

Are Solar Panels Worth It?

With the price of electricity changing so rapidly it is hard to give a definitive answer so we need to look at the return for several different situations.

Assuming you have panels rated at 3.7 kWp and you use half and export half of the power you generate (the amount assumed if you don't have an export meter) you will save/earn:-

Import price	Export price	Savings	Savings with battery
20p/kWh	5p/kWh	£331	£430
30p/kWh	5p/kWh	£464	£642
30p/kWh	7.5p/kWh	£497	£645
40p/kWh	5p/kWh	£596	£854
40p/kWh	7.5p/kWh	£629	£858
50p/kWh	7.5p/kWh	£762	£1070

With battery storage you should be able to use 80% of the energy you generate and export only a tiny amount.

With electricity at 20p/kWh it would take about 20 years to get your money back, though even that is not too bad since the panels are expected to last well over 25 years. But with the typical cost of a system about £6,000 and electricity prices going up you can see that at 30p/kWh for electricity you would get your money back in about 12 years and with battery storage costing an additional £4,000 your return would be in about 15 years. Of course if the price of electricity goes up even more, perhaps 40p/kWh as expected in October 2022, your return will be much sooner. Note that under the current system, your supplier also sets the export rate and this varies with different suppliers. You don't have to export to the same company as your supplier if you don't want to but you are unlikely to get the higher rates if you don't have an export meter.

If you have an electric car, one other option instead of battery storage, would be to get a smart charging point linked up to your solar panels. This can charge the car when you have surplus electricity so using the electricity instead of exporting it and giving you some extra savings without the expense of a separate battery (although you do have the expense of an electric car). Unfortunately this won't supply power when the sun isn't shining like battery storage.