

Solar Energy Cost Calculator

Estimate lifetime energy, total cost, and cost per kWh from system cost, annual output, O&M cost, and project lifetime.

Generated October 10, 2026

<https://www.elecatrrix.com/power-energy-cost/solar-energy-cost-calculator/>

Inputs

Input	Value	Unit
System cost	18000	\$
Annual energy	24000	kWh/year
Annual O&M cost	250	\$/year
Lifetime	25	years

Results

Result	Value	Unit
Lifetime energy	600000	kWh
Lifetime total cost	24250	\$
Levelized cost	0.0404	\$/kWh
Annualized total cost	970	\$/year
Capital cost per kWh	0.03	\$/kWh

Calculation details

Detail	Value	Unit
Calculation basis	Lifetime total cost equals system cost plus annual O&M multiplied by lifetime years. Levelized cost divides that lifetime total by lifetime energy.	
Boundary	Screening estimate only; no incentive, financing, degradation, insurance, tax, replacement, or production-risk result is made by this calculator.	

Formulas

Lifetime energy=Annual energy x Lifetime

Solar Energy Cost Calculator

Estimate lifetime energy, total cost, and cost per kWh from system cost, annual output, O&M cost, and project lifetime.

Generated October 10, 2026

<https://www.elecatrix.com/power-energy-cost/solar-energy-cost-calculator/>

$\text{Lifetime total cost} = \text{System cost} + \text{Annual O\&M} \times \text{Lifetime}$

$\text{Levelized cost} = \text{Lifetime total cost} / \text{Lifetime energy}$

$\text{Capital cost per kWh} = \text{System cost} / \text{Lifetime energy}$

Warnings and limitations

This solar energy-cost estimate uses entered production and cost assumptions only. It does not model incentives, financing, degradation, insurance, taxes, replacements, or site-specific production risk.