and contributions of private partners in energy transition efforts.

The implications of this cognitive gap are considerable. When stakeholders do not share a common understanding of the value that private sector innovation brings such as technological expertise, efficiency gains, and alternative financing green PPPs risk becoming unbalanced or underutilized. Misaligned beliefs can lead to resistance in policy design, difficulties in joint decision-making, and weak political support for innovation-led initiatives. This hinders the development of a coherent, long-term strategy to leverage the private sector's capabilities in achieving Zimbabwe's energy sustainability goals.

Bridging this cognitive divide requires strategic communication, capacity building, and exposure to best practices in private sector-driven green innovation. Public institutions must actively promote and institutionalize the private sector's role in energy sustainability through inclusive

policy dialogues, joint innovation platforms, and performance-based partnerships. Over time, these efforts can help align stakeholder mental models, build mutual respect, and foster a more enabling environment for innovation-led public-private collaboration. Establishing a shared vision will be essential to accelerating Zimbabwe’s sustainable energy agenda through effective green PPPs.



Source: Researcher (2025)

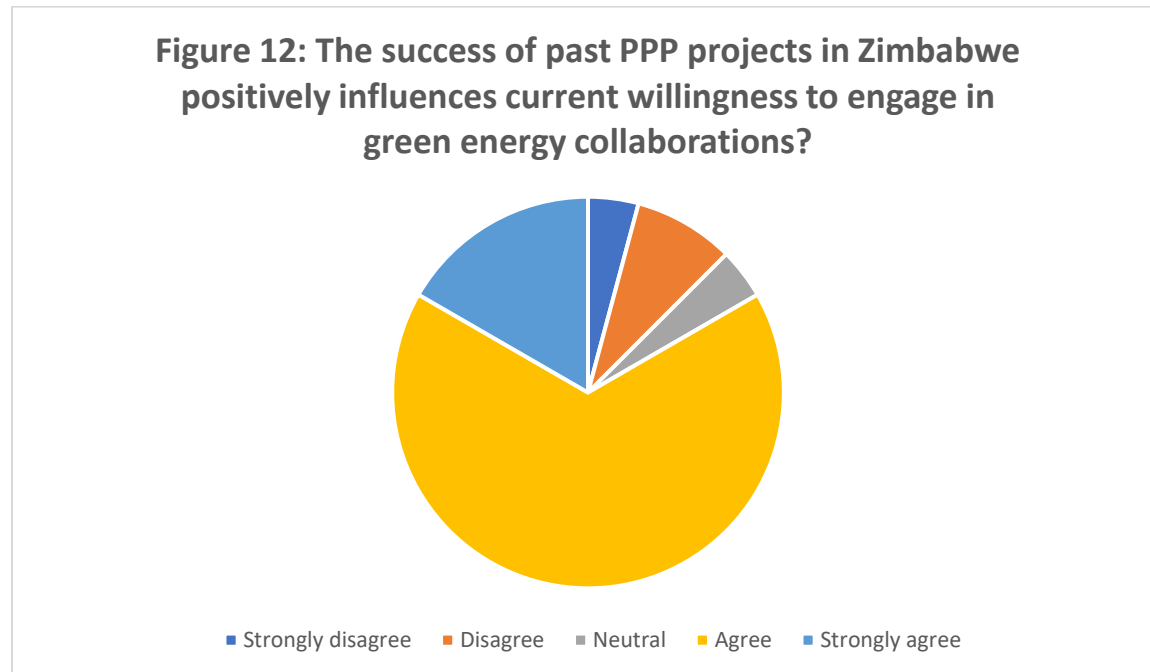
4. Response to the question: The success of past PPP projects in Zimbabwe positively influences current willingness to engage in green energy collaborations?

The survey data indicate a strong belief among stakeholders that the perceived success of past public-private partnerships (PPPs) positively influences their current willingness to engage in green energy collaborations (See Figure 12). A total of 80 respondents (66.7%) agreed with the statement, and an additional 20 (16.7%) strongly agreed. This overwhelming majority 83.4% reflects a high level of cognitive reinforcement, where past positive experiences with PPPs are shaping present attitudes toward future partnerships. Such cognitive framing is a powerful driver of behavior, suggesting that stakeholders who have witnessed or been part of successful PPP models are more likely to trust and support new collaborations in the green energy sector.

Conversely, only a small portion of respondents expressed doubt: 5 (4.2%) strongly disagreed and 10 (8.3%) disagreed with the statement. These minority views could reflect isolated negative experiences, project-specific failures, or limited involvement in PPPs altogether. The neutral responses (5 or 4.2%) indicate that only a few stakeholders are unsure or ambivalent, further emphasizing the dominant perception that successful past projects foster present willingness to collaborate. This general alignment points to a form of cognitive path dependency, where prior success sets the tone for future engagement and perceived feasibility.

This data suggests that cognitive institutions particularly belief systems shaped by experiential learning play a critical role in driving support for green PPPs. When stakeholders see evidence that collaboration can deliver results, their readiness to commit time, resources, and political capital increases. In practical terms, successful past PPPs act as cognitive reference points or mental shortcuts that reduce perceived risks and uncertainty associated with new partnerships. This effect not only bolsters stakeholder confidence but also contributes to the institutionalization of PPPs as a legitimate and reliable model for energy sustainability.

To maintain and build on this positive cognitive framing, the government and its partners need to document, communicate, and replicate past PPP successes. Creating case studies, conducting stakeholder reviews, and highlighting key lessons learned can reinforce belief in the model and encourage broader participation. Furthermore, embedding mechanisms for transparency and accountability in current and future PPPs will help sustain stakeholder trust and prevent disillusionment. By leveraging the momentum generated by past achievements, Zimbabwe can strengthen its foundation for scaling up green energy collaborations through well-structured public-private partnerships.



Source: Researcher (2025)

Conclusions

This study set out to explore the cognitive, normative, and regulatory institutional dimensions influencing the implementation of green public-private partnerships (PPPs) in Zimbabwe’s energy sector, under the title “Bridging the Sustainability Gap: Opportunities and Barriers for Green Public-Private Partnerships in Zimbabwe.” The central problem identified was the persistent sustainability gap in the country’s energy development, which continues to be hampered by structural, cultural, and institutional misalignments between public and private actors. Grounded in Institutional Theory, the study examined how deeply embedded beliefs, values, and rules—especially those related to cognitive institutions influence perceptions, trust, and willingness to collaborate in green energy PPPs.

Using a quantitative survey methodology with a 5-point Likert scale, data were collected from 120 stakeholders directly or indirectly involved in energy and PPP projects. The findings revealed a strong belief in the potential effectiveness of PPPs as a model for delivering sustainable energy solutions, suggesting a generally favorable cognitive environment. However, the results also highlighted significant cognitive and normative barriers particularly cultural mistrust between

sectors and a lack of shared sustainability values which reduce the momentum and cohesion necessary for successful green PPPs. Importantly, the perceived success of past PPP projects emerged as a powerful cognitive driver that positively influences current engagement readiness, emphasizing the importance of experiential learning in shaping future cooperation.

Implications for Practice

The study offers actionable insights for practitioners and policymakers. While belief in PPP effectiveness is encouraging, more needs to be done to institutionalize trust and align stakeholder values. Structured, transparent engagement platforms that promote regular dialogue, clarify roles, and build mutual respect across sectors are essential. Furthermore, documenting and sharing lessons from successful PPPs can reinforce positive perceptions and encourage broader participation. Policymakers should also consider embedding private-sector innovation into formal policy mechanisms through green investment incentives, co-creation platforms, and targeted capacity-building programs to address the perceptual and institutional gaps that inhibit collaboration.

Implications for Theory

The findings contribute to Institutional Theory by demonstrating how the cognitive pillar particularly perceptions shaped by experience and inter-sectoral trust plays a central role in influencing engagement in green PPPs. This supports and extends the theory's emphasis on how institutional logics, norms, and beliefs govern actor behavior, especially in resource-constrained, trust-deficient contexts like Zimbabwe. The results suggest that Institutional Theory may be particularly well-suited for analyzing complex sustainability collaborations in developing countries, where informal norms and experiential learning are just as critical as formal regulations. Future studies might build on this by integrating Institutional Theory with behavioral or trust-based frameworks to further explain PPP dynamics in similar contexts.

Suggestions for Further Research

Future research should explore regulatory institutional factors in greater depth—particularly how legal frameworks, procurement procedures, and political risk perceptions shape the enabling

environment for green PPPs. Comparative studies between Zimbabwe and other Southern African countries could yield valuable insights into how regulatory alignment (or its absence) affects partnership scalability and sustainability outcomes. Understanding these regulatory dynamics will be crucial for transitioning from isolated pilot projects to system-wide green energy transformation.

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