

SunPower Solar – the Greatest Total Value in Sustainable Energy

Recent announcements by SunPower competitors touting low-cost, high-efficiency modules have caused many buyers to mistakenly assume they can buy solar similar to SunPower’s high-quality, high-performance modules at a lower price. This is not true. SunPower solar provides the greatest total value for you and for all commercial and residential solar customers.

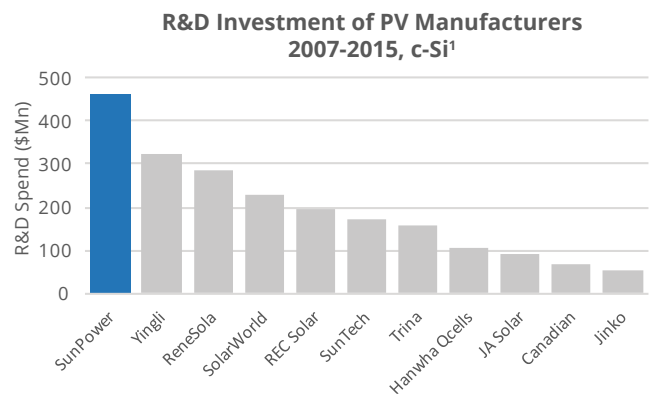
Simplicity

- Fundamentally better technology that is more durable and reliable than anything else on the market
- Excellent return on your investment (based on yearly expected energy cost savings)
- A superior, industry-leading 25-year warranty covering service, product and power for worry-free protection
- The solid backing of a financially sound company owned by Total, the world’s 11th largest company

SunPower – A History of Relentless Innovation and the Pursuit of Excellence

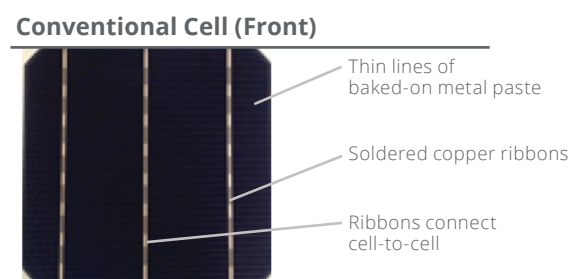
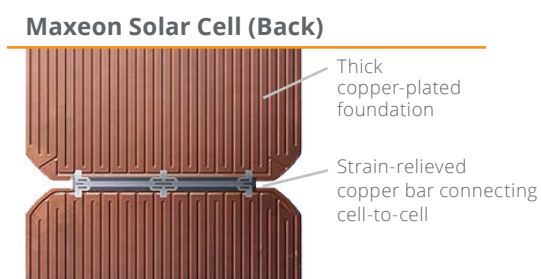
SunPower has been innovating relentlessly for more than 30 years.

- \$450M: From 2007 through 2017 SunPower spent more money in R&D than any other manufacturer of crystalline module (over \$450 MM).¹
- 116 patents: Between 2002 and 2014 SunPower filed more patents for solar energy technologies than any other company. Today, SunPower has more than 600 patents.²



SunPower’s Fundamentally Different Technology

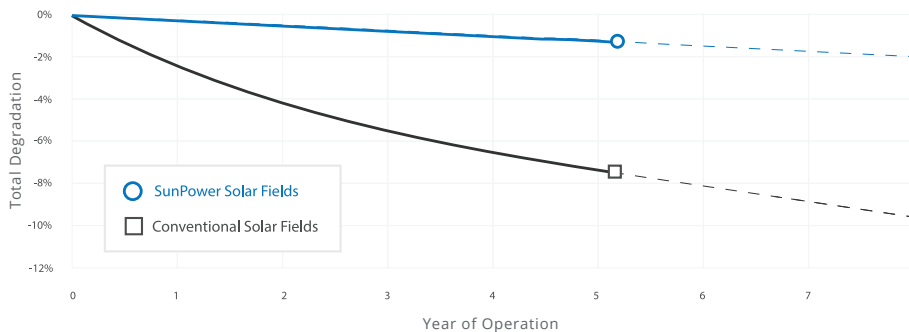
SunPower modules have always been, and are still today, fundamentally different than those of all other manufacturers, even high efficiency modules. While other modules may initially offer solid productivity and performance, this does not last. Even high-end, high-efficiency modules are still subject to the same degradation over time from which all front contact cell technology suffers. The fundamental difference with SunPower is the copper backed cell. This copper backing, along with many other superior technologies, allows SunPower modules to be 5 to 10% more efficient, degrade 50 to 58% more slowly, and be more durable over time. This is vital for your investment in solar, because it means you get the greatest total value over the life of your investment.



SunPower’s Superior Durability

In the most comprehensive independent degradation study ever done, SunPower’s industry leading low degradation was confirmed by Black & Veatch, one of the most experienced Independent engineers in the solar industry.³ This study tracked more than 800,000 panels wired to 400 individually-monitored inverters across 144 sites, for time spans averaging six years, including SunPower and non-SunPower modules. SunPower guides to a median degradation rate of 0.25%/year.⁴

Fleet Wide Module Degradation



SunPower module provides **6-15% more energy** than conventional panels over the first 25 years **thanks to lower degradation rate.** ^(3, 4, 5)

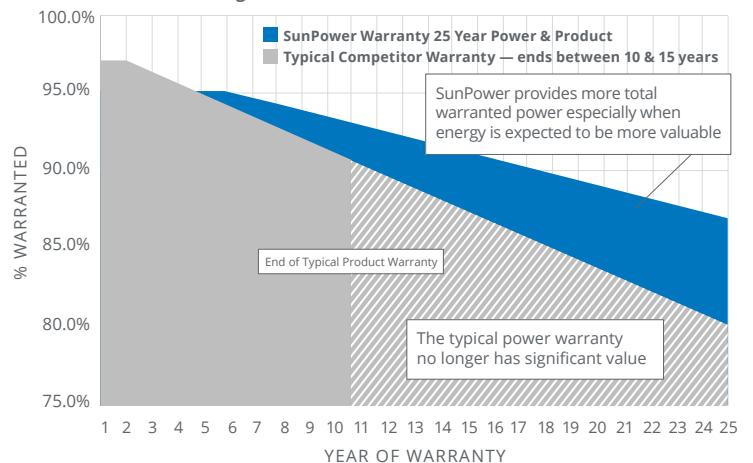
SunPower’s Backing – a Warranty to Match the Brand

SunPower offers the industry’s best warranty—a 25 year combined product, service, and power warranty. How does this stack up to what other high-efficiency panel manufacturers offer? SunPower outshines them all.

While all PV panel manufacturers offer warranties, there is no industry-standard. The fine print in each warranty varies in key ways that can have a significant impact on you if something goes wrong.

It is also important to make a distinction between a power warranty and a product warranty. Nearly all manufacturers offer much shorter product warranties than SunPower. Since most power issues are caused by product problems, you could face a coverage gap if your product warranty expires before your power warranty. Not SunPower—our warranty covers both product and power for the full 25 years.

Comparison of Power Warranty Protection When product warranty ends, power loss due to manufacturer defects is no longer covered



SunPower provides more total warranted power especially when energy is expected to be more valuable

End of Typical Product Warranty

The typical power warranty no longer has significant value

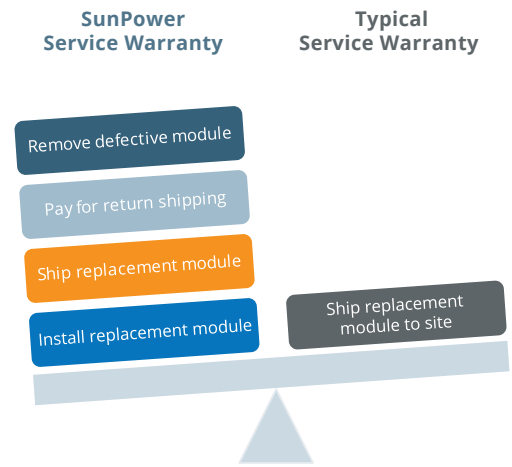
To add to the uncertainty, **typical product warranties have numerous exclusions** for common factors that cause panels to under perform. These can include:

- No coverage in seaside environments
- No coverage of microcracks in cells
- No coverage for damage caused during transport
- No coverage without original receipt
- No coverage without annual cleaning records
- No coverage unless claims are submitted in paper to the manufacturer

How Warranty Coverage Stacks Up

Further, some companies don't cover all costs of returning a module. That means the compensation provided does not reimburse the customer and the dealer for all costs, or does not allow the customer to make a claim without incurring costs.

Some companies offer pro rata payments for only the energy production shortfall. This means they pay you for the percentage of energy production shortfall of a panel using a depreciated value of your original installation cost of the module, not the full system price. In other words, you only get a small percentage of what you lost, not full compensation. This is not the case with SunPower. Our warranty covers the service, product and power for 25 years.



SunPower – the Best Return on Your Investment

On top of the superior technology and vastly better warranty, SunPower solar is a better investment. The productivity and low degradation of SunPower's modules allows them to produce more energy and consequently more savings in every year and in total over the first 25 years. It is important to note that a system using SunPower modules will be producing the most energy when energy costs are expected to be vastly more expensive. Below is a sample set of data illustrating how a SunPower system stacks up with others using competitors' modules:

	Light Commercial			Residential		
	SunPower E20	High Efficiency Competitor	Tier 1 EU	SunPower E20	High Efficiency Competitor	Tier 1 EU
System Size kWp	100 kWp			4 kWp		
1st Year Energy Production kWh	100%	99%	96%	100%	99%	96%
25 Year Energy Production MWh	100%	93%	91%	100%	93%	91%
1st Year Net Savings €	100%	99%	96%	100%	99%	96%
25 Year Net Savings €	100%	97%	95%	100%	93%	91%

While the content of the table above is only a sample and system prices vary, we encourage you, the customer, to line up your alternatives and see what option saves you the most and provides you the best return on investment. We are confident that you will find that the SunPower system is the winner.

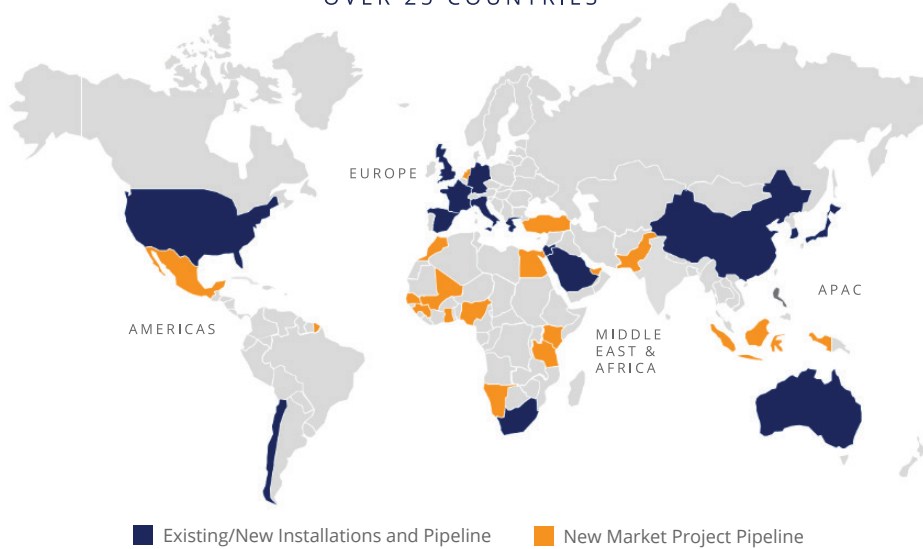
SunPower – Company Strength

You can buy with confidence knowing that SunPower is a viable long term partner. Financial stability is important when considering the value of any investment and any warranty. SunPower has diversified its operations in order to maintain long term viability and thrive in a highly competitive environment. SunPower sells to customers in residential, commercial and utilities sectors and has a global set of clients across six continents.

SunPower Active Markets 2016

19.3 GW WORLDWIDE

OVER 25 COUNTRIES



Strength in the Backing of TOTAL

SunPower’s long term prospects and financial stability are strengthened by its partnership with Total SA., which owns 66% of SunPower’s stock. In July 2016, SunPower extended the terms of its existing credit support agreement with Total S.A through 2018. This agreement, which supports up to \$500 million credit, appropriately matches SunPower’s current and long-term credit needs. Total and SunPower work together on the development of SunPower utility scale projects across the globe. When you buy SunPower, you have the strength and backing of one of the largest companies in the world. You can rest assured you are in good hands with SunPower.



“Our ambition is to have renewables make up 20% of our portfolio in 20 years’ time”

Integrating Climate into our Strategy Report, TOTAL - 2016

1 R&D spending analysis of top PV module manufacturers in 2015, PVTech.com, Osborne (Jun. 2016) (based on publicly reported R&D spending)
 2 Clean Energy Patent Growth Index Presented by the Cleantech Group- Heslin Rothenberg Farley & Mesiti P.C.<http://www.cepgi.com/2015/04/2014-year-end.html>
 3 Romero, Ralph, et al. “Review of SunPower Fleet-Wide System Degradation Study using Year-over-Year Performance Index Analysis,” Black & Veatch Eng., 2012. Updated values 2014.
 4 Campeau, Z. et al. “SunPower Module Degradation Rate,” SunPower white paper, 2013.
 5 Jordan, et. al. “Photovoltaic degradation rates as an analytical review.” PIP 21.1, 2013.”