

In the United States, the average cost of residential PV panel installation is around \$2.95 per watt. For commercial and utility-scale installations, the costs are even lower due to economies of scale.

Evolution of solar PV module cost by data source, 1970-2020 - Chart and data by the International Energy Agency.

Costs refer to solar panels only. The first practical photovoltaic (PV) cell was developed in 1954 by Bell Labs, with an efficiency of around 6%. These early solar panels were primarily used in space applications due to ...

Initially, the commercial solar panels became available at a price point approaching \$300 per watt, rendering solar energy viable primarily for specific applications, such as in space missions or niche ...

Today, solar panels cost about \$3.00 per watt on average and are between 19% and 22% efficient. The price of solar panels could continue to drop, but it can depend on technology, market conditions, and government ...

The Price of Solar Panels Over Time
Solar Panel Efficiency Over Time
Solar Panel Cost and Efficiency Today
In 2025, the average cost of a solar installation is about \$19,000, or \$3.00 per watt, before any incentives are factored in. The industry standard for efficiency is between 19% and 22%, but we're beginning to see more panels with efficiency ratings above 22%. Some are even close to breaking 23%! Data from Solar Energy Industries Administration (SEI)... See more on solarreviews IEA - International Energy Agency
Evolution of solar PV module cost by data source, 1970 ... Evolution of solar PV module cost by data source, 1970-2020 - Chart and data by the International Energy Agency.

In this article, we'll take a deep dive into eight major historical solar panel price drops, look at the events and trends that caused them, and explore how those same factors might keep driving prices lower.

The dramatic and sustained decline in the cost of electricity from utility-scale solar photovoltaics (PV) has been one of the most compelling developments in the power generation sector over the past few decades.

Average value of photovoltaic modules, 2006-22. 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Data source: U.S. Energy Information Administration, Form EIA-63B, ...

Solar photovoltaic panel prices Average price of solar modules, expressed in US dollars per watt, adjusted for inflation.

Curious about solar panel prices and efficiency? Learn how advancements have slashed costs by 90% and

boosted efficiency to over 25%. See why now is the perfect time to go solar!

Web: <https://www.rrrprojects.co.za>