Solar Empowerment: Fueling Rural Business Growth in Zimbabwe

Introduction:

Greetings! I'm Simbarashe Gwenzi, the Project Lead at the helm of an extraordinary team from Zimbabwe, dedicated to championing renewable energy solutions. Alongside me are Mukudzei Gwenzi, our Youth Focal Lead and innovator in solar technology; Shirley Munjanga, our adept Tech Specialist; and Kudzai Munyaradzi, our insightful Gender Specialist.

Together, we are united in our commitment to combat climate change and energize communities through our project, the 'Green Energy Accelerator.'



Y4C Green Energy Accelerator Project Team

Our Collective Journey Towards Climate Action:

Each of us brings a unique story and motivation to this endeavor. My journey into climate action was sparked by witnessing the struggle for reliable energy access in our rural areas. Mukudzei, with his passion for technology, is driven by the potential of solar energy to transform lives. Shirley's expertise in IT is crucial in integrating innovative tech solutions in our kiosks. While Kudzai's focus on gender brings an essential perspective to our work, ensuring inclusivity

and broader social impact. A study by the International Renewable Energy Agency (IRENA) suggests that women are underrepresented in the energy sector, holding only about 32% of jobs in renewables, which is higher than the traditional energy sector (22%) but still shows a gap. In rural Zimbabwe, the participation of women in energy-related entrepreneurship is even lower due to socio-economic barriers and lack of access to finance and training.

Project Overview:

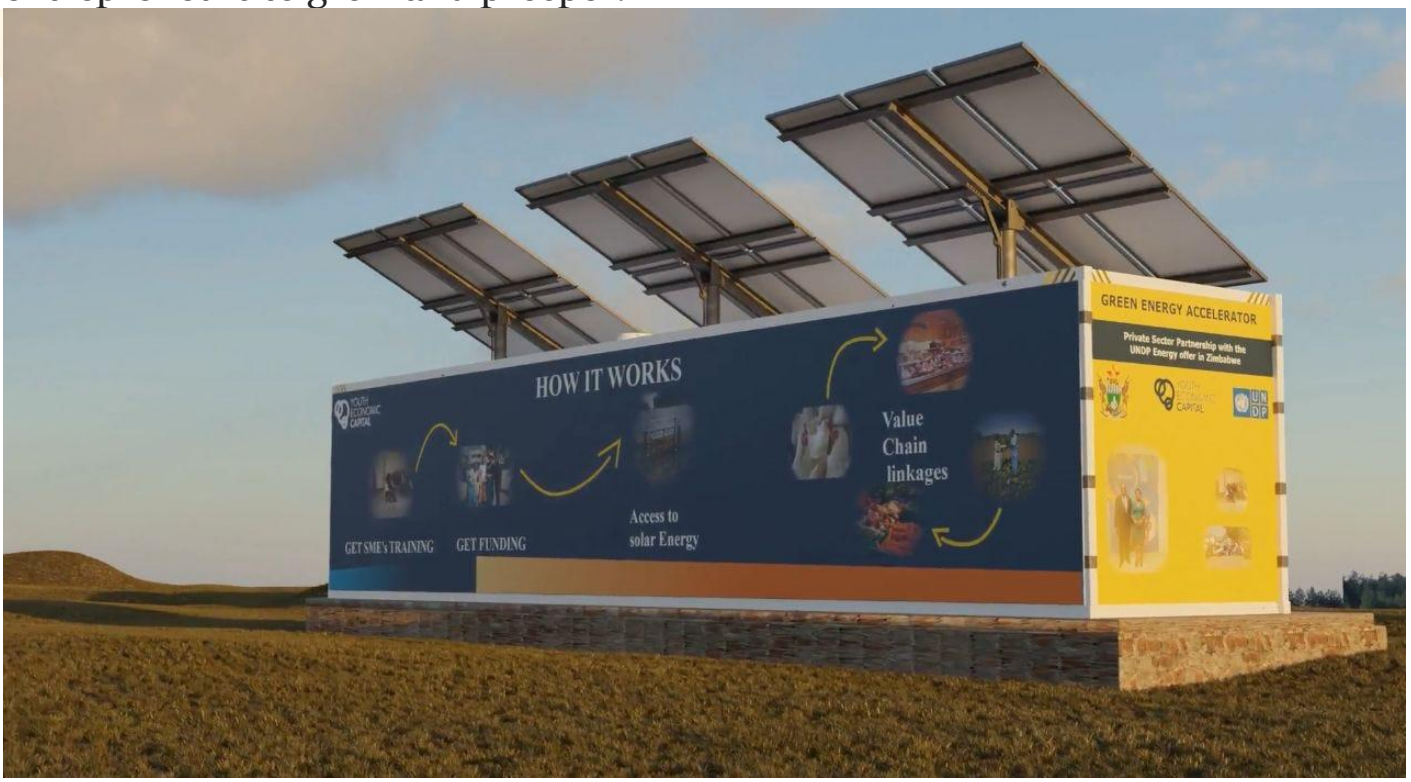
The 'Green Energy Accelerator' is at the heart of our mission. It's a project that introduces solar-powered kiosks to rural businesses, providing them with a reliable source of energy. In Mashaba, rural Zimbabwe, Kudzi, an 18-year-old orphan and sole breadwinner for her two siblings, faced significant challenges with her small grocery business due to unreliable electricity access. Her daily struggle included the inability to store perishable goods and limited operating hours, impacting her income and her ability to provide for her family. The introduction of a solar-powered kiosk in her community marked a turning point. It enabled Kudzi to refrigerate products, extend business hours, and offer additional services like mobile phone charging, leading to increased sales and opportunities. This transformative change not only improved Kudzi's business prospects but also empowered her as a young entrepreneur, setting a positive example in her community.

Our aim is to tackle both energy access challenges and to help mitigate climate change.

Innovation and Our Approach:

What sets us apart is our approach to combining renewable energy with sustainable community development. YEC's pay-as-you-go solar solutions and Shirley's implementation of the SoshoPay technology, YEC's tech solution that offers pay-as-you-go financing for sustainable energy products, enabling

underbanked communities to access solar systems and household devices through manageable installment payments; are pioneering efforts in this field. Our strategy goes beyond energy provision; it's about enabling local entrepreneurs to grow and prosper.



Green Energy Accelerator Model Illustration. Copyright (YEC).

Inspiration Behind Our Project:

Our project was born from real-life challenges. Seeing the direct impact of energy scarcity on communities and local businesses compelled us to seek solutions that are not only sustainable but also empower local economies. Our project directly contributes to the empowerment of local economies in several key ways:

1. **Boosting Local Businesses:** By providing reliable access to solar energy through our kiosks, we enable local businesses, like Kudzi's grocery store, to extend their operational hours and preserve perishable goods.

This directly translates into increased sales and revenue for these businesses.

2. **Job Creation:** The installation and maintenance of solar kiosks generate employment opportunities in the community. For instance, locals are trained and employed to manage the kiosks, handle maintenance, and provide customer service, thereby creating new job opportunities and enhancing skill sets within the community.

3. **Enabling New Ventures:** Access to electricity opens doors for new types of businesses that were previously unfeasible due to energy constraints. For example, individuals can now consider enterprises like internet cafes, electronic charging stations, or refrigeration services for perishable goods.

4. **Stimulating Agricultural Productivity:** In rural areas, where agriculture forms the backbone of the economy, solar energy can power irrigation systems, leading to increased agricultural productivity, better crop yields, and higher incomes for farmers.

5. **Reducing Operational Costs:** By switching to solar energy, businesses save on the cost of alternative energy sources like diesel generators

Our Local Vision and Global Impact:

We envision a future where sustainable energy is the cornerstone of rural economic development in Zimbabwe. This vision aligns with our nation's broader goals of sustainable growth and climate resilience. We envision a future where sustainable energy acts as the cornerstone of rural economic

development in Zimbabwe. This vision is closely aligned with Zimbabwe's Nationally Determined Contributions (NDCs) under the Paris Agreement, where the country has committed to reducing its greenhouse gas emissions. Specifically, our project supports Zimbabwe's focus on expanding renewable energy sources as part of its NDCs, contributing to the country's goal of a 33% per capita emissions reduction by 2030.

Furthermore, our vision complements the objectives laid out in Zimbabwe's Renewable Energy Policy, which aims to increase the contribution of renewable energy in the national energy mix. This policy underscores the importance of renewable energy in enhancing energy access, particularly in rural and off-grid areas, which resonates with our goal of empowering these communities.

On a policy level, we advocate for enhanced support and incentives for renewable energy initiatives in rural areas. This includes streamlined processes for solar energy project approvals, financial incentives for rural renewable energy investments, and greater integration of renewable energy education in local development plans. Such policy advancements would not only accelerate the adoption of sustainable energy solutions but also ensure that these interventions are deeply integrated into Zimbabwe’s path to sustainable growth and climate resilience.

The Role of Y4C in Our Journey:

Being part of the Youth4Climate (Y4C) community has been transformative. The support from Y4C in funding and capacity building has been instrumental in turning our vision into a reality. We at YEC are committed to shaping a future where sustainable energy is the foundation of rural economic development in Zimbabwe, a vision in harmony with Zimbabwe's Nationally Determined Contributions (NDCs) under the Paris Agreement. Our project

directly supports the nation's goal to expand renewable energy sources, aligning with the aim to reduce greenhouse gas emissions by 33% per capita by 2030. Additionally, our efforts resonate with Zimbabwe's Renewable Energy Policy to enhance energy access, especially in rural and off-grid areas. To further this cause, we advocate for policy reforms that bolster support for renewable energy initiatives, including streamlined project approvals, financial incentives, and the integration of renewable energy education in development plans. These policy advancements are crucial for accelerating sustainable energy adoption and integrating these solutions into Zimbabwe’s sustainable growth and climate resilience pathway.

With the recent funding boost, we're poised to significantly expand our solar kiosk project, bringing sustainable energy to more communities and opening up new economic prospects. Our plan includes deploying additional solar kiosks in high-need areas, upgrading our technology with more efficient solar panels and advanced battery systems, and implementing smart energy management systems. We're also focusing on extensive training programs for local entrepreneurs and technicians, enhancing their ability to effectively use and maintain the solar kiosks. Our commitment extends to community engagement and education, where we'll conduct workshops to raise awareness about renewable energy benefits. A pivotal part of our plan is a pilot project supporting agricultural activities with solar energy, aimed at demonstrating the potential of solar power in improving agricultural productivity. Strengthening our monitoring and evaluation framework, we aim to track and optimize the impact of our expanded activities. Furthermore, we're dedicated to forging partnerships to enhance our project’s reach and share best practices, ultimately aiming to establish a replicable model for rural energy and economic empowerment that can be adopted in other regions.

Visual Narratives:



Our Gender Specialist, **Kudzai**, handing over equipment to women entrepreneurs in Mashaba, Gwanda South. Copyright (YEC).



Our Youth Focal Lead, **Mukudzei Gwenzi**, inspecting a wood-fired cook oven in Dete, Karoi. Copyright (YEC)

https://youtu.be/Y6e8VrWTevU?si=T-bcIzbzXGOaLxXa

Green Energy Accelerator Concept Video. Copyright (YEC).

Join Our Cause:

We invite you to be part of this journey. Your support, whether through spreading awareness or other means, can make a significant difference.

Our Commitment:

This blog represents our dedication and collective effort to address climate change. With a diverse team and a shared goal, we are paving the way for a sustainable future for all.

In unity,

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Want to know more about Youth4Climate and the work we do? Head to our Y4C platform!

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