

Quality Assurance for Off-Grid Solar Powered Lights: A Brief Guide for Institutional Buyers

Why Quality is Important

The market for off-grid solar powered lights has expanded rapidly in recent years. Cumulative global sales over the past five years exceed 8 million units, and sales have grown at annual rates exceeding 100%. This has been driven by improvements in technology, reductions in manufacturing costs and the great demand for access to modern lighting. However, poor quality lights have also entered the off-grid lighting market and threaten to spoil customer trust of the technology.



Lighting Global—a joint IFC and World Bank program—is working to support sustainable growth of the global off-grid lighting market. In order for customers to invest in solar lights, they must be confident that the product they purchase will perform as promised and last for a reasonable period of time. However, many customers find it difficult to discern between good and poor quality products.

How Quality can be Assured

The quality verification program is a key component of Lighting Global’s effort to ensure consumer confidence and has become the international standard for off-grid lighting product quality assurance. Through this program, solar powered lights and solar home lighting kits of less than 10 W in size are quality verified through independent testing. Currently, over 45 products from more than 25 manufacturers are quality verified, representing a significant portion of the “branded” products in the market. Lighting Global’s quality assurance framework is used widely by governments, distributors and microfinance institutions as a guide for procuring and supporting quality-verified off-grid lighting products.

What Quality Verified Means

Lighting Global maintains the Quality Standards, a set of off-grid lighting benchmarks that set a baseline level of quality, durability, and truth-in-advertising to protect consumers. Products are rigorously tested against these Standards according to the Quality Test Method in International Electrotechnical Commission (IEC) Technical Specification 62257-9-5. Product testing is conducted at third-party, approved test laboratories using randomly-procured samples, and products that are verified to meet the Standards are listed on the [Lighting Global website](http://www.lightingglobal.org). Manufacturers are also required to provide at least a one-year warranty for quality verified products.

The Role of Institutional Buyers

Institutional (or bulk) buyers are responsible for purchasing large quantities of off-grid lighting products and have a considerable influence on the off-grid lighting market. Additionally, the end-consumers of bulk-purchased products do not have the option to choose the products purchased on their behalf. As such, it is particularly important for institutional buyers carrying out procurement of off-grid lighting products to select only quality products for their program beneficiaries. Procuring only quality verified products will also help to develop a common expectation for quality from manufacturers in the solar lighting market.

A Guide for Procurement Officers

How can you ensure that your organization buys only quality solar lighting products?

Step 1: Vendor Notification

If your organization has previously purchased solar lights or other off-grid lighting devices, you may wish to release a public notice informing potential vendors of your decision to adopt the Lighting Global Quality Standards. A template statement can be downloaded from our website and customized by adding your organization's letterhead and logo.

Step 2: Bidding Process

Include meeting the [Lighting Global Quality Standards](#) as a Requirement/Specification in your RFP or RFQ.

Step 3: Check Claims

Check bidders' claims of quality verification against the [Verified Product list](#) on the Lighting Global website. You may wish to request a copy of each bidder's Lighting Global Product Testing Verification Letter for your documentation.

Note:

If you already have an existing supplier but their products have not been quality verified, they may arrange for their products to be tested by [contacting Lighting Global](#). The quality verification process takes several months. As such, it is advisable to publish notice of your decision to shift to quality verified products well in advance.

Lighting Global's quality assurance framework only covers solar lighting products of less than 10 W in size, but we are currently in the process of expanding the framework to cover solar home system kits of greater than 10W.

Lighting Global may be contacted to assist with procurement through our [website](#).