



# Health Electrification Champions

This profile is part of a series sponsored by the Health Electrification and Telecommunications Alliance (HETA) on diverse champions for health facility electrification (HFE) in sub-Saharan Africa. In sharing these profiles, HETA aims to highlight health, electrification, and digital connectivity or telecommunications professionals in HETA countries who have helped accelerate electricity and digital access in healthcare facilities while also supporting the inclusion of women and youth.



*Challenge yourself. Stretch yourself. So, you can reach your highest potential. You will make mistakes, but that is the only way you will grow.*



## Jodie Wu

Jodie is the CEO of OffGridBox, Inc., a company that powers livelihoods with clean water and energy across East Africa. Fluent in Swahili, an MIT trained engineer, and an entrepreneur who entered straight into social enterprise out of college, Jodie brings unique expertise to the field of international development. She lived and worked in Tanzania for eight years, delivering life-enhancing solar lanterns, clean cookstoves, and agricultural tools to over 100,000 families before selling her company to Sun King and joining their leadership as VP of New Products in Kenya. Now splitting her time between Rwanda and DRC as CEO of OffGridBox, Jodie works across East Africa, focusing on powering health centers, supporting productive uses in refugee camps, and helping franchisees run water businesses through OffGridBox.

Tanzania, Uganda, and later, the DRC. My first role in OffGridBox was as a consultant, focusing on business development around our OffGridBox Pioneer to bring water and energy to 10 villages across Tanzania. As the project faced challenges due to delays from the civil contractors, I soon found myself playing a technical role similar to the one I had during college, using spanners and multimeters for hands-on work. I knew I had found my perfect match, bringing together my love for working in the field, building sustainable business models, and leveraging my technical skills.

I began working in healthcare electrification during COVID. OffGridBox was awarded our first health project as part of the Power Africa Off-Grid Project in Rwanda. There, we introduced vaccine refrigerators and sterilizers alongside our water filtration system, ensuring clean water for these health facilities.



### How did you come to work in the health electrification sector?

I started working in this field during COVID, when the opportunity arose to apply our OffGridBox Pioneer, a 2m x 2m x 2m container, to power hospitals in Rwanda. Here, we found that our energy and water kiosk could bring free power to health facilities while creating a sustainable business model by providing services to the surrounding community - selling purified water, charging power banks, and connecting nearby businesses. We soon found ourselves solarizing health facilities in



### What is your role in health facility electrification (HFE)? How does your role in health facility electrification impact the community and stimulate economic growth?

I knew there was a huge need for solar when I was in the field in 2010 selling income-generating agricultural tools, and everyone wanted to buy

my “expensive” solar light. I started by bringing one carton of lights, then ten cartons, and eventually, I was importing containers of solar lanterns to sell in villages. Most of our work consisted of bringing lighting and phone charging capabilities to the remotest areas.

Right now, I have three goals in the health sector:

1. To repair solar graveyards at health facilities instead of installing brand-new panels. We can leverage the power of the sun with these unused solar panels.
2. To create a model that covers the cost of operations and maintenance of the solar installations wherever OffGridBox works to demonstrate to health facilities that we are committed to ensuring the systems last 20 years and that we are invested in being a part of the journey.
3. To bring a solar intervention alongside energy efficient appliances, which has the biggest impact per dollar in tackling mortality in health facilities, where an energy cut is life or death for the patients.

Too often, health facilities are gifted solar systems that break within the first year of operation. As I see it, my role is to bring my technical knowledge as an engineer to ensure the impact of grant money is maximized from a technical perspective (repair rather than replace) and business perspective (cost savings and revenue generation with every installation), while also considering the unique needs of health facilities from country to country. We do not try to power the entire clinic, but only those services that are essential, which makes solar power accessible for more facilities, especially as they can solarize buildings month-by-month, which is more aligned with their budgets from year-to-year.

OffGridBox is bringing top-of-the line solar systems that last up to 10 years before needing a battery replacement and solar panels last 20 years. Combining this with our sterilizers for surgical equipment, our products commercially pay for themselves over the lifetime of the product. Moreover, we enable the digital health space, which cannot function without power and connectivity. We close the technology gap, enabling facilities that have shifted to electronic medical records to serve patients effectively and efficiently. When patients receive better service at hospitals, everyone wins.



## What motivates you in your work?

I have been working in solar for nearly 15 years, but nothing motivates me more than healthcare electrification. By eliminating electrical outages where oxygen is cut, anesthesiology machines stop working, and lights go out while doctors are performing surgeries on people whose lives hang by a thread, we enable doctors to do their jobs. When facilities pay for your service, you know that you are bringing value to them. We had 100% satisfaction from all the facilities we have electrified, and that makes me proud. Many of the facilities are already asking for more solar power, ready to pay for additional systems. We just need to figure out how to make it more accessible to them.



## Share an accomplishment related to HFE that you are most proud of.

Defining success is quite simple for us. Ultimately, what we care about is whether the client is happy 5, 10, or even 20 years down the line. Are they still using the system years later, and is it still meeting their needs?

Anybody can do an installation, but for us, operations and maintenance are the most essential parts of our work. Therefore, we work hard to ensure that for each issue that arises, our time for acknowledgement, intervention, and resolution is less than 24 hours.

As many people already know, Eastern Congo is a major conflict zone of DRC. We solarized six health facilities that have been by the war in North Kivu. I am most proud of the CSR Kaseghe health facility in that their actions showed that they truly valued our work. On July 2, 2024, the facility was informed that the rebel group M23 was coming. As they knew their equipment would be at risk, they removed their solar system from the walls, (we actually prefabricate everything on a board, so it was quite easy) and shifted their equipment to a place of safety. M23 ended up taking over the health facility and occupying it for 25 days. As soon as they left, the doctors of CSR Kaseghe called us for assistance to reinstall the solar system. Due to the simplicity of the system and that the roads were not passable due to M23's presence, we were able to remotely assist a local technician to complete the installation.



## Do you have any advice for women and youth pursuing a career in energy, health, telecoms, or digital innovation?

For women in this space, don't just be good, but be great at what you do. Working in a male-dominated space is difficult but master your art, and you will become a rare gem that brings tremendous value to your organization and have infinite opportunities at your doorstep. To all youth, both men and women, one of the biggest challenges of your time is getting a job. Employers will not hire you based on resume, but they will hire you based on your work ethic, honesty, and resilience.

If you are unable to land a job right away, go on a road trip to somewhere you've never been, study in virtual classrooms, grow your non-technical skills, or learn a new language. As someone working in multiple countries, those who speak multiple languages and have travelled into the unknown are the biggest asset to the team.

Don't be dissuaded by being the only female in the room; you are laying the groundwork for your daughters. And don't be dissuaded by being the youngest person in the room; I was a boss at 22 years old! By not holding back, you can be leagues ahead of your peers once you "grow up." So be spirited and chase your dreams.



## What are some untapped actions that the energy sector could focus on to accelerate progress in equitable HFE?

There are a number of actions that would allow for the acceleration of the energy sector:

1. Creating a centralized database of all health facilities across developing countries and their electricity status, their current energy sources, their existing solar systems so that we have a better idea of what is needed in the sector.
2. Exchanging data with the Ministry of Health of the project country to enable funders to quickly evaluate the impacts of solar before and after their intervention.
3. Procuring global SIM cards to remotely monitor facilities.

4. Coordinating with health organizations working in digital health, cold chain, and neonatal care so that resources are not duplicated but rather synergized for greater impact.
5. Lobbying telecommunications companies and banks to enable organizations to easily set up mobile money and bank accounts.

Finally, I believe the future of scaling healthcare electrification is through a special purpose vehicle where electrification is publicly owned but privately run. Blended financing models alongside carbon credits, donor funding, and private investment, whether from the health facility, community, or an outside party, could be one step in the right direction. Who should lead this conversation is yet to be determined, but these actions and changes would help remove many of the barriers to equitable Healthcare Facility Electrification.



## Closing thoughts: Is there anything else you would like to share about your experiences or insights in the energy and health sector?

Overall, I envision a future where no health facility relies on a generator or unreliable power. Instead, they will have battery systems for voltage stabilization or will have transitioned to using solar as their primary power source. Where the health facility's capital was once spent on fuel, this money will now be directed toward the payment for solar equipment, operations and maintenance, and improvements to medical equipment. People will gain access to reliable solar power while saving money and reducing greenhouse gas emissions.

As we solarize health facilities, there are two things we must not forget:

First, it is not just about conducting load assessments and solarizing a health facility but about looking at where we might introduce energy efficient medical equipment that is designed for regions where there are brownouts, excessive amounts of dust, and non-existent roads. Next, as a power provider, we connect to the health ecosystem that is related to affordable insurance, inventory management for drugs, pharmaceuticals, and vaccines, electronic medical records, and telemedicine. There is much more potential in this space than we, as HFE providers, can enable.

We connect to everything related to the healthcare system, so it is key that we involve these other critical stakeholders that truly want to scale healthcare electrification.

**About HETA** | The Health Electrification and Telecommunications Alliance (HETA) is a USAID Global Development Alliance and Power Africa's flagship initiative for health facility electrification and digital connectivity in sub-Saharan Africa. Our mission is to catalyze public-private partnerships

and sustainable business models that increase access to reliable, renewable energy and digital connections for 10,000 health facilities—vital improvements to support equitable access to lifesaving care across the region. Together with diverse partners from the public, private, and social sectors, HETA is making it easier and less costly to invest in the systems that power healthcare and productive uses of energy. To learn more, please contact [HETA@abtglobal.com](mailto:HETA@abtglobal.com).

