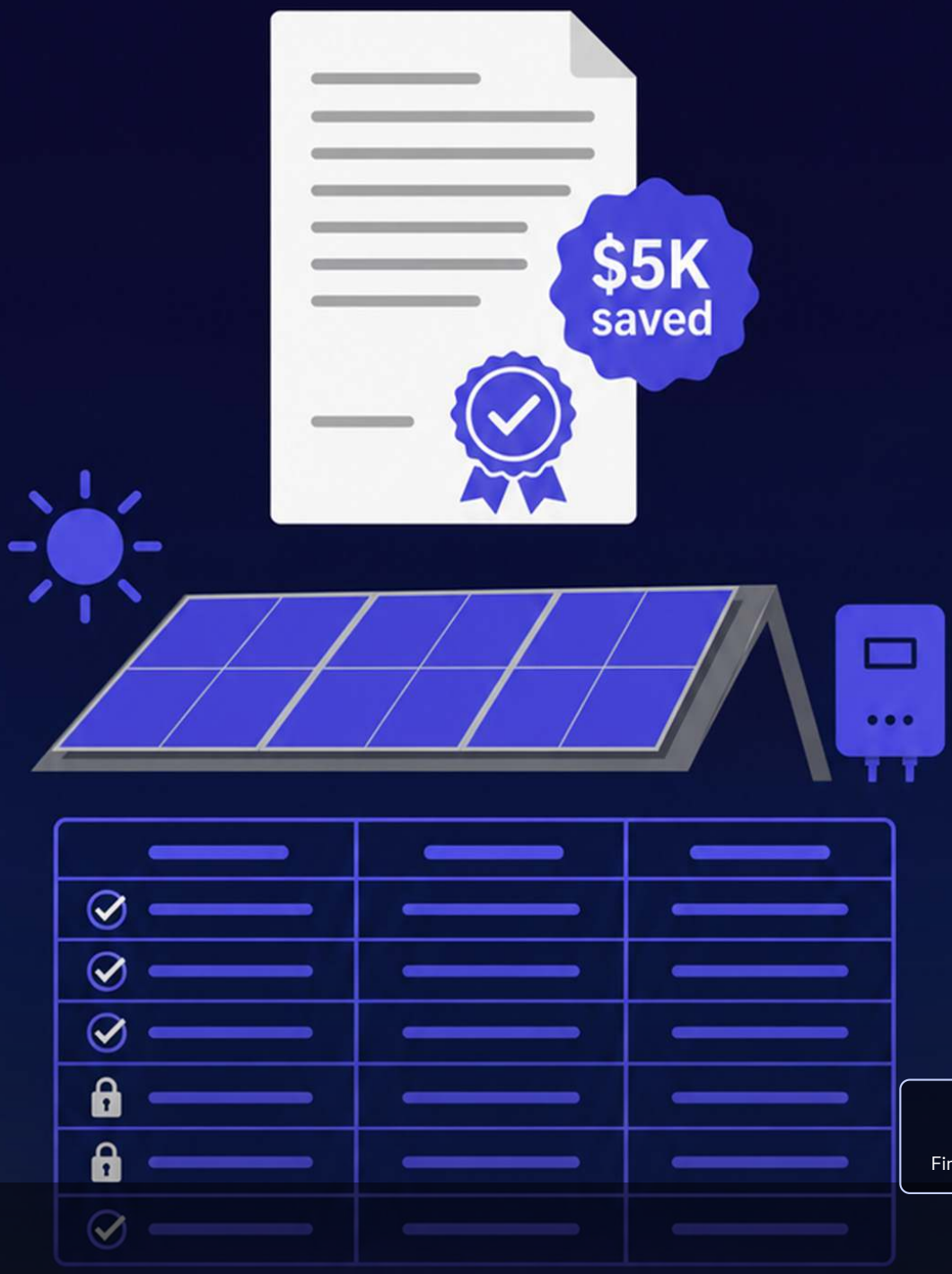

The Solar Quote Decoder

Compare Panels, Batteries, Financing, and Installer Claims Before Signing a $28,000 Contract

pragma.vision

TRUST.GUIDE

The Solar Quote Decoder

Trademark Notice

Google, Google Pay, Google Cloud, and Android are trademarks of Google LLC. Stripe is a trademark of Stripe, Inc. Cloudflare and Cloudflare Workers are trademarks of Cloudflare, Inc. Supabase is a trademark of Supabase, Inc. OpenAI and ChatGPT are trademarks of OpenAI, Inc. Claude is a trademark of Anthropic, PBC. W3C is a trademark of the World Wide Web Consortium. Visa is a trademark of Visa International Service Association. OWASP is a trademark of the OWASP Foundation. Midjourney is a trademark of Midjourney, Inc. Canva is a trademark of Canva Pty Ltd. Etsy is a trademark of Etsy, Inc. Amazon is a trademark of Amazon.com, Inc. All other trademarks are the property of their respective owners.

No Affiliation

This book is an independent publication. It is not authorized, sponsored, or endorsed by any of the companies or organizations whose products or services are mentioned herein.

No Professional Advice

The information in this book is provided for educational purposes only. It does not constitute legal, financial, investment, tax, or other professional advice. Readers should consult qualified professionals for guidance specific to their situation.

Code Examples

Code examples in this book are provided for illustration only. They may not be suitable for production use without additional validation, error handling, and security review.

Published by Pragma Vision LLC

First edition, 2026.

Contents

1

The High-Pressure Solar Funnel

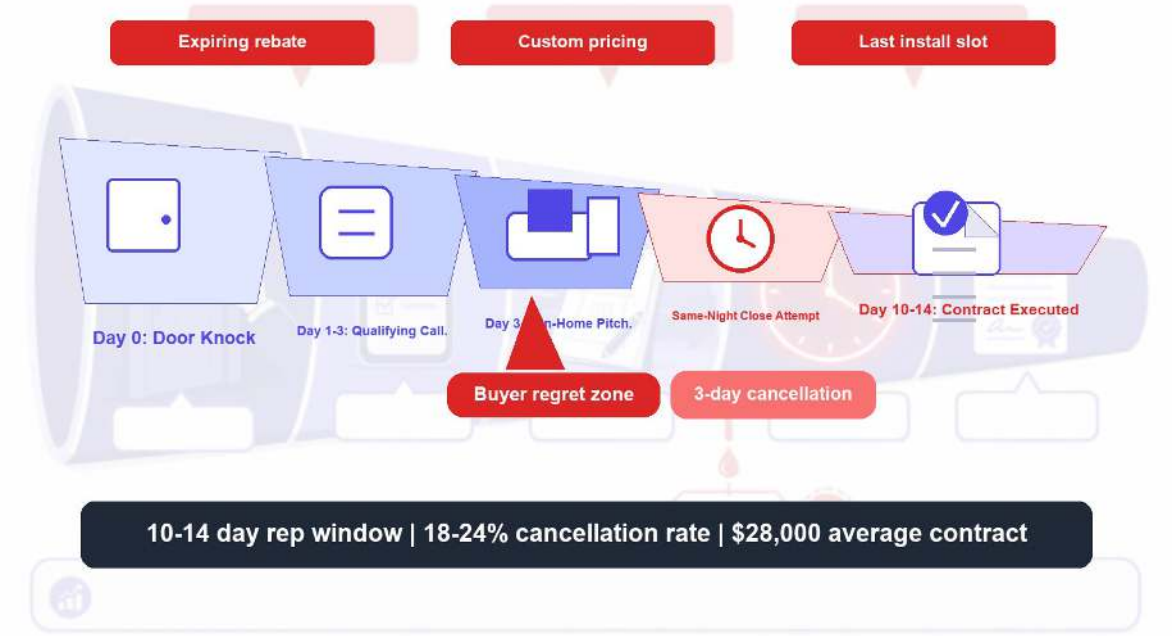

Figure 1. A five-stage sales funnel compresses a homeowner from Day 0: Door Knock to Day 10-14: Contract Executed, with a 10-14 day rep window, 18-24% cancellation rate, and $28,000 average contract

1.1 Why a Solar Rep Wants You to Sign Tonight

A solar rep sitting at your kitchen table is not lying when they say the price is only good for today. They are telling you the truth about their own incentive structure—and that structure is the reason you should never sign that night.

Most residential solar reps are paid on closed contracts and most carry a 10-to-14-day window from first knock to signature. The major lead-gen platforms (SunRun, Sunnova, Vivint Solar before its merger, Tesla Energy) burn through a rep cohort at roughly 60–75% annually. The math the rep is doing in their head, while they sketch panels on a notepad, is: how do I close this person before the next rep gets in front of them, before my supervisor reassigns the lead, before I get fired for missing my quota. The price on the table is real. The urgency is real. What is not real is the idea that this is your only chance.

Solar installation is a 25-year decision. You will live with the system longer than most marriages. The right time to sign is when you have three normalized bids and a quiet weekend to compare them, not when a stranger has been in your living room for two hours and the spouse is hungry.

$28,000

average residential solar contract value in the United States in 2025, before federal tax credit[1]

[1] EnergySage, "Solar Marketplace Report: Q4 2024," aggregated quote data across 50,000+ residential systems.

1.2 The Funnel That Sells You

The path from your front door to a signed contract is engineered. Each stage compresses your decision window:

Stage	What Happens	Typical Window
1. Lead capture	Door knock, online form, or referral	Day 0
2. Qualifying call	Confirm interest, roof age, utility bill	Day 0–3
3. In-home appointment	Pitch, custom design, financing offer	Day 3–7
4. Same-night close attempt	“Sign tonight or lose the rebate”	Day 3–7
5. Follow-up urgency	“Price expires Friday” calls	Day 7–14
6. Contract execution	Signature, deposit, permit application	Day 10–14

Notice what is not in the funnel: a comparison phase. The rep’s job is to keep you from talking to anyone else. The first thing they will do, after sketching the panels, is plant doubt about every other installer in your zip code. “They use Chinese panels.” “They are not certified.” “They subcontract the install to anyone with a ladder.” Some of this is true some of the time. None of it is something you can verify in the living room.

1.3 The Three Sales Tactics That Compress Time

After reviewing two hundred solar quotes for homeowners across the country, I see the same three pressure techniques in almost every pitch.

1.3.1 Tactic 1: The Expiring Rebate

"The federal tax credit drops next year, so we need to lock this in." Verify this carefully—the federal rules changed. The residential solar tax credit (IRS Section 25D), long scheduled at 30% through 2032 under the Inflation Reduction Act, was repealed by the 2025 federal budget law for systems placed in service after December 31, 2025. New residential installations generally can no longer claim the 30% federal credit, so any rep quoting the old 30%/26%/22% schedule is out of date—confirm current eligibility on the official IRS website before relying on any credit. State and utility incentives still change on their own published sunset dates; if a rep cannot show you the published sunset date on the state or utility website, the urgency is manufactured.

1.3.2 Tactic 2: The Custom Pricing

"This price is custom to your roof, so I cannot extend it past tonight." The price is custom to your roof—they ran your address through a satellite-imagery tool while you made coffee—but the unit pricing is not. A reputable installer will hold the same per-watt price for 14–30 days. If yours will not, that itself is information.

1.3.3 Tactic 3: The Last-Slot Install

"We have one install slot open in our queue for next month; if you do not take it, you wait until [winter season starts in three weeks]." Sometimes true at small installers in peak season. Almost never true at the marketplace lead-gen platforms (SunRun, Sunnova, Tesla) that have hundreds of crews. Ask which crew is doing your install and where their next confirmed installation date is. If the rep cannot give you a crew name and a date on a calendar, the urgency is theater.

Key Insight

The rep is not your enemy. They are answering the incentives of their job—which are not aligned with yours. Your job, sitting across from them, is to be polite, take the proposal, and tell them you will compare it to two others before deciding. A rep who tries to override that boundary is showing you exactly why you need it.

1.4 The Real Numbers Behind Solar in 2025

A few benchmarks worth carrying with you through the rest of this book:

Metric	Value
US residential solar installations 2024	~730,000 systems[2]
Average residential system size	8.6 kW DC
National average installed cost (pre-credit)	$3.10–$3.50 per watt DC
Federal ITC (historical; repealed for residential installs after 2025)	30%
Average payback period (cash purchase)	8–12 years
Typical financed-loan APR (2025)	4.99–9.99%
Lease/PPA escalator (annual price increase)	1.99–3.99%
Net metering retail rate (state-dependent)	0.05–0.40 $/kWh
Installer cancellation rate before install	18–24%[3]

Read the cancellation number twice. Roughly one in five residential solar contracts that get signed never make it to a working system on the roof. Some of that is permit problems. Some is HOA rejection. Some is the homeowner reading the contract more carefully two weeks later and exercising the legal right to cancel. The system is built around the assumption that some percentage of buyers will get cold feet—which

[2] Wood Mackenzie / SEIA, "US Solar Market Insight: 2024 Year in Review."
[3] NREL Q3 2024 "Residential Solar Customer Acquisition Cost Study."

means the same-night close is engineered to overcome a buyer's better judgment, not to reward it.

1.5 The Three Buyer Profiles I See Most

In two hundred reviews I keep meeting the same three homeowners.

1.5.1 Profile 1: The Hot Prospect

A homeowner with a high summer electric bill ($300+) who saw a SunRun ad on Facebook, requested a quote, took the in-home appointment two days later, and is about to sign a 25-year lease for an $0.00 down payment because "it sounds like free money." This buyer has run zero math on the lifetime cost of the lease and does not yet know that the property cannot be sold without lease transfer paperwork that some buyers will refuse to sign. The fix is Chapter 3.

1.5.2 Profile 2: The Comparison Shopper

A homeowner who has three quotes that are wildly different (one for 6.4 kW at $24,000, one for 9.2 kW at $36,000, one for 8.0 kW at $31,500), cannot tell whether the differences are real or sales math, and is paralyzed. This buyer needs the apples-to-apples normalization spreadsheet in Chapter 8.

1.5.3 Profile 3: The Researcher

A homeowner who has spent fifteen hours on Reddit, knows the brand of every panel manufacturer, can quote PVWatts at three decimal places, but cannot make the decision because they want certainty about whether net metering 2.0 will be cut to net

billing 3.0 in their state in 2027. This buyer needs the production-claims chapter (Chapter 5) and permission to accept that some uncertainty is structural.

1.6 What This Book Will Do for You

Nine chapters. The math gets gradually more sophisticated, but it never requires anything more than a calculator, your last twelve electric bills, and about three hours over a weekend. By the end you will have:

- A line-by-line decode of a typical solar quote so you can tell which numbers are fixed and which are negotiable
- The 25-year cash-flow comparison across cash, loan, lease, and PPA financing
- A working knowledge of which panel brands, inverters, and batteries are oversold and which actually deliver
- A production math sanity-check that catches the "30% over-production" trick before you sign
- A red-flag checklist for installer behavior, contracts, and warranty language
- The three-bid comparison spreadsheet you can drop your own quotes into
- A 50-question installer interview checklist
- Clear guidance on when to spend $200–$500 on an independent solar consultant

Case Study

The Same-Night Save

A homeowner in suburban Phoenix called me on a Tuesday evening. A SunRun rep had been at his kitchen table for three hours, had "cleared" a 9.8 kW system at $38,400 financed at 6.99% for 25 years, and was waiting in the living room for him to sign while he "stepped out to grab his glasses." He read me the line

items over the phone. The system was oversized by about 35% versus his actual annual usage. The loan included a $1,200 “dealer fee” built into the principal. The escalator clause was 2.9% annually on a loan he thought was fixed. We worked through Chapter 8’s three-bid math in fifteen minutes. He went back into the living room, told the rep he was sleeping on it, and called me back the following Saturday with three quotes. He signed a 7.2 kW system at $22,300 with a different installer the following week. He saved roughly $8,900 in real money. The rep, when he heard, sent a sad emoji text.

DEMO

This is a free preview of the full edition.

Get the complete book at:

https://shop.pragma.vision