

Solar Payback Worksheet

Estimate how long a solar system takes to pay for itself, using your own bills and quotes.

1. Gather your numbers

Number	Where to find it	Yours
System cost (\$)	Full installed price from your quote, after rebates or certificates	
Yearly generation (kWh)	Your installer's estimate	
Import rate (\$ per kWh)	Your power bill	
Feed-in tariff (\$ per kWh)	Your retailer	
Self-use (kWh a year)	Roughly how much solar you'll use as it's made	
Exported (kWh a year)	Yearly generation minus self-use	

2. Yearly savings

Sum	Result
Self-use kWh _____ × import rate \$_____ = money saved	\$
Exported kWh _____ × feed-in tariff \$_____ = money earned	\$
Yearly savings (add the two)	\$

Power you use yourself is usually worth much more than power you export, because import rates are usually higher than feed-in tariffs.

3. Payback

Simple payback (years) = system cost \$_____ ÷ yearly savings \$_____ = _____ years

Example only, not real prices: a \$6,000 system that saves \$1,000 a year pays back in 6 years.

Off-grid shed or workshop?

Compare the solar cost with running a cable from the house, or the fuel and servicing for a generator. The "savings" are the costs you avoid.

Things that change the answer

- Tariffs and feed-in rates change, sometimes yearly.
- Panels slowly make a little less power as they age.
- Batteries add cost, but let you use more of your own solar at night.
- Inverters usually need replacing before the panels do. Allow for it.
- Rebates and certificates differ by state and change over time.

Once it's running, check the inverter app against your installer's estimate now and then. If you suspect a fault on the 240V AC side, call a licensed electrician or your installer.