



Approach to Sustainability

We Care Solar recognizes that sustainability is one of the most important aspects of our work. Through our technical design, programmatic approach, and allocation of resources, we aim for Solar Suitcases installed at maternal health facilities to offer reliable lighting and electricity for at least 10 years.

In the countries where Solar Suitcases are helping save lives, there are many examples of other solar systems installed in rural environments that fail after a few months or remain unused for a number of reasons: poorly designed systems, lack of user and/or maintenance training, limited supplies or capacity to service the systems, and/or a lack of consensus or understanding of system ownership. Sustainability is an ongoing challenge for any organization, and especially for those with product-based interventions.

Sustainability has been a priority for We Care Solar from the very beginning and continues to be an essential component of our programs. We have strengthened our sustainability model by working closely with governments and implementing partners to co-create and implement a sustainability plan specific to each Light Every Birth country. For all programs, we aim for sustainability measures to be in place in the planning stage and support our partners in their efforts to maximize the lifespan of the Solar Suitcases. With more than 8,500 Solar Suitcases installed globally, We Care Solar is demonstrating the feasibility and reliability of solar for health care in resource-poor environments.

We frame our approach to sustainability through three key overarching areas based on UNF's "Lasting Impact" report:

- 1. Technical:** The award-winning Solar Suitcase is the product of 10 years of extensive in-field experience and research.
- 2. Organizational:** We Care Solar builds local capacity, ensures spare parts are available, and collaborates with in-country partners.
- 3. Economical:** Maintenance costs are supported through We Care Solar's "sustainability fund" and government commitments.

Technical	Organizational	Economical
<ul style="list-style-type: none">• Proper sizing: The solar panel provides sufficient energy to fully charge the battery every day, which increases the likelihood of achieving the maximum battery lifespan.• High quality parts: We use high-quality parts and custom-build the medical grade LEB lights to withstand harsh clinical environments.• Prevention of user abuse: Devices powered by the Solar Suitcase use	<ul style="list-style-type: none">• Collaboration with government and private partners: We develop and implement country-specific sustainability plans that include participation from both government and private partners, creating overlap and building in redundancy to ensure issues are addressed quickly and with adequate resources.• In-country capacity building: We train and hire local solar companies	<ul style="list-style-type: none">• Donor funding: We include installation and sustainability support in all donor budgets as part of a fundraising strategy.• We Care Solar technical assistance: We ensure we have the human and financial resources available to provide free remote technical assistance indefinitely in response to Solar Suitcase issues or questions.

Direct Current (DC), increasing efficiency, ensuring loads are matched to available power, and preventing attachment of customer appliances, such as TVs.

- **Safe:** The system wiring and electronics are protected and contained with the Solar Suitcase, which reduces harm to the installers and users as well as the equipment.
- **Ease of installation and use:** The Solar Suitcase has a design optimized by more than 10 years of field experience and research on human-centered design principles.
- **Hardware and tools included:** All hardware and tools required for installation and use are provided.



for installation, monitor quality control throughout the installation process, train health workers to use the system, and conduct maintenance training for local government.



- **In-country inventory of spare parts:** We include spare parts with every shipment.
- **Integration into government maintenance of equipment:** We work with government to include Solar Suitcase maintenance as part of their routine supervisory visits and upkeep of other health facility equipment.
- **Feedback mechanisms:** We include a phone number on the Solar Suitcase that health staff can use when there is a problem or to provide feedback.

- **Warranty:** We provide a two-year warranty for all Solar Suitcase batteries and key components.
- **Government budget to replace main battery:** We partner with governments that are willing to be involved from the beginning and agree that the ultimate goal is to have government cover the cost of battery replacement after five years.
- **Government in-kind support for routine performance checks:** Governments additionally provide in-kind support, such as staffing and vehicles, to promote sustainability.



- **Private Partnerships:** We also partner with local private companies to supplement and strengthen government-led sustainability efforts.

For general information or specific inquiries, please contact us at info@wecaresolar.org or +1 510 766 0206.