

THE 2022 INFLATION REDUCTION ACT

Which credits interest solar owners the most?

Survey shows that 58% of solar owners report an increased interest in energy-efficiency investments in response to the new credits.

Table of Contents

01

Overview

02

Key Findings &
Methodology

04

Home
Energy Efficiency
Satisfaction

06

Interest in
Energy Efficiency
Upgrades

09

Perceived Impact of
Energy Efficiency
Investments

12

Key Drivers for
Energy-Efficiency
Investments

14

Learnings

Overview

Despite its name, the Inflation Reduction Act (IRA) of 2022 is, in fact, the most significant climate law to be passed by Congress and seeks to stamp out rising prices, reduce emissions, and incentivize renewable energy and energy efficiency upgrades in the home. Its spending package dedicates more than \$739 billion to solving our nation's

biggest issues, including healthcare costs, climate change, and inflation.

In response to the new legislation, we polled more than 350 Palmetto solar customers to find out which energy-efficiency home and vehicle upgrades now incentivized by the IRA they're most likely to invest in—from heat pumps to electric vehicles, additional solar panels, solar battery storage, and more—and which investments might impact their lives the most.



Key Findings

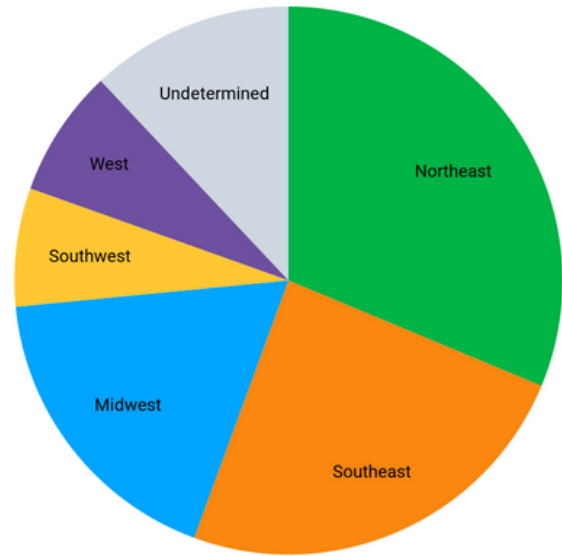
- 48% of solar homeowners are **satisfied with their home energy efficiency**
- More than half of solar homeowners have **already invested in high-efficiency appliances**
- **61% of solar homeowners are interested in solar energy battery storage** now that the Inflation Reduction Act of 2022 has passed
- Only **11% of solar homeowners own or lease a hybrid or electric vehicle**
- More than 78% are **now interested in purchasing a hybrid or electric vehicle**, knowing that such vehicles may now be eligible for financial incentives under the Inflation Reduction Act
- 71% of solar homeowners selected **price as a key factor in the decision** to invest in home or vehicle energy-efficiency upgrades
- More than 50% of solar homeowners consider **incentives and credits to be a key factor** in these decisions
- 58% of solar owners report an **increased interest in energy-efficiency investments** in response to the new credits



Survey Methodology

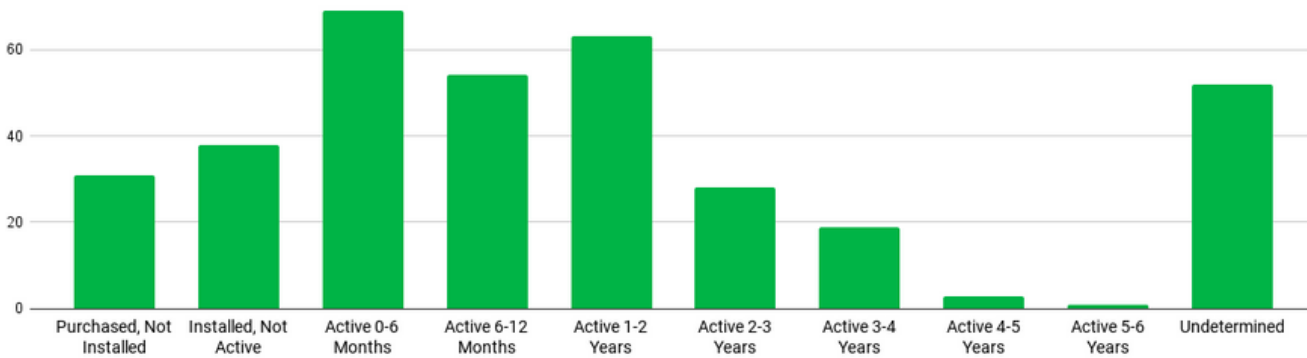
To understand how the new credits available through the Inflation Reduction Act of 2022 might impact solar homeowners' interest in energy efficiency upgrades, we sent a survey to Palmetto customers across the U.S. who purchased a solar energy system in or prior to September of 2022, when the survey was conducted.

55% of respondents located in the eastern United States



358 residential solar owners

66% had active home solar



More than 350 Palmetto solar customers from 20+ states responded to the survey. Based on the contact information provided, we were able to identify the location, solar activation status, and solar energy system size for 87% of respondents.

Given the solar installation process—or the time between solar purchase,

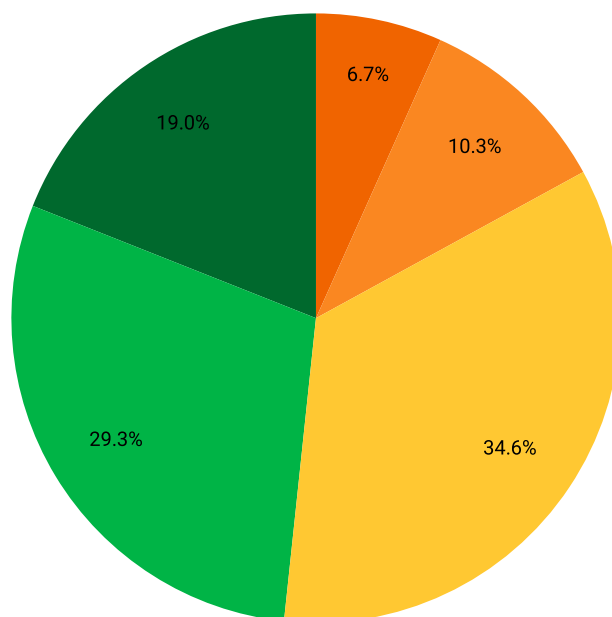
installation, and activation, when a solar system can begin producing power—approximately 20% of respondents were not yet producing power at the time the survey was conducted.

While the average system size was 24 panels, more than 50% of respondents purchased a 16-30 panel solar energy system.

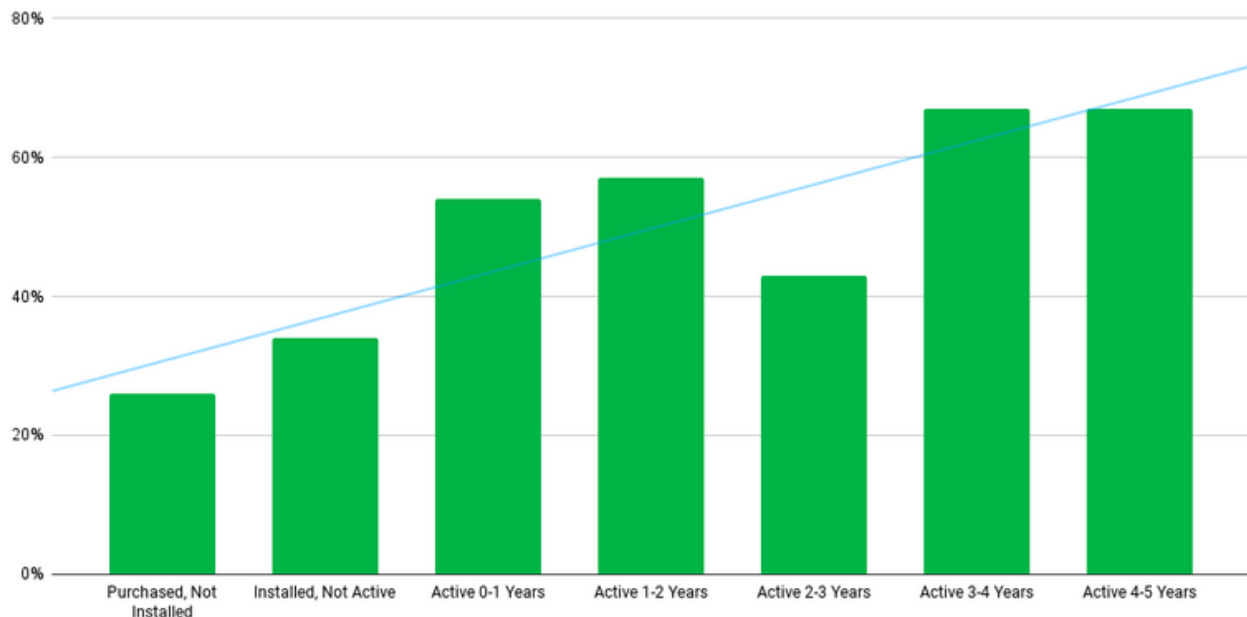
While many solar owners are satisfied with their home energy efficiency, the opportunity for improvement is high

We asked solar homeowners how satisfied they were with the energy efficiency of their home, with 1 being very dissatisfied and 5 being very satisfied. Most respondents fell into the 3 to 4 range, indicating some level of satisfaction but recognizing that there might be opportunities to improve their home's energy usage and, thus, maximize their solar energy generation—a home energy investment already made by these respondents.

48% of solar owners are satisfied with their home energy efficiency



Homeowners' satisfaction with the energy efficiency in their home increases over the course of solar ownership

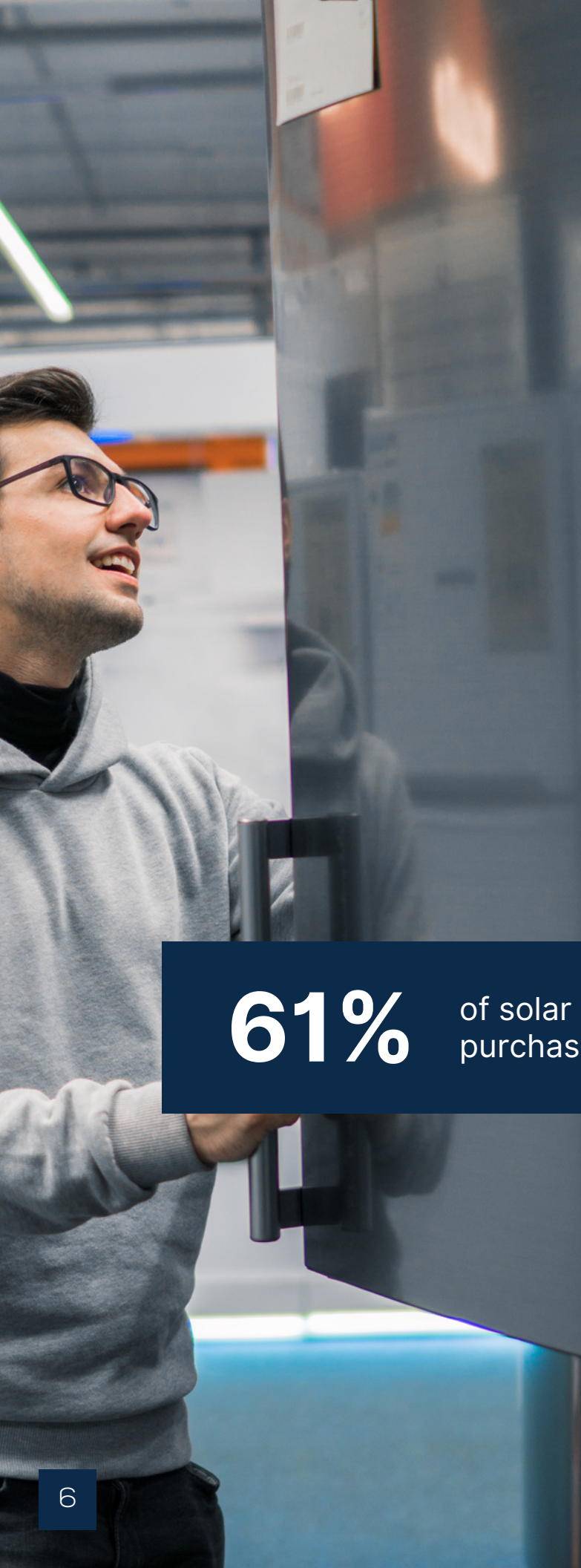


When responses to the question, “How satisfied are you with the energy efficiency in your home?”, were mapped to respondents’ solar ownership status, we found that the percentage of homeowners who indicated that they are either satisfied or very satisfied with the energy efficiency in their home increases over the course of solar ownership.

While satisfaction dips in year two before increasing in year three, we found that solar homeowners' interest in energy-efficiency upgrades followed the same trend, indicating this might be a time when solar homeowners seek to further optimize their energy efficiency.

67%

of homeowners whose solar energy systems have been active for 3-5 years report being either satisfied or very satisfied with the energy efficiency in their home



Adoption of home energy-efficiency upgrades among solar owners has been low, but interest is now strong

More than 70% of respondents named price as a primary factor in the decision to invest in energy-efficient technology, while 55% named incentives and credits.

Now that the Inflation Reduction Act incentivizes energy-efficiency upgrades, including home energy audits, high-efficiency (HE) appliances, and building envelope improvements, we are seeing a significant difference between adoption rates and interest—especially for solar battery storage and electric vehicles.

61% of solar homeowners are now interested in purchasing smart home battery storage

While only 5% of solar owners currently have battery storage, 61%, or 220 out of 358 respondents, said they are interested in investing in battery storage.

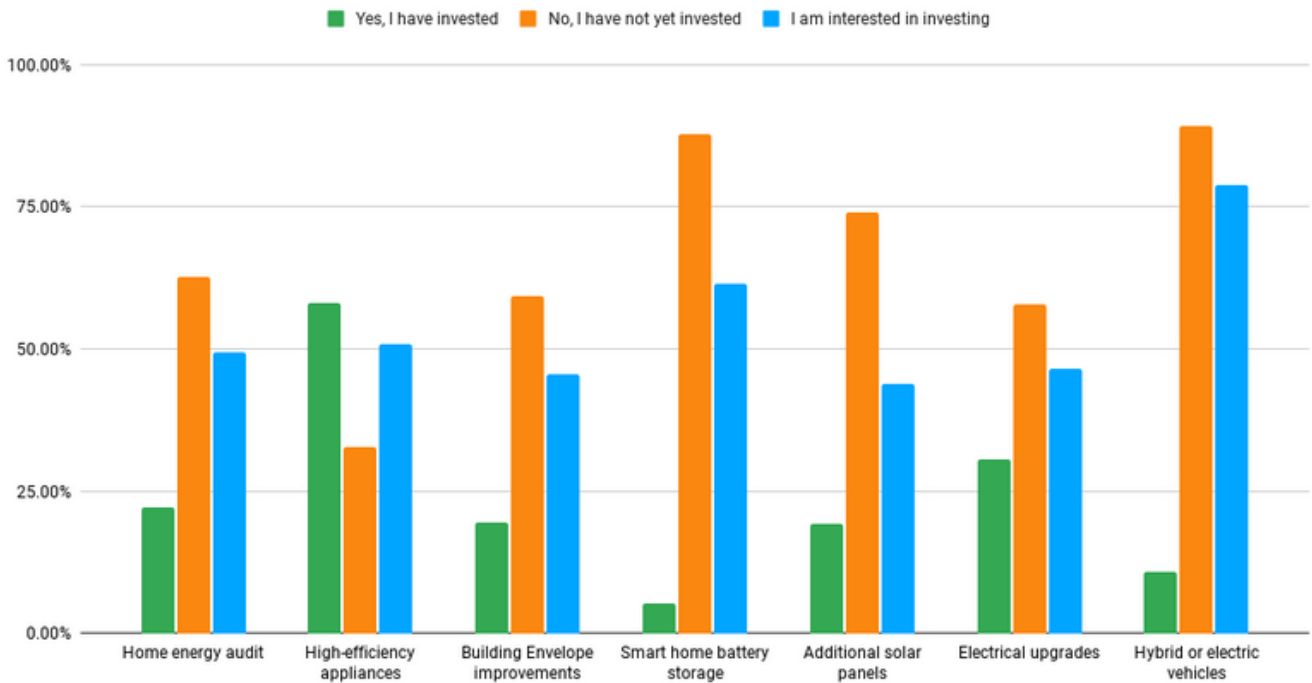
EVs have even more interest, with only 11% of respondents having already invested in either a hybrid or electric vehicle, but more than 78% of

respondents saying that they would be interested in a hybrid or electric vehicle as a result of the EV rebate outlined in the Inflation Reduction Act.

efficiency appliances, with more than half (58%) of respondents already having invested in at least one HE appliance for their home.

The only category for which adoption rate exceeded interest was high-

78% of solar homeowners are now interested in purchasing a hybrid or electric vehicle

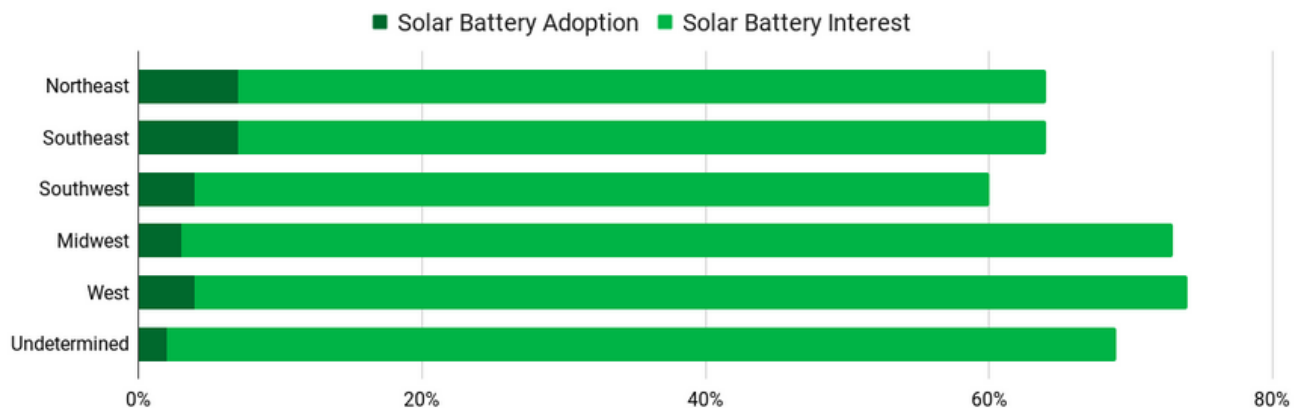


Smart home battery storage shows the highest opportunity for growth

While regional differences emerged for both the adoption of and the interest in home energy-efficiency upgrades, solar battery storage showed the greatest opportunity for market growth, having the lowest adoption rate (5%) and the highest interest rate (61%).

Among the home energy-efficiency upgrades presented in our survey, solar battery storage captured the highest level of interest in four out of five U.S. markets. (The exception was the Northeast, where interest in battery storage came in second to HE appliances at 57% vs. 59% respectively.)

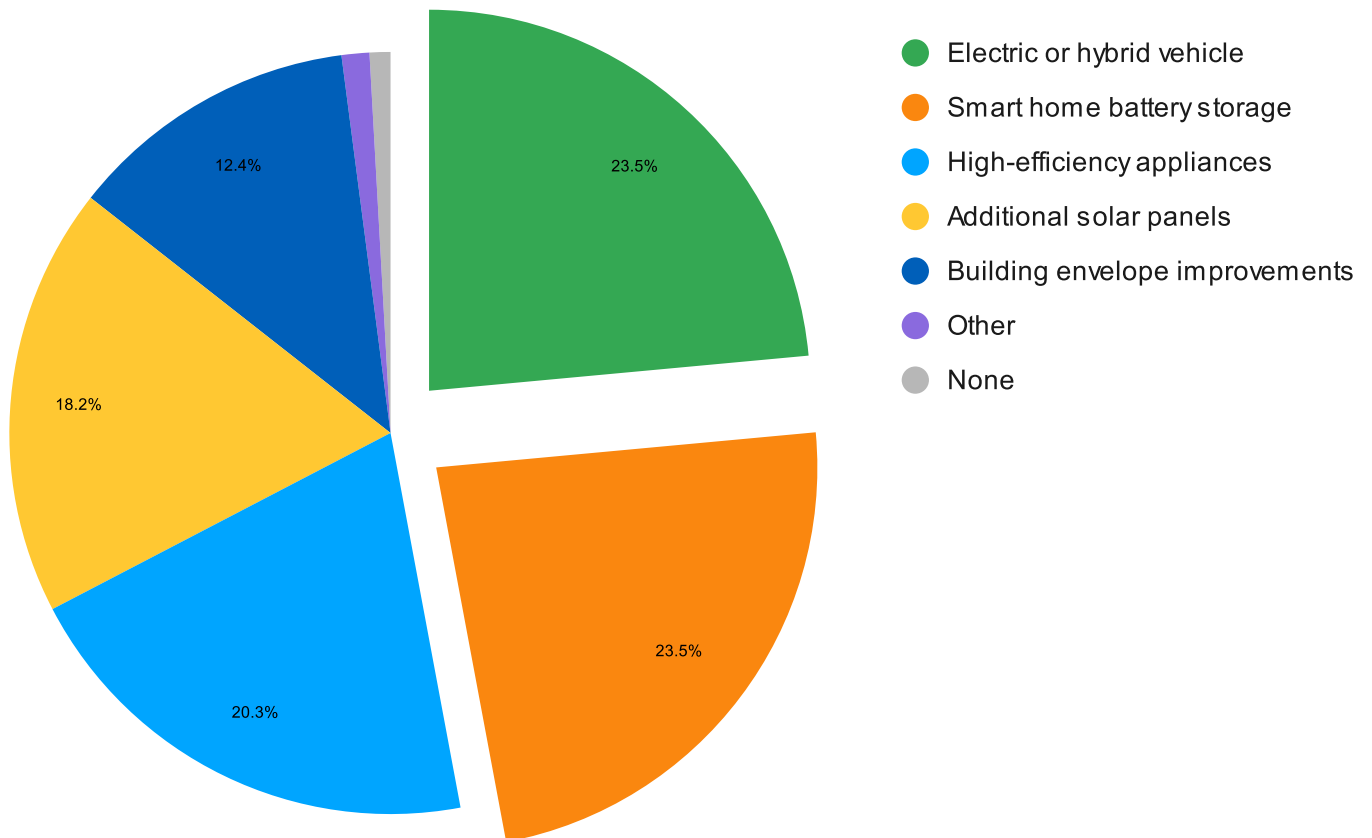
Overall interest was highest in the Western and Midwestern states, where 70% of homeowners indicated interest in smart home battery storage knowing that incentives may now be available.



Electric vehicles and battery storage have the greatest perceived impact on reducing carbon footprints, according to solar owners

When it comes to environmental impact, solar owners believe that electric or hybrid vehicles and smart home battery storage would have the greatest impact on reducing their carbon footprint—even over additional solar panels—with about a quarter of respondents voting for each. Narrowly behind them were high-efficiency appliances, which many solar owners have already invested in.

Battery storage and hybrid or electric vehicles are tied for greatest perceived impact on carbon footprint



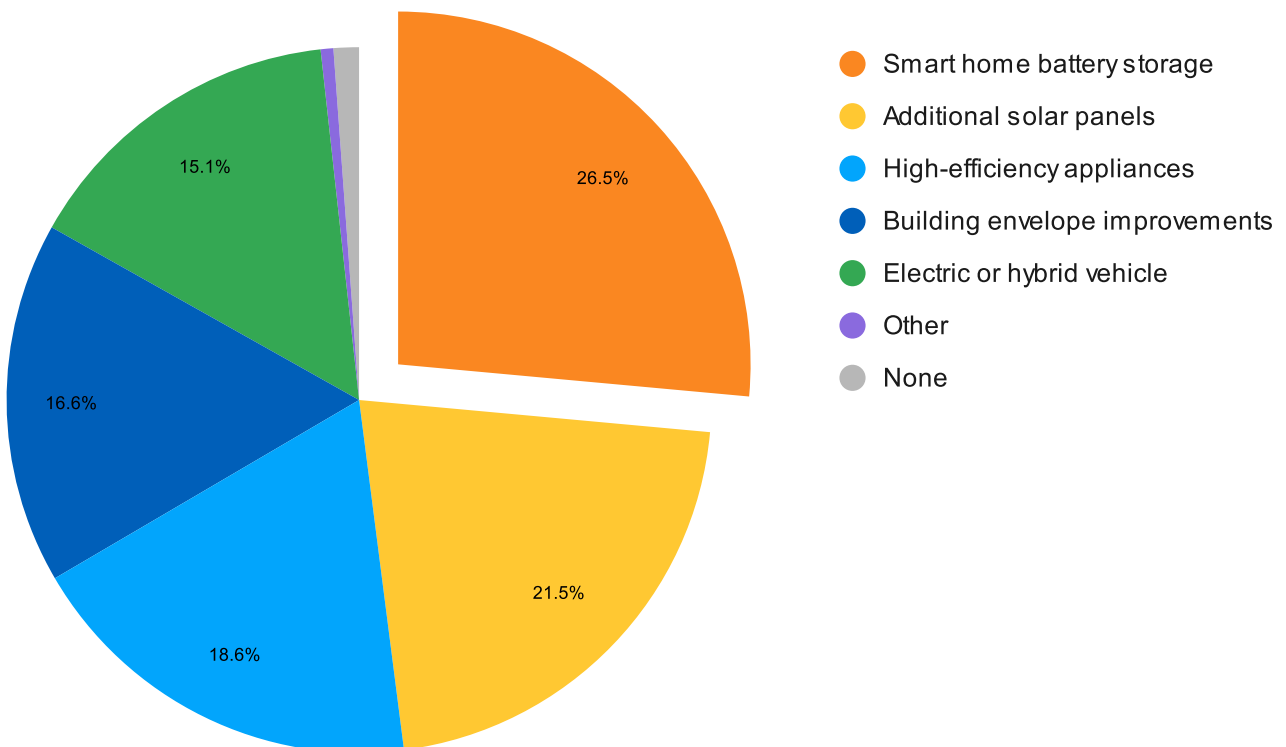
Battery storage provides the greatest perceived impact on long-term financial savings, according to solar owners

When asked which upgrades might have the greatest impact on their financial savings, respondents favored solar battery storage and additional solar panels, revealing an awareness of the

unique benefits each investment can provide. More than a quarter (26.5%) of solar owners believe battery storage will have the greatest long-term impact on their financial savings.

In contrast, while solar owners believe that electric vehicles have the greatest impact on the environment, battery-powered cars ranked last in terms of long-term financial savings. This may be due to the higher perceived cost of purchase and ownership, even after the savings provided by the Inflation Reduction Act.

26.5% of solar homeowners believe solar storage will deliver the greatest financial savings

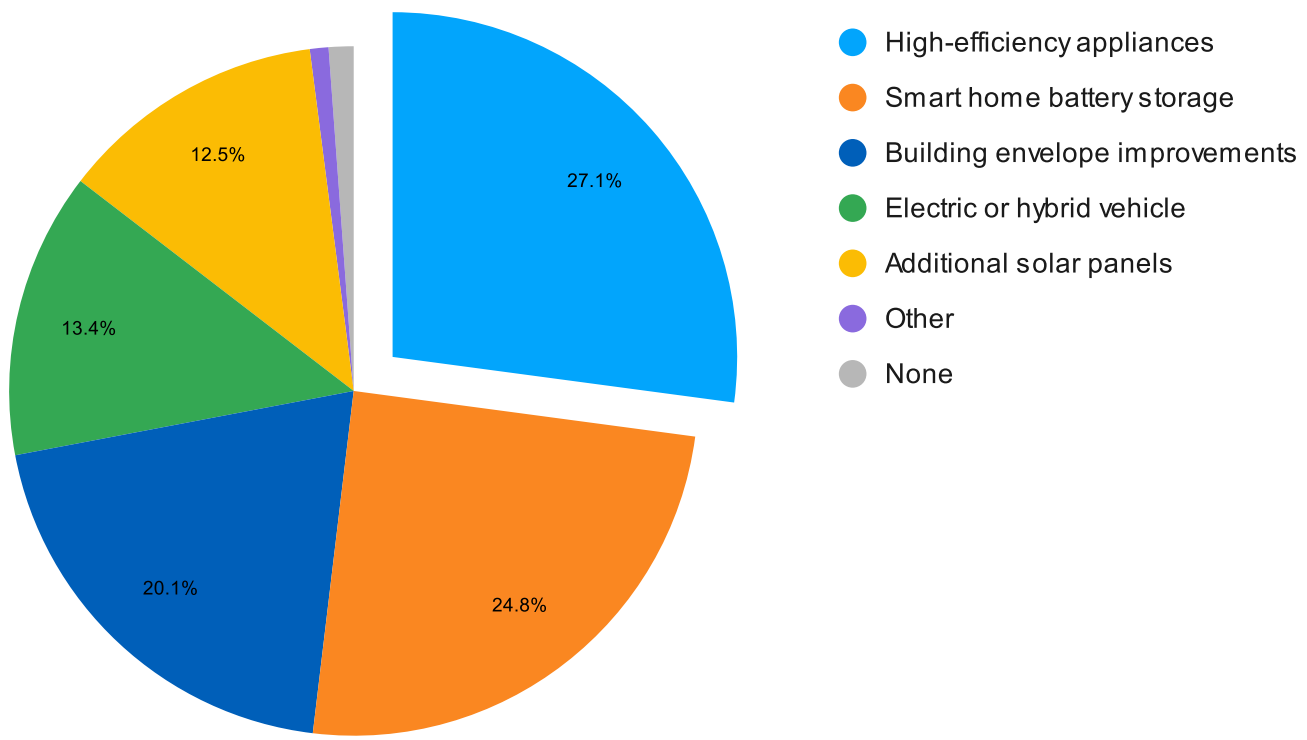




High-efficiency appliance upgrades offer the greatest impact on one's lifestyle and comfort, according to respondents

One more insight from the survey was that high-efficiency appliances, rather than battery storage or EVs, had the greatest perceived impact on one's comfort and lifestyle.

27% of solar owners believe high-efficiency appliances will offer the greatest impact on their lifestyle and comfort



This makes sense, given that these are everyday appliances, like washers and dryers, refrigerators, stovetops, dishwashers, and TVs that people use and interact with regularly.

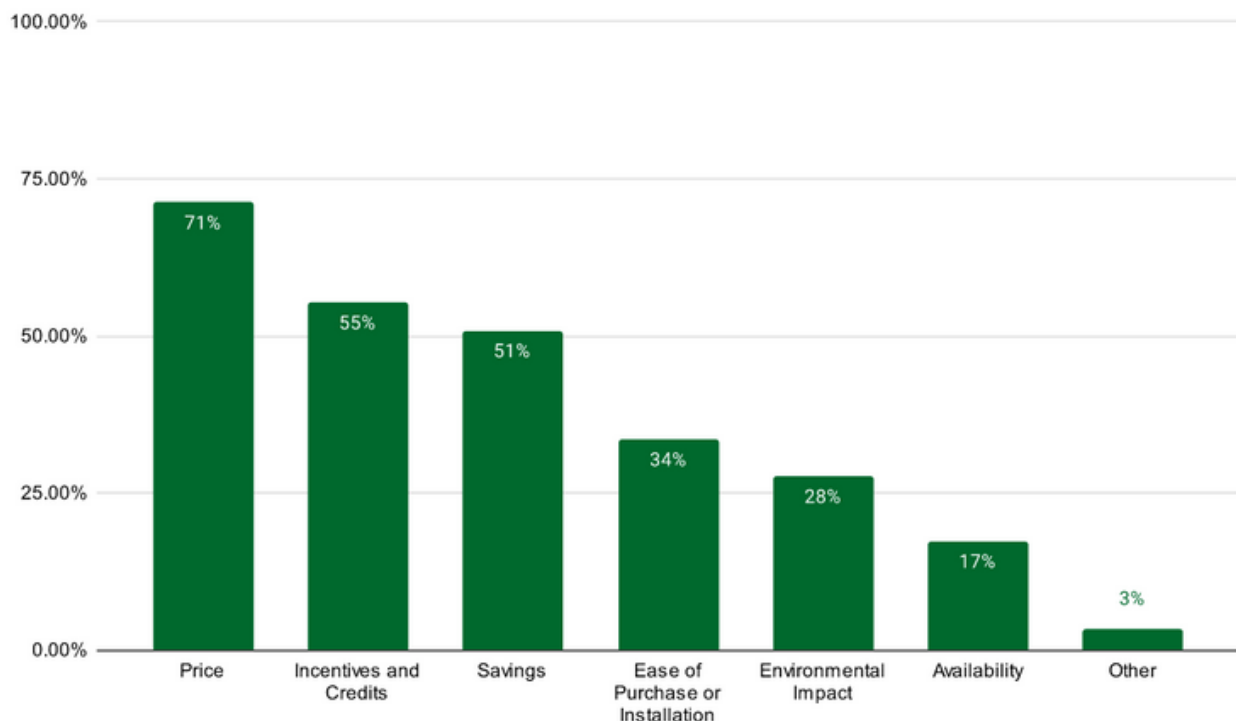
Battery storage, however, came in second at 24.8%—most likely due to

the fact that batteries can mitigate outages and save additional money on electricity bills, depending on the area and utility. Envelope improvements, such as insulation, windows, and doors, came in third—likely because they help to insulate homes and keep them comfortable.

71%

of respondents selected price as a key factor in the decision to invest in energy-efficiency upgrades

Price, incentives, and savings are the most important factors when deciding to invest in energy-efficient home or vehicle upgrades



We wanted to understand the factors that are going to motivate homeowners to invest in these home upgrades, whether it be price, environmental impact, or something else.

It turns out that price is clearly the most important factor when it comes to evaluating future investments in home or vehicle energy-efficiency upgrades, with more than 70% of respondents choosing price as their most important factor.

55%

of respondents named incentives as a key factor in the decision to invest in energy-efficiency upgrades

That said, more than half of all respondents reported that the incentives and credits (55%), along with the savings they receive (50%), will also be important, if not the most important, factor when determining which upgrades to invest in.

While certainly not insignificant, both environmental impact and availability came second to last and last, respectively.

We think the environmental impact is a worthwhile factor for homeowners—certainly for the 99 individuals who voted yes—it's just one of the many factors that go into investing in home upgrades, like solar, that help justify an investment in more efficient and cleaner technologies.



New incentives available through the Inflation Reduction Act may drive increased interest and demand for energy efficiency upgrades

To close out the survey, we asked solar homeowners an open-ended question: "How do the new credits and rebates impact your overall interest in energy efficiency investments?" We then categorized the responses by stated level or type of impact.

Our results indicate that more than 58% of solar homeowners show an increased interest in energy-efficiency investments in response to the Inflation Reduction Act. An additional 19% indicated that they were unsure and need more information.

Some of the respondents that claimed no to low impact shared that their interest in energy-efficiency upgrades preceded the Inflation Reduction Act, making the new credits a "nice-to-have" rather than a key driver.

Based on the responses, it's clear that homeowners have many questions about the Inflation Reduction Act and how the new credits and incentives might benefit their daily lives.

It's also clear that they're interested—to see if the new credits and incentives might bridge the gap between desirable and accessible energy-efficiency investments.

"Makes me more interested in purchasing if it brings the price down to what I'm willing to pay."

"Credits and Rebates are great, but I was interested before they started!!"

"I haven't looked into purchasing an electric vehicle bc we are on a tight budget but if it was significantly credited I would not hesitate to move forward."

"They make me want to invest more in saving energy and the environment. It never hurts to take advantage of good incentives on things to help our world."

Learnings

Solar tax credits have been around for nearly 20 years now, and many homeowners who have gone solar have done so because of the value these tax credits provide. With the Inflation Reduction Act, the federal government has largely expanded the potential savings that homeowners can take advantage of when investing in environmentally-friendly products.

With this survey, we wanted to understand the motivations of homeowners who have already taken advantage of clean energy technologies, and who might be interested in furthering their investment in their home or reducing their carbon footprint even more so than they already have.

Although many solar owners are satisfied with their home's overall

energy efficiency, there is still room for improvement among many homeowners—even those that have already invested in solar.

While the adoption of other energy-efficient technologies has remained low, a newfound interest in these technologies, including electric vehicles, is now evident, thanks in part to the knowledge that homeowners could potentially save more money on their investment as a result of the Inflation Reduction Act.

Finally, when the rubber meets the road, price is the number-one factor when it comes to deciding what energy-efficient upgrades to invest in over others, followed closely by incentives and savings. As a result, we expect that the price reductions from these new incentives and savings will significantly increase the number of homeowners who decide to invest in these improvements.





About Palmetto

Palmetto is a clean energy operating platform, streamlining the process and lowering the cost for homeowners wanting to produce their own energy from renewable sources like solar. We offer a national fulfillment network, servicing homeowners with local sales and installation specialists to advance the clean energy economy in communities across the nation. Palmetto's Energy Intelligence Platform simulates and models the solar potential and energy load profiles for 84% of rooftops in the U.S., including local requirements for 130+ utility service areas, plus demographic, market and building level data.

Survey Methodology

Palmetto surveyed 358 customers across the U.S. about the credits and rebates outlined within the Inflation Reduction Act of 2022. The survey respondents own a solar energy system and are customers of Palmetto Energy. The survey was conducted via email from Sept. 20 through Oct. 18, 2022, with responses collected using Google Forms.

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