

## Will a Solar System Eliminate My Electricity Bill?

Earlier this year, Addy Solar & Electric sent out questionnaires to four clients, all of which purchased solar systems from Addy in the last couple years. These four clients' systems varied in size and use, making this case study useful and informative for anyone switching to solar. While the systems did vary, they did not fail to provide a similar stream of data. The data was similar in that it brought confirmation to solar's claim: a system will garner all the energy an owner will need, and (essentially) eliminate the electric bill. The solar industry promises a complete reformation to the way we do energy and these case studies were an opportunity to see, if over time, solar performs to the level it claims.

## What Our Clients With a Solar System In Northern California Are Paying Today.

All four clients in Redding California transitioned to solar energy to save on their electric bills, as well as to hedge themselves from rising energy prices. The consistent thread we found was that while the customers were paying more for energy (including the system), they had greatly reduced their electric bill. Out of the four system owners, three of them were paying an average of \$30 a year (\$2.50/month) to the electric company. This was in comparison to a \$250.00/month median (for the electric bill) before they purchased their solar system.

While all of these clients are experiencing virtually no electric bill today, they are paying more a month (in terms of energy), than they were before. The difference is that now, instead of paying that (x) a month for energy, they are paying the (x) towards an energy structure.

## Paying For A Solar System Instead Of Paying The Electricity Company

The answer to this question comes assuming that the owner took out a loan for the solar system. This loan is paid month to month until the loan is paid in full. At that point, the system owner is paying, as we found out earlier, a couple dollars a month for energy. Until that system is paid off (it could take some time to pay off a \$30,000 system), the owner typically ends up paying \$25-\$30 more a month for energy than before. This is on account of the system. As previously stated, the difference between paying monthly for energy and paying monthly for an energy structure is the reason why

a system owner would invest in solar to begin with. The system owner will spend more a month on energy than they did pre-solar. The payout, when seen strictly through “what it costs each month to power my house”, will not seem like a payout until the system is paid in full. Until that time, the homeowner should see their investment in this light: The homeowner is hedging themselves from today’s energy prices, as well as from what it will cost tomorrow. This switch is comparable to buying a home after years of renting. While the new homeowner is paying more in the “housing” category of their budget, they are paying towards the ownership of something that will one day give them financial space. This space is only possible if someone buckles down early on a worthwhile investment.

## A Real Life Example of The Monthly Payments After Switching to Solar Power

As a sample, these are the numbers on one of our case studies. These numbers reflect a system that powers a house with a medium-sized family.

Before solar, the homeowner paid \$250 a month for their energy bill. After switching to solar, they were shelling out about \$300 a month (\$297 of this being towards the loan). In this particular case study, the homeowner’s electric bill was cut down to almost nothing, allowing them to only feel a \$50 dollar a month difference in expenses. This is, of course, little to stomach if after paying that extra \$50 for the length of a loan, the homeowner can experience free energy and a free energy structure.

If the total of the loan was \$21,000 (after the 30% tax credit), and the homeowner’s paying \$300 a month on the loan, they’ll spend 70 months paying on the loan before the structure is paid for. When the system is paid for, the homeowner is able to enjoy a free energy structure. Most solar systems come with a 25 year warranty, and, after time with these systems, the industry has concluded that the 25-year mark acts more like the floor for the system’s lifetime than the ceiling. Ideally, a solar owner has (virtually) no electric bill upon switching to solar, so that they are not overburdened with the solar loan.

## Free Energy And Financial Stability By Switching To Solar Power

These systems garner the energy the owner needs, and they do so with consistency. Clients are seeing solar energy sustain their energy needs throughout the whole of the year. This adds further resolve to the frequently asked question, “Well what about when it’s raining, or when it’s winter?”. These studies show that when the system’s production is analyzed at the end of a full year (and not just an isolated look at a rainy day), the

system performs up to the standard it claimed it would. All in all, these case studies bring evidence to the “never go back” assertion that solar energy makes. Solar energy in Northern California gives its owners the financial space they need to direct finances towards a personal, sustainable energy structure.