Energy Projects Pipeline

1. Thermal Energy

1.1. Zimbabwe Power Company Unit (1-6) Repowering Project

Project Name	**Zimbabwe Power Company Unit 1-6 Repowering Project**
Sector	Energy
Project Promoter	**Eng. Alfred Sithole,** Hwange Repowering Project Manager, Zimbabwe Power Company, ASithole@zpc.hps.co.zw, +263773334954
Location	Mat North, Hwange
Investment Type-Financing Model	Loan / PPP model
Project Scope	The project involves upgrading of Stage 2 Units (5 and 6), which includes installing new plant and equipment to enhance the capacity of the Units to 335 MW each. Additionally, it aims to restore the Stage 1 Units (1- 4) to their original design capacity of 120 MW each.
Project Rationale / Project Objectives	The project aims to enhance the capacity and efficiency of existing power units to meet growing energy demands in Zimbabwe, aligning with national priorities for infrastructure development and Sustainable Development Goals (SDGs).
Project Cost	Estimated Overall project cost, including cost of land
Funding Required	USD852.3 million
Funding Utilisation	**Unit** — **Cost (USD)** **Unit 5 and 6** — $407,627,179.00 **Unit 1-4** — $444,684,195.00
Project Status	Brownfield (ongoing project)
Feasibility Studies	Pre-Feasibility Study Done
Project Economics	**Metric** — **Value** **Net Present Value (NPV)** — USD 2,028,094,306.00 **Payback Period** — 7 Years **Debt Service Coverage Ratio (DSCR)** — 2.827 **Return on Investment (ROI)** — 66.44% **Internal Rate of Return (IRR)** — 11.65% **Levelized Cost of Energy (LOCE)** — USD 49.37
Value Proposition/ Expectations and Contributions	**Advanced Readiness:** Approvals and permits are already secured, indicating the project is ready for implementation. **Investment Opportunity:** Seeking financial investment from potential investors to support project completion. **Attractive Returns:** Offering potential investors returns aligned with the project's risk profile, which may include equity stakes, regular dividends, or other financial incentives.

1.2. Zimbabwe Power Company Unit (9 &10) Expansion Project

Project Name	Hwange Power Station (9&10) Expansion Project
Sector	Energy and Power Generation
Project Promoter	Sydney Gata, Executive Chairman, ZESA Holdings (Pvt) Ltd Electricity Centre 25 Samora Machel Avenue Harare, Zimbabwe Tel: (024) 2 773388 Email: zesasocials@zesaholdings.co.zw Web address: www.zesaholdings.co.zw ZESA Holdings (Pvt) Ltd is a Zimbabwean state-owned firm that controls subsidiaries mandated to generate, transmit, and distribute electricity. It has delegated this task to its subsidiaries, Zimbabwe Power Company (ZPC) and Zimbabwe Electricity Transmission and Distribution Company (ZETDC). Other subsidiaries are ZESA Enterprises (ZENT), whose mandate is to pursue non-regulated business activities that add value to the ZESA Group, especially the electricity supply chain. Powertel Communications (Pvt) Ltd provides Information and Communication Technologies (ICT) services to the ZESA Group and sells excess capacity to other external customers
Location	Matabeleland North Province, Hwange Town.
Investment Type-Financing Model	The Proposed financing model is a Public Private Partnership arrangement, using Build Own Operate Transfer or Build Operate Transfer. Development Costs – Own Resources EPC Costs – Loan Facility
Project Scope	The Proposed Project aims to construct a thermal power plant in Hwange Town with a net sent-out power of 600MW. The Project includes the construction of a Short Transmission Line from the Proposed Site to the Hwange B Substation. Construction of a new transmission line from Hwange B Substation to Sherwood B substation. The Power Plant will include Boiler and Its Auxiliaries, Turbine and Its Auxiliaries, Generator and Its Auxiliaries, Balance of plant systems which among other systems include, Water Treatment Plant, Ash Handling Plant, Stacker Reclaimer including Coal Handling Plant, Step Up Transformers, Low Voltage Switchgear, Medium Voltage Switchgear, 400kV Transmission Line, Fabric Filter Plant and Flue Gas Desulphurisation Plant, Administration Offices etc.
Project Rationale / Project Objectives	• The Project seeks to augment the Base Load capacity of the Zimbabwean national grid.

<table>
<tr><th>Project Name</th><th>Hwange Power Station (9&10) Expansion Project</th></tr>
<tr><td></td><td>

Construction of another Thermal Power Plant is in line with the Country’s Vision 2030, which aims to achieve an upper-middle-income economy by 2030. This also takes into consideration the economy's growth, which has seen an increased generation forecasted.
Hwange has one of the largest coal reserves in the world, suitable for power generation. The availability of the coal resources makes it viable for additional Thermal Power generation projects to be pursued.
With the recent impacts of El Nino on Rainfall Patterns, which have affected the water levels at Kariba South Power Station, a reliable solution is required to cater to the growing need for electricity. In the last five seasons, generation has been dramatically affected by El Nino-induced droughts. It is wiser to have a baseload from reliable Coal-Fired Plants.
There is a growing power market locally and regionally. Hence, there are readily available off-takers for the new power plant

</td></tr>
<tr><td>Project Cost</td><td>

Estimated Cost of the Project is 1.5 billion dollars inclusive of Cost of Land and Development Costs
Actual project cost is US$1,284Billion, assuming an average cost of construction of US$2,5mil/MW, and utilisation of Asian Project Developers)

</td></tr>
<tr><td>Funding Required</td><td>US1.5 billion</td></tr>
<tr><td>Funding Utilisation</td><td>1. Pre-construction US$50 Million
2. Construction and US$1,350 Billion
3. Post-construction phases US$100 Million</td></tr>
<tr><td>Project Status</td><td>Project is Brown Field Project as there is construction of a new Power Plant and Transmission Infrastructure
The project is also a Yellow Field as there is a need to upgrade the Water Supply Facility from DEKA, and there is also a need to reinforce the Transmission Grid</td></tr>
<tr><td>Feasibility Studies</td><td>Pre-feasibility Studies are available</td></tr>
<tr><td>Project Economics</td><td>
<table>
<tr><td>NPV</td><td>US$36m,</td></tr>
<tr><td>Payback Period:</td><td>7 years</td></tr>
<tr><td>IRR</td><td>15.5%</td></tr>
<tr><td>WACC</td><td>11%</td></tr>
<tr><td>DSCR</td><td>3.6 (Average)</td></tr>
</table>

The ratios are based on the following assumptions:

Construction Period: 42 months
Plant Life 40 Years
Loan Repayment period 20 years with 7-year grace period
Funding : 70% Debt, 30% Equity

</td></tr>
</table>

Project Name	Hwange Power Station (9&10) Expansion Project
Value Proposition	Invest in the Hwange Power Station (9&10) Expansion Project, a strategic initiative to bolster Zimbabwe's energy security and support its Vision 2030 goals. This $1.5 billion project aims to add 600MW of reliable base load capacity to the national grid by constructing a state-of-the-art thermal power plant in Hwange, leveraging one of the world's largest coal reserves. With a strong local and regional power market, credible offtake agreements, and robust economic metrics including an NPV of $36 million, a 7-year payback period, and a 15.5% IRR, this project offers investors a compelling opportunity for significant returns within a stable and growing energy sector. The project is currently in the development stage, with permits and licenses to be obtained following the completion of the feasibility study.

2. Hydro Power Energy

2.1. Bikita Siya Dam 5 MW Mini-Hydro Power Project

Project Name	**Bikita Siya Dam 5 MW Mini- Hydro Power Project**
Sector	Energy – Hydro
Project Promoter	Mr. Peter Chibhi CEO Bikita Rural District Council, 0772245434, or 0772245435 bikitardc@gmail.com
Location	Masvingo Province, Bikita
Investment Type-Financing Model	PPP model
Project Scope	Construction of a 5 MW hydro power plant on Bikita dam owned by ZINWA (Zimbabwe National Water Authority), and the land belonging to Bikita RDC (Rural District Council). The proposed work breakdown structure includes: 1. Obtaining all approvals including generation license. 2. Civil works. 3. Procurement and installation of generators and turbines. 4. Construction of a 7 km access road. 5. Construction of transmission line and substation.
Project Rationale / Project Objectives	Address energy needs in Bikita and contribute to Zimbabwe's national energy security. Support sustainable development goals (SDGs) related to clean energy and infrastructure development.
Project Cost	USD14 million
Funding Required	USD14 million
Funding Utilisation	• **Pre-construction Phase**: Obtaining approvals and licenses. • **Construction Phase**: Civil works, procurement and installation of equipment, construction of access road, transmission line, and substation. • **Post Construction Phase**: Operational setup and initial maintenance
Project Status	Greenfield (New Project)
Feasibility Studies	No Feasibility Study Done
Project Economics	Detailed project metrics such as NPV, IRR and ROI will be availed once the FS is conclusion
Value Proposition	**Project Readiness**: Approvals and permits are yet to be secured, presenting an opportunity for early engagement. **Investment Needs**: Seeking USD 14 million for financing this project.

Project Name	Bikita Siya Dam 5 MW Mini- Hydro Power Project
	Offer to Investors: Potential returns from electricity sales and a stake in a sustainable energy project in Zimbabwe, aligned with national priorities and SDGs.

3. Solar Energy

3.1. Chiredzi 200 MW Solar Farm Project

Project Name	Chiredzi 200 MW Solar Farm Project
Sector	Energy – Renewable Solar
Project Promoter	**Eng. Wesley Kauma,** Town Secretary Chiredzi Town Council Cell: +26378105810 Email: weslykauma@gmail.com
Location	Chiredzi
Investment Type-Financing Model	Loan / PPP model
Project Scope	Establishment of a 200 Mw Photovoltaic Solar Power Plant as an IPP on 200 hectares of land in Ward 5, Chiredzi District. The project work breakdown is as follows: • Obtaining a Generation Licence from ZERA • EMA certification. • ZETDC approvals for specifications and designs for transmission line and solar farm. • Civil works such as Land clearance and construction of a 5 km access road, • Procurement and installation of solar equipment and transmission line and substation equipment. • ZETDC inspection and testing of installed equipment before commissioning. • Commissioning Test by ZETDC
Project Rationale / Project Objectives	The Chiredzi 200 MW Solar Farm Project addresses Zimbabwe's urgent energy needs by harnessing abundant solar resources to provide sustainable, renewable energy. It aligns with national priorities and SDGs by enhancing energy security, creating jobs, and reducing greenhouse gas emissions, thus supporting economic development and environmental sustainability. This project will significantly contribute to the country's efforts to diversify energy sources and mitigate climate change impacts.
Project Cost	USD200million
Funding Required	USD200million

<table>
<tr><td>Funding Utilisation</td><td>
<table>
<tr><th>Phase</th><th>Description</th><th>Estimated Cost (USD)</th></tr>
<tr><td>Pre-construction</td><td>Obtaining Generation Licence from ZERA - EMA certifies, ZETDC approvals for specifications and designs</td><td>$10 million</td></tr>
<tr><td>Civil Works</td><td>Country clearance and Construction of a 5 km access road</td><td>$20 million</td></tr>
<tr><td>Procurement and Installation</td><td>Procurement and installation of solar equipment, transmission line and substation equipment</td><td>$140K</td></tr>
<tr><td>Testing and Commissioning</td><td>ZETDC inspection and testing of installed equipment</td><td>$10 million</td></tr>
<tr><td>Contingency and Miscellaneous</td><td>Unforeseen expenses and additional costs</td><td>$20 million</td></tr>
<tr><td>Total Estimated Cost</td><td></td><td>$200 million</td></tr>
</table>
</td></tr>
<tr><td>Project Status</td><td>Greenfield (new project)</td></tr>
<tr><td>Feasibility Studies</td><td>No Feasibility Study Done</td></tr>
<tr><td>Project Economics</td><td>Detailed project metrics such as NPV, IRR and ROI will be availed once the FS is conclusion</td></tr>
<tr><td>Value Proposition</td><td>Approvals and Permits:
Generation License from ZERA needed
EMA certification required
ZETDC approvals for specifications and designs in progress
Investment Requirement:
Seeking USD 200 million in financing
Offer to Investors:
Opportunity to participate in a large-scale renewable energy project as a financing partner in a loan or PPP model.
Potential returns from the operation of a 200 MW solar farm under an IPP model.</td></tr>
</table>

3.2. Chiredzi Town Roof-Tops Solar System Installation

Project Name	**Chiredzi Town Roof-Tops Solar System Installation Project**
Sector	Energy
Project Promoter	**Eng. Wesley Kauma,**

<table>
<tr><th>Project Name</th><th>Chiredzi Town Roof-Tops Solar System Installation Project</th></tr>
<tr><td></td><td>Town Secretary
Chiredzi Town Council
Cell: +26378105810
Email: weslykauma@gmail.com</td></tr>
<tr><td>Location</td><td>Masvingo Province, Chiredzi</td></tr>
<tr><td>Investment Type-Financing Model</td><td>GI/ PPP model</td></tr>
<tr><td>Project Scope</td><td>Investors are invited to design and install solar power systems for various households and businesses in Chiredzi with varying capacities ranging from 0.5 kVa to 20 kVa, depending on the energy needs and usage patterns of each customer. The systems will consist of high-quality solar panels, inverters, and mounting systems, and will be designed to meet the current and future energy needs of each customer</td></tr>
<tr><td>Project Rationale / Project Objectives</td><td>The project aims to provide sustainable energy solutions aligned with national priorities and Sustainable Development Goals (SDGs).</td></tr>
<tr><td>Project Cost</td><td>US$21 million</td></tr>
<tr><td>Funding Required</td><td>US$21 million</td></tr>
<tr><td>Funding Utilisation</td><td>Funding will be utilised across the three phases of;
<table>
<tr><th>Category</th><th>Description</th><th>Estimated Cost (USD)</th></tr>
<tr><td>Pre-construction Phase</td><td>Feasibility studies, licensing, and initial project planning</td><td>$2 million</td></tr>
<tr><td>Construction Phase</td><td>Procurement and installation of solar systems</td><td>$18 million</td></tr>
<tr><td>Post Construction Phase</td><td>System testing, commissioning, and initial operations</td><td>$1 million</td></tr>
<tr><td>Total Estimated Cost</td><td>Overall project implementation cost</td><td>$21 million</td></tr>
</table></td></tr>
<tr><td>Project Status</td><td>Greenfield (New project)</td></tr>
<tr><td>Feasibility Studies</td><td>No Feasibility Study Done</td></tr>
<tr><td>Project Economics</td><td>TBA</td></tr>
<tr><td>Value Proposition</td><td>Project Readiness
• Approvals and Permits: Initial discussions with regulatory bodies have been initiated. The Chiredzi Town Council is committed to facilitating the necessary permits and approvals for project implementation.
• Feasibility Studies: While no formal feasibility studies have been conducted, the project scope and requirements have been clearly outlined, and the council is ready to move forward with investor collaboration.
Expectations from Investors</td></tr>
</table>

Project Name	Chiredzi Town Roof-Tops Solar System Installation Project
	• **Investment Requirement**: Seeking USD 21 million in financing under a General Investment (GI) or Public-Private Partnership (PPP) model. • **Expertise**: Investors are expected to bring in technical expertise in designing and installing solar power systems, along with the necessary capital. **Offering to Investors** • **Participation Opportunity**: Investors will have the opportunity to be part of a significant renewable energy project, gaining a foothold in the growing solar energy market in Zimbabwe. • **Returns**: Investors can expect returns commensurate with the project risks, with potential revenue streams from the sale of solar power to households and businesses. **Mutual Benefits** • **For the Local Authority**: The project will enhance energy security, reduce reliance on non-renewable energy sources, and support local economic development. • **For Investors**: The project offers a profitable investment opportunity in a growing market, with the potential for high returns and long-term sustainability. • **For the Community**: The solar installations will provide reliable and sustainable energy solutions, reducing energy costs and contributing to environmental sustainability.

3.3. Chivi 100 MW Solar Plant

Project Name	Chivi 100 MW Solar Plant
Sector	Energy
Project Promoter	**Dr. T Matavire** Chief Executive Officer Chivi Rural District Council chivirdc@gmail.com 0777039769
Location	Masvingo, Chivi

<table>
<tr><th>Project Name</th><th>Chivi 100 MW Solar Plant</th></tr>
<tr><td>Investment Type-Financing Model</td><td>JV/ PPP model</td></tr>
<tr><td>Project Scope</td><td>The project entails the establishment of a solar plant on a 100ha piece of land in Chivi District, Ward 8, Chitsaka Village. The proposed area has been pegged and reserved for the solar plant riding on its strength of receiving abundant sunlight and its proximity to the grid.</td></tr>
<tr><td>Project Rationale / Project Objectives</td><td>Aligns with national priorities and Sustainable Development Goals (SDGs) by promoting renewable energy and contributing to energy security.</td></tr>
<tr><td>Project Cost</td><td>USD75 million</td></tr>
<tr><td>Funding Required</td><td>USD75 million</td></tr>
<tr><td>Funding Utilisation</td><td>Funding Utilisation:
<table><tr><th>Phase</th><th>Description</th><th>Estimated Cost (USD)</th></tr><tr><td>Pre-construction</td><td>Land preparation, permits, approvals</td><td>$5 million</td></tr><tr><td>Construction</td><td>Infrastructure, solar panel installation</td><td>$65 million</td></tr><tr><td>Post Construction</td><td>Testing, grid connection</td><td>$5 million</td></tr><tr><td>Total Estimated Cost</td><td>Overall project implementation cost</td><td>$75 million</td></tr></table>
•</td></tr>
<tr><td>Project Status</td><td>Greenfield</td></tr>
<tr><td>Feasibility Studies</td><td>No Feasibility Study Done</td></tr>
<tr><td>Project Economics</td><td>Detailed project metrics such as NPV, IRR and ROI will be availed once the FS is conclusion</td></tr>
<tr><td>Value Proposition/ Expectations and Contributions</td><td>Project Readiness
Approvals and Permits: The project site has been identified and reserved, but approvals and permits are still pending. A feasibility study is required to finalize the project plan.

Investment Needs
Financing Requirement: Seeking USD 75 million through a Joint Venture (JV) or Public-Private Partnership (PPP) model to finance the pre-construction, construction, and post-construction phases of the project.

Offer to Investors
• Equity Stake: Investors will receive an equity stake in the project, providing them with ownership and a share in the profits.
• Steady Returns: The project promises potential for steady returns from the sale of renewable energy, contributing to long-term profitability.</td></tr>
</table>

Project Name	Chivi 100 MW Solar Plant
	• **Sustainable Development**: Investors will contribute to the achievement of national priorities and Sustainable Development Goals (SDGs) by promoting renewable energy and enhancing energy security in Zimbabwe. The Chivi 100 MW Solar Plant project represents a significant opportunity to invest in renewable energy infrastructure. With a total estimated cost of USD 75 million, the project aims to harness the abundant sunlight in Chivi District to generate sustainable energy, reduce reliance on non-renewable sources, and support local economic development. The Chivi Rural District Council is eager to partner with investors to bring this greenfield project to fruition, ensuring mutual benefits and a greener future for all.

3.4. Bikita 12 MW Solar Farm

Project Name	Bikita 12 MW Solar Farm
Sector	Energy – Renewable Energy
Project Promoter	**Mr. Peter Chibhi** CEO Bikita Rural District Council, 0772245434, or 0772245435 bikitardc@gmail.com
Location	Masvingo, Bikita
Investment Type-Financing Model	PPP model / IPP
Project Scope	The project entails the construction of a 12 MW Photovoltaic Solar Plant in Ward 24 of Bikita District under equity financing. The work breakdown is as follows: (i) Getting all approvals including the ZERA licence (ii) Procurement and installation of solar panels, (iii) Construction of 5 km access road,

<table>
<tr><th>Project Name</th><th>Bikita 12 MW Solar Farm</th></tr>
<tr><td></td><td>(iv) Construction of transmission line and substation.</td></tr>
<tr><td>Project Rationale / Project Objectives</td><td>The Bikita 12 MW Solar Farm project aligns with national priorities and Sustainable Development Goals (SDGs) in several ways:
• Renewable Energy: Promotes sustainable energy generation, contributing to Zimbabwe's commitment to renewable energy sources.
• Infrastructure Development: Enhances local infrastructure with a 5 km access road and transmission lines, supporting economic development in Bikita District.
• Environmental Impact: Reduces carbon footprint and air pollution by generating clean energy, thus contributing to climate action (SDG 13).
• Local Economic Growth: Creates employment opportunities during construction and potentially long-term operation, benefiting the local community (SDG 8).</td></tr>
<tr><td>Project Cost</td><td>USD18 million</td></tr>
<tr><td>Funding Required</td><td>USD18 million</td></tr>
<tr><td>Funding Utilisation</td><td>
<table>
<tr><th>Phase</th><th>Description</th><th>Estimated Cost (USD)</th></tr>
<tr><td>Pre-construction</td><td>Approvals (ZERA license, regulatory approvals), feasibility studies, detailed engineering design</td><td>$1 million</td></tr>
<tr><td>Construction</td><td>Procurement and installation of solar panels, construction of 5 km access road, construction of transmission line and substation</td><td>$15 million</td></tr>
<tr><td>Post Construction</td><td>Testing and commissioning, operational startup costs, initial maintenance and monitoring expenses</td><td>$2 million</td></tr>
<tr><td>Total Estimated Cost</td><td>Overall project implementation cost</td><td>$18 million</td></tr>
</table>
</td></tr>
<tr><td>Project Status</td><td>Greenfield (New project)</td></tr>
<tr><td>Feasibility Studies</td><td>No Feasibility Study Done</td></tr>
<tr><td>Project Economics</td><td>Detailed project metrics such as NPV, IRR and ROI will be availed once the FS is conclusion</td></tr>
<tr><td>Value Proposition</td><td>Project Readiness
• Approvals and Permits: Securing necessary approvals, including the ZERA license. Feasibility studies are planned but not yet conducted.
• Project Status: Greenfield stage with a defined scope and strategic location.
Investment Requirements
• Financing Needs: USD 18 million required under a Public-Private Partnership (PPP) to cover all project phases.
Offer to Investors
• Ownership/Equity Stake: Investors can gain equity stakes for long-term revenue from power sales to ZETDC.</td></tr>
</table>

Project Name	Bikita 12 MW Solar Farm
	Mutual Benefits • Renewable Energy Promotion: Supports Zimbabwe's renewable energy goals, enhancing energy security and sustainability. • Infrastructure Development: Improves local infrastructure, aiding economic growth in Bikita District. • Environmental Impact: Produces clean energy, reducing carbon footprint and pollution. • Economic Growth: Provides jobs during construction and operations, benefiting the local community. The Bikita 12 MW Solar Farm project represents a strategic investment opportunity in the renewable energy sector, promising both environmental and economic benefits. With a total estimated cost of USD 18 million, this project aims to harness solar energy to provide sustainable power, support local infrastructure, and promote economic growth in the region. The Bikita Rural District Council is keen to partner with investors through a PPP model to realize this greenfield project, ensuring mutual benefits and contributing to Zimbabwe's sustainable development goals.

3.5. City of Masvingo Solar Plant

Project Name	City of Masvingo Solar Plant (CMSP)
Sector	Energy – Renewable Energy
Project Promoter	**Eng E Mukaratirwa,** Town Clerk, City of Masvingo, Cell: 0773 223 531, E-mail: emukaratirwa@gmail.com
Location	City of Masvingo, Masvingo Province
Investment Type-Financing Model	PPP model
Project Scope	The City of Masvingo Solar Plant (CMSP) project involves the development and installation of a 3 MW solar photovoltaic (PV) system designed to maximize clean energy production. This initiative will include the construction of ground-mounted PV panels at a strategically located site, 6 km from Masvingo City, to ensure optimal solar exposure and energy efficiency. The project aims to deliver sustainable energy solutions, enhance local energy security, and contribute to environmental sustainability goals.
Project Rationale / Project Objectives	The project aims to: • Increase the generation of renewable energy. • Contribute to energy security and reliability in Masvingo. • Reduce greenhouse gas emissions.

<table>
<tr><td></td><td>• Support sustainable development goals (SDGs), particularly SDG 7 (Affordable and Clean Energy).</td></tr>
<tr><td>Project Cost</td><td>USD3 million</td></tr>
<tr><td>Funding Required</td><td>USD3 million</td></tr>
<tr><td>Funding Utilisation</td><td>
<table>
<tr><th>Phase</th><th>Description</th><th>Estimated Cost (USD)</th></tr>
<tr><td>Pre-construction</td><td>Detailed engineering design, environmental assessments, securing permits and approvals</td><td>$0.5 million</td></tr>
<tr><td>Construction</td><td>Procurement of equipment and materials, construction of solar PV systems and related infrastructure</td><td>$2 million</td></tr>
<tr><td>Post Construction</td><td>Testing and commissioning, operational startup costs</td><td>$0.5 million</td></tr>
<tr><td>Total Estimated Cost</td><td>Overall project implementation cost</td><td>$3 million</td></tr>
</table>
</td></tr>
<tr><td>Project Status</td><td>Greenfield</td></tr>
<tr><td>Feasibility Studies</td><td>No Feasibility Study Done</td></tr>
<tr><td>Project Economics</td><td>Detailed project metrics such as NPV, IRR and ROI will be availed once the FS is conclusion</td></tr>
<tr><td>Value Proposition</td><td>The City of Masvingo Solar Plant (CMSP) is in the greenfield stage, with approvals and permits pending as part of the development plan.

The project aims to secure USD 3 million in full financing through a Public-Private Partnership (PPP) model, covering all phases from pre-construction to post-construction.

Investors will benefit from equity participation and potential returns based on Internal Rate of Return (IRR) and Return on Investment (ROI).

The solar plant will enhance renewable energy generation, improve local energy security, reduce greenhouse gas emissions, and foster economic growth by creating jobs and supporting sustainable development goals.</td></tr>
</table>

3.6. Harare 50 MW Solar Plant

Project Name	**Harare -50MW solar plant**
Sector	Energy – Renewable Energy
Project Promoter	**Eng H.A. Chisango** Town Clerk, City of Harare +263 024275333,

<table>
<tr><td></td><td>Email: townclerk@hararecity.co.zw</td></tr>
<tr><td>Location</td><td>Harare Metropolitan Province, City of Harare</td></tr>
<tr><td>Investment Type-Financing Model</td><td>PPP model</td></tr>
<tr><td>Project Scope</td><td>The project involves establishing multiple solar plants with capacities ranging from 5 to 50 MW on council-owned land, farms, and rooftops. The generated electricity will primarily power local water and sewer treatment plants, with any surplus energy fed into the national grid through net metering arrangements.</td></tr>
<tr><td>Project Rationale / Project Objectives</td><td>the rationale behind the project is to enhance energy self-sufficiency and sustainability by generating renewable solar power to support essential municipal services like water and sewer treatment. By utilizing council-owned land and rooftops for solar installations, the project aims to reduce operational energy costs, minimize environmental impact through clean energy, and contribute excess electricity to the national grid, thereby supporting broader energy security and sustainability goals.</td></tr>
<tr><td>Project Cost</td><td>USD50 million</td></tr>
<tr><td>Funding Required</td><td>USD50 million</td></tr>
<tr><td>Funding Utilisation</td><td><table>
<tr><th>Category</th><th>Description</th><th>Estimated Cost</th></tr>
<tr><td>Pre-construction</td><td>Planning, design, permitting, and site preparation</td><td>$5 million</td></tr>
<tr><td>Construction</td><td>Procurement, installation of solar panels, and infrastructure</td><td>$40 million</td></tr>
<tr><td>Post Construction</td><td>Testing, monitoring, operational setup, and initial maintenance</td><td>$5 million</td></tr>
<tr><td>Total Estimated Cost</td><td></td><td>$50 million</td></tr>
</table></td></tr>
<tr><td>Project Status</td><td>Greenfield (New Project)</td></tr>
<tr><td>Feasibility Studies</td><td>No Feasibility Study Done</td></tr>
<tr><td>Project Economics</td><td>Detailed project metrics such as NPV, IRR and ROI will be availed once the FS is conclusion</td></tr>
<tr><td>Value Proposition</td><td>Project Readiness: The project is in the greenfield stage, with approvals and permits pending.
Investment Requirements: The City of Harare seeks full financing of USD 50 million under a Public-Private Partnership (PPP) model.
Offer to Investors: Investors will gain a long-term revenue stream from power sales agreements, contribute to sustainable development goals by supporting renewable energy, and potentially benefit from tax incentives or other financial advantages.</td></tr>
</table>

3.7. Chitungwiza Roof-Top Photovoltaic Solar Energy

Project Name	Chitungwiza Rooftop photovoltaic solar energy
Sector	Energy – Renewable Energy
Project Promoter	**Mr. Japson Nemuseso,** Acting Town Clerk, Chitungwiza Municipality, jnemuseso@chitungwiza.co.zw
Location	Harare, Chitungwiza
Investment Type-Financing Model	PPP model / IPP
Project Scope	The Chitungwiza Rooftop Photovoltaic Solar Project involves leasing rooftops across various buildings within Chitungwiza and installing advanced solar photovoltaic (PV) systems to harness renewable energy. This project encompasses the identification and leasing of suitable rooftops on residential, commercial, and public buildings, followed by the procurement and installation of high-efficiency solar panels, inverters, and mounting systems. The initiative includes site assessments, engineering design, and integration of solar systems with existing electrical infrastructure. The generated solar power will be used to meet local energy needs, reduce electricity costs, and contribute surplus energy to the national grid, thus supporting the city's sustainability goals and reducing overall carbon emissions.
Project Rationale / Project Objectives	The Chitungwiza Rooftop Photovoltaic Solar Energy Project aims to: • Promote renewable energy generation. • Reduce carbon emissions and environmental impact. • Provide sustainable energy solutions to Chitungwiza. • Support national priorities for renewable energy development and contribute to achieving Sustainable Development Goals (SDGs), particularly SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action).
Project Cost	USD25 million
Funding Required	USD25 million

<table>
<tr><td>Funding Utilisation</td><td><table>
<tr><th>Category</th><th>Description</th><th>Estimated Cost</th></tr>
<tr><td>Pre-Construction</td><td>Site assessments, rooftop leasing, engineering design, and permitting</td><td>$5 million</td></tr>
<tr><td>Construction</td><td>Procurement and installation of solar panels, inverters, and mounting systems</td><td>$15 million</td></tr>
<tr><td>Post-Construction</td><td>Testing, system integration, operational setup, and initial maintenance</td><td>$5 million</td></tr>
<tr><td>Total Estimated Cost</td><td></td><td>$25 million</td></tr>
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<tr><td>Project Status</td><td>Greenfield (New Projects)</td></tr>
<tr><td>Feasibility Studies</td><td>No Feasibility Study Done</td></tr>
<tr><td>Project Economics</td><td>Detailed project metrics such as NPV, IRR and ROI will be availed once the FS is conclusion</td></tr>
<tr><td>Value Proposition</td><td>The Chitungwiza Rooftop Photovoltaic Solar Energy Project offers a strategic opportunity for investors to engage in a high-impact renewable energy initiative. The total funding requirement is USD 25 million.

The project is at the greenfield stage, with approvals and permits still pending.

Investors will benefit from potential returns based on project performance, equity stakes, and contributions to sustainable development.

The project supports Chitungwiza’s energy needs, reduces carbon emissions, and aligns with national and global sustainability goals.</td></tr>
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