



# The relationship between solar module quality and price



## Overview

With solar panel prices tumbling, project developers will need to be vigilant about quality. Comprehensive product testing could be a vital safeguard as PV manufacturers struggle to retain their margins, according to Everoze's Martin Laing and Gauthier Dambrine. Cost savings of a few tenths of a cent per watt. The analysis and cost model results in this presentation ("Data") are provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy LLC ("Alliance") for the U. Department of Energy (the "DOE"). As is so often the case, things have come full circle over the past decade. Every new iteration of Kiwa PV Evolution Labs' (PVEL) Module Reliability Scorecard comes with its. With silver prices nearing \$50 per ounce, researchers from the University of New South Wales (UNSW) and the Fraunhofer Institute for Solar Energy Systems (Fraunhofer ISE) tell pv magazine that efforts to reduce silver use in solar cells will not compromise module quality if properly engineered. NLR analyzes manufacturing costs associated with photovoltaic (PV) cell and module technologies and solar-coupled energy storage technologies.

## Article Content

Solar Manufacturing Cost Analysis | Solar Market Research

These manufacturing cost analyses focus on specific PV and energy storage technologies—including crystalline silicon, cadmium telluride, copper indium gallium diselenide, ...

Silver prices surge, yet "thriftig" poses little threat to ...

With silver prices nearing \$50 per ounce, researchers from the University of New South Wales (UNSW) and the Fraunhofer Institute for Solar ...

PV Tech Power 38: BESS pricing in focus, solar ...

Volume 38's cover story is an in-depth look at how Chinese dominance and global expansion have powered a PV price war that threatens to ...

Proposing to optimize the price and warranty of photovoltaic modules ...

The main goal of this paper is to optimize the price and warranty period of PV modules so that the environmental and socioeconomic benefits of PV modules can be further promoted.

Module quality is suffering as PV producers cut costs

This has also affected the price of the main components to build modules, including polysilicon and wafers, which have recently continued to ...

PRICE INDEX | January 2026

Every month we publish a current price index on the development of wholesale prices of solar modules. In doing so, we differentiate between the main technologies available on the market.

Shining a light on solar module quality - pv magazine USA

With solar panel prices tumbling, project developers will need to be vigilant about quality. Comprehensive product testing could be a vital safeguard ...

Quantifying the cost savings of global solar photovoltaic ...

Here we assess the cost savings from a globalized solar photovoltaic (PV) module supply chain. We develop a two-factor learning model using historical capacity, component and input material...

Excessive cost-cutting puts solar module reliability at risk

With PV module manufacturers having aggressively cut costs to compete in the ongoing price war, the negative consequences are starting to filter through. Recent failure rates in testing ...

Reflections on 15 Years of PV Module and System Price Declines ...

Having a Domestic Module supplier (or combination Domestic/Imported) helps to reach the minimum 40% threshold. Having a Domestic Solar Cell really helps the numerator.

## Contact Us

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