

HOMEOWNER'S ROOFTOP SOLAR SAVINGS CHECKLIST

A practical worksheet to estimate and maximize your solar savings

How to use this checklist: Complete the available information before comparing solar quotations. The goal is to understand annual and lifetime savings—not just the first-year bill reduction.

1. Electricity Consumption

- ☐ Average monthly electricity consumption (kWh): _____
- ☐ Annual electricity consumption (kWh): _____
- ☐ Current average monthly electricity bill: _____
- ☐ Current residential electricity tariff (₹/kWh or \$/kWh): _____
- ☐ Future electricity demand considered (EV, additional ACs, home expansion, work-from-home, etc.)

2. Solar Resource & Location

- ☐ Location: _____
- ☐ Peak Sun Hours (PSH) / solar resource checked
- ☐ Roof orientation and tilt assessed
- ☐ Current shading assessed
- ☐ Potential future shading from trees, buildings or rooftop construction assessed

3. Solar System Design

- ☐ Recommended system size (kW): _____
- ☐ Expected annual generation (kWh): _____
- ☐ Solar panel technology and specifications reviewed
- ☐ Expected panel degradation rate reviewed
- ☐ Inverter type and efficiency reviewed

4. Daytime Consumption & Self-Consumption

- ☐ Approximate share of electricity consumed during daylight hours: _____
- ☐ High-energy appliances can be shifted to daytime
- ☐ EV charging can be scheduled during solar-generation hours

- ☐ Water pumping/washing machine / other flexible loads can be shifted to daytime
- ☐ Expected solar self-consumption has been considered

5. Electricity Tariff & Future Price

- ☐ Current electricity tariff verified from recent bills
- ☐ Expected annual electricity tariff escalation considered
- ☐ Different tariff slabs / time-of-use rates considered where applicable

6. Net Metering / Export Compensation

- ☐ Applicable policy: ☐ Net metering ☐ Gross metering ☐ Feed-in tariff ☐ Zero export ☐ Other
- ☐ Export compensation rate verified
- ☐ Import electricity tariff verified
- ☐ Rules for surplus electricity understood
- ☐ Possibility of future policy changes considered

7. Maintenance & Performance

- ☐ Panel cleaning requirements understood
- ☐ Cleaning frequency appropriate for local dust, pollution, rainfall and bird activity
- ☐ System monitoring app/portal available
- ☐ Performance can be checked regularly
- ☐ Annual maintenance/servicing cost estimated
- ☐ Repair and downtime assumptions considered

8. Lifetime Financial Analysis

- ☐ First-year electricity savings estimated
- ☐ Annual savings over the project life estimated
- ☐ Panel degradation included
- ☐ Electricity tariff escalation included
- ☐ Annual maintenance costs included
- ☐ Inverter replacement cost included

- ☐ Other major equipment replacement / repair costs included
- ☐ Government subsidy included where applicable
- ☐ Payback period calculated
- ☐ Cumulative lifetime savings calculated
- ☐ ROI / overall project economics evaluated

9. How to Maximize Savings

- ☐ Improve home energy efficiency before sizing the solar system
- ☐ Replace major inefficient appliances where economically justified
- ☐ Address air leakage/insulation issues where relevant
- ☐ Choose a system size based on present and realistic future energy needs
- ☐ Avoid unnecessary oversizing based only on expected exports
- ☐ Maximize daytime self-consumption
- ☐ Minimize current and future shading
- ☐ Monitor system performance and respond quickly to faults

10. Final Solar Savings Decision

- ☐ Expected savings are based on my actual electricity consumption
- ☐ System size matches my present and realistic future needs
- ☐ Export assumptions have been verified
- ☐ Lifetime costs have been considered—not just upfront cost
- ☐ Lifetime savings have been estimated—not just first-year savings
- ☐ Installer quotation and equipment specifications have been reviewed
- ☐ Expected financial outcome matches my expectations

My Key Numbers

- ☐ System size: _____ kW
- ☐ Estimated annual generation: _____ kWh
- ☐ Estimated first-year savings: _____
- ☐ Estimated payback period: _____ years

☐ Estimated lifetime savings: _____

Important

Solar savings are not a fixed number. They depend on consumption, solar resource, electricity tariff, system design, export policy, panel degradation, maintenance and other factors. Use this checklist to make sure the major variables are considered before investing.

Want a personalized estimate?

Use [SFS India Edition](#) or [SFS USA Edition](#) to estimate solar generation, savings, payback period and lifetime financial performance.

SolarWithYash • Homeowner's Rooftop Solar Savings Checklist