

Renewable-Energy-Solutions-Programm (RES-Programm)

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<https://enpower.life/dena-res-project-uganda>



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¹ EA, IRENA, UNSD, World Bank, WHO. 2023. Tracking SDG 7: The Energy Progress Report. World Bank, Washington DC. © World Bank. (2023). *Access to electricity (% of population) - Uganda*. World Bank Open Data. https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=UG&name_desc=false

Bringing Solar Energy to Kampala: enPower.life's Success Story

Uganda has made significant strides toward sustainable energy solutions in recent years, addressing critical challenges such as unreliable electricity supply and environmental pollution. A landmark project exemplifying this progress is the collaboration between **enPower.life** and **Yujo Izakaya**, which resulted in the installation of a **40 kWp photovoltaic (PV) plant and solar charging stations for electric motorcycles (E-Bodas) and electric cars (E-Cars)** at the Nekosero shopping and lifestyle complex in Kampala. This project not only supports sustainable energy adoption but also enhances the growing e-mobility sector and promotes gender inclusion in Uganda.



Figure 5: Yujo Izakaya

Uganda's energy sector has long faced challenges, with only 47.1%¹ of the population having access to electricity as of 2022¹. In rural areas, this figure drops to 35.9%¹, highlighting a

¹ EA, IRENA, UNSD, World Bank, WHO. 2023. Tracking SDG 7: The Energy Progress Report. World Bank, Washington DC. © World Bank. (2023). *Access to electricity (% of population) - Uganda*. World Bank Open Data. https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=UG&name_desc=false

significant disparity in energy availability. The national grid is often unreliable, leading businesses and households to rely on diesel generators, which are expensive, environmentally harmful, and pose health risks due to air pollution. Founded on over 25 years of German engineering expertise, enPower.life aims to provide affordable, clean, and reliable solar energy solutions to small and medium-sized enterprises (SMEs) in Uganda. By offering solar PV systems through a lease model, enPower.life eliminates the barrier of high upfront costs, enabling businesses to transition to sustainable energy sources without significant financial strain. The company's goal is to provide SMEs with a reliable alternative that ensures energy independence while reducing operational costs and environmental impact.

When Yujo Izakaya, a Japanese fusion restaurant established by entrepreneur Hanif Rehemtulla, sought to integrate sustainability into its operations within the Nekosero complex, enPower.life identified an opportunity to collaborate and bring renewable energy to the heart of Kampala. In mid-2022, enPower.life and Yujo Izakaya embarked on a joint project to install a 35 kWp rooftop solar PV system atop the restaurant to supply clean energy to the businesses within the Nekosero complex, reducing dependence on the unreliable grid and costly diesel generators. Executed with the expertise of our Engineering, Procurement, and Construction partner Equator Solar, the installation was completed to high engineering and efficiency standards. However, as the project unfolded, it became clear that it had the potential to expand beyond providing electricity to commercial spaces and could address Kampala's pressing transportation challenges by incorporating e-mobility solutions.

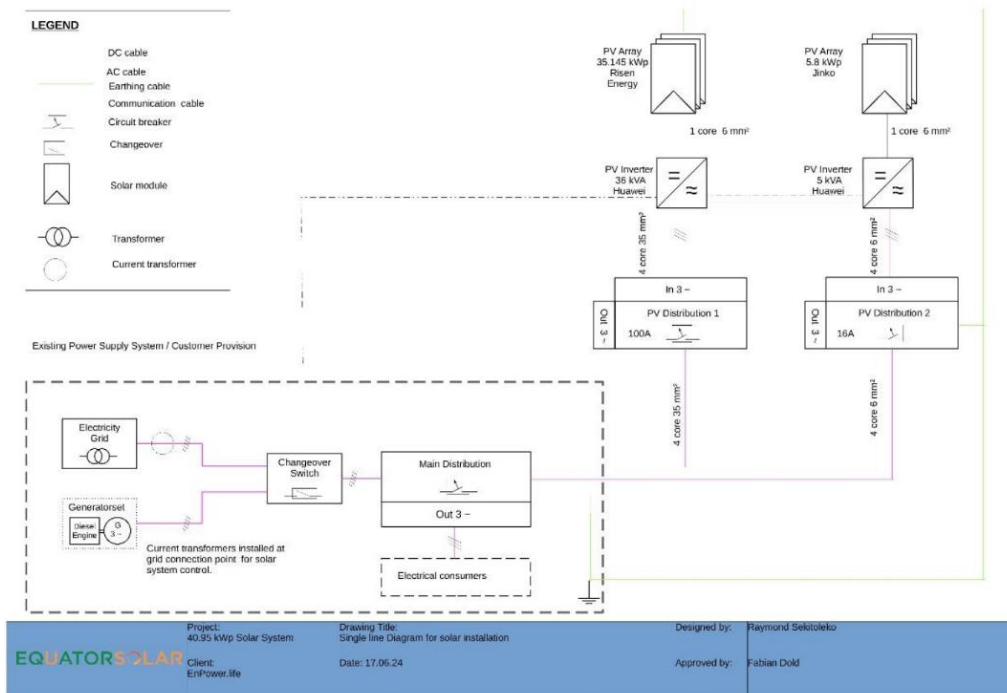


Figure 6: Overview circuit diagram

Kampala's urban transport system relies heavily on motorcycles, commonly known as bodas, which serve as a primary mode of transport for many residents but contribute significantly to urban air pollution and greenhouse gas emissions due to their petrol-based engines. Recognizing the need for cleaner alternatives, the project expanded its scope to include a solar-powered charging station for E-Bodas, a move that was largely influenced by the **Women on Wheels** program, founded by **Liliane Felix** of Women Rising for Africa. This initiative is designed to empower women by providing training in motorcycle riding, traffic laws, first aid, self-defense, and basic business skills, which was crucial given that women comprised less than 2% of Uganda's professional drivers. In 2024, enPower.life responded to this opportunity by installing an additional 5 kWp PV system near the entrance of the Nekosero complex, specifically dedicated to powering a solar charging station for E-Bodas and E-Cars, thus ensuring that electric vehicle users had access to an affordable, renewable charging infrastructure while simultaneously advancing gender inclusion by providing women riders with a reliable charging solution.



Figure 7: Inauguration ceremony I.

The project's success was strongly supported by the **German Energy Agency's (dena)** Renewable Energy Solutions Programme, which played a crucial role in facilitating its development. The dena project provided enPower.life with valuable expertise, financial backing, and networking opportunities that enabled the company to scale its impact more effectively. Through dena's support, enPower.life was able to optimize its project design, integrate international best practices in renewable energy, and enhance its credibility among potential partners and customers. Furthermore, the collaboration with dena opened doors to new stakeholders in the renewable energy and e-mobility sectors, allowing enPower.life to expand its reach and accelerate the adoption of solar-powered mobility solutions in Uganda.

The culmination of these efforts was celebrated on November 14, 2024, with an official inauguration ceremony at Yujo Izakaya. The event drew around 100 guests, including

government officials, renewable energy experts, e-mobility advocates, and members of the press, all eager to witness the operational PV plant and charging stations in action. The ceremony featured speeches from key figures such as **Thomas Frank**, CEO of enPower.life, who emphasized the company's mission to deliver clean and affordable energy solutions to Ugandan businesses, and **Hanif Rehemtulla**, founder of Yujo Izakaya, who shared his perspective on integrating sustainability into business operations and the impact of the solar project on the Nekosero complex. **Claudia Ardelean** from dena stressed the importance of international collaboration in advancing renewable energy initiatives, while **Hon. (Prof) Robinah Nanyunja, President of the Uganda Solar Energy Association (USEA)**, highlighted how the project was reshaping Uganda's renewable energy landscape and helping bridge gender gaps in the transport sector. Additional insights were provided by **Sandra Graf** of Wilhelm Büchner University, who presented research on how solar-powered e-mobility initiatives could empower women and transform societal norms. The German Ambassador to Uganda, **H.E. Matthias Schauer**, highlighted the project as a model for sustainable development and international cooperation in his closing remarks at the inauguration.



Figure 8: Inauguration ceremony II.

The event's highlight was the ribbon-cutting ceremony, which officially commissioned the PV plant and charging stations, followed by a guided tour that allowed attendees to witness the system's functionality and integration with the e-mobility infrastructure firsthand. As the event transitioned into networking and press interactions, discussions centered on the future of renewable energy in Uganda, with participants exchanging ideas, forming partnerships, and exploring potential areas for expansion. The public attention generated by the event played a key role in attracting further interest in enPower.life's work, with numerous businesses and organizations reaching out in the aftermath to explore potential collaborations. The high visibility of the inauguration helped position enPower.life as a leading provider of sustainable energy solutions in Uganda, leading to an increase in customer inquiries and investment opportunities.

Since the successful inauguration of the Yujo Izakaya plant, enPower.life has continued to expand its impact. The company has since installed four additional photovoltaic plants, each contributing to CO₂ emission reductions and providing businesses with a reliable alternative to the national grid. The growing demand for tailored renewable energy solutions has also led to rapid expansion within enPower.life itself, with its employee count more than doubling from four to nine since the Yujo Izakaya project, with further positions to be filled in the coming months to meet the increasing demand for solar energy services. This growth reflects the broader enthusiasm for renewable energy solutions within Uganda's business community, as hundreds of SMEs are now in discussions with enPower.life to find energy solutions suited to their needs.

enPower.life's ability to provide value lies not only in its high-quality solar PV installations but also in its customer-oriented approach. The company's lease-based business model ensures that businesses can transition to renewable energy without financial barriers while benefiting from lower operational costs and a more reliable power supply. Additionally, enPower.life places a strong emphasis on long-term customer support, offering maintenance services and consultation to help businesses maximize the efficiency of their solar systems. Through its commitment to innovation, sustainability, and inclusivity, enPower.life has demonstrated that renewable energy solutions can be both practical and economically viable, positioning itself as a key player in Uganda's transition toward a cleaner, more independent energy future.

The enPower.life and Yujo Izakaya partnership serves as a compelling case study of how renewable energy, e-mobility, and gender inclusion can intersect to create meaningful change. By combining solar power with a forward-thinking approach to transportation and business, the project addresses multiple societal and environmental challenges simultaneously. As Uganda continues its journey toward a more sustainable and inclusive future, initiatives like this will play a crucial role in driving meaningful progress, proving that when stakeholders from different sectors collaborate with a shared vision, transformative solutions become possible.