



National Energy Compact for the Republic of Zimbabwe



# **FOREWORD**

**Zimbabwe's National Energy Compact** is aligned with the United Nations Sustainable Development Goal 7 (UN SDG 7) and the country's long-term development agenda—Vision 2030, which aspires to build a Prosperous and Empowered Upper-Middle-Income Society.

Hon. July G. Moyo

Minister of Energy and Power

Minister of Energy and Power Development Zimbabwe

The Compact is a bold commitment to achieving universal access to reliable, affordable, sustainable, and clean energy for all Zimbabweans by 2030, while advancing inclusive growth and climate resilience. Despite having abundant renewable energy potential, Zimbabwe continues to face critical energy challenges. As of 2022, 38% of the population lacks access to electricity, and over 61% of households rely on traditional biomass for cooking. This energy poverty has disproportionately affected rural communities, women, and youth, while constraining productivity and economic growth.

The Government of Zimbabwe (GoZ) recognizes that access to modern energy services is a fundamental enabler for industrialization, improved health and education, gender empowerment, and overall human development. Zimbabwe's energy strategy is rooted in the principle that the public sector must provide strong leadership in policy and planning, while mobilizing private sector investment through appropriate de-risking mechanisms, competitive procurement, and regulatory certainty. To realize its energy ambitions, the Government is making efforts to:

- Achieve 100% household electricity access by 2030, through a combination of on-grid, mini-grid, and standalone solar systems.
- Raise access to clean cooking solutions from 38.6% to 70%, reducing reliance on firewood and charcoal.
- Expand the share of renewable energy excluding large hydro in the power mix from 7.8% to 31%, contributing

to climate resilience and energy diversification.

 Mobilize over USD9 billion in investments across generation, transmission, distribution, off-grid access, and clean cooking, with more than USD4.42 billion expected from the private sector.

Compact is the product of extensive consultations and collaboration with a broad range of stakeholders, including development partners, private sector actors, academia, and civil society organizations. It is informed by key planning instruments such as the National Electrification Strategy (NES), National Clean Cooking Strategy (NCCS), and the forthcoming National Integrated Energy Resource Plan (NIERP). The Government acknowledges that achieving Compact's ambitious targets will require innovative financing, capacity development, policy coherence, and transparent monitoring systems. The successful implementation of this Compact will not only improve the quality of life for millions of Zimbabweans but also position the country as a regional energy hub within the Southern African Power Pool (SAPP).

In this spirit, the Government of Zimbabwe calls upon development partners, philanthropies, the private sector, and civil society to partner with us on this transformative journey. Together, we can accelerate energy access, enhance sustainability, and build a resilient energy future that leaves no one behind.

## Government of the Republic of Zimbabwe

# **EXECUTIVE SUMMARY**

This document outlines Zimbabwe's National Energy Compact, which is aligned with Vision 2030, the National Development Strategy 1 (NDS1: 2021–2025), and the forthcoming NDS2 (2026–2030), as well as the global Sustainable Development Goal 7 (SDG7) on ensuring access to affordable, reliable, sustainable, and modern energy for all. The Compact demonstrates the Government of Zimbabwe's commitment to accelerating universal access to electricity and clean cooking by 2030, while fostering private sector participation, enhancing energy infrastructure, and increasing the share of renewable energy. Zimbabwe aims to address its energy access challenges by scaling up least-cost investments, leveraging geospatial planning tools, and pursuing regulatory and financial reforms to crowd in private capital and development partner support. The Compact represents a national commitment to transition toward a resilient, inclusive, and low-carbon energy future.

## **KEY ASSUMPTIONS**

- Demographic and Household Growth: Zimbabwe's population is projected to reach approximately 18.3 million by 2030, with an estimated 4.86 million households, placing increasing demand on energy services.
- Current Access Rates: As of 2022 (Zimstat Census), 62% of the population had access to electricity (33.7% on-grid, 28.3% off-grid), while 38.6% of households use clean cooking solutions. A more recent estimate of access as per National Electrification Strategy is 41% indicating a mismatch between the rate of connections and the rate of increase of households. A significant share of the population, especially in rural areas, remains underserved.
- Economic Growth and Sectoral Priorities: Zimbabwe is targeting accelerated growth through industrialization, mining, agriculture, and tourism. The mining sector, particularly platinum, lithium, and other energy transition minerals, is expected to drive electricity demand.

## **KEY TARGETS**

**Electricity Access:** To achieve 100% household access to electricity by 2030, with 320,000 on-grid and 200,000 offgrid new connections annually between 2025 and 2030.

**Clean Cooking:** To raise access to clean cooking solutions from 38.6% to 70% by 2030. This will include the implementation of the National Clean Cooking Strategy (NCCS) with USD 791.5 million capital investment, reducing

firewood and charcoal reliance by 50% and ensuring that 80% of new buildings incorporate clean cooking infrastructure.

**Renewable Energy:** To increase renewable capacity from 1,282 MW (2024) to 2,640 MW by 2030 (48.6% of total projected generation). This will also involve raising renewables excluding large hydro from 7.8% to 29% of the energy mix and reach 100MW of net-metered capacity by 2025 and additional 200MW between 2026 to 2030.

## **KEY POLICY FRAMEWORKS**

Zimbabwe's energy transition is guided by:

- National Integrated Energy Resource Plan (NIERP):
   A planning tool under development, to be finalized by December 2025, aimed at optimizing least-cost generation and transmission investments.
- National Electrification Strategy (NES): Provides a roadmap to achieve universal access by 2030, through on-grid, mini-grid, and standalone systems.
- National Clean Cooking Strategy (NCCS): A 2024–2030 roadmap to scale up clean cooking access.
- Government Project Support Agreement (GPSA):
   A policy tool to de-risk IPP investments through guarantees, cost-reflective tariffs, and currency convertibility provisions.
- Mini-Grid Regulatory Framework (MGRF): In progress, to standardize technical requirements, licensing, and grid encroachment terms for mini-grids.
- Updated National Energy Policy (NEP): Under review for consolidation and harmonization with sectorspecific strategies by Q3 2025.

#### **ENERGY DEMAND DRIVERS**

The Compact anticipates surging energy demand across the following areas:

- **Mining:** Expansion in platinum, lithium, gold, and energy-transition mineral production.
- Agriculture: Increased irrigation and agro-processing needs
- **Industrialization:** Emergence of value chains and special economic zones.
- **Population Growth:** Rising residential demand driven by household formation and urbanization.

#### **IMPLEMENTATION PILLARS**

Zimbabwe's Energy Compact is structured around five thematic pillars:

- 1. Generation and Infrastructure Expansion: Expand installed capacity and modernize T&D networks, including the development of 1,607 km of new transmission lines and smart metering systems.
- 2. Regional Integration: Strengthen cross-border electricity trading through projects like MOZISA and ZIZABONA and alignment with SAPP frameworks.
- 3. Distributed Renewable Energy and Clean Cooking

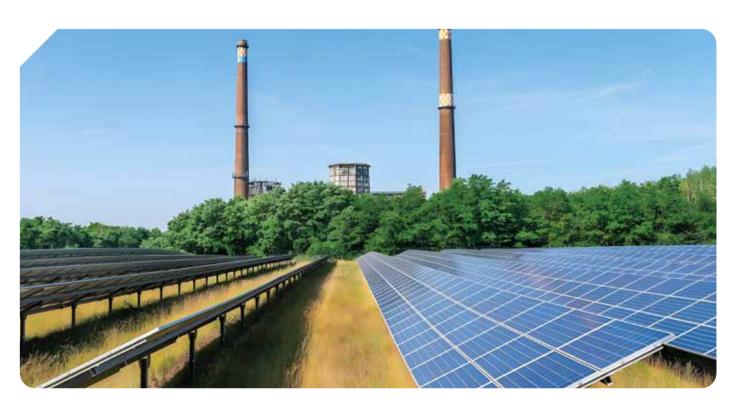
Solutions: Scale up off-grid electrification and clean cooking via private sector engagement, innovation hubs, Results-Based Financing (RBF), and awareness campaigns.

- 4. Private Sector Engagement: Mobilize over USD 4.42 billion in private investment by de-risking the energy market and launching a competitive IPP procurement framework by Q2 2026.
- 5. Utility Viability: Achieve 100% operational cost recovery for utilities by fiscal year 2027, resolve legacy debt, and enhance governance, billing, and collection.

## **ENERGY COMPACT OBJECTIVES**

Zimbabwe's Compact aims to:

- Achieve universal access to electricity and clean cooking by 2030.
- Ensure financially viable, transparent, and climateresilient energy systems.
- Facilitate public-private partnerships for investment mobilization.
- Leverage geospatial planning and least-cost modeling for decision-making.
- Contribute to climate goals and regional power market development.



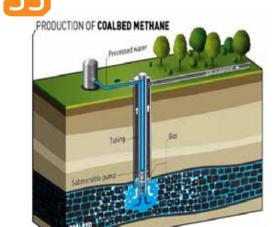


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# **OUR VISION**

To achieve universal access to sustainable and modern energy in Zimbabwe by 2030.

# **OUR MISSION**

To provide adequate and sustainable energy through formulating and implementing effective policies and regulatory framework.

# **CORE VALUES**

- > Teamwork
- > Truthfulness
- > Integrity
- > Respect
- > Commitment





# 1

# DECLARATION BY THE HEAD OF STATE

**As the President of the Republic of Zimbabwe**, I reaffirm my unwavering commitment to ensuring that every Zimbabwean has access to reliable, affordable, and sustainable energy services.

This commitment is deeply rooted in our national aspirations as set out in Vision 2030, which aims to transform Zimbabwe into an upper-middle-income society and is supported by the National Development Strategies (NDS1: 2021–2025 and NDS2: 2026–2030). These strategies recognize that access to modern energy services is not only a development imperative but a fundamental enabler of industrialization, economic growth, and improved quality of life.

We recognize that energy is more than just a service, it is the lifeblood of socio-economic transformation. To this end, we are embracing smart and sustainable energy planning tools, including geospatial mapping and least-cost technology analysis, to ensure that our investments are both impactful and cost-effective.

By the year 2030, we are resolute in achieving the following nationally determined energy access and sustainability goals:

#### **Universal Electricity Access**

- As of 2022 (Zimstat Census), 62% of the population had access to electricity. A more recent estimate of access as per National Electrification Strategy is 41%. It is proposed to increase electricity access from 41% (2024 National Electrification Strategy, NES estimate) to 100% of all households by 2030.
  - > Annually connect:
  - > 320,000 households on-grid, resulting in 1.9 million additional grid-connected households by 2030.
- 200,000 households off-grid, benefiting 1.2 million households, particularly in rural and underserved areas.
- Electrification strategies will be informed by the National Electrification Strategy (NES) and supported by the Presidential Rural Solarization Scheme, which targets over one million rural households with 1kW solar systems by 2030.

## **Clean Cooking Transition**

- Increase access to clean cooking solutions from the current 38.6% to 70% of the population by 2030.
- Reduce the reliance on charcoal and firewood (currently 61%) by 50%, curbing environmental degradation and improving health outcomes.
- Ensure that 80% of all new residential and institutional buildings incorporate clean cooking infrastructure.



His Excellency, the President of the Republic of Zimbabwe and Chairperson of SADC,

#### Dr Emmerson Dambudzo Mnangagwa

 Implement the National Clean Cooking Strategy (NCCS) 2024–2030, with a projected investment of USD 791.5 million for stove dissemination and fuel systems enhanced by use of carbon financing mechanisms.

#### **Sustainable Energy Mix and Renewables**

- Increase renewable energy capacity from 1,282 MW (2024) to 2,640MW by 2030, making up 48.6% of the projected installed capacity (5,432 MW).
- Expand renewables excluding large hydro (solar, wind, bagasse) from 7.8% to 29% of the generation mix by 2030.
- Reach 100 MW in net-metered capacity by 2025, up from 28.5 MW in 2024 and add an additional 200MW between 2026 and 2030.

#### **Investment Mobilization**

Mobilize a total of USD 9.13 billion by 2030 for generation, transmission, distribution, off-grid electrification, and clean cooking:

- > USD 3.81 billion for generation (90% from private sector).
- > USD968.4 million for transmission (80% public).
- > USD147.4 million for distribution (80% public sector).
- > USD 2.97 billion for on-grid access (100% public sector).
- > USD 405 million for standalone solar systems (70% private sector).
- > USD 791.5 million for clean cooking (70% private sector).
- The total investment envelope under phase 1 (2025-2030) is US\$9.1 billion (US\$3.8 billion for the generation projects to achieve 5.432 MW of the total installed capacity and is informed by the implementation readiness of licensed generation projects).
- The investment requirement beyond 2030 is considering a total investment envelope of US\$16.8 billion (US\$10.9 billion for the full portfolio of licensed generation projects projected to achieve 10,938 MW of total installed capacity).

#### **Strategic Reforms and Actions**

To achieve these ambitions, my Government is implementing transformative actions across the energy value chain:

 Expand and Modernize Infrastructure: (i) Develop and adopt the Integrated Least Cost Power System Plan by Q2 2026; (ii) Enhance the efficiency and

- available capacity of existing generation and network infrastructure by Q4 2030. (iii) Digitalize the electricty to enhance real-time monitoring control and operational efficiency by Q4 2030
- Enhance Regional Integration: (i) Develop priority local and regional transmission and distribution infrastructure to support regional trading of power by Q4 2027; (ii) Implement transparent and standardized Transmission Pricing Methodology aligned with regional standards by Q4 2026.
- Scale Distributed Renewable Energy (DRE) and Clean Cooking: (i) Complete the initiated Multi-Tier Framework (MTF) by Q2 2026; (ii) Adopt and operationalize the validated National Electrification Strategy (NES) by Q4 2025; (iii) Finalize, adopt and operationalize the validated National Energy Policy by Q4 2026; (iv) Finalize, adopt and operationalize the validated National Clean Cooking Strategy by Q4 2026.
- Facilitate Private Sector Investment: (i) Develop and adopt regulatory framework for incentivizing private sector investments by Q4 2026; (ii) Develop and adopt a competitive procurement framework for private sector investment in renewable energy by Q2 2026; (iii) Scale up incentives to promote private sector investment in DRE and clean cooking by Q4 2027.
- Improve Utility Viability and Governance: (i) Publish annual audited accounts that will be tabled in Parliament in accordance with the standards and timelines provided in the relevant legislation by

- ZESA Holdings and its subsidiaries by Q1 2026; (ii) Achieve at least 100% operational cost recovery in both local currency and foreign currency by utilities by Q4 2027; (iii) Enhance the government's oversight role on State Owned Enterprises (SOEs) by Q4 2026.
- Establish a Rigorous M&E Framework: (i) Establish and operationalize the Energy Planning Unit at MoEPD by Q2 2026, with capacity-building support from development partners; (ii) Establish an Inter-Sectoral Compact Implementation Unit under an M&E framework to monitor the implementation of Energy Sector Programs by Q3 2026; (iii) Institutionalize use of the Multi-Tier Framework (MTF) to track household energy access and quality; (iv) Publish annual performance reviews and progress reports to enhance accountability and transparency.

### **Call for Partnerships**

The Government of Zimbabwe invites development partners, philanthropies, and private sector stakeholders to support Zimbabwe's journey towards universal access to affordable, reliable, sustainable, inclusive and clean energy. These efforts will foster economic growth, create income opportunities, and contribute to the nation's development goals.

## **Summary of Investment Needs**

Activity	Total Investment (\$)	Private Sourced (%)	Public Sourced (%)
Generation <sup>1</sup>	3,811, 000,000	90	10
Transmission and sub-transmission lines rehabilitation reinforcement and expansion	765,550,000	25	75
Transmission and sub-transmission transformers and substation rehabilitation	202,840,000	0	100
Investment in Distribution Primary Network rehabilitation, uprating and expansion	147,400,000	20	80
Investment in On-Grid access	2,965,200,000	0	100
Standalone Solar Systems	405,200,000	70	30
Mini grids	46,200,000	50	50
Clean Cooking	791,500,000	70	30
Total Investment requirement (2025-2030)	9,134,890,000		

#### Total financing requirements will thus reach an average of approximately \$1.5 billion per year

#### **Call to Action**

To our valued development partners, philanthropies, investors, and innovators, Zimbabwe invites you to partner with us on this transformative journey. Together, we can achieve universal access to modern energy, support climate-resilient development, and build a prosperous, equitable, and energy-secure Zimbabwe for all. Let us power the future of Zimbabwe—sustainably, inclusively, and decisively.

#### His Excellency, President of the Republic of Zimbabwe

# **COUNTRY OVERVIEW**

1.1 Located in Southern Africa with 4 neighboring Countries





Approximately 16.8 million people (2024)



GDP in USD (2024) US\$ 35.3

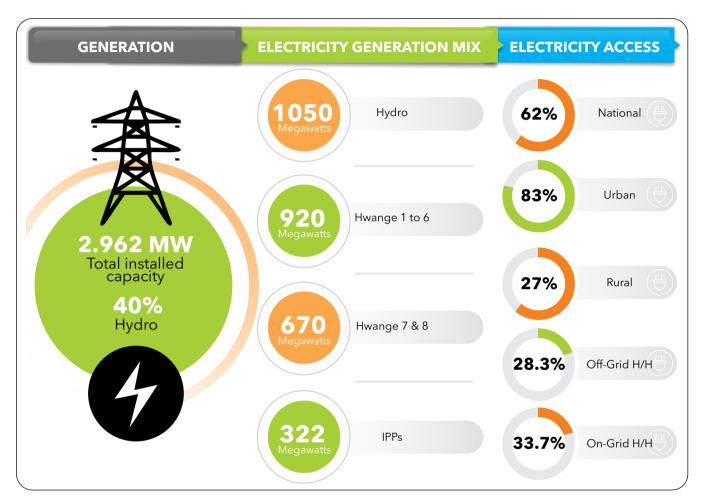


Mining, Agriculture, Manufacturing, and Tourism



Energy as an Enabler

# 1.2 Generation mix and Energy Access





# 2

# COUNTRY AND SECTOR OVERVIEW

Zimbabwe is a developing country with a land area of 390,757 square kilometers. Based on the growth rate projections in the Zimbabwe National Statistics Agency (ZIMSTATS)2022 Census Report, it is estimated that the population of the country was about 16.8 million by 2024 with an average household size of 4 people. Zimbabwe's population is projected to reach approximately 18.3 million by 2030 with an estimated 4.86 million households.

The country's main economic activities are agriculture, mining, manufacturing, and tourism. High debt and arrears to International Financial Institutions (IFIs) due to exogenous factors limit Zimbabwe's economic growth potential. Power shortages are also a constraint to growth. World Bank estimates that Zimbabwe's power shortages cost the country a total of 6.1% of Gross Domestic Product (GDP) in 2022 with 2.3% due to generation inefficiencies and network losses and 3.8% due to the downstream costs of unserved energy.

The 2024 GDP at current prices is approximately USD 45.7 billion for 2024. With a projected GDP growth rate of 6% in 2025, Zimbabwe is one of the fastest-growing economies in Southern Africa, due to an expansion in agriculture, mining, and tourism. The country's foreign currency receipts rose by 30.2% to US\$6 billion for the period January to May 2025, compared to US\$4.9 billion received during the same period in 2024.

#### Energy Sector Structure (Institutional structure of the power sector with the role of the key institutions

Organization	Responsibility
Ministry of Energy and Power Development (MoEPD)	Oversight role over the energy sector, develops energy policies and spearheads energy planning in the sector.
Zimbabwe Energy Regulatory Authority (ZERA)	Responsible for regulation, licensing, and oversight of licensee performance.
<ul> <li>ZESA Holdings (ZESA) group and its subsidiaries:</li> <li>Zimbabwe Power Company (ZPC)</li> <li>Zimbabwe Electricity Distribution Transmission Company (ZETDC)</li> <li>Zesa Enterprise Private Limited (ZENT)</li> <li>Powertel</li> </ul>	Mandate to generate, transmit, distribute, and retail electricity.
Rural Electrification Fund (REF)	Mandated to facilitate rapid and equitable electrification through grid infrastructure and renewable energy technologies, aiming for universal access to modern energy service by 2030.
Mutapa Investment Fund (MIF)	The shareholder for ZESA Holdings on behalf of the government.

The energy sector also involves the participation of private sector players.

<sup>&</sup>lt;sup>2</sup>Monetary Policy Statement February 2025

# Current level of electricity and clean cooking access

According to the 2022 Population and Housing Census, Zimbabwe has made notable progress in expanding access to electricity, with 62% of the population having access to electricity (33.7% of households in Zimbabwe are connected to grid electricity, while 28.3% utilise off-grid electricity). ). A more recent estimate of access as per National Electrification Strategy is 41%. The 59% of the population that have no access to electricity comprises 91% of the households in rural areas and 9.0% in urban areas.

Frequent assessment of electricity access is being addressed through a project for building capacity for using the multi-tier framework (MTF). Frequent assessment of electricity access is being addressed through a project for building capacity for using the multi-tier framework (MTF). ZIMSTATS estimates that 38.6% of households have access to clean energy sources for cooking such as electricity, biogas, LPG, and ethanol.

The National Energy Policy of 2012 set an ambitious target to achieve universal modern energy access by 2030. In 2018, the Government of Zimbabwe (GoZ) published "Vision 2030: Towards a Prosperous and Improved Upper Middle-Income Society by 2030," with three energy priorities: optimal electricity generation from diverse sources, expanded household access, and increased private sector involvement through public-private partnerships (PPP), joint ventures, and independent power producers (IPPs). The National Development Strategy 1: (2021-2025) (NDS1) outlines the first five-year plan towards achievement of Vision 2030. The next five-year plan, NDS2 for the period 2026-2030, is to be finalized by Q4 2025.

With the current pace of electrification of 40,000 to 60,000 households per year and an annual growth rate of 118,000 households, the electrification rate will decline unless significant

measures are taken to expand grid and off-grid electrification. Achieving universal access by 2030 requires increasing annual connections to over 500,000.

Rural electricity access is mainly funded through a tariff levy for the REF, with minimal fiscal allocations from the Government. The Rural Electrification Fund Act provides the legal framework for funding REA programs, allowing for funding through levies, loans, fiscal allocations, grants, and donations. Current connection fees are unaffordable for most households, who also bear infrastructure connection costs from the grid to their homes. Electrification funding needs are estimated at US\$3.4 billion in the next 5 years, therefore requiring significant additional funding.

## Current share of Renewable Energy (RE) in the energy mix: key progress made towards increasing the share of RE in recent years

Since the adoption of the NEP in 2012, the generation energy mix has diversified, with a significant increase in non-renewable energy sources alongside a continued commitment to renewable energy. While 300 MW of older coal-fired power plants have been retired, the commissioning of 770 MW of new coal-fired plants—including 100 MW from the private sector—reflects ongoing investment in generation capacity. Meanwhile, large hydropower capacity has increased by 300 MW, bringing the total to 1,050 MW, with mini-hydro, solar, and bagasse contributing an additional 232 MW. Currently, renewable generation excluding large hydropower accounts for 7.8% of installed capacity, while total renewable generation including large hydro stands at 43%. Several large-scale solar projects have been licensed which if realized would increase installed solar capacity to 1,500 MW before 2030. More small-scale hydropower projects and biogas initiatives are also being developed to enhance clean energy access and sustainability.



Looking ahead, it will be important for the upcoming National Integrated Energy Resource Plan (NIERP) to carefully assess future coal options. Even without factoring in carbon pricing, new coalfired generation is expected to be less competitive compared to renewable energy technologies. This trend suggests that future capacity additions in coal may no longer present a viable least-cost option, reinforcing the need to prioritize investment in clean and sustainable energy sources.

## Status of regional interconnections

Zimbabwe's strategic location at the heart of the Southern African Power Pool (SAPP) facilitates seamless electricity trade with neighboring countries. The country manages electricity shortages by importing power through bilateral agreements with regional utilities. Notably, Zimbabwe imports approximately 300 MW from South Africa's Eskom and 50 MW from Mozambique's Hidroeléctrica de Cahora Bassa (HCB). Electricity imports remain an important component of total supply, but the potential for continued trade is constrained by regional shortages, ZETDC's ability to pay, and transmission capacity limitations<sup>3</sup>.

The planned Zimbabwe-Zambia-Botswana-Namibia interconnector (ZIZABONA), Mozambique-Zimbabwe-South Africa interconnector (MOZISA), 2nd Alaska – Sherwood 330kV Line, Bindura - Mutorashanga 330kV Line, and Orange Grove -Middle Sabi- Triangle transmission projects, will improve network transfer capacity, system stability and reliability, and regional wheeling thereby enhancing regional trade. There are significant opportunities to further bolster regional trade through additional investments in generation and transmission infrastructure, particularly with private sector involvement. Countries like Angola and Tanzania possess surplus generation capacity that could be leveraged through transmission investments estimated at over US\$4 billion to integrate them into the Southern African Power Pool (SAPP) grid.

## **Private Sector Participation**

The Electricity Act (Chapter 13:19) of 2002 offers opportunities for private sector investment in the energy sector. As a result, the regulator had issued generation licenses to unsolicited private sector projects totaling 7,130 MW valued at approximately US\$11 billion by March 2025. The GoZ is pursuing energy development through the Public Private Partnership (PPP) arrangement, notably the Batoka Gorge Hydropower Project (2,400 MW total, 1,200 MW for Zimbabwe), projected for post-2034 completion,

and the Devil's Gorge Hydroelectric Project 1,200 MW by 2040. This indicates a bias towards greater private sector investment in the sector.

While there are significant opportunities to expand electricity generation, financing remains a challenge. The projected amounts cannot be raised from domestic public resources alone, necessitating more private investors and international development community involvement to meet financing needs. Most of the unsolicited projects have not reached financial closure mainly due to various risks. To address this, the GoZ has created an enabling environment by introducing the Government Project Support Agreement (GPSA) framework, which tackles three key risks related to political risk, bankable PPA tariff risk and currency convertibility risk. Through the Reserve Bank of Zimbabwe, the Government of Zimbabwe offers Letters of Comfort to the investors clearly outlining the Governments undertaking on foreign exchange issues relating to the operation of offshore accounts, remittance of foreign currency to pay for imports, loan repayments and dividends, and access of foreign currency from the interbank market. The Action Plan will include GoZ commitment to fully implement the GPSA and transition unsolicited bids into a competitive procurement process.

To date the regulator has licensed approximately 160 projects, 61 have been commissioned and are operational using funds from local banks, own resources, and pension funds while a few projects mainly mini-hydros were funded from Foreign Direct Investments.

In addition, the GoZ provides incentives such as cost-reflective tariffs, currency convertibility, government guarantees on Power Purchase Agreements, insurance from reputable international companies, escrow account arrangements, and the possibility for IPPs to be accorded National Project Status with tax exemptions, as well as complementary investment from local pension funds and commercial banks. Further, the Regulator, ZERA undertook a study on a tariff review methodology including the review of the draft Third Party Access regulations. The private sector can also invest in local and regional transmission infrastructure. Investments in the Southern African Power Pool (SAPP) would help insulate credit risk associated with one country, as the credit rating is tied to the entire region. For solicited projects, the GoZ is developing standard documentation to support the competitive procurement process.

Notably, Zimbabwe imports approximately 300 MW from South Africa's Eskom and 50 MW from Mozambique's Hidroeléctrica de Cahora Bassa (HCB). Electricity imports remain an important component of total supply, but the potential for continued trade is constrained by regional shortages, ZETDC's ability to pay, and transmission capacity limitations

<sup>&</sup>lt;sup>3</sup>World Bank, Zimbabwe Economic Update 2023

# **Sector Voice**



We built six hydroelectric projects in the Honde Valley, two in Nyanga and one solar in Motoko. At the same time we built two hydros in Malawi. In Zimbabwe we are producing 40 megawatts and then 10 megawatts in Malawi. We have been feeding in the grid for 10 years, plus, we started in 2007 and our first operating project is 15 years old this year. We are also currently building a third hydro project in Nyanga.

**Ian McKersie**Managing Director

We have been feeding in the grid for 10 years, plus, we started in 2007 and our first operating project is 15 years old this year.



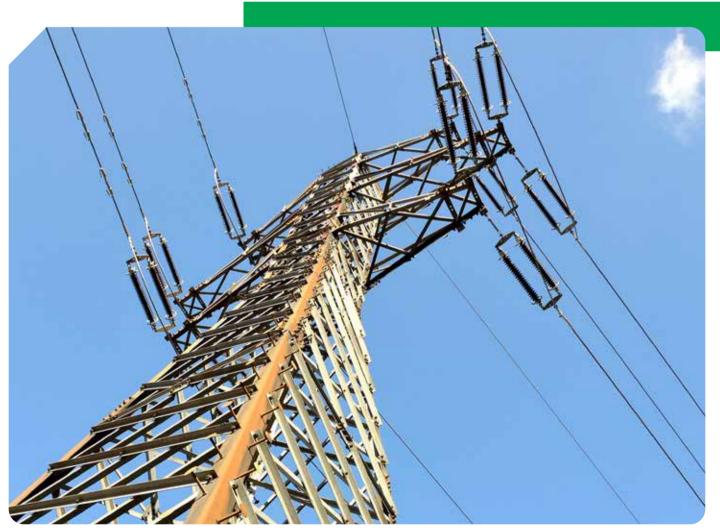
# **Sector Voice**



**Victor Utedze**President of Zimbabwe
Independent Power
Producers Association

We are a grouping of private sector companies that are generating electricity and supplying it to the national grid. Collectively, we have invested almost US\$400 million in the power sector, mostly from renewable energy sources. Our clients include the national utility and also the large commercial industrial customers. We are producing energy from all the renewable energy technologies that are available in the country. We have a predominant PV solar, we have wind in our portfolios and we also have a large hydro portfolio in operation and in development. Over the last 10 years, our share of contribution out of all the electrical energy that is consumed in the country has grown from almost zero and we are now moving towards closer to about 5%. Our aim is that by 2030, there about we should be on about 30% contribution to all the electricity produced in the country.

We are producing energy from all the renewable energy technologies that are available in the country





# **CURRENT STATUS AND CHALLENGES**

# Pillar I: Expand Generation and Network Infrastructure at Competitive Costs

### Overview of generation capacity and state of T&D infrastructure

ZPC's installed generation capacity is 2,640MW (Kariba – 1,050MW, Hwange 1 to 6 – 920 MW, and Hwange 7&8 – 670MW). The dependable capacity is between 1,200MW and 1,600MW. The national installed electricity generation capacity for both on-grid and off-grid is 2,962MW, with large hydro contributing 1,050MW (35.4%), coal contributing 1,680MW (56.7%), and small hydro, bagasse and solar IPPs contributing 232MW (7.8%). Despite the installed generation capacity exceeding peak demand of 2,000MW, the dependable capacity has remained constrained resulting in the need for imports and load shedding to ensure system stability.

The Zimbabwe transmission network forms the Central Transmission Corridor (CTC) of the Southern African Power Pool (SAPP). However, the transmission and distribution networks consist of old equipment with inadequate transfer capacity which requires replacement, rehabilitation and expansion. It is therefore estimated that 80% of trading on SAPP is failing because of lack of transmission infrastructure.

The distribution network needs reinforcement, expansion and rehabilitation to improve reliability of supply. The power utility has a backlog of 467,470 of client connections as of May 2025 characterized by high connection costs which the majority of customers cannot afford, leaving some clients in reticulated areas remaining unconnected.

## **Least Cost Power System Planning**

Over the years, uncoordinated planning has been a challenge in the sector which has seen fragmented planning by the national utility and the Rural Electrification Fund. The Government of Zimbabwe, through the ongoing development of the NIERP, will consolidate the Network Master Plan and the Rural Energy Master Plan aimed at examining available energy resources and determining the least-cost energy supply options, evaluating the security of supply options while providing information on the opportunities for investment into new energy projects. In view of this, the MoEPD is in the process of establishing an Energy Planning Unit to enhance leadership and coordination in selecting least-cost technology options for achieving universal access. A geospatial platform will be needed to enable targeted and efficient investments in the development and implementation of energy plans, programs, and projects.

## **Procurement Policy for Renewable Energy**

The Government is receiving support from International Cooperating Partners (ICPs) in the development of a structured Procurement Framework to facilitate the implementation of priority renewable energy projects in line with the NIERP and the National Renewable Energy Policy (NREP).

Currently, procurement of power projects is primarily done through self-sourcing. However, the Government is working on transitioning to a Competitive Procurement Policy for Renewable Energy. The framework under development includes the creation of standardized procurement documents, capacity building, and the establishment of a dedicated office to manage the procurement process.

Zimbabwe's energy sector stands at a critical juncture, grappling with mounting demand, aging infrastructure, and financing constraints, while simultaneously pursuing a path toward sustainable and inclusive energy development. As the country aims to double its electricity demand by 2030, persistent challenges in generation, transmission, policy, and planning continue to hinder progress. However, these obstacles also present an opportunity to rethink current strategies, strengthen institutional frameworks, and attract targeted investments

<sup>&</sup>lt;sup>4</sup>For details of the pillars, please refer to the Africa Energy Compact.

## **Challenges**

- **Generation Constraints:** These include aging infrastructure that limits generation capacity as well as financial challenges that have stalled many IPP projects and delayed implementation.
- **Transmission and Distribution (T&D) Limitations:** Aging infrastructure in key cities undermines reliability that hampers power evacuation and regional trade.
- Planning and Coordination Gaps: Delays in setting up the Energy Planning Unit hinder integrated planning.
- **Policy and Procurement Weaknesses:** Lack of a renewable energy procurement framework leads to non-competitive bidding processes affecting pricing and investor trust

## **Opportunities**

- Abundance of natural resources (both renewable and non-renewable): To diversify the energy mix.
- Captive Power Plants and Independent Power Producers (IPPs): There are significant opportunities for investments in captive power plants for self-supply with opportunities to supply mines and industries with the excess supplied to the grid thereby easing pressure on the utility company. Investors can invest as IPPs with options to supply the power utility, selected customers or export to the SAPP.
- **Net metering:** Supply of excess capacity by domestic, commercial and industrial customers to the grid through a net metering arrangement.
- **Battery Energy Storage Systems (BESS):** The country is promoting the development of a utility scale BESS as complimentary investment for management of increased variable renewable energy systems and several companies have submitted bids to build BESS.
- Natural gas and CBM reserves: Enhance exploration and quantification of gas reserves.

# Pillar II: Leverage Benefits of Increased Regional Integration

## **Status of Regional Integration**

Zimbabwe, a member of the Southern African Power Pool (SAPP), actively participates in regional electricity trading by importing up to 500MW mainly from Eskom, HCB and EDM while exporting approximately 204 MW mainly to Namibia, Zambia, and the Democratic Republic of Congo. To support non-discriminatory access to the national grid, the Government undertook a study on the Tariff Review Methodology and third-party access code, which are currently being implemented by the energy regulator. Additionally, studies on protection coordination between the ZESA and SAPP grids were completed by March 2025, further enhancing regional grid integration and reliability.

The reinforcement and extension of local and regional transmission interconnection will enhance opportunities for both the public and private sector generation projects to trade within the region. Zimbabwe will need to construct at least 1,607km of greenfield transmission networks to meet domestic demand and further integrate into the SAPP to fully benefit from trading power with neighboring countries and to increase security of supply. GoZ has expressed its interest in investigating public-private partnership (PPP) options for network development. Examples of projects to be funded include the MOZISA interconnector and ZIZABONA interconnector, where studies have already been completed. Annexure III summarizes the country's transfer capacity on interconnections and the Transmission Grid Reinforcement and Stabilizing Projects.

# **Challenges**

- **Inadequate and aging Infrastructure:** The national and regional transmission infrastructure is insufficient, frequently overloaded, and requires major expansion and modernization. Challenges include inadequate transfer capacity, thermal loading violations, and aging assets.
- **Regulatory Gaps:** Persistent gaps exist in regulatory frameworks, particularly concerning the implementation of third-party access and standardized transmission use of system pricing mechanisms.
- **Financing Constraints:** Insufficient access to financing hinders infrastructure upgrades and expansion needed to improve transmission capacity and foster regional integration.

#### **Opportunities**

- Innovative Funding Mechanism: To overcome financing challenges, SAPP with support from member governments, has initiated the Regional Transmission Infrastructure Funding Facility (RTIFF) aimed at mobilizing investments for critical transmission projects and enhancing regional power trade.
- Central location in the region: Allows access to regional markets.
- Existence of Intermediary Power Trading Companies: To enhance de-risking of energy projects.



# Pillar III: Embrace Distributed Renewable Energy (DRE) and Clean Cooking Solutions for Affordable Last Mile Access

## **Status of DRE and Clean Cooking**

The GoZ has developed the NES 2025-2030 based on the Least Cost Geospatial Electrification Plan (LCGEP), which utilizes geospatial data to determine cost-effective infrastructure routes and prioritize electrification projects. Accounting for 2024 estimated ZETDC domestic customers and off-grid households that own and use solar home systems, approximately 1.76 million urban and rural households had access to electricity service at the end of 2024. ZIMSTAT population projections estimate the total number of households to be 4.3 million by 2024, resulting in an estimated balance of 2.55 million households that remain without electricity service. ZIMSTAT projections indicate that households' growth rate in Zimbabwe will be 2% translating into approximately 4,859,000 households in Zimbabwe by 2030.

## On-going initiatives to increase access include the following:

- The Presidential Rural Solarization Scheme, to be funded by the government set to begin in 2025, for five years, will see 1kW solar systems installed in over one million rural households, providing access to sustainable and reliable energy.
- Between 2006 and 2024, Government through the Rural Electrification Fund (REF) has electrified 7,686 rural public institutions through the REF levy, fiscus funding and funding from development partners.
- As part of embracing the DRE, Government has installed a total of 502 solar mini grids and micro grids for rural public institutions. This comprises of 25 mini grids of sizes ranging from 5kW to 25kW, 8 community solar mini grids, with 4 already commissioned and the rest expected online in 2025. To date, 333 biogas digesters have been constructed while 300 biogas digesters masons have been trained. Donor-supported Mini grids have emerged with prominent ones being Mashaba in Gwanda and Hakwata in Chipinge. A Mini-Grid Regulatory Framework (MGRF) is under development to govern mini-grids development covering key issues such as licensing processes, technical requirements, and grid encroachment. The framework is expected to drive private sector participation and grow rural electrification rates in Zimbabwe.
- The private sector is active in providing solar home systems in both urban and rural areas. According to the draft NES, current private sector connection rates are 20,000-30,000 per year.

According to ZIMSTATS, 61% of households in Zimbabwe rely on firewood for cooking. Other solid fuels, such as coal, charcoal, animal dung, and similar materials, are used by only 0.5% of households. The remaining 38.6% of households utilize cleaner energy sources, including electricity, biogas, Liquefied Petroleum Gas (LPG), or ethanol. The country is importing an average of 2,692 tonnes of LPG per week with a daily average consumption of 165 tonnes. The Government of Zimbabwe has developed the National Clean Cooking Strategy (NCCS), which provides a strategic roadmap to transition the nation's cooking energy landscape towards sustainability, health, and economic inclusivity by 2030. The strategy provides targeted interventions for specific fuel and technology types: electricity, gaseous fuel covering LPG, biogas and natural gas, liquid fuels, solid fuels, solar and other emerging efficient cooking solutions.

According to the NCCS, financial requirements for stove purchases amount to approximately US\$791.5 million (December 2023 estimates). Thereafter there would be an additional annual requirement of US\$6 million from 2024 to accommodate population growth. The potential funding sources: 44% of this total (US\$344 million) could come from users as self-finance across the three customer segments (i.e. low, middle, and high income), 7% (US\$59 million) from stove suppliers via credit facilities and microfinance options, and the remaining 49% (US\$ 387.8 million) from development partners.

# Challenges

- Weak public awareness: market intelligence and consumer education are required to improve awareness and understanding of the benefits of DRE and clean cooking solutions.
- Regulatory framework and standards: Inadequate or unclear regulatory frameworks create barriers for effective deployment of DRE and clean cooking technologies. In addition, the inadequacy of established quality standards affects the reliability and performance of DRE and clean cooking technologies.

- Business development models: Inadequacy of robust business development models makes it challenging to scale and sustain DRE and clean cooking initiatives. The Government is exploring the use of the Results Based Financing scheme with seed capital sourced from the local market leveraging on availability of customer self-finance.
- Limited access to financing (both enterprise and consumer financing) hinders the growth and adoption of DRE and clean cooking technologies. Modern cookstoves and clean fuel options, such as LPG or electric stoves, are often too expensive for low-income households.

## **Opportunities**

- **Net-Metering:** There is an opportunity to increase DRE investments by the private sector through net metering. According to the utility currently they have 55 MW applications with 28.5 MW already operational with a feasible target of 100 MW by end of 2025.
- Local manufacturing of clean cooking products: Support from innovation hubs at universities and research institutions to exploit this opportunity.
- Access to carbon credits: To fund clean cooking initiatives.
- Private sector participation: Providing biogas cooking solutions.
- **Installation of biogas digesters in municipal sewer treatment plants:** For production of gas to electricity for own consumption.



## Pillar IV: Incentivize Private Sector Participation to Unlock Additional Resources

#### Status of Private Sector Participation in On-Grid and Off-Grid Access

The policy thrust of the GoZ is to substantially increase the participation of the private sector which has so far been able to mobilize US\$657 million for power generation projects with additional projects in progress worth US\$391 million. Projects under preparation require US\$8.656 billion. There are also unlicensed projects of above 100kW completed and in progress that are not reflected in these figures, but which are hoped to be captured in the planned Multi-Tier Framework (MTF) survey by the Ministry of Energy and Power Development. GoZ has created an enabling environment that includes incentives such as cost reflective tariffs, currency convertibility, government guarantees on Power Purchase Agreements, insurance from reputable international companies, National Project Status with tax exemptions as well as complimentary investment from local pension funds and commercial banks, and escrow account arrangements. On the issue of Escrow accounts, current policy requires that IPPs operate local foreign currency and local currency denominated accounts through which off takers shall settle their payments for electricity purchases. Escrow accounts may be opened and operated with local banks as the IPP is a resident company. The escrow account allows for ring-fencing of funds which may then be remitted offshore into debt service accounts.

Furthermore, investors in power generation have the option to sell directly to selected customers or to the regional power pool, Southern Africa Power Pool (SAPP). Examples include Distributed Power Africa (DPA) that supplies Varun Beverages directly and Nyangani Renewable Energy, NRE that exports 5MW to the region whilst the bulk of its 30MW capacity is supplied locally.

Government remains committed to fiscal discipline, transparency, and compliance with legal and regulatory requirements which underpins foreign investment in the energy sector. In this respect, the Government will undertake to provide general support to the investors under the Government Project Support Agreements (GPSA) which will be signed between the Ministry of Energy and Power Development, Ministry of Finance, Economic Development and Investment Promotion and the foreign/private investor. The GPSA is intended to provide comfort to IPPs through guaranteeing a cost reflective tariff, uptake of power as well as ensuring the offshore repatriation of funds by the investor.

With respect to large energy investments in Zimbabwe, fiscal and monetary authorities are working to improve the macro-economic environment, currency stability and convertibility to ensure that foreign investments are not exposed to currency risks and investors are able to expatriate their profits offshore. The Government, through Reserve Bank of Zimbabwe (RBZ) will offer Letters of Comfort to the investors clearly outlining the Government's undertaking on foreign exchange issues relating to the operation of offshore accounts, remittance of foreign currency to pay for imports, loan repayments and dividends, and access of foreign currency from the interbank market, as follows

- a) **Expatriation of Profits-** Dividends and profits due to foreign investors are freely remittable and can be funded from the resident entity's own foreign currency resources or from the foreign exchange interbank market. Importation of goods and services can also be financed using own foreign currency resources or from the foreign exchange interbank market.
- b) **Conversion of Local Currency into Foreign Currency** In terms of Guidelines on foreign exchange transactions, both corporates and individuals are allowed to use their local currency to purchase foreign currency on the foreign exchange interbank market to meet legitimate external obligations such as external loan repayments, importation of capital equipment and external services supported by relevant documents. The interbank market funds are meant to cater for foreign payments. As regards the framework for the administration of the foreign exchange interbank market, Authorized Dealers (banks) sell foreign currency to their clients on a willing buyer-willing seller basis. The Reserve Bank only intervenes in the interbank market when there is a shortfall by providing the requisite foreign currency to the affected bank(s).
- c) **Treatment of Capital from Foreign Investors** In terms of foreign exchange management rules, the country has a Capital-in Capital-out Policy. Foreign investors are allowed to bring in any amount of capital for investment purposes. Upon disinvestment, foreign investors are also free to remit their initial capital outlay and any appreciation to their respective jurisdictions.
- d) **Opening and Operation of Local Bank Accounts** Resident entities are free to open and operate both local currency and foreign currency accounts with a local bank(s) of their choice. The opening and operation of bank accounts is done in line with the Know Your Customer (KYC) and Customer Due Diligence (CDD) principles.
- e) **Opening and Operation of Offshore Accounts** Resident entities are allowed to borrow offshore loans in line

with Guidelines on External Borrowings. The offshore loans can be repaid from the borrower's foreign currency resources or settled through the Foreign Exchange Interbank Market. In cases where the external lender requires security in the form of offshore debt service accounts to be operated by the borrower, the Reserve Bank stands ready to facilitate such requests on a case-by-case basis.

- f) **Utilization of Offshore Loan Proceeds** Where a resident entity borrows offshore, the respective loan proceeds should be received into the country before utilization. The proceeds are credited into the borrower's designated Offshore Loans Foreign Currency Account for own use to settle bona fide foreign payments to external suppliers, domestic requirements or any other external obligations. Such funds are not subject to surrender requirements. In cases where the lender has to disburse loan proceeds directly to external service providers and suppliers, the arrangement must be registered with the Reserve Bank. Furthermore, prior Reserve Bank approval is required where loan proceeds are received directly into an offshore account operated by the borrower.
- g) **Retention of Insurance Proceeds Offshore** In terms of the current Exchange Control Policy, residents may secure insurance from external service providers as long as the relevant approval from the Insurance and Pensions Commission (IPEC) is obtained. Insurance proceeds received from external insurance or re-insurance companies, should be retained locally where the insured assets are resident. On a case-by-case basis, Reserve Bank may give authority for insurance proceeds to be retained offshore provided there is justification for such retentions.
- h) **Registration of Service Agreements with External Service Providers** the current policy requires that all service agreements between resident entities and external service providers be registered with the Reserve Bank prior to payment of service fees. The service agreements are registered expeditiously through Authorized Dealers (banks) to allow timeous implementation of projects. Once a service agreement is registered, service fees may be remitted to the external service provider using their own foreign currency resources or foreign currency sourced from the interbank market.

The private sector can invest in local and regional generation, transmission and distribution infrastructure. For development of local transmission and distribution infrastructure by private entities, ZETDC has commercial guidelines which are informed by the Grid Code. In all cases ZETDC provides the designs and supervises for quality. Investments in the SAPP insulate the credit risk associated with one country as the credit rating is for the whole region.

ZERA is spearheading the process of establishing a domestic electricity wholesale market for which transmission and distribution use of system prices are being developed. Captive power projects are being developed for own use and IPPs for supply to selected customers or through the grid as outlined below:

#### a. Generation projects for own use

These are mainly installed at the premises where the business operations are happening, i.e. factories, farms, schools and are normally financed using own resources or through a borrowing repaid over an agreed timeframe. See Annexure V. Current regulations require that all such projects above 100kW need to be licensed and registered by ZERA. However, regulations are being developed that only require registrations for all projects below 5MW. Projects above 5MW will still require licensing.

#### Captive power projects can also be connected to the grid in the following ways:

- i. Where the power project is not on site, the connection is through the grid before the meter. This requires that the owner of the project uses the grid to wheel power to the customer. This connection requires that a Grid Impact Assessment be conducted by the grid operator to ascertain that there are no negative effects of connecting to the grid.
- ii. Where the power project is not connected to the grid and the customer is not connected to the grid the system operates in island mode and a Grid Impact Assessment is not required.
- iii. Where the electricity project is connected to the customer after the meter, it requires that the grid operator and the project owner ensures compatibility of the two systems.

#### b. Generation projects installed to supply selected customers

These are projects set up by companies for the purpose of supplying power to another company based on a commercial agreement usually in the form of a Power Purchase Agreement (PPA) – see Annexure VI. This involves metering, agreeing on a tariff and a PPA which is exempt from regulatory approval. Such projects require licenses issued by ZERA.

Transmission infrastructure development by the private sector takes various forms on a project-by-project basis. For transmission infrastructure solely dedicated for a consumer for which no other client will benefit from that investment, the client assumes all the investment costs. This protects the utility against unforeseen risks of business closure.

For projects that benefit some other clients besides the immediate investing party, ZESA enters into a PPP arrangement governed by the ZIDA Act where the client finances the project under a Bridging Finance Agreement (BFA). Under the arrangement, a certain percentage of the client's monthly bill goes towards settlement of the project cost as the client effectively comes in as an EPC Contractor engaged by ZESA.

For residential distribution infrastructure, the developer constructs 11kV and low voltage (LT) lines and charges clients. The asset becomes ZESA's asset. The challenge is the high cost, which probably emanates from high capital costs making it unaffordable to clients. This has resulted in some clients in reticulated areas remaining unconnected.

The Regulator, ZERA undertook a study on a tariff review methodology including the review of the draft Third Party Access regulations. The current Transmission Use of System charges being levied on energy wheeled through the grid is 2.43USc/kWh while the Distribution Use of System charge is 5.19USc/kWh. The average tariff is 16.08USc/kWh. For the cost breakdown, see annexures VII, VIII, IX.

#### **Challenges**

- Perceived risks associated with large energy investments in Zimbabwe, including macroeconomic environment and currency convertibility.
- **Regulation and Policy:** Lengthy licensing and permitting processes, coupled with inefficiencies in a multiinstitutional system slows down project development, the Zimbabwe Investment and Development Agency (ZIDA) working with relevant ministries and agencies has been established as the one stop coordination center to resolve the inefficiencies.
- **Limited affordability of energy services:** The low purchasing power of off-grid and mini-grid customers limits the commercial viability of private sector energy investments in underserved areas.
- **Limited availability of low-cost long-term capital:** Currently developers have access to high cost, short-term funding whereas they require long-term capital. This has been due to an environment of high inflation and fluctuating exchange rates. The multi-currency system which will be operational in the medium term has resulted in inflation reduction and exchange rate stability. This period provides an opportunity for the Reserve Bank to take measures that will unlock long-term capital using both local and foreign capital.

#### **Opportunities**

- **Government de-risking initiatives:** Ongoing pilot programs aimed at de-risking large-scale energy projects signal commitment to reducing investment challenges and boosting investor confidence.
- **Zimbabwe Investment and Development Agency (ZIDA) as a one-stop-shop:** Enhancement of ZIDA operations to streamline licensing and permitting so as to improve efficiency and reduce bureaucratic delays.
- **Leveraging clean coal technologies:** By incorporating clean coal technologies, Zimbabwe aims to maintain energy security while reducing environmental impacts—opening up new funding avenues for cleaner thermal power.
- Availability of land: For solar projects
- Existence of legal and regulatory framework: Allows private sector participation.
- **Revision of use of system charges:** ZETDC and ZERA are in the process of reviewing the use of system charges downwards as a way of encouraging increased usage of transmission and distribution systems by third parties.

## Pillar V: Ensure Financially Viable Utilities that Provide Reliable and Affordable Services

ZETDC, the main off taker and supplier of electricity in the country, currently has substantial creditor obligations and legacy debt. The root causes lie partly in the adverse impacts of the past macro-economic conditions such as high inflation and fluctuations in exchange rates, past sub-economic tariffs, and partly in internal inefficiencies. The Government is implementing various strategies to improve utility financial viability. Such strategies include debt restructuring, utility restructuring, creating a conductive environment for private sector participation in the electricity sector, and implementing recommendations from studies conducted with support from cooperating Partners (WB, AfDB, etc.). ZERA has been reviewing the tariff and most customer categories are now on a cost-reflective tariff. The tariff increased from an average of 11.3 to 16.08 USc/kWh. During the multicurrency system which ends in 2030, customers can pay in both local and foreign currency. To improve revenue collection, the utility has rolled out prepayment and smart metering systems. Most domestic customers are on prepaid metering while at least 50% of customers eligible for smart metering have been connected. The utility has prepared strategic plans to enhance operational efficiency and commercial viability with a roadmap for significant outcomes that include supplying adequate power, achieving adequate growth, efficient utilization of assets and creating a sustainable business model. ZESA Holdings and its subsidiaries have consistently published annual audited accounts that have been tabled in Parliament.

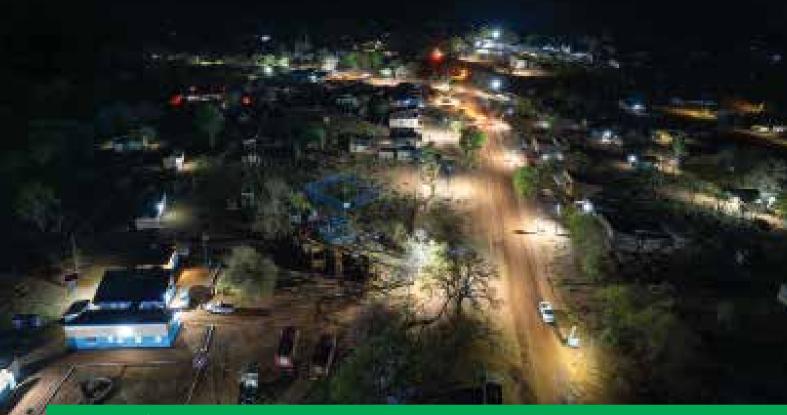
The Government with support of the World Bank crafted a Performance Improvement Plan for ZPC and ZETDC in 2018. Some of the action items in the Performance Improvement Plan are already being implemented by the Government and the utility. Going forward, the Government shall review the Plan with a view of aligning it to the current situation.

# Challenges

- **Fluctuations in exchange rates:** Whilst recognizing the improved stability in the exchange rates, the past fluctuations have adversely affected the cost-reflectivity of the recent adjustments of electricity tariffs in Zimbabwe.
- **Operational inefficiencies of the utility:** This includes poor revenue collection, high technical and non-technical losses, theft and vandalism of infrastructure have constrained the utility's ability to deliver reliable power and meet demand effectively.
- **High Levels of Legacy Debt:** The power sector is burdened with high levels of legacy debt and high cost of borrowing, which limits the ability to invest in infrastructure improvements.
- Multicurrency system complexity: The ongoing multicurrency system, which allows payments in both local and foreign currency until 2030, introduces complications in financial planning and revenue accounting, especially in the context of inflation and exchange rate movements.

# **Opportunities**

- **Debt Restructuring and Dialogue with Development Partners:** The government has initiated a structured dialogue platform with development partners aimed at resolving the legacy debt issue. This provides a foundation for improved fiscal health and investor confidence in the utility sector.
- **Cost-Reflective Tariffs:** The ZERA has revised tariffs across most customer categories to reflect actual service costs, rising from 11.3 to 16.08 USc/kWh. This adjustment enhances revenue adequacy and supports long-term sustainability of power supply.
- **Prepayment and Smart Metering Systems:** The full coverage of domestic customers under prepaid metering and the progressive rollout of smart meters for commercial and institutional users enhance billing efficiency and minimize revenue losses.
- **Strategic and Operational Reforms:** ZESA Holdings has developed strategic plans focused on improving operational efficiency, asset utilization, and commercial viability. Key pillars include performance contracts for management, restructuring initiatives, and roadmap-driven results aimed at delivering adequate power and achieving sustainable growth.



# Hwakwata Business Owner

We are pleased about the new street lighting. My shop has been robbed three times when I did not have electricity, and we believe that the new street lights will help prevent such incidents in the future, as there will be better illumination. Additionally, the improved lighting will enable us to keep our business open until 8 or 9 pm, because the streets will be well-lit and safer.

# **Sector Voice**



**Aaron Mlambo** Hwakwata Clinic Nurse We are very happy about the electrification of the clinic because we used to rely on lamps in the evenings for deliveries and handling cases, which was very difficult. We once used a source of lighting called yellow boxes, but it was not sustainable for the clinic. We faced problems with thieves and people loitering around the clinic. Now that we have electricity that lights up in the evening, we can ensure better security for our clinic. Previously, we used gas refrigerators to store children's vaccines, but now that we have solar electricity, we hope to have a reliable and constant power supply to keep the vaccines refrigerated.

Now that we have electricity that lights up in the evening, we can ensure better security for our clinic

# **Sector Voice**



**Isaiah D. Nyakusendwa** REAZ Chairperson

We are looking at an enabling environment and talking about policies to encourage private investment in the sector. It is essential to have guarantees that, if investments are in foreign currency, there are provisions for currency conversion and the ability to pay for equipment and dividends, which are critical for investor confidence. The enabling environment benefits significantly from supportive policies; for example, if the private sector wants to invest in the minigrid sector, there should be policies stating that ZETDC or REAS will connect these mini-grids once they are established. Incentives are also necessary to attract investment, especially considering the numbers needed to electrify the country, where affordability for end-users is key. This can be addressed through various measures, including resolving issues related to the status of national projects, VAT, and other regulatory hurdles, which need to be tackled to scale up private sector investment effectively. Additionally, attention must be given to the main grid, ensuring it receives adequate investments to accommodate diverse renewable energy solutions, supporting the broader goal of sustainable and widespread electrification.

Incentives are also necessary to attract investment, especially considering the numbers needed to electrify the country, where affordability for end-users is key.





# COMPACT TARGETS AND ACTION PLAN

# **Key assumptions**

- Demographic and Household Growth: Zimbabwe's population is projected to reach approximately 18.3 million by 2030, with an estimated 4.86 million households, placing increasing demand on energy services.
- Current Access Rates: As of 2022 (Zimstat Census), 62% of the population had access to electricity (33.7% on-grid, 28.3% off-grid), while 38.6% of households use clean cooking solutions. A more recent estimate of access as per National Electrification Strategy is 41% indicating a mismatch between the rate of connections and the rate of increase of households. A significant share of the population, especially in rural areas, remains underserved.
- Economic Growth and Sectoral Priorities: Zimbabwe is targeting accelerated growth through industrialization, mining, agriculture, and tourism. The mining sector, particularly platinum, lithium, and other energy transition minerals, is expected to drive electricity demand.
- The transmission network expansion specified hereunder relate to network reinforcement and expansion including interconnectors. Transmission network for power evacuation from power stations is linked to the respective generation projects.

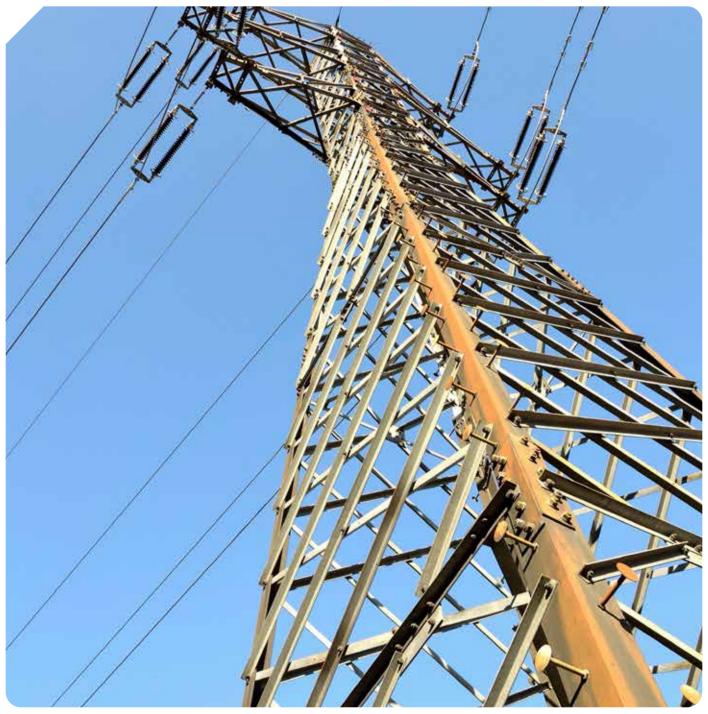
# **Compact Targets**

Trajectory target	Current Annual Pace Be	tween 2017 to 2024	Targeted pace between 2025 and 2030	
Increase Access to Electricity (Off- Grid and On-Grid)	On Grid ~25,000-30,000/year		Average 320,000 HH/year (starting with 50,000 in 2025) new connections i.e. an additional 1.9 million households	
		(ZETDC total customers in 2024: 900,680)		
	Off Grid	30,000/year	200,000 HH/year new connections i.e. an additional 1.2	
		(Total 861,000 HH in 2024)	Timilot Households	
Increase Access to Clean Cooking	61% HH use firewood and	39% use clean cooking energy	Increase clean cooking access from 39% to 70% by 2030     Reduce firewood and charcoal usage by 50% by 2030     80% of new residential and institutional buildings incorporate clean cooking infrastructure by 2030	
	Current share (MW) of R generation mix	enewable Energy in	Target by 2030	
Increase share of Renewable Energy	1,282.3MW <sup>7</sup> of RE out of 2	,962MW total generation (43%)	2,640 MW out of 5,432 MW of projected generation (48.6%)	
	Current share of Renewa	ble Energy excluding large hy	dro in generation mix	
Increase share of Renewable Energy excluding large hydro	7.8%		Increase the share to 29% by 2030	
	Current Baseline		Target by 2030	
Amount of Private Capital Mobilized	Amount of Private Capital Mobilized Generation USD1,048.2million		US\$3.43 billion	
		(operational: USD 657.4 million) (under construction: USD390.8 million)		
	Transmission & Distribution	USD 88.3 million	US\$220.87million	

<sup>&</sup>lt;sup>6</sup>The Presidential Solarization Scheme targets 200,000 Solar Home Systems new connections per year.

<sup>&</sup>lt;sup>7</sup>Consists of 1,050 MW (large hydro); and 232MW (small hydro, solar, bagasse)

Trajectory target	Current Annual Pace Bet	ween 2017 to 2024	Targeted pace between 2025 and 2030
Share of private sector investment in power sector in MW installed	Generation 356 MW (12% of 2,962 MW)		2,440.5 MW out of 5,432 MW (45%)
	Electrification	US\$45 to US\$50 million per year (REA/ZETDC)	Total Investment of US\$3.4billion by 2030 (draft NES):GoZ 3.1billion (average US\$515million/year) and private sector 0.3bln (average \$51million/year)



# **Action Plan**

Pillar	Indicator	Baseline Data (2024)	Target Year & detailing the action needed to achieve goal (including timeline)
I: Expand Generation and Network Infrastructure at Competitive Costs  Integrated Least Cost Power System Plan adopted incorporating regional resources	No	<ul> <li>To develop and adopt the Integrated Least Cost Power System Plan by Q2 2026.</li> <li>Actions needed to achieve the goal</li> <li>Develop the National Integrated Energy Resource Plan (NIERP) by Q4 2025.</li> <li>Establish and operationalize the Energy Planning Unit at MoEPD by Q2 2026, with capacity-building support from development partners.</li> <li>Review and update the National Network Masterplan to align with regional master plans by Q2 2026.</li> </ul>	
	Improvement in the operational performance and efficiency of existing electricity generation and network assets.	No	<ul> <li>To enhance the efficiency and available capacity of existing generation and network assets by Q4 2030.</li> <li>Actions needed to achieve the goal.</li> <li>Complete feasibility studies for repurposing the small thermal power plant sites by Q2 2026.</li> <li>Conduct dynamic network simulation and load flow studies for renewable energies through a technical assistance by Q3 2026.</li> <li>Build capacity in efficient distribution network operation in a deregulated environment by Q3 2026.</li> <li>Build capacity for ZETDC in GIS, AI and big data analytics to enhance advanced systems planning for the enrollment of distributed generation and renewable energy projects by Q4 2026.</li> <li>Complete the Battery Energy Storage System (BESS) implementation by Q2 2027.</li> <li>ZPC to complete the implementation of a project to re-power Hwange Power Station Units 1-6 to restore available capacity from 400 MW to 800 MW by Q3 2027.</li> <li>Construct at least 1,607 km of new transmission and distribution lines coupled with communications optic fibre to improve operational efficiency and reduce technical losses from 18–20% to 14% by Q4 2030. Deploy transformer anti-intrusion system (TAIS) units on at least 47,000 transformers by Q4 2030</li> </ul>

Pillar	Indicator	Baseline Data (2024)	Target Year & detailing the action needed to achieve goal (including timeline)
II: Regional Integration	Transmission and distribution infrastructure developed	No	<ul> <li>To develop priority local and regional transmission and distribution infrastructure to support regional trading of power by Q4 2027.</li> <li>Actions needed to achieve the goal.</li> <li>Continue to support the ongoing SAPP's Regional Transmission Infrastructure Financing Facility (from 2023) to fast-track the implementation of prioritized local transmission lines and interconnectors such as MOZISA and ZIZABONA by Q4 2025.</li> <li>Develop an appropriate Independent Power Transmission (IPT) business model to leverage private sector participation in the transmission sector by Q4 2025.</li> <li>Mobilize resources for the implementation of the prioritized Central Transmission Corridor such as MOZISA and ZIZABONA by Q4 2027.</li> <li>Ensure that regional infrastructure projects include gender-responsive measures and promote women's participation in regional energy forums</li> </ul>
	Adopt and enforce harmonized transmission pricing within their respective power pools to facilitate power trade across borders	No	To implement transparent and standardize Transmission Pricing Methodology aligned with regional standards by Q4 2026.  Actions needed to achieve the goal.  Standardize cost-reflective transmission use of system pricing mechanisms to align with SAPP regional standards by Q4 2026.
	Transnational generation infrastructure developed.	No	<ul> <li>To develop priority transnational power generation infrastructure projects such as the Batoka Gorge Hydro Electric Scheme (BGHES) and other projects to support regional economic growth and increase generation capacity from cleaner sources.</li> <li>Actions needed to achieve the goal.</li> <li>Finalise the updating of Batoka Project bankable feasibility studies by Q3, 2026.</li> <li>Complete procurement process for project developer by Q2, 2027.</li> <li>Achieve project financial close by Q4, 2028.</li> <li>Start construction by Q1, 2029.</li> <li>Implement feasibility studies for other potential power generation sites on the Zambezi River (e.g. the Devil's Gorge) by 2027.</li> </ul>
Pillar III: Last Mile Access	Monitoring & Evaluation program adopted to track the multi-tier framework for access to electricity and clean cooking	No	<ul> <li>To complete the initiated Multi-Tier Framework (MTF) by Q2 2026.</li> <li>Actions needed to achieve the goal.</li> <li>Build capacity on the use of gender sensitive Multi-Tier Framework (MTF) surveys by Q4 2025.</li> <li>Report and publish information and data on electrification and clean cooking access by Q2 2026.</li> <li>Establish an Inter- Sectoral Compact Implementation Unit under an M&amp;E framework to monitor the implementation of Energy Sector Programs by Q3 2026.</li> </ul>
	National Electrification Strategy adopted including an updated 5-year electrification plan with clearly defined role for private sector	No	To adopt and adopt and operationalize the validated National Electrification Strategy (NES) by Q4 2025.  Actions needed to achieve the goal  Allocate annual resources for the implementation of NES starting in 2025 National Budget by Q4 2024  Conduct stakeholder and consumer awareness programmes for scaling up net metering programs by Q2 2025  Finalize and adopt the validated National Electrification Strategy (NES) by Q4 2025.  Connect rural clients through Compact Distribution Boards (CDBs) by the Rural Electrification Fund by Q1 2026.

Pillar	Indicator	Baseline Data (2024)	Target Year & detailing the action needed to achieve goal (including timeline)
			<ul> <li>Scale up engagement of private technicians for last mile connections to complement own staff by Q1 2026.</li> <li>Explore innovative models for incentivizing private sector participation in electrification, such as Private Sector Concession Model for Distribution Programs and Results Based Financing (RBF) by Q2 2026.</li> <li>Connect 450,000 customers to the grid by the utility by Q4 2027.</li> <li>Ensure equitable involvement of women in the implementation of NES and increase women's access to electricity in line with relevant policies by Q4 2030</li> </ul>
	National Clean Cooking Strategy in place	No	<ul> <li>To finalize, adopt and operationalize the validated National Clean Cooking Strategy (NCCS) by Q4 2026.</li> <li>Actions needed to achieve the goal</li> <li>Approve the National Clean Cooking Strategy (NCCS) by Q3 2025.</li> <li>Launch national awareness campaigns and targeted consumer education on clean cooking solutions by Q3 2025.</li> <li>Allocate annual resources for the implementation of NCCS in the National Budget starting in Q1 2026.</li> <li>Engage industries and private sector for technical and financial support to innovation hubs at universities and research institutions to facilitate the creation and strengthening of local supply chains for clean cooking stoves and fuels, aiming to reduce costs and improve accessibility, particularly in rural areas by Q1 2026.</li> <li>Explore innovative models for incentivizing private sector participation in the clean cooking supply chain such as Results Based Financing (RBF) by Q2 2026.</li> <li>Support women and youth led initiatives in LPG supply and infrastructure by Q4 2026.</li> </ul>
	Policy and regulatory framework including adopting minimum quality standards for grid, off-grid and clean cooking solutions	No	<ul> <li>To finalize, adopt and operationalize the National Energy Policy (NEP) of 2012 by Q4 2026.</li> <li>Actions needed to achieve the goal</li> <li>Finalize, validate and adopt the National Energy Policy by Q3 2025.</li> <li>Approve the Mini-Grid Regulatory Framework (MGRF) that is currently under development and scheduled for completion by Q4 2025.</li> <li>Finalize and approve regulatory framework documents, such as Regulatory Accounting Framework, Grid and Distribution Code by Q4 2025.</li> <li>Issue Secondary Distribution and Retail Licenses for private sector participation in distribution network expansion and management by Q1 2026.</li> <li>Finalize Third-party Grid Access Regulations to enable fair and non-discriminatory use of the transmission network by Q1 2026.</li> <li>Establish product and service quality standards, including local testing facilities for grid, off-grid, and clean cooking technologies, by Q2 2026.</li> <li>Develop a Policy Implementation Strategy following the adoption of the NEP, including the redrafting of sub-sector documents as complementary strategies and action plans by Q4 2026.</li> </ul>

Pillar	Indicator	Baseline Data (2024)	Target Year & detailing the action needed to achieve goal (including timeline)
IV: Private Sector Participation	Process outlined for regulatory approval of private sector-led investments	No	<ul> <li>To develop and adopt regulatory framework for incentivizing private sector investments by Q4 2026.</li> <li>Actions needed to maintain and improve the goal</li> <li>Create awareness on the frameworks and incentives available for both renewable and clean-coal energy opportunities by Q3 2025.</li> <li>Review use of system charges by Q4 2025.</li> <li>Finalize the development of regulations for registration of projects below 5MW by Q1 2026.</li> <li>Exempt licensing of small projects of less than 5MW for own consumption by Q1 2026.</li> <li>Restructure the licensing processes under the one stop shop by Q4 2026.</li> </ul>
	Competitive procurement framework for private sector investment in renewable energy adopted	No	<ul> <li>To develop and adopt a competitive procurement framework for private sector investment that supports women participation in renewable energy by Q2 2026.</li> <li>Actions needed to achieve the goal</li> <li>Test and adopt Government Project Support Agreements for de-risking IPPs including achieving and sustaining currency convertibility by Q4 2025.</li> <li>Engage a transaction advisor to help with the development of the bidding documents to pilot IPP Renewable Energy tendering, to test and refine the competitive procurement framework by Q4 2025.</li> <li>Develop a roadmap for achieving and sustaining currency convertibility to support project bankability by Q4 2025.</li> <li>Build capacity for effective renewable energy tendering (for MoEPD, ZERA, and ZETDC) by Q2 2025, and continuing capacity building during implementation of the tendering process.</li> </ul>
	Financial support to private sector DRE and clean cooking operators to ensure affordability and viability	No	<ul> <li>To scale up incentives to promote private sector investment in DRE and clean cooking by Q4 2027.</li> <li>Actions needed to achieve the goal</li> <li>Identify target markets and utilize technical assistance to prepare sites for bankable DRE by Q2 2026.</li> <li>Engage key stakeholders such as UNFCCC and its subsidiaries on climate financing particularly for clean energy projects including clean cooking by Q2 2026.</li> <li>Introduce targeted subsidies and Results-Based Financing (RBF) mechanisms by Q4 2026.</li> <li>Simplify procedures for tax exemptions on rural electrification equipment and establish mechanisms for duty exemptions and tax relief on renewable energy technologies by Q4 2026.</li> <li>Support microfinance institutions (MFIs) in offering credit lines to rural households for purchasing DRE and clean cooking solutions by Q4 2026.</li> <li>Engage private sector to develop appropriate finance models, work with development partners to establish frameworks to enable capital investments that will trigger new power distribution assets and new last-mile connections in underserved areas, while retaining affordability to end-users by Q4 2026.</li> <li>Develop a Just Energy Transition Framework with support from the World Bank by Q4 2026.</li> </ul>

Pillar	Indicator	Baseline Data (2024)	Target Year & detailing the action needed to achieve goal (including timeline)
V: Financially Viable Utilities	Audited annual financial statements and annual reports for publishing	Yes	To publish annual audited accounts consistently in accordance with the standards and timelines provided in the relevant legislation by ZESA Holdings and its subsidiaries by Q1 2026.
			Actions needed to achieve the goal
			<ul> <li>Enhance the publicity of reports after adoption by Parliament by Q4 2025.</li> <li>Incorporate the timely submission of reports into performance contracts by Q1 2026.</li> </ul>
	Utilities achieving at least 100 percent operational cost	No	To achieve at least 100% operational cost recovery in both local currency and foreign currency by utilities by Q4 2027.
	recovery		Actions needed to achieve the goal
			<ul> <li>Enhance revenue collection by completing the installation of prepaid and smart meters for all customers by Q4 2025.</li> <li>Strengthen conditions for procurement of new debt to prevent the accumulation of debt by Q4 2026.</li> <li>Review impact of existing tariffs in order to inform the updating of the Tariff Code (2013) and Cost of Service Study (2020) by Q4 2026.</li> <li>Conduct training on domestic energy trading using block chain technology or other appropriate technology through technical assistance by Q4 2026.</li> <li>Resolve the national utility's legacy debts as part of the broader National Debt resolution process by Q4 2027.</li> <li>Review, adopt and implement the Performance Improvement Plan through technical assistance from the World Bank by Q1 2027.</li> <li>Set up the domestic energy trading platform through technical assistance by Q4 2027.</li> </ul>
	Improve Government oversight over State Owned Enterprises (SOE)	No	To enhance the government's oversight role in terms of planning and policy (MoEPD), regulation (ZERA), and shareholder responsibilities (Mutapa Investment Fund) by Q4 2026.  Actions needed to achieve the goal  Implement the new structure for the national utility by Q4 2025.
			Complete the study on the Integrated SOE Framework by Q4 2026.



# ONGOING ACTIVITIES AND SUPPORT FROM DEVELOPMENT PARTNERS<sup>7</sup>

Development Partner	Project Name	Time-	Project Description	Funding (including from the private sector) <sup>9</sup>	Contribution to Compact Targets			
					Access to Electricity	Access to Clean Cooking	RE installed	Binary & Numerical Targets
World Bank	Kariba Dam Rehabilitation	2014- 2026	Rehabilitation works to ensure longevity, long term efficient operation into the future and continued contribution to energy security for Zimbabwe and Zambia	\$294 million from EU, WB, AFDB, Sweden, and the Zambezi River Authority on behalf of the Governments of Zimbabwe and Zambia, through a combination of grants and loans.	Energy security for over 1 million grid connected customers	N/A	Efficient operation of the 1,050 MW Kariba hydro plant enables flexible system operation with growing share of VRE.	
	Zimbabwe Energy Sector Programmatic Advisory Services & Analytics (PASA)	2024-26	Supports activities for improving framework conditions for private sector involvement and provides technical assistance financing transaction advisory services for a credible, transparent, and competitive solar IPP procurement process and associated institutional capacity building.	\$ 1 million	Achieving universal access.	N/A		Improving the fundamentals of the power sector

<sup>&</sup>lt;sup>9</sup>Public and private sector projects should be listed separately

Development Partner	Project Name	Timeline	Project Description	Funding (including from the private sector) <sup>9</sup>	Contribution to Compact Targets			
					Access to Electricity	Access to Clean Cooking	RE installed	Binary & Numerical Targets
	Zimbabwe Electricity Access Recovery Project (ZEAP)	2025-26	The proposed recipient executed project will be the competitive procurement of Solar IPPs; and expanding access to modern electricity services in partnership with the private sector.	\$5 - 10 million	Smart subsidies for expansion of electricity access	Smart subsidies for expansion of clean cooking access		
AfDB	Zimbabwe - Energy Sector Reform Support Project	2022-2026	Improve the availability of reliable electricity supply through facilitating the creation of an enabling environment for private sector participation.	UA2.50 million (approx. US\$3.6 million)			Enabling environment for IPPs and VRE integration	
	Zimbabwe - Emergency Power Infrastructure Rehabilitation Project - Phase II Stage II	2017-2025	Support of electricity transmission and distribution infrastructure rehabilitation in Midlands and Manicaland provinces.	\$32.94 million from Zimbabwe Multi- donor Trust Fund	Improved availability and reliability of electricity supply			
UNDP	Joint SDG Fund		Catalyzing local investment into renewable energy through the SDG Renewable Energy Fund (SDG REF) which seeks to leverage local financial markets to support investment worthy renewable energy projects with positive social impact for the accelerated achievement of SDGs.	\$21 million			Increasing renewable energy capacity by an estimated 100 MW.	
UNDP, UNICEF	Climate Adaptation Water & Energy Programme (CAWEP)	2022- 2026	Development of climate resilient, multiple water use and renewable energy infrastructure in vulnerable communities.	\$20.8 million total contributions from Foreign Commonwealth & Development Office (FCDO)	To improve access to clean energy for multiple use	30,422 people and 80 social institutions have improved access to clean energy	592.5KW total Renewable Energy installed capacity. (Mini grid, Solar Home Systems, Solar water pumping, biogas and solar e-cooking)	30,422 people and 80 social institutions with improved access to clean energy for multiple use.

Development Partner	Project Name	Timeline	Project Description	Funding (including from the private sector) <sup>9</sup>	Contribution to Compact Targets			
					Access to Electricity	Access to Clean Cooking	RE installed	Binary & Numerical Targets
UNDP	Modern Cooking Facility for Africa programme	2027	The Modern Cooking Facility for Africa (MCFA) is a new financing programme supporting access to and scale-up of higher tier clean cooking solutions in six Sub-Saharan African countries. Zimbabwe is the latest country to join the programme.	EUR 4.8 million from SIDA		4 million people have access to clean cooking in Africa by 2027		
NEFCO	Power Africa	2021-2030	Regional project initial focus areas are access to electricity; regional, economic integration and institutional capacity; energy efficiency; productive use of energy; clean cooking solutions.	500 MSEK/year <sup>10</sup>	10 million new customers with access to renewable electricity	1 million customers with access to clean cooking solutions by 2030	500 MW of new RE capacity targeted by 2030	
SIDA	Harare Sustainable City Initiative	2022 - 2027	Sustainable waste to wealth practices in the greater Harare. Increased access to clean energy by the urban and peri-urban poor in Harare. Achieved energy and resource efficiencies in Zimbabwe's built environment.	US\$6.5 million	Provide better living conditions to at least 200 000 Harare citizens by increasing their access to sustainable waste management services, clean energy provision and to promote energy and resource efficiency in Zimbabwe's Built Environment			

 $<sup>^{\</sup>rm 10}\text{Total}$  funding and targets for all participating countries including Zimbabwe

Development Partner	Project Name	Timeline	Project Description	Funding (including from the private sector) <sup>9</sup>	Contribution to Compact Targets			
					Access to Electricity	Access to Clean Cooking	RE installed	Binary & Numerical Targets
UNICEF	"Transforming the life of learners, teachers and community through sustainable school solarization"	2022-2026	Rural Schools solarization	£4.1 million	30,000 children in nearly 79 schools	800KW of renewable energy by December 2026		30,000 children in nearly 79 schools
	Oxygen Systems Strengthening	Jan-Dec 2025	Solarization of two (2) Pressure Swing Adsorption (PSA)/ oxygen generation plants	USD450,000.00	7 million people will have access to the system			7 million people will have access to the system
	Primary Health Care Systems Strengthening	2023-2025	Supply of 305 solar powered tricycles to support integrated outreach activities	USD950,000.00	2,5 million people will be reached			2,5 million people will
	Climate Action for the last Mile: Reaching the most vulnerable children in Zimbabwe	January 2025- December 2026	Solarized piped water schemes in 17 schools and 5 health care facilities	USD250,000	To save 20,000 people with 40% being children below 18 years		70000KW of renewable energy targeted by December 2026	20 000 people with 12 000 being children below 18 years
JICA	Strengthening regional power system of Southern Power Pool (SAPP)	2024 - 2027	Increased cross-border electricity integration, thereby promoting stable use of clean and affordable electricity.	US\$1.5 million				
Switzerland	Energy and Environment Partnership Trust Fund Africa	2021 - 2025	Provide affordable clean energy through climate resilient and zero carbon initiatives in Zimbabwe.	US\$4.4 million	Swiss contribution will ensure an estimated additional 425'000 people with enhanced energy access			



#### **Sector Voice**



**Chiedza Rachel Musekiwa**ZIMGREENCO Business
Development Officer

We present our bankable Power Purchase Agreements (PPAs) to potential financiers and investors. We are transforming the energy sector by addressing credit worthiness of the end user. So what we do is provide bankable power purchase agreements which allow for IFP developers to bring their projects online. We present our bankable Power Purchase Agreements (PPAs) to potential financiers and investors. These PPAs are backed by our liquidity buffer, which gives financiers the confidence to fund the projects. As a result, the projects are able to reach financial close and come online. In this way, we facilitate the participation of Independent Power Producers (IPPs) in the energy sector. While we don't provide the actual funding ourselves, we act as an intermediary, enabling access to finance through the strength and credibility of our PPAs.

What we do is we come in, we provide a power purchase agreement. So we're saying, okay, we will be buying this power, so we'll be an off-taker, so we remove what we call off-taker risk whereby investors are maybe not very excited to sponsor a project because they're worried that the off-taker might not be able to pay on time and that's the off-taker risk. So as AfricaGreencCo and ZimGreenCo we then come in to say we will be the off-taker of this power and because we have a liquidity buffer, the financier will be very much more willing to sponsor because they are seeing, okay, Green Coal is your off-taker, so they'll be able to pay on time because they have a liquidity buffer.

A liquidity buffer is what then makes our power purchase agreement bankable. We have quite a few projects in the pipeline and we are driving more renewable energy projects to come online.



### TURNING TRASH TO TREASURE: GEO POMONA WASTE TO ENERGY





**Dr Dilesh Nguwaya**Geo Pomona Waste
Management CEO & Executive
Chairman

In Harare, Zimbabwe, waste is growing quickly as the city expands. Geo Pomona Waste Management is leading the way in solving this problem with smart and sustainable solutions. The company follows the 4Rs of waste management—**Reduce, Reuse, Recycle, and Recover** — to manage waste responsibly and protect the environment.

As cities grow and consumption patterns shift, landfills have become overwhelmed with mountains of waste. For Geo Pomona, simply disposing of this waste is no longer an option. Instead, the company is investing in a transformative solution: waste recovery through energy generation.

While efforts to reduce, reuse, and recycle remain critical, not all waste can be repurposed. That's where recovery steps in. This stage focuses on extracting value from waste that would otherwise damage the environment. Geo Pomona's Waste-to-Energy (WtE) Plant embodies this principle. Rather than letting inert and urban waste pile up in landfills, the plant will harness it to generate electricity, contributing to both environmental protection and energy security.

Currently under development, the Geo Pomona WtE Plant is designed to process up to 1,000 tons of urban waste per day, sourced from Harare's waste collectors. Utilizing advanced thermal treatment technology, the plant

will produce between 16–22 megawatt-hours (MWh). Approximately 12% of this energy will power in-house operations, while the remainder will be fed into Zimbabwe's national grid, supporting the country's growing energy needs. The facility will operate using the Rankine cycle, a tried-and-tested thermal cycle used in power plants worldwide. Through the combustion of solid urban waste, steam will be generated to drive turbines and produce electricity. The process ensures complete combustion of the waste fractions, using carefully regulated airflow to achieve total and fast oxidation, resulting in minimal environmental impact and maximized energy recovery.

Geo Pomona's approach goes beyond waste disposal, it's about creating a circular economy, where waste is no longer an environmental burden but a renewable resource. The project aligns with global goals on climate action, sustainable energy, and responsible consumption. As Zimbabwe and other African nations look toward sustainable development, the Geo Pomona Waste-to-Energy Plant represents a bold step forward.

## COALBED METHANE (CBM) AND WASTE TO ENERGY STATUS IN ZIMBABWE

#### a) CBM STATUS IN ZIMBABWE

Coal Bed Methane (CBM) gas is a form of natural gas that is normally found in areas with abundant coal reserves. In Zimbabwe, it occurs in the Lupane and Hwange areas west of the country. To date 40 trillion cubic feet (TCF) of potentially recoverable gas is estimated to be available in the Lupane/Lubimbi area.

Work done to date constitutes the first phase in the development of CBM as a source of energy that is, establishing the existence of quantities of gas locked up in the coal seams. A few companies initiated exploration in the early 90's through Special Grants (SG's) that they acquired through the Ministry of Mines and Mining Development (MMMD). Below is a summary of the exploration activities and estimated quantities established since the early 90's into early 2000. Not much work has been done thereafter. Shangani Energy Exploration (SEE) acquired SG 1312 to explore for CBM in the Lupane area at the beginning of 1992 for a period of two years. They drilled to an average depth of 400 m and a total of 509 samples were analysed and a total of 50,000 Mm3 (1.77 TCF) of gas was estimated as being available. Further, SEE established that the gas content was lower than most measured basins in the world, but viable due to the great thickness of the reservoirs. Thus, despite the lower gas content SEE were convinced that they needed to proceed to pilot production stage. Apart from the SG 1312, SEE was also doing similar work in SG 1731, 1729, SG 1803 and SG 1806, where encouraging results were also produced. In all these special grants, prospects of going to Phase II were good but the constraints related to the cost of proceeding in the absence of an established market precluded further work. Further, unavailability of suitable drilling equipment locally stalled this initiative

Discovery Exploration acquired a Special Grant (SG 2060) for the Lupane area for the period 1997 to 2005 covering a total area of 14,345 ha. Reports from the Geological Survey do not show a lot of work having been done but existence of substantial volumes of gas is recorded. As in the case of SEE, they appear to have hesitated to continue

due to the absence of a guaranteed market for the gas if it was produced in commercial quantities.

AFPENN had Special Grants 1590 and 1603 granted in 1994 and did some exploratory work funded by the European Investment Bank (EIB) in the Lupane/Mazola/ Gokwe (1590) and the Chiredzi (1603) culminating in the production of a feasibility study report. The feasibility study report concluded that a significant gas resource base does exist in the Lupane/Lubimbi lease area and that, based on measured permeability values and reservoir pressures, substantial gas flow rates would be achievable. It further recommended a small-scale 4 to 5 well pilot production whose results would be used to define geologic and reservoir variability over a wide area as well as accelerate the demonstration of commercial viability. The study, however, concluded that such a pilot well programme could only be realistically considered in the context of a potential market for CBM.

Against this background, it is important to note that the demand for gas use in Zimbabwe increased from around 5000 tonnes in 2010 to about 60 000 tonnes in 2024. As such, the present demand for gas is a strong indicator for the need to invest in CBM extraction for both domestic and industrial use.

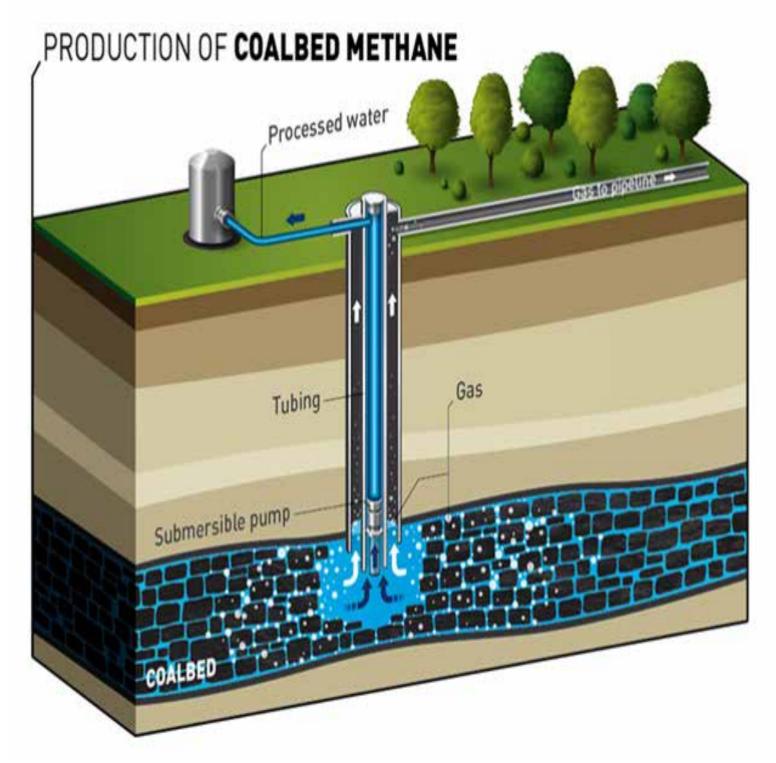
### B) Waste to energy development in Zimbabwe

The current waste disposal techniques in Zimbabwe are unsustainable and pollute the environment. These poor disposal techniques include dumping at the sawmills, plantations, municipal dumpsites, and open air burning resulting serious environmental effects such as underground water contamination and smoke that pollutes the air. For example, the release of carbon dioxide or methane into the atmosphere has very serious consequences to human health since the two gases are potent greenhouse gases that contribute significantly to climate change (global warming) and air pollution.

There need to invest in waste collection, waste separation and aggregation as well as designing and construction

of properly engineered landfills. As a typical case study, work has begun at Geo Pomona dumpsite in Harare to develop a properly designed landfill. Once the project is successful, it will be replicated in other municipalities.

The Geo Pomona project is also designed to generate electricity from municipal solid waste collected from homes, businesses, and industries in Harare. The project is a 22MW power plant.



# **Annex I:** Electrification targets and financing requirements estimated under NES 2025-2030

The Government of Zimbabwe has prepared a National Electrification Strategy (NES) 2025-2030, validated in December 2024 and awaiting to be endorsed by the cabinet. According to NES 2025-2030, approximately 1.76 million urban and rural households had access to electricity service while an estimated 2.55 million households had no electricity service at the end of 2024.

Table 2: Electrification access in households until 2030.

Item	2024	2025	2026	2027	2028	2029	2030
Total households	4,314,815	4,401,112	4,489,134	4,578,917	4,670,495	4,763,905	4,859,183
ZETDC & Off-grid HH	1,762,000						
Unelectrified households	2,553,135	2,514,151	2,077,880	1,609,328	1,107,509	571,413	
Densification		24,791	75,847	135,384	203,656	280,924	367,455
Grid Expansion (Private)		20,446	194,905	380,314	627,002	885,304	1,205,568
Grid Expansion (ZETDC/REA)		50,000	150,000	250,000	300,000	350,000	350,000
Standalone solar systems		29.054	225,132	435,713	661,231	902,133	1,158,877
Mini grid		989	3,690	6,498	9,418	12,451	15,602
Total new HH access		125,280	649.574	1,207.91	1,801,306	2,430,812	3,097,503
Annual new connections		125,280	524,294	558,335	593,397	629,506	666,691
% Grid (Expansion & Densification		76%	65%	63%	63%	62%	62%
% Mini-grid and SHS Access		24%	35%	37%	37%	38%	38%
Access-percentage	41%	43%	54%	65%	76%	88%	100%

#### Electrification access expansion costs by year through 2030 shown in US\$ millions.

The table below presents a summary of investment requirements by year if expansion activities proceed as projected in the expansion model. The principal driver of the financing requirements is to achieve universal access by 2030. Investment requirements vary annually as a function of annual expansion targets for each electrification modality. Financing requirements will very likely vary according to how projects are prioritized by national and local authorities, as well as by availability of financing available from Government of Zimbabwe, development partner and private sector investment availability. The total projected financing requirements through 2030 using the LCGEA data to achieve universal access is US\$3.397 billion. Total financing requirements will thus reach an average of approximately USD\$566 million per year.

Table 3: summary of investment requirements by year (US\$ million)

Technology	2025	2026	2027	2028	2029	2030	Totals
Densification	\$9.3	S19.1	\$22.3	S25.6	\$29.0	\$32.4	\$137.70
Grid Expansion	40.23	298.54	320.39	360.98	384.42	418.04	1,822.60
ZETDC	98.37	229.76	210.61	172.72	151.98	121.36	984.80
Standalone solar	\$10.2	\$68.6	\$73.7	\$78.9	\$84.3	S89.9	\$405.60
Mini grids	S3.2	\$8.5	S8.6	58.6	S8.6	S8.7	\$46.20
Total by year/period	S161.3	S624.6	S635.6	S646.8	S658.4	S670.4	\$3,397.10
Cumulative total	S161.3	\$785.9	S1,421.4	\$2,068.3	\$2,726.7	\$3,397.00	



## **Annex II:** Energy Compact Pillars-Proposed Metrics/Indicators

Pillars	Metrics /Indicators	Data (latest available)
Pillar 1 –Expand Generation and T&D Networks	<ul><li>Generation Capacity Installed; Available (MWs)</li><li>% Thermal, % Renewable (including BESS)</li><li>Average annual growth rate (%) (of last 3 years)</li></ul>	<ul> <li>2,962; 1,505¹</li> <li>57; 43</li> </ul>
	<ul> <li>Electricity Produced Annually (GWh) – Total</li> <li>% Thermal; % Renewable (including VRE/BESS)</li> <li>Average annual growth rate (%) (2019-2022)</li> <li>Average Cost per kWh (USD/kWh) – Thermal; Renewable</li> </ul>	<ul> <li>8,706</li> <li>31; 69</li> <li>3</li> <li>0.017; 0.003²</li> </ul>
	<ul> <li>Electricity Imported Annually (GWh) – Total</li> <li>Average annual growth rate (%) (of last 3 years)</li> <li>Average cost per kWh (USD/kWh)</li> </ul>	<ul> <li>2,303³</li> <li>15</li> <li>0.08²</li> </ul>
	<ul> <li>Electricity Exported Annually (GWh) – Total</li> <li>Average annual growth rate (%) (2019-2022)</li> <li>Total revenue (USD)</li> </ul>	· 395 · -5
	<ul> <li>Transmission Network (HV, MV), Total: Length (km)</li> <li>Voltage (kV):</li> <li>Transfer Capacity – MW/MVA</li> </ul>	<ul> <li>7,274<sup>4</sup></li> <li>66; 88; 132; 220; 330;42</li> </ul>
	Rehabilitation:	· 1,607
	Expansion:	
	<ul> <li>Distribution Network (LV), Total: Length (km)</li> <li>Voltage (KV):</li> <li>Transfer Capacity – MW/MVA</li> </ul>	<ul><li>119,784</li><li>11; 33</li></ul>
	Rehabilitation:	· No data
	Expansion:	· No data
	<ul><li>Access to energy (electricity and clean cooking) (%)</li><li>Electricity (%)</li><li>Clean cooking (%)</li></ul>	<ul> <li>62<sup>5</sup></li> <li>38.6<sup>6</sup></li> </ul>
	Number of new on-grid connections (by customer <sup>7</sup> type)	· 22,665 <sup>8</sup>

<sup>&</sup>lt;sup>2</sup> Zimbabwe Economic Update. Issue 4. World Bank. December 2023

<sup>&</sup>lt;sup>3</sup> Electricity imports and export data from International Energy Agency, 2022

<sup>&</sup>lt;sup>4</sup> Transmission and Distribution network data from GET. Invest Zimbabwe report, 2019

<sup>&</sup>lt;sup>5</sup> Zimbabwe 2022 Population and Housing Census Report, Volume 1. ZIMSTAT

<sup>&</sup>lt;sup>6</sup> National Clean Cooking Strategy 2023

<sup>&</sup>lt;sup>7</sup> Residential, commercial, industrial, mining, etc

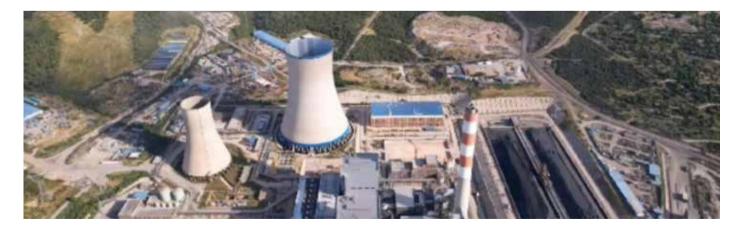
<sup>&</sup>lt;sup>8</sup> The 2019 ZETDC annual report states that ZETDC served a total 778,555 customers at the end of 2019 and achieved 22,665 new connections in 2019 and 27,247 in 2018.



Pillars	Metrics /Indicators	Data (latest available)
Pillar 2: Regional integration	Transmission Interconnectors (HV), Total: Length (KM); Voltage (KV):     Transfer Capacity – MW/MVA	No data
	Energy traded in Bi-lateral Power Purchase Agreements / MOU:	No data
	Energy Traded in Power Pool:	No data
	Transmission Wheeling Charges (USD per kWh)	No data
	Payables (arrears) / Receivables (USD)	• 119 million <sup>1</sup> ;
Pillar 3: DRE / Clean Cooking	Number of mini-grid connections (by customer <sup>2</sup> type) (last 3 years, if possible)	850,000 rural households
	Number of Solar Home Systems (last 3 years, if possible)	No data
	Number of Clean Cooking Connections / Appliances	No data
	<ul> <li>Total (Private) investment needs by 2030 (USD) &gt; Grid Expansion (%)</li> <li>&gt; Grid densification (%)</li> <li>&gt; Mini grid (%)</li> <li>&gt; Solar home systems (%)</li> <li>&gt; Clean cooking) (%);</li> </ul>	<ul> <li>2,171 billion<sup>3</sup></li> <li>35</li> <li>30</li> <li>5</li> <li>30</li> </ul>

As of June 30, 2021, the bulk of the amounts payable for imports (US\$119 million or 91 percent of the total) were in arrear Residential, commercial, industrial, mining. ZESA financial diagnostic 2023. Zimbabwe National Electrification Analysis, 2022

Pillars	Metrics /Indicators	Data (latest available)
Pillar 5: Sector Reforms and Sustainable Utilities	<ul> <li>Utility financial profitability (per audited accounts) – Net income/loss (ZWL¹ amount for ZETDC; ZPC)</li> <li>ZPC</li> <li>ZETDC</li> <li>(Regulator) Tariff policy, average end-user tariffs (USc/ kWh) and trajectory to full cost reflectivity (current % of recovered costs to</li> </ul>	<ul> <li>6,548.52</li> <li>8,328.24</li> <li>16.08/kWh²</li> </ul>
	<ul> <li>achieve 2030 target)</li> <li>Total Subsidy Amount (USD)<sup>3</sup>; Path/Timelines to full cost reflectivity<sup>4</sup> (estimate);</li> </ul>	No data
	<ul> <li>Aggregate Technical Commercial &amp; Collection (ATCC) Losses: (%)</li> <li>% reduction targets per year.</li> <li>Number of metered /unmetered customers</li> <li>Number of prepayment meters</li> </ul>	• 60 <sup>5</sup> • 1 <sup>15</sup>
	<ul> <li>Level of Debt – Payables to local suppliers (ZWL)</li> <li>Payables for imports (USD)</li> <li>Level of arrears – Receivables from Government / Public entities (any pre-payment meters). (%)</li> <li>Revenues by breakdown of customer types (e.g. from households, industries, commercial, mines, imports, etc).</li> <li>Capital restructuring plan (yes/no)</li> </ul>	<ul><li>9,857.80 million</li><li>119 million</li><li>71</li></ul>
	Load shedding average number of hours per day)	· 12-14 <sup>2</sup>
Additional - Cross-Cutting for consideration	<ul> <li>Capacity Building requirements (US\$) (at all levels)</li> <li>Alignment of Power Sector Least Cost Expansion Plans to country Long Term Strategies and NDCs/Paris Agreement – Yes/No</li> <li>Household Affordability (i.e. % of household disposable income available to be spent on energy services and/or % of Households Receiving Energy Subsidies)</li> <li>Jobs or gender % in energy sector</li> </ul>	· X · No



From 2019, reporting currency changed from the US\$. ZESA

<sup>2</sup> A tariff adjustment of 21% was approved for implementation on 1 December 2023 effectively taking the tariff level to USc16.08/kWh

<sup>3</sup> This could include subsidies for electricity generation, distribution, renewable energy projects, and consumer subsidies

<sup>4</sup> Tariff Subsidy for Consumers (USD/kWh); Cost Recovery Rate (%); Dedicated Funds (esp. Rural) (USD, annual)

<sup>&</sup>lt;sup>5</sup> ZESA financial diagnostic 2023

### **Annex III:** Transfer Capacity for interconnection

Interface	Contingency	Transfer Limit(MW)	Limiting Factor
Phokoje – Insukamini (South–North)	Spitkop – Gaborone South	583	Thermal loading violation on the Kopfontein – Gaborone South 132kV
Kariba North – Kariba South	KafueG – LeopH	439	Lmfez – LeopH line overload
Kariba South – Kariba North	Alaska – Sherwood	453	Thermal loading violation at Sherwood – Selous line
Songo – Bindura	Alaska – Sherwood	452	Thermal overload on the Sherwood – Selous line
Bindura – Songo	Alaska – Sherwood	216	Thermal overload on the Alaska – Mutora 132kV line
CEC – SNEL (ring open)	1X Leopards Hill – Kabwe	329	Thermal loading violation on the two remaining Leopards Hill – Kabwe lines
Insukamini – Phokoje	Alaska – Sherwood	543	Thermal loading of LSMFEZ – Leopards Hill line
ZAMBEZI HVDC (ZESCO – NAMPOWER)	Gerus – Omburu 220kV	202	Line loading violation at Victoria Falls – Sesheke line
ZAMBEZI HVDC (NAMPOWER – ZESCO)	Gerus – Omburu 220kV	170	Line loading violation at Victoria Falls – Mukuni line



# **Annex IV:** ZETDC Transmission Lines ans Substations Inventory as at 31/12/24

Description	Size/No.	Comments
Transmission line length (66kV – 420kV)	8,164.79km	Various lengths different capacities
Distribution Line Lengths (0.4kV - 33kV):	119,874km	Various length @ different capacities
Substations: 0.4 -11 to 400/330	30,139	Different amounts for different substations sizes



# **Annex V:** Operational Captive Power Projects for own use as at 10/03/2025

No	COMPANY/ INVESTOR	MW	TECHNOLOGY	LOCATION
1	Triangle Private Limited	35.00	Bagasse/	Triangle
			Thermal	
2	Hippo Valley Estates Pvt Ltd	39.00	Bagasse/	Hippo Valley
			Thermal	
3	Green Fuel Pvt Ltd	18.30	Bagasse/	Chisumbanje
			Thermal	
4	Manhize Resources (Private)	50.00	Coal-Fired	Manhize,
			Thermal	Mvuma
5	Padenga Holdings Limited	1.20	Solar PV	Kariba
6	Econet Wireless-Willowvale	0.45	Solar PV	Harare
7	Standards Association of Zimbabwe	0.19	Solar PV	Harare
8	Schweppes Limited- Harare	1.00	Solar PV	Harare
9	Old Mutual Life Assurance Company	0.65	Solar PV	Harare
	Zimbabwe			
10	Econet Wireless Zimbabwe – Msasa	0.11	Solar PV	Harare
11	Econet Wireless Zimbabwe- Graniteside	0.10	Solar PV	Harare
12	Econet Wireless Zimbabwe- Mutare	0.11	Solar PV	Mutare
13	Luxaflor Roses P/L	0.12	Solar PV	Concession
14	MD De Chassart & Son P/L t/a Surrey	0.12	Solar PV	Marondera
	Abattoir			
15	Schweppes Zimbabwe Limited- Beitbridge	0.56	Solar PV	Beitbridge
16	Tanganda Tea Company Limited	1.80	Solar PV	Chipinge
				District
17	Dormervale (Private) Limited	0.38	Solar PV	Marondera
18	Rift Valley Properties (Pvt) Ltd	0.50	Solar PV	Harare
19	Tanganda Tea Company Limited - Jersey	1.40	Solar PV	Chipinge
	Estates			
20	Tanganda Tea Company Limited- Tingamira	1.20	Solar PV	Chipinge
	Estates			
21	Caledonia Mining Services(Private) Limited	12.20	Solar PV	Gwanda
22	Charles Stewart Day Old Chicks Limited -	0.23	Solar PV	Chegutu
	Sun Valley Farm			
23	Hazeldale Enterprises (Private) Limited	1.00	Solar PV	Macheke
24	St Patrick's High School	0.16	Solar PV	Gweru
25	Charles Stewart Day Old Chicks (Private)	0.30	Solar PV	Chegutu
	Limited - Hatchery			
26	Rainbow Tourism Group Limited	0.30	Solar PV	Kadoma
27	Moores Farming	0.18	Solar PV	Darwendale
28	Kefalos Cheese Products (Pvt) Limited	0.60	Solar PV	Mubaira Road
29	Paramount Garments Exports (Private)	0.55	Solar PV	Harare
	Limited			

30	Ally Property Investments (Private) Limited	0.17	Solar PV	Harare
31	Ariston Management Services (Private) Limited	0.50	Solar PV	Chipinge
32	Pharmaceutical Chemical Distributors (Private) Limited	0.12	Solar PV	Harare
33	Border Timbers Limited	0.81	Solar PV	Chimanimani
34	Proplastics Limited	0.41	Solar PV	Harare
35	Zimbabwe Platinum Mines (Private) Limited- Phase 1	35.00	Solar PV	Chegutu
36	Fletchers (Private) Limited	0.15	Solar PV	Guruve
37	Falcon College	1.00	Solar PV	Bulawayo
38	Sligo Farm (Private) Limited	0.50	Solar PV	Chinhoyi
39	Infrastructure Fund Zimbabwe	0.15	Solar PV	Harare
40	Tobacco Processors Zimbabwe (Private) Limited	3.10	Solar PV	Harare
41	Lancet Properties (Private) Limited	0.15	Solar PV	Harare
42	St John's College	0.20	Solar PV	Harare
43	St John's Preparatory School	0.20	Solar PV	Harare
44	Nottingham Estates (Private) Limited	2.25	Solar PV/Diesel	Beitbridge

## **Annex VI**: Operational Projects supplying other customers

No	COMPANY/INVESTOR	CAPACITY/MW	TECHNOLOGY	LOCATION
1	Zimbabwe Zhongxin Electrical Energy	50	Coal-Fired Thermal	Hwange
2	Thathile Investments	4.4	Solar PV	Bubi
3	Masvingo Solar Photovaltic Company	12	Solar PV	Bikita
4	Distributed Power Africa	3.5	Solar PV	Harare

### **Annex VII:** Transmission Use of System Charges

Transmission Use-Of-System Charge	USc
66kV- 400kV	1.79
Use-of-system loss charge 4% of Approved tariff	0.64
Total	2.43

### Annex VIII: Distribution Use-of-System charges

Transmission Use-Of-System Charge	USc /
Distribution Use-Of-System Charge	USc /kWh
Below 66kV	3.58
Use-of-system loss charge 10% of Approved tariff	1.61
Total	5.19

### Annex IX: Average Tariff Breakdown

	USc/kWh	% contribution
Purchase of Electricity	10.97	68.3%
Payroll	1.3	8.1%
Admin & general expenses	0.57	3.5%
Transmission cost	0.39	2.4%
Distribution Cost	1.27	7.9%
Depreciation & amortization	0.16	1.0%
2% Government IMTT	0.05	0.3%
ZERA fees	0.08	0.5%
Total Expenses	14.79	92.0%
Return on Assets	1.28	8.0%
Total Tariff	16.08	100.0%

### **Annex X:** Licensed Projects

				Capex	Investment
	Plant C	apacity (MW)	Technology	per kW	cost in US\$
1	Shilands Enterprises	345	Gas- fired	1800	621,000,000
2	Manicaland Bioenergy P/L	10	Biomass (Combined heat		
			and power plant)	1800	18,000,000
3	Lubimbi Power and Gas (Private) Limite	d 5	CBM Gas	1800	9,000,000
4	PER Group ventures	2,000	Coal	1800	3,600,000,000
5	Titan Power (Private) Limited	720	Coal-fired thermal	1800	1,296,000,000
6	Lafrica Energy (Private) Limited	150	Coal-fired thermal	1800	270,000,000
7	Bayrich Energy (Private) Limited	50	Concentrated Solar Power	1800	90,000,000
8	Tokwe Mukorsi Hydroelectric (Pvt) Ltd	15	Mini-hydro	2500	37,500,000
9	Steam Team	0.5	Mini-hydro	2500	1,250,000
10	Eastern Hydro and Electricity Supply				
	Company	2.4	Mini-hydro	2500	6,000,000
11	Tsanga Power Stations	2.15	Mini-hydro	2500	5,375,000
12	Rusitu Power Corporation Pvt Ltd	1	Mini-hydro	2500	2,500,000
13	Pelshong Investments (Private) Limited	1	Mini-hydro	2500	2,500,000
14	Nyakupinga Power Station (Private)		-		
	Limited	0.6	Mini-hydro	2500	1,500,000
15	ZFC Limited	5	Solar PV	1000	5,000,000
16	Solgas Energy (Private) Limited	10	Solar PV	1000	10,000,000
17	Gridpro (Private) Limited	56.25	Solar PV	1000	56,250,000
18	Yellow Africa Private Limited	50	Solar PV	1000	50,000,000
19	De Green Rhino Energy	50	Solar PV	1000	50,000,000
20	Sinogy Power Zimbabwe	175	Solar PV	1000	175,000,000
21	Solarwise Energy (Private) Limited	50	Solar PV	1000	50,000,000
22	TD Energy (Private) Limited	40.8	Solar PV	1000	40,800,000
23	The Solar Group Zimbabwe (Private)				
	Limited	50	Solar PV	1000	50,000,000
24	Indo Africa Power (Private) Limited	10	Solar PV	1000	10,000,000
 25	Pito Investments (Private) Limited	25	solar PV	1000	25,000,000
26	Energywise Equipment (Private) Limited		solar PV	1000	30,000,000
27	Africa Oracle Solar Generation Compan		solar PV	1000	25,000,000
28	Acacia Energy Company	50	solar PV	1000	50,000,000
 29	Riverside Power Station (Private) Limited		Solar PV	1000	7,500,000
30	Custodian Energy Group	50	Solar PV	1000	50,000,000
31	New Glovers Solar (Pvt) Ltd	10	Solar PV	1000	10,000,000
32	Equinox Energy P/L	10	Solar PV	1000	10,000,000
33	Planet Solar Zimbabwe (Pvt) Ltd	50	Solar PV	1000	50,000,000
34	Shangani Renewable Energy (Pvt) Ltd	25	Solar PV	1000	25,000,000

### **Annex X:** Licensed Projects

				Capex	Investment
	Plant C	apacity (MW)	Technology	per kW	cost in US\$
35	Mopower Solar (Pvt) Ltd	50	Solar PV	1000	50,000,000
36	Sable Solar Energy (Pvt) Ltd	50	Solar PV	1000	50,000,000
37	TD Energy (Private) Limited	36	Solar PV	1000	36,000,000
38	Zhenje Solar Park (Private) Limited	33	Solar PV	1000	33,000,000
39	Matshela Energy (Private) Limited	100	Solar PV	1000	100,000,000
40	Lumiger Solar (Private) Limited	50	Solar PV	1000	50,000,000
41	Accelerated Sustainable Power in Rene	wable Energy (AS	PIRE) (Private) Limited	10.2	Solar PV
100	0 10,200,000				
42	Parvalue Energy (Private) Limited	50	Solar PV	1000	50,000,000
43	Kujoke Africa Investments	6	Solar PV	1000	6,000,000
44	Gombe Power Solutions (Private) Limite	ed 50	Solar PV	1000	50,000,000
45	Alliance Africa Energy (Private) Limited	50	Solar PV	1000	50,000,000
46	Triangle Solar Systems (Private) Limited	45	Solar PV	1000	45,000,000
47	Murombedzi Solar Park (Private) Limite	d 10.5	Solar PV	1000	10,500,000
48	Cam and Motor Solar (Private) Limited	30	Solar PV	1000	30,000,000
49	Renco Solar (Private) Limited	15	Solar PV	1000	15,000,000
50	Murowa Solar (Private) Limited	15	Solar PV	1000	15,000,000
51	Dalny Solar (Private) Limited	15	Solar PV	1000	15,000,000
52	AF Power Zimbabwe (Private) Limited	50	Solar PV	1000	50,000,000
53	Chibani I Solar (Private) Limited	20	Solar PV	1000	20,000,000
54	Corezim Mining (Private) Limited	20.6	Solar PV	1000	20,600,000
55	Teges Solar (Private) Limited	5	Solar PV	1000	5,000,000
56	Zororo Energy Company Ltd	50	Solar PV	1000	50,000,000
57	Hapnust Investments P/L	5.071	Solar PV	1000	5,071,000
58	Camelzone Enterprises P/L	50	Solar PV	1000	50,000,000
59	EPCA South P/L	5	Solar PV	1000	5,000,000
60	Kusile Solar Park P/L	24	Solar PV	1000	24,000,000
61	Zimbabwe Platinum Mines				
	(Private) Limited	105	Solar PV	1000	105,000,000
62	Zimbabwe Platinum Mines				
	(Private) Limited	45	Solar PV	1000	45,000,000
63	Centrawest (Private) Limited	12	Solar PV	1000	12,000,000
64	Centrawest (Private) Limited	20.8	Solar PV	1000	20,800,000
65	CDF Resources (Private) Limited	12	Solar PV	1000	12,000,000
66	Afrobliss Energy	10.5	Solar PV	1000	10,500,000
67	Chatsworth Energy Private Limited-				
	Temporary Licence	5	Solar PV	1000	5,000,000
68	Ruzawi Solar Park Private Limited	5	Solar PV	1000	5,000,000

### **Annex X:** Licensed Projects

				Capex	Investment
	Plant	Capacity (MW)	Technology	per kW	cost in US\$
69	Sunports Energy Private Limited	5.5	Solar PV	1000	5,500,000
70	TD Energy (Private) Limited	65	Solar PV	1000	65,000,000
71	Ravensus (Private) Limited	50	Solar PV	1000	50,000,000
72	TD Energy (Private) Limited	20	Solar PV	1000	20,000,000
73	Geo Pomona Waste Management				
	(Private) Limited	22	Waste to Energy	1800	39,600,000
74	Manhize Resources (Private) Limited	50	Coal-Fired Thermal	1800	90,000,000
75	Munyati Evergreen Energy				
	(Private) Limited	100	Solar PV	1000	100,000,000
76	SunOne (Private) Limited	100	Solar PV	1800	180,000,000
77	SunOne (Private) Limited	130	Solar PV	1800	234,000,000
78	SunOne (Private) Limited	70	Solar PV	1000	70,000,000
79	Prestige Massive (Private) Limited	1,000	Coal-Fired Thermal	1800	1,800,000,000
80	Centrachine (Private) Limited	100	Solar PV	1000	100,000,000
81	Bindura Solar (Private) Limited	25	Solar PV	1000	25,000,000
82	Eureka Solar (Private) Limited	7.07	Solar PV	1000	7,070,000
83	Siyavuma Incorporated (Private) Limite	ed 50	Solar PV	1000	50,000,000
84	Guarantee Risk Solar Energy				
	(Private) Limited	10	Solar PV	1000	10,000,000
85	Zhongjin Heli Energy (Private) Limited	135	Coal-Thermal	1800	243,000,000
86	London Bridge Power (Private) Limited	d 40	Solar PV	1000	40,000,000
87	Innscor (Africa) Limited	0.739	Solar PV	1000	739,000
88	Innscor (Africa) Limited	0.986	Solar PV	1000	986,000
89	Breckridge Investments (Private) Limit	ed 4	Solar PV	1000	4,000,000
90	Yellowcob Enterprises (Private) Limited	d 0.96	Solar PV	1000	960,000
91	Mvura Dam Pvt Ltd	0.4	Mini Hydro	2500	1,000,000
	Total	7,130			10,937,701,000

### **Annex XI:** Prioritized Projects

				Capex	Investment
	Plant	Capacity (MW)	Technology	per kW	cost in US\$
1	Prospect lithium	70	Coal-Fired Thermal	1800	126,000,000
2	Manhize Resources (Private) Limited	50	Coal-Fired Thermal	1800	90,000,000
3	Huoyuntong	300	Coal-Fired Thermal	1800	540,000,000
4	Titan Power (Private) Limited	270	Coal-fired thermal	1800	486,000,000
5	Zhongjin Heli Energy (Private) Limited	100	Coal-Thermal	1800	180,000,000
5	Prestige Massive (Private) Limited	300	Coal-Fired Thermal	1800	540,000,000
7	Geo Pomona Waste Management				
	(Private) Limited	22	Waste to Energy	1800	39,600,000
3	Tokwe Mukorsi Hydroelectric (Pvt) Ltd	15	Mini-hydro	2500	37,500,000
)	Gwayi-Shangani	10	Mini-hydro	2500	25,000,000
10	Tsanga Power Stations	3.5	Mini-hydro	2500	8,750,000
11	Gairezi	30	Mini-hydro	2667	80,000,000
12	ZFC Limited	5	Solar PV	800	4,000,000
13	Solgas Energy (Private) Limited	10	Solar PV	800	8,000,000
14	Gridpro (Private) Limited	56.25	Solar PV	800	45,000,000
15	Energywise Equipment (Private) Limited	d 30	Solar PV	800	24,000,000
16	Riverside Power Station (Private) Limite	ed 7.5	Solar PV	800	6,000,000
17	Equinox Energy P/L	10	Solar PV	800	8,000,000
18	Murombedzi Solar Park (Private) Limite	ed 10.5	Solar PV	800	8,400,000
19	Cam and Motor Solar (Private) Limited	30	Solar PV	800	24,000,000
20	Renco Solar (Private) Limited	15	Solar PV	800	12,000,000
21	Murowa Solar (Private) Limited	15	Solar PV	800	12,000,000
22	Dalny Solar (Private) Limited	15	Solar PV	800	12,000,000
23	Zimbabwe Platinum Mines				
	(Private) Limited	105	Solar PV	800	84,000,000
24	Zimbabwe Platinum Mines				
	(Private) Limited	45	Solar PV	800	36,000,000
25	Centrawest (Private) Limited	12	Solar PV	800	9,600,000
26	Centrawest (Private) Limited	20.8	Solar PV	800	16,640,000
27	CDF Resources (Private) Limited	12	Solar PV	800	9,600,000
28	Chatsworth Energy Private Limited-				
	Temporary Licence	5	Solar PV	800	4,000,000
29	Ruzawi Solar Park Private Limited	5	Solar PV	800	4,000,000
30	Sunports Energy Private Limited	5.5	Solar PV	800	4,400,000
31	Ravensus (Private) Limited	50	Solar PV	800	40,000,000
32	Centrachine (Private) Limited	100	Solar PV	800	80,000,000
33	Bindura Solar (Private) Limited	25	Solar PV	800	20,000,000
34	Eureka Solar (Private) Limited	7.07	Solar PV	800	5,656,000

### **Annex XI:** Prioritized Projects

				Capex	Investment
	Plant C	apacity (MW)	Technology	per kW	cost in US\$
35	Guarantee Risk Solar Energy				
	(Private) Limited	10	Solar PV	800	8,000,000
36	London Bridge Power (Private) Limited	40	Solar PV	800	32,000,000
37	Innscor (Africa) Limited	0.739	Solar PV	800	591,200
38	Innscor (Africa) Limited	0.986	Solar PV	800	788,800
39	Breckridge Investments (Private) Limited	d 4	Solar PV	800	3,200,000
40	Yellowcob Enterprises (Private) Limited	0.96	Solar PV	800	768,000
41	National Foods Limited	2.74	Solar PV	800	2,192,000
42	Agric Value Chain Zimbabwe				
	(Private) Limited	1.28	Solar PV	800	1,024,000
43	Carrera Ventures (Private) Limited	0.473	Solar PV	800	378,400
44	David Whitehead Textiles Zimbabwe				
	(Private) Limited -Chegutu	3.5	Solar PV	800	2,800,000
45	David Whitehead Textiles Zimbabwe				
	(Private) Limited -Kadoma	3.37	Solar PV	800	2,696,000
46	Africa University	0.25	Solar PV	800	200,000
47	Zimgold Oil Industries (Private) Limited	1.782	Solar PV	800	1,425,600
48	Greenagric Solar Park (Private) Limited	1	Solar PV	800	800,000
49	Innscor (Africa) Limited -Bakers Inn Hara	are 1.232	Solar PV	800	985,600
50	Innscor (Africa) Limited -Bakers				
	Inn Bulawayo	0.986	Solar PV	800	788,800
51	Dolcin Trading (Private) Limited	50	Solar PV	800	40,000,000
52	ZETDC competitive procurement	370	Solar PV	800	296,000,000
53	Other	110	Solar PV	800	88,065,600
54	Wind competitive procurement	100	Wind	1200	120,000,000
55	Munyati Evergreen Energy				
	(Private) Limited	100	Solar PV	1000	100,000,000
	Total	2,471			3,332,850,000
	BESS	450		1063	478,350,000
	Total including BESS				3,811,200,000