

Audience Profile Report for a Residential Solar ROI Decision Guide

Eric C. Rose

San Antonio College

ENGL-2311-SAC 013 Technical & Business Writing

Professor Davis

2/15/2026

The technical document discussed in this report is a hypothetical decision guide focused on helping homeowners decide whether installing residential solar panels is financially worth it. This type of guide reflects the kind of information homeowners often look for when comparing solar options, especially when deciding if the long term savings justify the upfront cost. While the document itself is hypothetical, it is based on real world factors such as installation pricing, tax incentives, maintenance costs, and changes in electricity rates over a 25-year period.

The purpose of the guide is to help homeowners compare the long term costs and benefits of solar panels using basic financial measures such as payback period, return on investment (ROI), net savings, and levelized cost of energy (LCOE). These concepts are commonly used in solar planning but are often confusing to most people. The guide is designed to present this information in a way that is practical and easier to understand.

This guide is not written for engineers or energy professionals. It is meant for everyday homeowners trying to make a practical decision. Most people that are considering to purchase solar panels are not experts in energy systems or finance. Instead, they are usually focused on practical questions such as how much solar costs, how long it takes to break even, and whether the savings are worth the risk. Because many readers are likely to skim for key information rather than read every calculation in detail, understanding the audience is critical. This report analyzes the audience's characteristics, goals, attitudes, and expectations in order to evaluate how the guide should be written and designed.

Audience

With that said, the primary audience for the hypothetical solar decision guide is Texas homeowners between the ages of approximately 25 and 60 who are considering installing a

residential solar panel system within the next year. This group includes homeowners who are new to solar research as well as those who have already received quotes from installers and want to verify whether the projected savings are realistic.

Installing solar panels is a major financial decision, like purchasing a vehicle or replacing an AC system in your home. It involves high upfront costs, long term planning, tax incentives that depend on government policy, and uncertainty about future electricity prices. Because of this, readers will probably approach the guide cautiously. They want information that feels honest and realistic.

A secondary audience includes spouses or partners who share financial decision making responsibilities, along with real estate professionals or lenders who may help homeowners consider long term costs and home value. While these readers may not make the final decision themselves, they often influence it. The rapport built between real estate professionals and future homeowners goes hand in hand with the financial decisions people make. This makes clarity and transparency especially important.

The audience is diverse in terms of age, education level, and profession. Most readers are adults who own a home or are involved in household budgeting decisions. Many live in suburban or urban areas of Texas, where electricity use tends to be high due to climate conditions and where solar energy production is strong.

Income levels vary, but homeowners considering solar generally have access to financing or savings that allow them to consider systems costing tens of thousands of dollars. Installation costs typically range from \$25,000 to \$50,000 before tax incentives and from \$18,000 to \$38,000

after the federal tax credit. A solar system purchase is usually viewed as a long term investment rather than a quick purchase.

Most readers do not have technical backgrounds in energy systems or financial modeling. While homeowners are familiar with their monthly electric bills, many do not understand how electricity is priced per kilowatt hour (kWh) or how small rate increases can add up over time. Solar terminology can also be confusing, especially the difference between system size measured in kilowatts (kW) and electricity usage measured in kilowatt hours (kWh).

Financial terms such as payback period, ROI, net savings, and LCOE may also be unfamiliar. If these concepts are presented without explanation, readers may misunderstand the results, become intimidated, or lose interest. Because of that, these terms need to be explained in plain language and tied to real life examples. For example, payback period should be explained as the point where total savings equal the upfront cost, and LCOE should be described as an average cost of energy over the system's lifetime.

Purpose of Engagement

Homeowners use this decision guide when evaluating a solar quote and wanting to verify whether the promised savings or payback period actually make sense. They are not trying to learn solar technology. They want to confirm the financial numbers they were given.

The guide serves as a decision making tool by translating costs, incentives, electricity rates, and maintenance assumptions into a clear, user friendly financial forecast. Rather than selling solar, it helps homeowners assess whether solar is financially reasonable for their situation.

The main question readers want answered is simple: will solar actually save money over 25 years? Beyond that, they also want to understand how the federal tax credit, maintenance costs, and financing options affect the overall outcome.

Audience Attitudes & Expectations

Homeowners usually come to solar with cautious interest. Lower electric bills and long term savings sound appealing, but the heavy marketing around solar makes many people skeptical. Some readers already like the idea of solar for environmental reasons, but most are focused on cost, risk, and whether the numbers actually hold up. Because of that, they're more likely to trust something that feels straightforward and factual, not sales driven.

Their main concerns tend to be the upfront price, whether the savings projections are realistic, and whether maintenance or repairs could eat into those savings. Many also worry about policy changes or question whether electricity rates will really rise the way installers claim. This means they expect clear assumptions, realistic ranges of outcomes, and no promises or guarantees.

They also want something practical. Most readers will scan headings, tables, and summaries instead of reading every word. They're looking for quick answers, similar to how people use manuals or troubleshooting guides. A clear summary of results from costs to savings, to risks, makes the guide easier to trust and use.

Graphics and Design Preferences

Graphics matter because solar is a long term decision, and long timelines are hard to grasp through text alone. Charts and tables make it easier to spot trends, compare options, and understand how costs and savings change over time.

The most useful visuals for this audience would include:

- A year to year comparison of total utility costs versus solar costs.
- A simple payback or break even chart.
- A straightforward cash flow table showing how savings build over time.
- A basic visual explaining the difference between kW and kWh.
- A maintenance cost summary showing typical yearly expenses and the possibility of larger repairs.

From a design standpoint, readers benefit from a clean layout that's easy to scan. Short sections, clear headings, bold key numbers, and simple charts help them find answers quickly. Charts should also be readable without relying on color alone, since many people will print the guide.

Learning About the Audience

This profile is based on homeowner focused solar research and general patterns in how people respond to financial decisions.

Homeowner oriented sources on electricity prices and solar maintenance costs show that people mainly care about cost, incentives, and long term savings when researching solar. Informal discussions and research also suggest that many homeowners feel overwhelmed by financing options and unsure about whether promised savings are realistic. Searches like "Is solar worth it in Texas?" point to a clear preference for direct, straightforward answers rather than technical detail or sales language.

Analyzing Social Media Data

Social media plays a big role in shaping how homeowners think about solar. Platforms like YouTube, Facebook, Reddit, and Nextdoor are full of personal stories, advice, and warnings from other homeowners. A lot of the conversation centers on pushy sales tactics, confusing incentives, and worries about maintenance or warranties. Taken together, these discussions show that people value honesty and transparency and expect a guide to cover potential downsides, not just the benefits.

Conclusion

The audience for a residential solar ROI guide is broad, mostly non-technical, and focused on making a practical financial decision. These readers want clear answers and realistic expectations, not technical deep dives or sales language. Their main goal is to decide whether solar makes financial sense for their home, while secondary goals include understanding incentives, maintenance costs, financing options, and potential risks.

At the same time, readers understand that any long term financial projection comes with uncertainty. Actual results will vary based on electricity use, roof conditions, financing terms, and local utility policies, and long term assumptions cannot be guaranteed. For that reason, the guide is best viewed as a comparison tool rather than a promise of savings. By being upfront about these limitations and presenting information clearly and honestly, the guide can help homeowners make informed decisions without overstating the outcome.

References

Farmer, T. (2024, September 15). *How much does solar panel maintenance cost?* HomeGuide.

<https://homeguide.com/costs/solar-panel-maintenance-cost>

Zientara, B. (2024). *How much electricity prices increase per year in the U.S.* SolarReviews.

<https://www.solarreviews.com/blog/average-electricity-cost-increase-per-year>