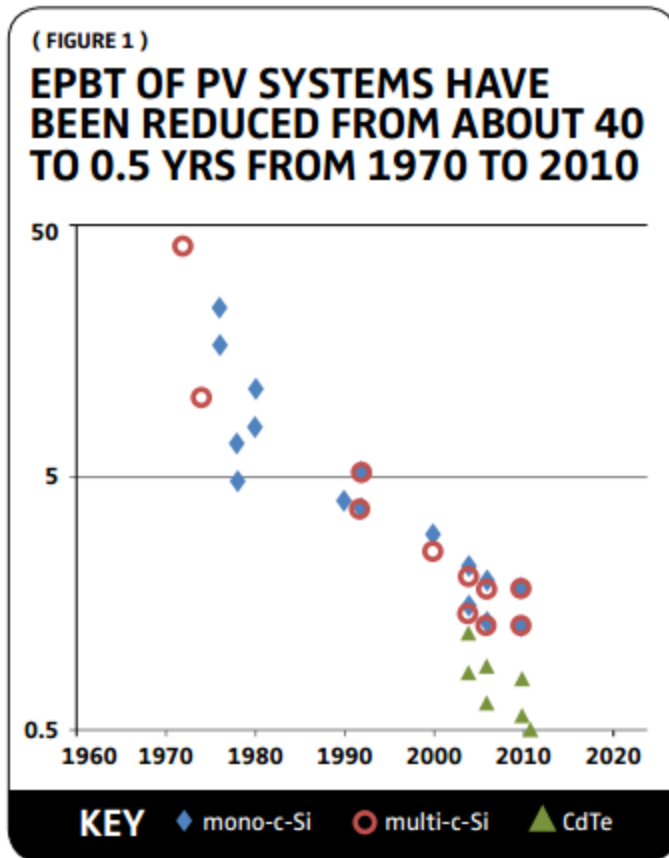




The European Photovoltaic Industry Association [says](#),
“Depending on the type of PV system and the location of the installation, the EPBT at present is between 0.5 and 1.4 years.”

<https://thinkprogress.org/a-new-wind-turbine-generates-back-the-energy-it-takes-to-build-it-in-just-6-months-d7b91fce29ad#.nhdmd89b2>

Lots of good stuff here -

<https://www.quora.com/How-long-does-it-take-until-the-embedded-energy-in-a-solar-panel-system-is-amortized>

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The number of years to payback varies depending on the technology. Silicon panels take a bit longer than thin film panels. And payback will depend on the amount of sunshine where they are installed. Payback will happen quicker in sunny SoCal than in the less sunny Northeast.

And payback times have been dropping as manufacturing becomes more efficient. IIRC, the first panels required more energy to manufacture than they produced in their first 40 years of use.

Let me copy out part of a 2012 study and give you a payback graph from it...

"EPBT (energy payback time) for the same type of systems installed in the U.S. Southwest are decreased in proportion to the solar irradiation ratio (1700/2380) between the U.S. average and Southwest solar conditions. Thus, for Southwest irradiation the EPBTs for the three PV technologies shown in Figure 3 are 1.2, 1.2, and 0.5 years and the corresponding EROIs are 0.04, 0.04, and 0.02, thus 50 times better than stated in the July PE article. And these EROI keep improving as systems and material utilization efficiencies continue to improve."

<http://www.clca.columbia.edu/2...>

Six months to 1.2 years. Four years later payback might be quicker since efficiencies have increased.

Below is everything I've collected - just dumped. Might be some useful stuff if someone digs through.