

OVERVIEW OF PRIVATE SECTOR PARTICIPATION IN ZAMBIA'S ENERGY SECTOR

Submitted to the Committee on Energy, Water Development and Tourism



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1 INTRODUCTION

This document is the response of the Zambia Institute for Policy Analysis and Research (ZIPAR) to the request by the Committee on Energy, Water Development and Tourism of the National Assembly assigned to scrutinise Private Sector Participation in the Energy Sector.

The memorandum is structured as follows: Section one introduces the purpose of the memorandum. Section two provides an overview of the Energy Sector in Zambia, while Section three delves into private sector involvement in the energy sector. Section four focuses on the threats and opportunities for private sector involvement, while Section five looks at how the private sector has contributed to energy projects in other countries. Section six delves into the benefits of private sector involvement, and Section seven concludes.

1.1 Background and Rationale

Energy in Zambia remains an enabler critical to triggering economic development. In the Eighth National Development Plan (8NDP), energy is one of the areas in need of strategic interventions to support Economic Transformation and Job Creation. However, the sector has seen increased incidences of adverse climate change effects such as droughts, floods and extreme temperatures. In the electricity subsector, this has resulted in decreased generation capacity from hydroelectric sources.

In addressing the aforementioned challenges, the 8NDP states that there will be a focus on switching towards green and renewable energy sources in the electricity subsector, such as biogas, solar, and wind. A push towards increasing efficient energy use, as well as a prioritisation on reducing electricity transmission and distribution losses from the national grid will be prioritised.

The 8NDP has further proposed reforms in the petroleum subsector aimed at improving its performance through the removal of inefficiencies in the fuel supply chain by among others, supplying fuel through pipelines and undertaking procurement reforms to standardise supply contract prices. Overall, the Government is keen to effect measures in the energy sector that are important to forge Zambia towards attainment of the Vision 2030. These include, but are not limited to, strategies towards enhancing generation, transmission and distribution of electricity; diversifying to other renewable as well as clean alternative energy sources; enhancing management of petroleum products; improving transport and logistics; upscaling the provision of industry-relevant skills; investing in applied research and development; enhancing digital capacity; and strengthening management and productive use of water resources.

The 2024 drought has exposed the inefficiency of relying on hydropower generation due to its vulnerability to climate change events. This inefficiency has resulted in a reduced energy generation capacity from an installed capacity of 3,811 megawatts to around 1,225 megawatts resulting in a shortage of electricity¹.

According to ZESCO, peak demand as at September 2024 was at 2,400 megawatts². However, the Integrated Resource Plan for Zambia projects that this will reach 4,922 megawatts by 2030. Further to this, according to the International Energy Agency (IEA), electricity consumption per capita in Zambia grew by 12 percent between the years 2000 and 2022, hitting 0.709MWh/Capita in 2022 (IEA, 2024). This placed Zambia as the thirteenth highest consumer per capita in Africa³. Therefore, Zambia needs to increase its generation capacity to meet future demand.

Table 1: Electricity consumption per capita, Top 20 regional ranking, 2022

S/N	Country	Electricity consumption/population
1	Libya	4.22
2	South Africa	3.497
3	Mauritius	2.333
4	Algeria	1.779
5	Tunisia	1.565
6	Egypt	1.454
7	Botswana	1.412
8	Namibia	1.386
9	Eswatini	1.153
10	Gabon	1.084
11	Morocco	0.975
12	Republic of Equatorial Guinea	0.802
13	Zambia	0.709
14	Ghana	0.547
15	Zimbabwe	0.53
16	Republic of Congo	0.464
17	Senegal	0.407
18	Mozambique	0.394
19	Angola	0.393
20	Cote d'Ivoire	0.349

Source: Author's own construct from the International Energy Agency Data Services

¹ GRZ 2024b. 2025 Budget Address by Honourable Dr Situmbeko Musokotwane, MP, Minister of Finance and National Planning, Delivered to the National Assembly on Friday, 27th September, 2024.

² ZESCO 2024. The Turbine – ZESCO Internal News. September 2024

³ IEA 2024. Zambia- Electricity consumption per capita in Zambia. IEA Data Services

Notably, against the backdrop of the heightening drought experienced overtime, the Government has instituted reforms in the energy sector to firstly, address the persistent low energy supply the country has been experiencing dating as far back as 1987/1988⁴, and secondly, to trigger participation of private sector players, independent power producers (IPPs) in the energy sector.

The Government has resolved to import power from other countries, notably Mozambique, Namibia, South Africa and Zimbabwe. As at June 2024, ZESCO and CEC were importing a combined total of about 557.40GWh of electricity from the sources represented in the Table 2 below.

Table 2: Table 2: Zambia’s Electricity Imports from January to June 2024

UTILITY	Electricity Imports	2024 (GWh)
ZESCO	Low Voltage Imports	0.97
	Electricidade de Mozambique	168.10
	SAPP Market	182.71
	Emergency Power Imports from Mozambique	186.80
	SAPP Market	18.82
GRAND TOTAL		557.40

Source: Author’s own construct from the Energy Regulation Board’s 2024 Mid-Year Statistical Bulletin

In addition, the Government is promoting the use of off-grid solutions such as industrial generators and solar systems. Further to this, the Government is encouraging investments in thermal and solar power plants across the country with ZESCO and private investors expected to take up the initiative. The Government is also engaging in discussions on implementing cost-reflective tariffs to attract investment in alternative energy sources. This, however, will take into consideration a framework that guarantees affordable electricity for households on power consumption within an agreed limit per month (GRZ, 2024b).

⁴ https://knowledge4policy.ec.europa.eu/sites/default/files/sadri_drought_resilience_profile_zambia.pdf

2 OVERVIEW OF ZAMBIA'S ENERGY SECTOR

2.1 Status of Zambia's Energy Mix

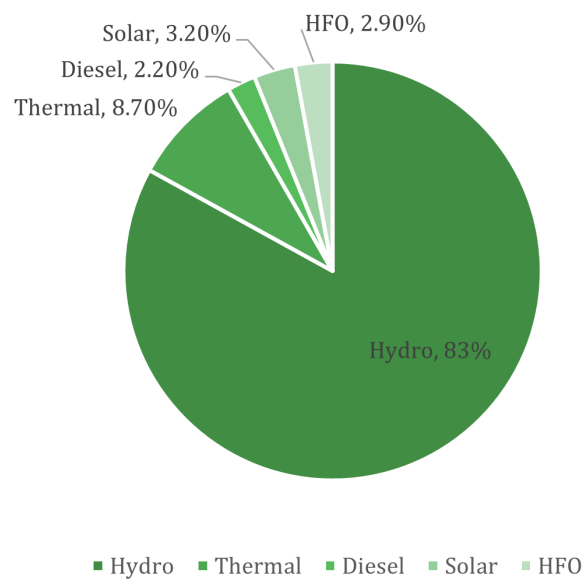
Zambia remains reliant on hydropower generation leaving the country exposed to adverse climate change impacts as evidenced by the erratic rainfall pattern and high temperatures experienced over the past decade.

2.1.1 Electricity

Zambia's installed national electricity generation capacity in 2023 stood at 3,811.3 MW⁵. This constitutes 3,164.14 MW of hydro electricity generation, 300 MW of coal fired thermal electricity generation, 122.38 MW of solar, 110 MW of Heavy Fuel Oil (HFO) generation, and 80 MW of diesel installed capacity. According to the 2023 National Energy Access survey report, national electricity access rate currently stands at 53.9 percent where electricity access rates for both urban and rural areas accounted for 80 percent and 34 percent respectively (GRZ, 2024a).

Figure 1: Installed Generation Capacity by Technology

Installed Generation Capacity by Technology



Source: Author's own adaptation from the 2023 Energy Sector Report by the Energy Regulation Board

⁵ ERB 2024. Energy Sector Report 2023. Energy Regulation Board.

2.1.2 Petroleum

The total national consumption of petroleum products in 2023 was estimated at 1,627,405.87 Metric Tonnes (MT), showing an increase of 5 percent from 1,549,274.44 MT in 2022⁶. Of these, Kerosene grew by 370.4 percent, Jet A-1 grew by 41.7 percent, LPG grew by 13.3 percent, diesel grew by 4 percent, and petrol grew by 4.5 percent (ERB, 2024). However, a decline was seen in the national consumption of HFO by 2.7 percent and aviation gasoline by 36.4 percent. The significant increase in Kerosene consumption was attributed to INDENI's production and importation following care and maintenance in 2021/2022. This is because the availability and consumption of Kerosene in Zambia has been historically influenced by INDENI's production, with a decline of 833.04 MT witnessed in demand for Kerosene in 2022 following placement of INDENI under care and maintenance.

2.2 Policy and Regulatory Environment

Zambia has developed several policies aimed at encouraging private sector involvement in the energy sector. These are discussed below:

- i. **National Energy Policy (NEP) 2019:** According to Zambia's National Energy Policy 2019 (NEP), the country's aspiration to become a prosperous middle-income country by 2030 will require a supply of energy services to Zambians as input into their productive activities. As such, the vision of the NEP 2019 is for 'universal access to clean, reliable and affordable energy at the lowest total economic, financial, social and environmental cost, consistent with national development goals, by 2030'. The NEP emphasizes private sector participation by promoting competition in electricity generation, transmission, and distribution. It also highlights the importance of diversifying Zambia's energy mix by encouraging investments in renewable energy, such as solar and wind, to reduce reliance on hydropower.
- ii. **Electricity Act No. 11 of 2019:** This legislation governs Zambia's electricity sector. It was enacted to replace the outdated Electricity Act of 1995, considering the changes in the global and national energy landscape, such as the growing importance of renewable energy and the need for more competition in the energy market. The 2019 Act seeks to modernize the legal framework for the generation, transmission, distribution, and supply of electricity in Zambia, with a focus on encouraging private sector participation and improving service delivery.

⁶ ERB 2024. Energy Sector Report 2023. Energy Regulation Board.

- iii. **Rural Electrification Act No. 5 of 2023:** The act exists to promote and enhance rural electrification in Zambia. This includes coordinating rural electrification with the private sector, non-governmental organisations and other institutions through the Rural Electrification Authority.
- iv. **Renewable Energy Feed-in Tariff (REFIT) Strategy:** Launched in 2017, the REFIT program aims to attract private investment in small-scale renewable energy projects by providing guaranteed tariffs for electricity generated from renewable sources. The strategy supports projects under 20 MW, primarily in solar, biomass, and small hydropower.
- v. **Public-Private Partnership (PPP) Act:** This act provides a framework for partnerships between the public and private sectors to develop energy infrastructure projects.

3 PRIVATE SECTOR INVOLVEMENT IN THE ENERGY SECTOR

The energy sector comprises both public and private actors. The Ministry of Energy is responsible for the development and management of the energy sector, and supervises the following statutory bodies:

- i. Energy Regulation Board (ERB);
- ii. Zambezi River Authority (ZRA); and
- iii. Rural Electrification Authority (REA).

The Ministry also provides guidance to the following State-Owned Enterprises:

- i. INDENI Petroleum Refinery Company Limited;
- ii. Tanzania Zambia Mafuta pipelines Limited (TAZAMA); and
- iii. Zesco Limited.

The Ministry further coordinates all other actors in the sector. To promote private sector participation in the development of power in the country, the Ministry has an Office for Promoting Private Power Investment (OPPPI) whose mandate is to coordinate the development and implementation of projects by the private sector to promote private sector participation. The OPPPI is also the custodian of the One-Stop-Shop that houses the single window licensing system.

⁷ https://haqaa.aau.org/wp-content/uploads/2019/03/AQRM-CONSOLIDATED-REPORT_AAU_FINAL-.pdf

⁸ <https://acqf.africa/resources/policy-guidelines/african-union-policy-documents/african-standards-and-guidelines-for-quality-assurance-asg-qa>

⁹ <https://afriqan.aau.org>

The OPPPI has previously coordinated the implementation of projects such as the 300 MW Maamba Coal Fired Power Plant, 120 MW Itezhi-Tezhi Hydroelectric Power plant, 750 MW Kafue Gorge Lower Hydroelectric Power Project and the Zambia-Tanzania-Kenya Power Interconnector Project.

In the NEP 2019, the proposed policy objective to promote private sector participation in the Energy Sector, and ensure the sustainable growth of the sector, involves measures such as:

- promoting citizen-owned entities in the development of the energy sector;
- ensuring cost-reflective pricing in the energy sector; and,
- developing standardised Transaction Documents.

There are several IPPs currently active in the energy sector. The notable players include, but are not limited to:

1. Maamba Collieries Ltd;
2. Ngonye/Bangweulu;
3. Ndola Energy Company;
4. North West Energy Corporation (NWEK);
5. 5. Copperbelt Energy Corporation (CEC); and
6. 6. Kalahari GeoEnergy Ltd.

While Zesco Limited continues to dominate a vertically integrated power system (Generation, Transmission, and Distribution) we have some private sector-led generation, transmission and distribution entities as shown in Table 3.

Table 3: Private Sector Players in Zambia’s Power System

Generation	<ul style="list-style-type: none"> • Bangweulu Power Company Limited • Itezhi-Tezhi Power Corporation • Lusemfwa Hydro Power Limited • Ndola Energy Corporation Limited (NEC) • Copperbelt Energy Corporation (CEC) • Maamba Collieries Limited • Ngonye Power Company Limited
Transmission	<ul style="list-style-type: none"> • CEC
Distribution	<ul style="list-style-type: none"> • CEC • North West Energy Company (NWEK)

Source: Author’s own adaptation from the 2023 Energy Sector Report by the Energy Regulation Board

4 CHALLENGES AND OPPORTUNITIES FOR PRIVATE SECTOR INVOLVEMENT

There are several factors that continue to impede private sector investment in the energy industry.

4.1 Challenges

According to the NEP 2019, most of the projects being undertaken in the energy sector have stalled or failed to reach financial close mainly due to the low tariffs that have been found inadequate and unsustainable to guarantee return on investment by the respective developers. In addition, Zesco Limited has been compelled to purchase all power produced by IPPs under a Single Buyer Model. This has caused Zesco Limited to procure power from IPPs at a higher tariff than the average selling tariff, thereby affecting its financial stability. Further to this, other factors that have contributed to low investment in power developments are bureaucratic processes that govern the issuance of licenses, permits and approvals administered by various Government agencies.

The following are the insights of stakeholders on how the private sector can be incentivised to participate in the energy sector.

4.1.1 Land Acquisition and Statutory Approval

Land acquisition processes are said to take long and are not straightforward. It is preferred that guidelines or an expedited approach should be put in place for the private sector to acquire land for investment especially beyond multi facility economic zones This could also include waivers on certain statutory fees.

Approval processes have also been known to be protracted and heavily bureaucratic as well as opaque. There is a need for a streamlined process when it comes to approval processes to enable projects to get off the ground and reach financial closure. As such, conditional approval that enables projects to go forward has been suggested as a possible avenue. This should include a deferment on the payment of statutory fees until a project is able to reach financial close. However, the impact this will have on revenue collection has been acknowledged and should be factored into new fee structures. Bankability of energy projects relating to project financing and risk is discussed in detail in sub-section 4.1.3.

¹⁰ KII with HEA official

4.1.2 Implementation Hurdles and Stakeholder Engagement

The Government should make it a point to understand the business environment and needs of the private sector. The newly introduced Single Window Licensing System is still being streamlined and as a result the process is either not yet clearly defined or has not been adequately communicated. This may also be attributed to a lack of stakeholder engagement. As such, stakeholder strategy should also be developed for the private sector to follow.

Standardised agreements should also be employed under the preserve of the ERB to ensure investors understand what it takes to set up a project in Zambia. Light-handed regulations with thresholds also need to be applied based on the amount of energy the investor intends to generate. This means that those small-scale energy projects should have lighter regulations than those producing large scale energy projects. The current format only has two categories of regulation. Projects above 250 megawatts that are regulated by ERB, and projects below 250 megawatts that are not.

4.1.3 Project Financing and Risk

The private sector has been known to have the capacity to find financing for energy projects. However, an enabling environment is required to capitalise on this opportunity. The private sector requires a low-risk environment to be able acquire sustainable financing for projects. This includes a stable exchange rate, availability of cash on the market including access to cheap debt, and local production of required assets.

Therefore, there is a need to tailor financing structures to risk profiles. This means that cost and ability to pay for project development needs to be considered per investor and not be treated using a single blanket structure. Guidelines on financing structures for projects should be developed according to the risk profile of the projects, and local financing should be provided based on the energy capacity of projects. This needs to be facilitated by the Ministry of Energy in conjunction with the Energy Regulation Board (ERB) and Zambia Development Agency (ZDA).

¹¹ https://www.unza.zm/sites/default/files/article_files/2019-04/QUALITY%20ASSUARANCE%20Final%281%29Full%20document.pdf

4.1.4 Role of Government

The Government should either support or carry out feasibility studies for potential energy projects in Zambia. This will prevent repetition in the conducting of feasibility studies of the same areas. The Government can also recover the costs of studies by factoring them into the fees that will be paid by investors/developers who wish to take up the projects.

The Government should also lower taxes on equipment and products needed to set up energy projects. This is due to some of them still attracting very high fees, thereby making them too expensive to acquire. This should be especially targeted at locally owned companies in the renewable energies sector and should include removal of Value Added Tax (VAT) and other ZRA fees so as to ensure the growth of local businesses.

4.2 Opportunities

The energy sector in Zambia is faced with challenges stemming from climate change impacts, which continue to affect hydropower generation capacity, and unstable prices for the petroleum subsector.

As such, in the immediate term, the Government has restructured the regulatory framework in the electricity subsector to attract IPPs to participate in the energy sector. To this effect, some measures have been introduced to mitigate the electricity deficit and the fuel challenges that the country is facing. These include:

- Open Access framework for electricity;
- Multi-Year Tariff Adjustment Framework;
- Single Window Licensing System;
- Open Access System for using TAZAMA Pipeline; and
- Net metering.

These are discussed in greater detail in the subsequent sections. In the medium term, the Government intends to facilitate an enhanced national electricity generation capacity through the increased investment in renewable energy such as solar across the country, expansion of the already existing thermal plants and other hydropower projects.

4.2.1 Multi-Year Tariff Adjustment Framework

In 2023, ZESCO Limited proposed a Multi-Year Tariff Adjustment framework that was approved by the Energy Regulation Board of Zambia (ERB) and is set to run from 2023 to 2027. The approved tariff adjustment increments are 37 percent for 2023, 9 percent for 2024, 15 percent for 2025, 10 percent for 2026, and 14 percent for 2027. However, the adjustments for 2023 to 2027 were granted conditional approval subject to the ERB's annual review of the Regulatory Clearing Account results (ERB, 2003).

The Multi-Year Tariff Framework (MYTF) aims to address the shortcomings of the previous tariff framework by ensuring cost-reflective tariffs, promoting operational efficiency, and providing regulatory certainty to utilities, investors, and consumers. The ZESCO multi-year tariff adjustment is cardinal to ensure cost-reflective tariffs. If well executed, it may promote and boost private sector participation in the electricity subsector. It has recently been credited as having played a part in the reduction of Zesco's Limited's debt from US\$1.8 billion at the end of 2021 to US\$450 million in August 2024, amid other structural reforms (Zesco Limited, 2024).

4.2.2 Net-Metering

The Government has introduced Net-Metering to the electricity sector in Zambia. Net-metering is targeted at encouraging investments in renewable energy systems at residential and commercial levels for own consumption⁷. As a result, consumers will meet their own needs and offload excess electricity to the main grid. This is expected to reduce pressure on the grid and promote socio-economic development. This measure opens opportunities for private investors, local and international, from supply to installation including accessibility and consumption of energy. It is however important to note that in the advent of a price change downwards for the net metering client, there will not only be a loss of revenue for the net metering client but an increase in payback for the system that the client has installed. As a result, this could reduce the attractiveness over the long term of this particular technology that is yet to be fully utilised in the context of Zambia. According to Zesco Limited, there were 158 registered clients on net-metering as at November 2024 (Zesco Limited, 2024).

4.2.3 Open Access Framework

The Open Access regime is in the long run expected to bolster the liberalisation of the power sector by allowing equal access to the electrical grid. This is anticipated to draw in private capital and stimulate competition by promoting consumer sovereignty, ultimately resulting in effective service delivery.

As such, the Government will in the medium term develop the open access regulations and market rules to promote investment in generation and security of supply and lessen fiscal stress on ZESCO Limited⁸. This will also allow for competition and encourage investment in the transmission and distribution infrastructure.

⁷ GRZ 2024c. The 2025-2027 Medium Term Budget Plan and the 2025 Budget. Ministry of Finance and National Planning

⁸ GRZ 2024c. The 2025-2027 Medium Term Budget Plan and the 2025 Budget. Ministry of Finance and National Planning

4.2.4 Single Window Licensing System

The Government has introduced a single licensing system to streamline licensing processes to enable investment in the development of energy projects. It is expected that this will enhance efficiency and attract investment through the establishment and operationalisation of a one stop shop.

4.2.5 Open Access Use of TAZAMA Pipeline

Following reforms to migrate to private sector-led importation and procurement of petroleum products, and the transformation of INDENI to an Oil Marketing Company (OMC) and storage facility, TAZAMA was converted from a petroleum feedstock transporter to a diesel carrier. This was followed by guidelines, Statutory Instrument No. 41 of 2023, to open up the use of the pipeline by OMCs on a competitive basis, as well as statutory regulations to enhance competition and efficiency in the sector including private sector participation.

4.2.6 Fuel Pricing Models

The Government intends to enhance private sector participation in the Petroleum sector by implementing measures that will improve importation and procurement of petroleum products by the private sector. As such, it intends to ensure uniformity in pricing of petroleum products across the country by implementing the Uniform Petroleum Pricing (UPP) mechanism to encourage low-cost petroleum retailing in rural and urban areas. The cost differential from different locations of retail sites will be harmonised through the established UPP Fund which is under the management of the ERB.

The Government will also continue to implement the Import Parity Pricing (IPP) model for pricing of petroleum products in the country over the medium term. This is aimed at promoting maximum efficiency in the supply chain for petroleum products while ensuring that the domestic prices reflect the cost trends of petroleum products on the international market.

5 POWER PROJECTS FROM ACROSS AFRICA – CASE STUDIES

As Africa seeks to expand its renewable energy capacity and enhance energy security, successful public-private partnerships (PPPs) in the energy sector provide valuable insights and precedents. Two notable examples from the continent are Kenya’s Lake Turkana Wind Power project and South Africa’s Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). These initiatives not only highlight the potential of collaborative efforts but also showcase the economic and environmental benefits of investing in renewable energy.

5.1 Lake Turkana Wind Power project in Kenya

The Lake Turkana Wind Power project in Kenya, launched in 2013, stands as an example of a successful initiative in Africa’s renewable energy landscape. Located in the arid region of northern Kenya, it has become the continent’s largest wind farm, boasting an installed capacity of 310 MW. This project is a collaboration between the Kenyan government and a consortium of private investors, including Aldwych International and the Investment Fund for Developing Countries (IFU). The project generates approximately 1.2 billion kWh of clean energy annually, providing power to around 1 million homes and significantly reducing reliance on fossil fuels. Beyond its energy contributions, the project has also fostered local economic development by creating jobs during its construction and ongoing operations, alongside offering skills training and capacity building in the region. Environmentally, it plays a crucial role in lowering greenhouse gas emissions, aligning with Kenya’s broader commitment to renewable energy as part of its climate strategy. Despite facing challenges, such as financing hurdles and logistical difficulties due to its remote location, the strategic partnerships and planning involved have successfully navigated these issues, showcasing the project’s resilience and impact⁹.

5.2 Renewable Energy Independent Power Producer Procurement Programme in South Africa

In South Africa, the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), initiated in 2011, represents a radical approach to diversifying the nation’s energy mix and increasing the generation of renewable energy. This initiative has attracted substantial private investment across various renewable sectors, including solar and wind, resulting in over \$14 billion in investments by 2020. The REIPPPP has led to the installation of more than 6,000 MW of renewable energy capacity, significantly reducing the country’s carbon footprint and decreasing dependence on coal. Economically, the program has created thousands of jobs throughout the construction and operational phases of the projects, fostering local economies. A key feature of the REIPPPP is its emphasis on local content requirements, ensuring that a portion

⁹ African Development Bank 2015. Lake Turkana Wind Power Project: The largest wind farm project in Africa. <https://www.afdb.org/en/projects-and-operations/selected-projects/lake-turkana-wind-power-project-the-largest-wind-farm-project-in-africa-143>

of materials and services are sourced from local suppliers. Additionally, the program incorporates community benefit schemes, enabling local communities to gain from infrastructure improvements and educational opportunities associated with the projects. While the REIPPPP has faced challenges, including political shifts and the need for a stable regulatory environment, its success in mobilizing private investment and promoting sustainable energy development makes it a model for renewable energy initiatives across the continent¹⁰.

6 BENEFITS OF PRIVATE SECTOR INVOLVEMENT

6.1 Mobilization and Efficient Allocation of Capital

A robust policy framework for private power generation is crucial for attracting investment into the energy sector. When the regulatory environment is stable and well-structured, it encourages private capital to flow into economic power generation projects. This influx of investment not only boosts the overall capital available for energy development but also enhances capital allocation efficiency. By creating clear guidelines and incentives, governments can leverage private funding to expand energy infrastructure, reducing the burden on public finances. Additionally, this private sector participation can act as a catalyst for the expansion of domestic capital markets, as it encourages local investors to engage in energy projects, fostering a more vibrant financial ecosystem.

6.2 Increased Efficiency and Competition

The entry of private players into the energy market introduces a level of efficiency and competition that can benefit the entire system. Private firms often bring advanced management practices, technical expertise, and financial acumen, leading to improved operational efficiency. By operating under competitive conditions, private entities are incentivized to innovate and optimize their processes. This competitive environment provides a benchmark for public utilities, allowing for performance assessments that can highlight areas for improvement. Ultimately, this competition can lead to better services for consumers, lower prices, and a more resilient energy system.

¹⁰ NDC Partnership. South Africa's Renewable Energy Independent Power Producer Procurement Programme. <https://ndcpartnership.org/knowledge-portal/good-practice-database/south-africas-renewable-energy-independent-power-producer-procurement-programme>

6.3 Public Capital Resource Allocation

By allowing private sector investments in power generation, governments can alleviate the pressure on national capital development budgets. Private investment reduces the demand for public funding, enabling governments to reallocate financial resources to other critical areas such as education, healthcare, or infrastructure development. This shift can be particularly beneficial in developing countries, where budgets are often constrained. As private entities take on the responsibility of generating power, governments can focus on strategic investments that drive economic growth and improve public welfare.

6.4 Tariff Reform

The participation of private power entities can drive much-needed tariff reforms in the energy sector. By clearly demonstrating the true costs associated with power generation, private companies can provide transparency in pricing. This transparency allows for a more rational approach to setting tariffs, ensuring that prices reflect the actual costs of production and delivery. Such reforms can lead to fairer pricing for consumers and a more financially viable energy sector. When customers understand the rationale behind tariff structures, it can foster greater acceptance and support for necessary price adjustments, ultimately leading to a more sustainable energy market.

7 CONCLUSION

The private sector is well placed to help Zambia alleviate its energy sector problems. The Government has gone so far as to create a One Stop Shop with Single Window Licensing System to ease the participation of the private sector in the energy sector. However, the Government needs to continually engage with private sector players to ensure that the hurdles they face in the setting up and running of energy projects are addressed.

REFERENCES

ERB 2024. Energy Sector Report 2023. Energy Regulation Board.

GRZ 2024a. 2023 National Energy Access Survey (NEAS) Report. Ministry of Energy.

GRZ 2024b. 2025 Budget Address by Honourable Dr Situmbeko Musokotwane, MP, Minister of Finance and National Planning, Delivered to the National Assembly on Friday, 27th September, 2024.

IEA 2024. Zambia- Electricity consumption per capita in Zambia. IEA Data Services

Zesco Limited 2024. Stakeholder Meeting for the National Energy Compact. Held on 11th December 2024.



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 Zambia Institute For Policy Analysis and Research (ZIPAR)

P.O Box 50782, Lusaka, Zambia

CSO Annex Building

Corner of John Mbita and Nationalist Road, Lusaka

 +260 211 252559

 +260 211 252559

 Email: info@zipar.org.zm

 Website: www.zipar.org.zm

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