

Procuring High-Quality Solar Appliances

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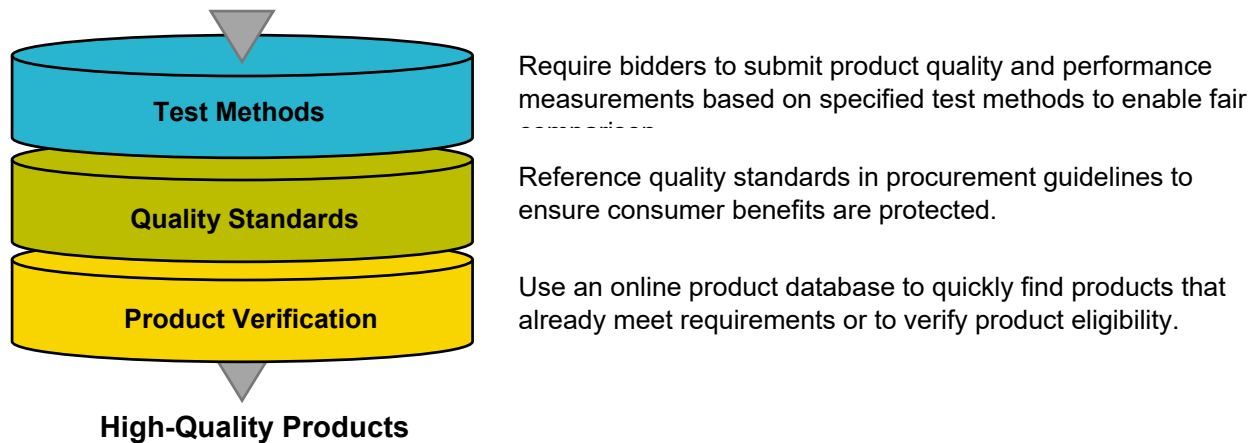
Why Procure High-Quality Solar Products

High-quality solar products can deliver life-changing energy services and can support the development of strong national markets for solar-powered technologies. Well-designed procurement initiatives can contribute to the growth of solar product markets by increasing the uptake of durable products, driving down costs, and pulling markets toward higher performance. Benefits of procuring quality products include:

- **Ensuring consumer protection:** Through procuring high-quality products, procurement agencies can have confidence that products will deliver high-quality and durable energy services to consumers.
- **Reducing market distortion:** To ensure the long-term sustainability of commercial markets, it is imperative to consider how specific interventions could affect those markets. If poor-quality products are promoted, this can undermine consumer confidence. An influx of poor-quality products, usually at below-market prices, can negatively distort the market.
- **Increasing program cost-effectiveness:** Through leveraging existing resources, procurement agencies can reduce costs and ensure investment in products that have been tested and evaluated. This reduces risks for both procurement agencies and consumers.

Services & Resources

This document describes a suite of services and resources that can help procurement agencies strengthen procurement guidelines and efficiently verify the eligibility of products. These services are provided through the Global LEAP Awards and VeraSol programs with support from the Efficiency for Access Coalition.



I. Define how the products are tested and evaluated

Standardized test methods are the foundation of procurement programs. By requiring potential bidders to submit product data that is measured using the same test method, procurement agencies can compare and objectively evaluate product performance and quality.

The Global LEAP Awards program has developed test methods for a suite of off-grid solar appliances including TVs, fans, refrigerators and solar water pumps. These test methods define a standard set of processes that laboratories use to evaluate product performance, enabling consistent comparisons of product quality and performance. The Global LEAP test methods leverage widely-accepted international test methods, developed in close collaboration with off-grid professionals and other market, product, and testing experts.

II. Define appropriate technical requirements

Building upon the test methods and available data, quality standards define a baseline level of quality to protect and better serve consumers, buyers, and sellers. Such standards are used to ensure that only companies and products that meet requirements gain access to the benefits of participating in market development initiatives, such as bulk procurement. Through incorporating quality standards in procurement guidelines, procurement agencies can ensure products procured meet a baseline level of quality and performance, and ensure that consumers are protected.

VeraSol, the leading quality assurance program for off-grid solar solutions, maintains and utilizes a set of quality standards to evaluate the quality and durability of solar appliances. VeraSol has developed quality standards for solar energy kits up to 350W, as defined in IEC TS 62257-9-8, that include small appliances such as radios. VeraSol has also piloted quality standards for off-grid appropriate televisions and fans, covering four core aspects of product quality: truth in advertising, safety, durability, and consumer protection.

Key resources that can help procurement agencies identify appropriate technical eligibility requirements include:

- [Global LEAP Off-Grid TV Test Method](#)
- [Global LEAP Off-Grid Fan Test Method](#)
- [Global LEAP Off-Grid Refrigerator Test Method](#)
- [Global LEAP Solar Water Pump Test Method](#)
- [Quality Standards for Off-Grid TVs and Fans](#)
- [Quality Standards for Solar Energy Kits \(IEC TS 62257-9-8:2020\)](#)

III. Verify Product Eligibility

Procurement agencies can simplify procurement decisions by screening the products that have already been tested and comparing performance and quality to identify high-quality and affordable solar products. The [VeraSol Product Database](#) is an open-access digital tool that hosts performance data for 500+ solar products, all on a single platform. All products in the database have undergone rigorous testing by accredited test laboratories according to IEC or Global LEAP test methods.

For products that are not listed in the VeraSol Product Database, procurement agencies can require product suppliers to submit products for testing and evaluation.

Through the Efficiency for Access Coalition Secretariat, technical assistance may be available to support data analysis and performance benchmarking to set reasonable technical eligibility requirements for public procurement programs. Support and advice are also available to procurement agencies on verifying the performance of products submitted as part of bids and determining their eligibility. Key resources include:

- [Appliance Testing Process](#)
- [VeraSol Product Database](#)

Learn More about Our Programs



Efficiency for Access

Efficiency for Access is a global coalition promoting energy efficiency as a potent catalyst in clean energy access efforts. Currently Efficiency for Access Coalition members lead 12 programs and initiatives spanning three continents, 44 countries, and 22 key technologies. The Efficiency for Access Coalition is jointly coordinated by CLASP and the UK's Energy Saving Trust. Learn more: EfficiencyforAccess.org



The Global LEAP Awards

The Global LEAP Awards is an international competition to identify and promote the world's best off-grid appliances, accelerating market development and innovation. This unique program has evolved into a trusted global brand that serves as the de facto source of accurate, actionable information about the quality and energy performance of off-grid appliances. Over the past seven years, the competition has grown to include five product categories (fans, refrigerators, TVs, electric pressure cookers, solar water pumps) and two challenges (solar e-waste and off-grid cold chain). Learn more: GlobalLEAPawards.org



VeraSol

Verasol supports high-performing, durable off-grid solar solutions that expand access to modern energy services. An evolution of Lighting Global Quality Assurance, VeraSol strives to make safe, affordable, and durable products the default option in the market. VeraSol's core services help sector actors implement and improve quality assurance across all areas of the market. Learn more: VeraSol.org