# NEW SOLAR HOMES PARTNERSHIP NEW CONSTRUCTION HOME BUYERS MARKET RESEARCH COMPARISON REPORT FOR 2007-2008

CONSULTANT REPORT

*Prepared For:*
**CALIFORNIA ENERGY COMMISSION**

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December 2009
CEC-180-2010-013

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# Table of Contents

**Abstract** ..... **iii**

**Executive Summary** ..... **1**

**CHAPTER 1: Introduction** ..... 3

Methodology ..... 3

Key Findings ..... 3

**CHAPTER 2: Detailed Findings** ..... **9**

Advertising Awareness ..... 9

Opinions of Built-In-Solar Electric Systems for Newly Constructed Homes ..... 14

Opinions About Solar Electric Systems and the Cost of Electricity ..... 18

Factors in Choosing a New Home ..... 21

**CHAPTER 3: Conclusions** ..... **23**

**APPENDIX A: Pre-Advertising Tracking Survey** ..... **25**

**APPENDIX B: Post-Advertising Tracking Survey** ..... **33**

# ABSTRACT

The New Solar Homes Partnership is a ten-year program managed by the California Energy Commission to encourage the installation of solar electric energy systems in new highly energy efficient home construction in California. Fairbank, Maslin, Maullin & Associates was retained by the California Energy Commission through a competitive bid solicitation to conduct market research in support of the New Solar Homes Partnership public awareness campaign. The baseline market research, conducted from March to May 2007, included focus groups and a telephone survey designed to examine the attitudes, behaviors and preferences of new home buyers toward solar electric power.

In June 2008, immediately before the consumer launch of the Go Solar California advertising campaign, a pre-advertising study was conducted to establish a baseline of awareness of and opinions toward solar electric power, including measuring awareness of advertising efforts conducted by other parties. A post-advertising study was conducted in November 2008, designed to measure the impact of the advertising campaign by comparing the findings on the exact same questions asked in June 2008 before the advertising campaign commenced. This report details the findings of that research and its implications for the public awareness campaign.

**Keywords:** solar, solar electric, PV, photovoltaic, new construction, new solar homes partnership, homes, energy, building, integrated, California, renewable, program, rebate, Fresno, Riverside, Concord, San Diego, Sacramento, survey, focus group, cost saving, save, electricity, utility, bills, environment, buyer, standard feature, green, California Solar Initiative

# Executive Summary

The New Solar Homes Partnership (NSHP) is a ten-year program managed by the California Energy Commission to encourage the installation of solar electric energy systems in new highly energy efficient home construction in California. Fairbank, Maslin, Maullin & Associates (FMM&A) was retained by the California Energy Commission through a competitive bid solicitation to conduct market research in support of the NSHP public awareness campaign.

The baseline market research, conducted from March to May 2007, included focus groups and a telephone survey designed to examine the attitudes, behaviors and preferences of new home buyers toward solar electric power.

The pre-advertising study was conducted in June 2008 to establish a baseline of awareness of and opinions toward solar electric power before the Go Solar California advertising campaign began, including measuring awareness of advertising efforts conducted by other parties. The post-advertising study conducted in November 2008 was designed to measure the impact of the NSHP advertising campaign by comparing the findings on the exact same questions asked in June 2008 before the advertising campaign commenced.

# CHAPTER 1: Introduction

## Methodology

In 2008, two surveys for the California Energy Commission were conducted. The first survey was conducted June 19 - 23, 2008 before the beginning of the California Energy Commission's Go Solar California advertising campaign and the second survey was conducted November 18 - 24, 2008 after the advertising campaign. Throughout this report the first survey is referred to as the "pre-advertising" survey or the "June" survey and served as a baseline for measuring the impact of the Go Solar California advertising campaign. The second survey is referred to as the "post-advertising" survey or the "November" survey. It was designed to measure change in awareness of the Go Solar California advertising campaign and the impact of the campaign on opinions toward solar energy issues.

Respondents in each survey were drawn evenly from the Inland Empire, the Fresno media market, the Sacramento media market, the San Francisco media market, and the San Diego media market. The June survey included 800 respondents and the November survey included 805 respondents. Each survey has a margin of error of +/-3.5 percentage points at the 95$^{th}$ confidence interval.

The survey results are also compared to similar questions from the New Solar Homes Partnership New Construction Home Buyers Market Research study conducted May 18 - 26, 2007 (referred to as the "2007 survey"). In that survey, 600 respondents were interviewed, with 200 each in three regions: the Inland Empire, the Central Valley, and the Sacramento area. The margin of error for the 2007 survey is +/-4.1.

## Key Findings

Survey findings from the pre-advertising study conducted in June 2008 indicated that half of the sample of new homebuyers had already heard or seen advertising about energy efficient solar homes in California – before the Go Solar California advertising campaign was initiated.

The good news in this finding is that, because of previous advertising exposure, much of the Go Solar California audience was already primed to accept the value of roof-top solar electric systems before the campaign tried to influence them to do so. In other words, the Go Solar California effort was greeted with an audience amenable to its message.

However, the post-advertising study suggests that communications specifically from the Go Solar California campaign reached a very small segment of their audience. This is most likely a result of 1) a small media buy that was spread out across many markets, resulting in too little repetition of the message to make a significant impact, and 2) a cluttered information environment where the Go Solar California effort competed for attention with communications on similar topics. Competition included advertising from other solar interests; political and news information regarding alternative energy, energy issues generally, and energy initiatives on the November 2008 ballot; and advertising and news stories regarding hybrid cars (with a hybrid car giveaway a focal point of the Go Solar California campaign).

There is evidence, however, that the advertising did reach some new homebuyers. A larger advertising buy, more carefully targeted and designed to stand out amidst advertising competition, could have greater success, especially now that extensive advertising related to renewable energy statewide ballot measures is no long on the air.

Key findings include:

## *The Advertising Campaign*

In the June 2008 pre-advertising survey, 50 percent of respondents said they had seen or heard advertising about energy efficient solar homes in California. Therefore, before the Go Solar California advertising campaign began, half of its audience was primed to accept its messages based on their awareness of other advertising efforts or broadcast information. In the November 2008 post-advertising study, the proportion who reported having seen or heard advertising on energy efficient solar homes increased insignificantly to 53 percent. The lack of change could mean that the Go Solar California advertising failed to penetrate – the advertising awareness did not increase as the sources of the advertising expanded or changed between June and November 2008. However, it is also possible that those previously aware of other advertising efforts became aware of the Go Solar California advertising as well. If this were the case, the proportion who said they saw advertising about energy efficient solar homes would not necessarily increase. However, the proportion recalling aspects of the Go Solar California campaign should rise. With this as the barometer, there are indicators that the Go Solar California campaign specifically had an impact – albeit a modest one:

- While the overall proportion reporting seeing or hearing advertising about energy efficient solar homes in California increased insignificantly from June 2008 to November 2008, the proportion who reported hearing or seeing "a lot" of this type of advertising rose from 14 percent to 21 percent (a 50 percent increase). While the proportion hearing or seeing "a lot" of advertising was modest, the increase in intensity of awareness suggests that some of those who heard advertising in June

may have heard additional advertising from the Go Solar California effort since that time.

- When asked to explain in their own words what they recall about the advertising they saw or heard in the post-advertising study, the proportion mentioning the Go Solar California website or sweepstakes specifically rose from five percent to 14 percent. Again, while a small proportion, this nearly three-fold increase suggests that these respondents indeed received the communications.

- The proportion of those who specifically said they recalled the website or sweepstakes and who actually went to the website rose as well. In June 2008, just six percent of those who claimed to have seen or heard the Go Solar California advertising regarding the website or sweepstakes (which had not yet aired) said they had gone to the website. In November 2008, after the advertising actually did air, 36 percent said they did so. The significant change in the proportion saying they had gone to the website shows that the advertising did reach a portion of its audience.

- Those who reported seeing or hearing advertising on the radio or Internet – the communication channels used by the Go Solar California campaign – were three times as likely to recall the website (14 percent to 5 percent) and twice as likely to recall the sweepstakes (9 percent to 4 percent) as those who reported seeing advertising on other media sources. Although small proportions, these findings suggest that these respondents received and could recall the Go Solar California advertising.

While these indicators suggest at least a modest penetration of the Go Solar California advertising specifically, 43 percent reported seeing advertising on television, 30 percent in newspapers, and another 12 percent from billboards – all advertising channels that were not used by the Go Solar California campaign. A far lower 16 percent recalled Internet advertising and 22 percent radio advertising – both of which were employed by Go Solar California[1]. This shows that significantly more respondents have seen advertising put forth by parties other than the Go Solar California campaign.

## *Perceptions of Solar Electric Systems and Solar Energy Generally*

- New homebuyers continue to show strong support for built-in solar electric systems for newly constructed homes. After hearing a statement about these systems, two out of three (66 percent) respondents said they would "definitely" or

[1] Multiple responses were allowed. Therefore, percentages add up to greater than 100 percent.

"probably" purchase such a system in the post-advertising study. This result is unchanged from the pre-advertising study. The consistent support from June to November 2008 (and up slightly from 2007) is a positive finding considering that consumers are more closely watching their resources in these uncertain economic times.

- High proportions continue to believe that builders should make built-in solar electric systems standard features, with seven in ten (69 percent) giving this response. This proportion is equal to the pre-advertising study but down slightly from 74 percent in 2007. However, such a small drop in support shows consumer value of solar energy systems persists despite the housing and economic pressures that one could expect to undermine it.

- Support for a solar electric system is almost certainly an outgrowth of its economic and environmental value to new homebuyers – values that have remained strong since the research began in 2007. In the November 2008 study, just over nine in ten (92 percent) agreed that *using a solar electric system for your house helps the natural environment*. Nearly eight in ten (78 percent) agreed that a homebuilder who installs such as system *is a green builder who cares about the environment*. Furthermore, seven in ten agreed that a solar electric system *will reduce your utility bill up to 60 percent* and nearly eight in ten (78 percent) agreed that the system *lets a homeowner start saving on monthly living costs immediately*. The proportion agreeing with these statements is statistically unchanged from the pre-advertising study. This shows that the Go Solar California campaign did not create these positive attitudes, but certainly benefits from them.

- The overall *quality of construction* and *purchase price of a home* continue to be the most important factors in choosing a home, with three out of four respondents saying these are "very" important factors. The *overall energy efficiency of a new home* ranked third and was considered "very" important by 51 percent of respondents in the November 2008 study. However, *the cost of the monthly electric bill* generated less concern, with just 36 percent calling this "very" important. In the current housing market, where home loans are harder to secure but prices favor the buyer, the proportion saying the purchase price of a home is the most important factor increased from 66 percent stating "very" important in June 2008 to 76 percent in November 2008. With consumers more closely watching their financial resources, the proportion calling *the overall energy efficiency of a new home* a "very" important factor also rose, from 43 percent to 51 percent since June 2008. There was no significant change in the value placed on the quality of construction.

The results suggest that new homebuyer opinion is and continues to be favorable with regard to the value of solar energy. Respondents see the economic and environmental value in purchasing a solar electric system and are willing to consider doing so despite current economic distress and uncertainties. However, these views existed before the Go Solar California advertising campaign and persisted after it. While the results suggest some penetration of the advertising effort, reconsideration of the campaign's messages, for example a focus on federal and state tax rebates, could be critical for expansion of the campaign's reach and efficacy in increasing and buoying support for new construction roof-top solar electric systems specifically.

# CHAPTER 2:
# Detailed Findings

## Advertising Awareness

In the June 2008 survey, conducted before the Go Solar California advertising campaign began, 50 percent of respondents said they had seen or heard advertisements about energy efficient solar homes in California. This finding indicated that, before the advertising campaign had even gotten started, many respondents were already aware (at least vaguely) of solar energy issues and information put out by other parties, including possibly from builders and utilities.

This finding presented opportunities and challenges. The opportunities derived from the fact that many new homebuyers were already primed to accept messages from the Partnership about solar energy. Research shows that people are more receptive to messages about which they already have information or have accepted the underlying premise of the message (in this case that solar energy saves money and protects the environment). Therefore, the Go Solar California campaign did not have to start from scratch – much of their audience had some information about solar energy.

However, this finding presented a significant empirical challenge – how do we sort out those who were aware of advertising from the Go Solar California campaign and those aware of advertising from other sources? Had awareness been low in the pre-advertising study, we would have been able to safely attribute a rise in advertising awareness in the post-advertising study to the Go Solar California communications. However, because half of respondents said they had seen some advertising in the initial June 2008 study, it is more difficult to determine from the post-advertising study how many respondents had seen the Go Solar advertising as opposed to other parties' advertising efforts.

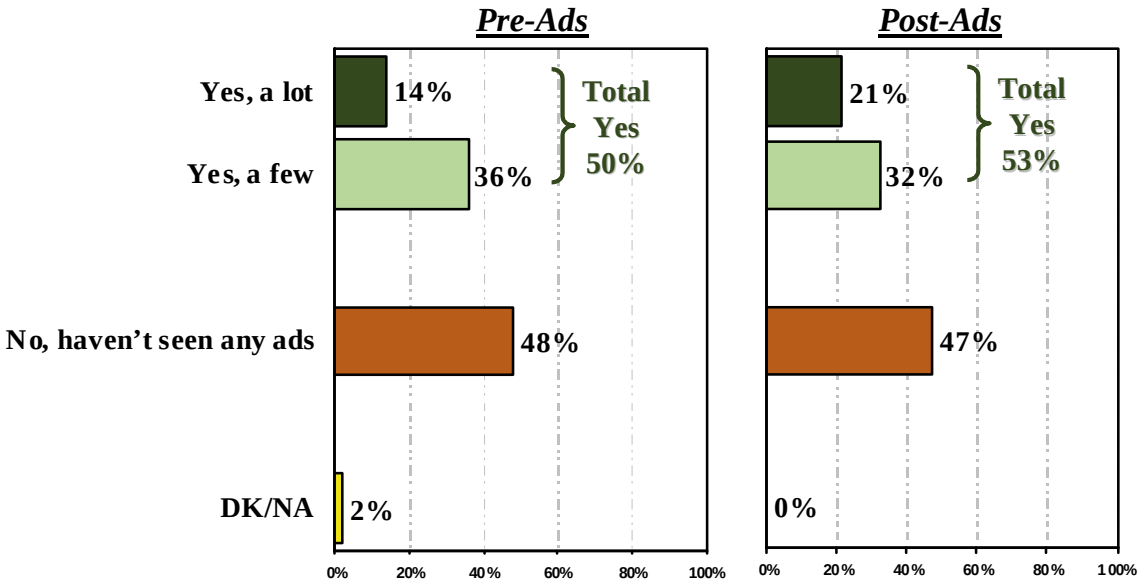
To this point, while 50 percent said they had seen or heard advertising in June 2008, a statistically equal 53 percent gave this response in November 2008. Just looking at the numbers, however, does not tell us if the 53 percent in November were answering the question by reflecting on advertising other than the Go Solar California effort (suggesting no change from June) or if some proportion of them were now *actually* recalling the Go Solar California campaign. Awareness of the Go Solar California advertising specifically could be higher than the change between the two surveys suggests.

There are other indicators which could help sort out this confusion. As shown in this report, some of the Go Solar California advertising effort appears to have reached its audience. But there are also other indications that much of the solar energy awareness comes from other sources.

## *Positive Indicator: Increased Intensity of Advertising Awareness*

One potential indication of penetration of the Go Solar California advertising campaign is that the proportion who said they had seen or heard "a lot" of advertising about energy efficient solar homes rose from 14 percent in June 2008 to 21 percent in November 2008 – a 50 percent increase (see Figure 1). While the proportion having heard "a lot" is still modest, the increase suggests respondents may have received information from an organized communication effort. In FMM&A's experience, respondents often say they have heard "a little" information when they are not sure what they have heard and have only a vague sense of it. An increase in intensity ("a lot" of information) suggests a greater likelihood that the respondents were reacting to a specific advertising campaign.

**Figure 1: Proportion Who Recall Hearing or Seeing Energy Efficient Solar Home Advertising, June and November 2008**
(*Asked of all respondents*)




There are few notable differences in the November 2008 study among subgroups in perceived awareness of advertising. Those with a high school education or less, African-American and Latino respondents and those in the Inland Empire were less likely to be aware of such advertising. Fresno (60 percent) and Sacramento (57 percent) region respondents expressed the greatest awareness among the five regions studied.

## *Positive Indicator: Increased Recall of Go Solar California Specifically from Advertising*

Those who recalled advertising were asked to explain in their own words what they recalled from the advertising they saw (see Table 1). The increased proportion who specifically mentioned the campaign indicates penetration of advertising for some respondents. In June 2008, four percent of those who recalled advertising regarding energy efficient solar homes in California mentioned the Go Solar California website. That proportion doubled to eight percent in the post-advertising study. Just one percent mentioned the Go Solar California sweepstakes in June. In November, six percent said they recalled information about the sweepstakes from the advertisements they saw or heard. Again, while the numbers remain small, the increase suggests that the advertising reached at least a small portion of its audience.

There was also a marked increase in the proportion who recalled hearing that solar energy saves money on monthly utility bills – a focus of the radio advertising in particular. The proportion recalling this fact from the ads rose from 24 percent in the pre-advertising study to 45 percent in the post-advertising study – nearly doubling. Further, while eight percent said they recalled hearing that solar energy helps the environment in the pre-advertising study, that proportion more than doubled to 20 percent in the post-advertising study (again, a focus of the radio advertising). The rise in the proportion able to give a specific response regarding the advertising suggests penetration of the Go Solar California campaign.

**Table 1: What Recall from the Advertising**

*(Asked only among those who said they had seen or heard advertising about energy efficient homes in California, n=400 in June and n=427 in November)*

| Source | June 2008 | November 2008 | Change June to November |
|---|---|---|---|
| Any mention of solar saving money on monthly utility bills | 24% | 45% | +21% |
| Any mention of a builder | 11% | 5% | -6% |
| Any mention of solar helping the environment | 8% | 20% | +12% |
| Any mention of the Go Solar California website | 4% | 8% | +4% |
| Any mention of the Go Solar California sweepstakes | 1% | 6% | +5% |
| Any mention of a utility | 1% | 2% | +1% |
| Can't recall specifics | 20% | 28% | +8% |

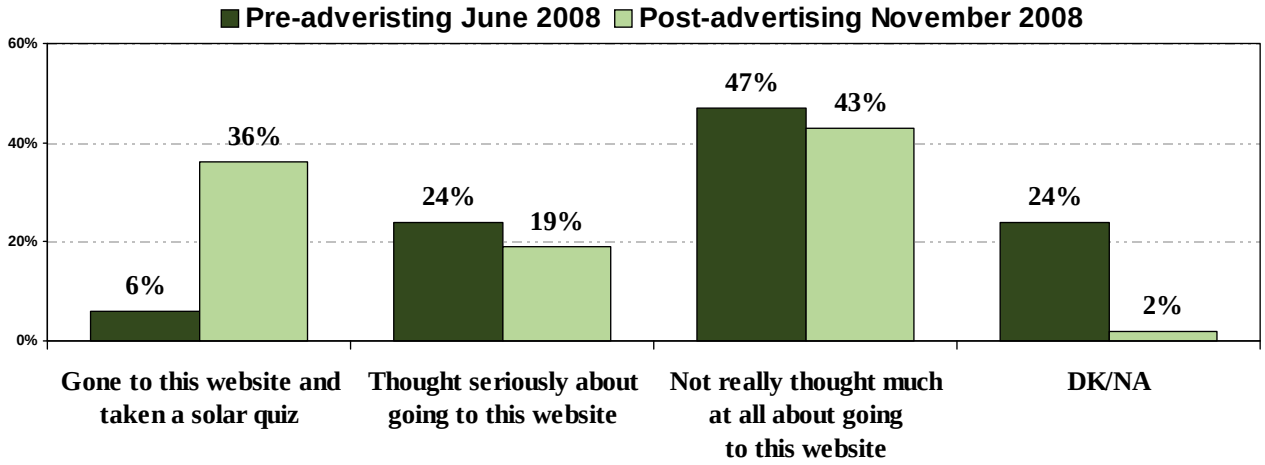
## *Positive Indicator: Increased Proportion Visiting Website or Sweepstakes*

Of those who mentioned the Go Solar California website or sweepstakes, 36 percent said they had gone to the website and another 19 percent said they had thought seriously about doing so. Just over four in ten (43 percent) said they had not really thought much at all about going to the website. While the sample size is small, this finding suggests that a strong proportion of those who saw the Go Solar California advertising were inspired to learn more.

This finding also shows that respondents who claimed to have seen the Go Solar California advertising did indeed see it since they went to the website to take the quiz. In the pre-advertising survey, just six percent of those who claimed to have seen or heard Go Solar California advertising specifically (which had not even aired) said they had gone to the website. Furthermore, in the pre-advertising study, one-quarter (24percent) of those who said they had seen or heard about the website or sweepstakes specifically were not able to give a response about whether they had gone to the website to take the quiz or even considered it. This shows that these respondents were really uncertain about what advertising they saw and the source of it. In the current study, just two percent were unable to answer the question (see Figure 2).

**Figure 2: Interest in Go Solar California Website and Solar Quiz, June to November 2008**

*(Asked only among those who specifically recalled the website or sweepstakes, n=34 in June and n=53 in November)*




Those who recalled the Go Solar California advertising in the post-advertising survey and said they had not thought about going to the website were asked for a reason why. Three in ten of this small group of respondents (23 respondents)[2] said they are too busy or do not have the time

[2] The small sample makes the results statistically less reliable.

(30 percent), while another 30 percent said that the cost of solar was too high. Just over one in ten (13 percent) said they were not interested and one in ten (9 percent) said they had no particular reason.

## *Negative Indicator: High Proportions Recall Advertising from Sources Not Used by the Go Solar California Campaign*

There was little change from June to November 2008 in media channels mentioned among those who said they had seen or heard advertisements about energy efficient solar homes in California. The highest proportion volunteered television and newspapers as where they saw the advertising in both studies[3]. The high rate of television and newspaper advertising recall is a negative indicator for the Go Solar California campaign given that neither television nor newspaper advertising were employed. This suggests that advertising awareness for many respondents is a result of efforts other than the Go Solar California campaign.

Just over two in ten (22 percent) in both studies mentioned radio, followed by the Internet at 16 percent – both media were used by the Go Solar California campaign. The proportion mentioning the Internet rose from 10 percent to 16 percent – a positive indicator that these respondents may have seen the Go Solar California advertising. However, there was no change in the proportion mentioning radio as a source of advertising (Table 2 illustrates the results). There was no notable difference among subgroups regarding sources of information in the November 2008 survey.

[3] The proportion mentioning newspapers decreased slightly from 37 percent in June 2008 to 30 percent in November 2008.

**Table 2: Source of Advertising, June and November 2008**
*(Asked only among those who said they have seen or heard advertising about energy efficient homes in California, n=400 in June and n=427 in November)*

| Source | June 2008 | November 2008 |
|---|---|---|
| Television | 40% | 43% |
| Newspapers | 37% | 30% |
| Radio | 22% | 22% |
| Billboards | 12% | 12% |
| Internet | 10% | 16% |
| From a builder's ad, website, or model home | 9% | 12% |
| In the mail delivered to my home | 5% | 8% |
| From local utility company | 1% | 4% |
| From a solar equipment installation company | 0% | 5% |
| Other | 8% | 3% |
| Can't recall where | 5% | 6% |

To better understand the impact of the Go Solar California campaign, FMM&A looked at advertising awareness of those who said they had seen or heard advertising on the Internet or radio (where the advertising was employed) versus those who said they had seen or heard advertising from other sources, such as television and newspapers, which were not used by the campaign. Those who had seen advertising on the radio or Internet were three times as likely to recall the website (14 percent to 5 percent) than those who said they recalled other sources of advertising. They were twice as likely to recall the sweepstakes (9 percent to 4 percent) and slightly more likely to recall solar saving money on monthly utility bills (50 percent to 43 percent) and helping the environment (24 percent to 18 percent). They were far less likely to say they could not recall something specifically from the advertising (20 percent to 33 percent). This finding shows that there was some penetration of advertising – although it appears to be modest. Again, given the small advertising buy, this is an encouraging finding that the advertising effort resonated with a portion of its audience.

## Opinions of Built in Solar Electric Systems for Newly Constructed Homes

In both studies, respondents were read the following statement:

*Let's assume that you saw a newly constructed single residence home that you liked and that you had the option of adding a built-in-roof-top solar electric system to it. Let's also assume that this solar electric system would add 13 to 15 thousands dollars to the purchase price of the home, that it would have a ten-year warranty and that using it would cut your yearly electric bill in half from what it otherwise would be.*

After hearing this statement, two out of three (67 percent) respondents in the pre-advertising study said they would purchase this option when buying a newly constructed single residence home, with 31 percent saying they would "definitely" do so and 36 percent saying they would "probably" do so. Just two in ten respondents (22 percent) said they would "probably" (11 percent) or "definitely" (11 percent) not do so. Just over one in ten (12 percent) were uncertain or need more information.

Responses were little changed in the post-advertising study, with 66 percent saying they would "definitely" (33 percent) or "probably" (33 percent) purchase this option and 21 percent saying they would "probably" (12 percent) or "definitely" (9 percent) not do so. Twelve percent (12 percent) were again uncertain.

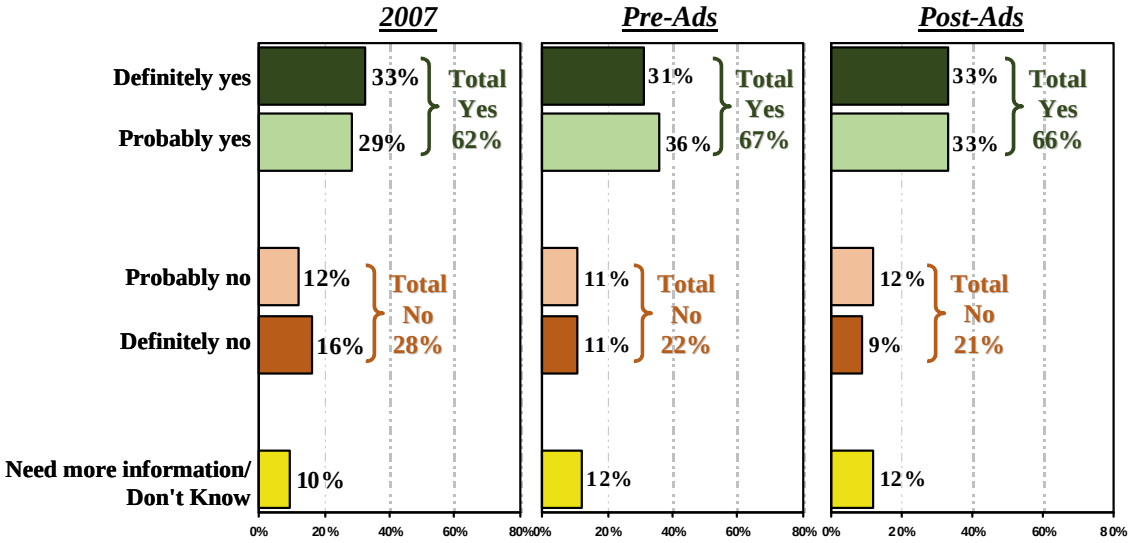
However, both the June and November results are slightly improved from the May 2007 New Solar Homes Partnership New Construction Home Buyer Market Research survey. At that time, after hearing the statement[4], 62 percent said they would purchase this option – five points lower than the June study and four points lower than the November survey. While just 22 percent said they would not choose this option in June 2008 and 21 percent in November 2008, 28 percent did so in 2007. Therefore, there is a 45-point difference between those who would and would not purchase this option in the June and November surveys, compared to 34 points in 2007.[5] The proportion that would "definitely" do so is statistically unchanged (see Figure 3).

It is encouraging that the proportion who would consider this option did not decrease in November given the economic crisis that unfolded just a few months after the June pre-advertising study. One might have expected more respondents to say they would not purchase such an item given the expense. The consistent interest in the last six months suggests that new home buyers do indeed see the value to them in making the investment in a built-in roof-top solar electric system – even when they are potentially watching their resources more carefully.

[4] The information given was identical in each survey other than the June and November surveys mentioning a purchase price of $13,000 to $15,000 rather than just $13,000 as was mentioned in the 2007 survey.

[5] The slight increase in June and November may reflect the inclusion of the San Francisco and San Diego media markets in the sample – both regions offering more support than the Inland Empire, Fresno, and Sacramento areas that were the focus of the previous survey. In fact, when the San Diego and San Francisco media markets are excluded from the current study, support is near equal across all three studies.

**Figure 3: Willingness to Purchase a Solar Electric System After Information, November and June 2008 and 2007**
*(Asked of all respondents)*




- As in June, those who said they had heard or seen "a lot" of advertising are slightly more likely to say they would buy a solar electric system option if purchasing a newly constructed single residence, with 75 percent giving this response, compared to 69 percent of those who have seen "a few" ads and 60 percent of those who had seen none.

- The proportion who say they would consider this option rises with income, from 56 percent of the small group earning less than $30,000 a year in household income and 63 percent of those earning $30,000 to $75,000 compared to 71 percent of those earning $75,000 to $150,000 and 77 percent of those earning more. Again, this same trend was apparent in the June study.

- The proportion willing to consider such a system is slightly lower among those 60 years of age or older (56 percent) than those 50 to 59 (65 percent) or younger (69 percent).

- Likelihood to purchase such an option increases as one moves to the left on the political spectrum, with 64 percent of conservatives saying they would purchase a roof-top solar electric system option compared to 68 percent of moderates and 71 percent of liberals.

- Post-graduates are slightly more likely to purchase this option (72 percent) than those with some college (68 percent) or a four-year college education (65 percent), but much more so than those with a high school education or less (61 percent).

- Those with children at home are more likely to buy this option than those without (70 percent to 62 percent).

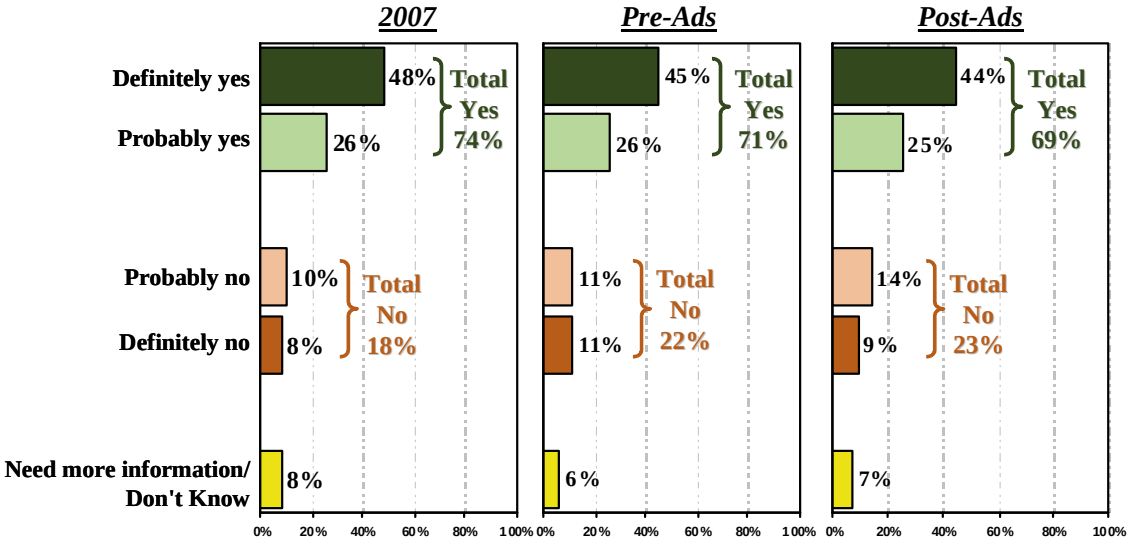
- There is little notable difference by ethnicity, region, or gender.

The proportion that believes that builders should make roof-top solar electric systems a standard feature in all new single family residence homes they build is little changed between the pre- and post-advertisings studies. In June 2008, 71 percent felt this should be a standard feature, with 45 percent saying it "definitely" should be so. In November 2008, 69 percent gave this response, with 44 percent "definitely." While 22 percent felt roof-top solar electric systems should not be a standard feature in June, an equal 23 percent gave this response in November. Again, one might have expected less support for solar electric systems given their cost and growing economic concerns, as well as the difficulty in securing home loans (with the added expense of the system increasing the home purchase price). However, the value of such systems environmentally and their cost savings may overcome other economic concerns.

It should be noted, however, that there is a modest drop-off in support for these systems as a standard feature since the 2007 study. At that time, 74 percent supported such a standard feature in all new single family residence homes, with 48 percent "definitely" in support of this proposal and 18 percent opposed it (see Figure 4).

**Figure 4: Opinion of Whether Home Builders Should Make Roof-Top Solar Electric Systems a Standard Feature in All New Homes, November and June 2008 and 2007**

*(Asked of all respondents)*




Evidence of the success of advertising efforts, three out of four respondents (75 percent) who had seen or heard advertising in the post-adverting study said these systems should be a

standard feature, compared to 62 percent of those who had not seen or heard advertising. The proportion is an even higher 82 percent among those who could specifically mention having seen or heard advertising about the Go Solar California website or sweepstakes.

Liberals are more likely to believe these systems should be standard features (80 percent) than moderates (68 percent) or conservatives (65 percent). Those with school-age children are slightly more likely to feel this way than those without (72 percent to 66 percent), as are women more than men (73 percent to 68 percent). Respondents from the Inland Empire are the least supportive, with three in ten (30 percent) saying it should not be standard, compared to 21 percent to 24 percent of those in other regions.

## Opinions about solar electric systems and the cost of electricity

The survey results show an ongoing concern about electricity costs and a positive association with solar energy and environmental protection and cost savings (see Table 3).

- Respondents nearly unanimously agreed that *using a solar electric system for your house helps the natural environment.* This is a view that has held constant since the June 2008 study. In June, 93 percent agreed with this statement. In November, 92 percent did so. However, the proportion that "strongly" agrees rose from 60 percent to 69 percent, suggesting that information has increased the intensity of agreement.

- In the post-advertising study seventy-eight percent (78 percent) of study respondents agreed that *a homebuilder who builds homes with solar electric systems is a green builder who cares about the environment*. Just 16 percent disagreed. The proportion in agreement is down slightly from 83 percent in June. However, intensity of agreement is slightly higher, with 49 percent "strongly" agreeing to 45 percent in June.

- Just under two in three post-advertising study respondents (63 percent) agreed that *a homebuilder offering solar electric power as an option is most likely to be offering high quality construction throughout the home*. This is up slightly from 59 percent in June. Intensity is also up slightly, with 36 percent "strongly" agreeing in November to 30 percent in June. Overall, the proportion who agreed with this statement is down from 67 percent in May 2007.

- In both June and November, seven in ten residents agreed that *with a solar electric system on your house, you can reduce your utility bill up to 60 percent* (69 percent in November and 71 percent in June). There is no change in intensity of response. An even higher 78 percent of respondents in both June and November agreed with a more general statement that *having a solar electric system lets a homeowner start saving on monthly living*

*costs immediately*. A higher 51 percent of November respondents "strongly" agreed with this statement than 41 percent of June respondents.

- Residents are far more likely to agree that a solar electric system will generate cost savings than to see a solar electric system as nothing more than a gimmick. Just 26 percent of November and 27 percent of June respondents agreed that *a solar electric system is just an expensive gimmick to get home buyers to pay more for a home* (only 12 percent and 13 percent, respectively, "strongly" agreed). Meanwhile 68 percent of November and 65 percent of June respondents disagreed. In June of 2007, a similar 24 percent agreed with the statement, although a lower eight percent "strongly" agreed. The proportion who disagreed was higher, at 72 percent – suggesting a level of distrust in the currently unstable housing market.

- Nine in ten respondents continued to believe in November 2008 that *electric bills will continue to increase steadily in the years ahead* (90 percent in June and 89 percent in November). Despite this strong finding, it is down slightly from 96 percent agreeing in 2007.

- Seven in ten respondents agreed that *the high cost of electricity has now become an important factor in my home buying decisions* (69 percent in November and 71 percent in June). Again, we see that intensity has increased since June 2008, with 45 percent of November respondents "strongly" agreeing compared to a slightly lower 41 percent in June. However, overall the proportion who agreed with this statement is lower in both 2008 studies than in the May 2007 study (78 percent agreed).

## Table 3: Agreement with Statements, November and June 2008 and 2007

| Statements | Year | TOTAL AGREE | Strong Agree | Smwt Agree | Total Disagree | DK/NA |
|---|---|---|---|---|---|---|
| Using a solar electric system for your house helps the natural environment | **Nov. 2008** | **92%** | 69% | 23% | 5% | 3% |
| | **June 2008** | **93%** | 60% | 33% | 4% | 3% |
| | **May 2007** | **NA** | NA | NA | NA | NA |
| Electric bills will continue to increase steadily in the years ahead | **Nov. 2008** | **89%** | 69% | 20% | 7% | 4% |
| | **June 2008** | **90%** | 65% | 25% | 7% | 4% |
| | **May 2007** | **96%** | 79% | 17% | 3% | 1% |
| A homebuilder who builds homes with solar electric systems is a green builder who cares about the environment | **Nov. 2008** | **78%** | 49% | 29% | 16% | 6% |
| | **June 2008** | **83%** | 45% | 38% | 12% | 5% |
| | **May 2007** | **78%** | 44% | 34% | 19% | 3% |
| Having a solar electric system lets a homeowner start saving on monthly living costs immediately | **Nov. 2008** | **78%** | 51% | 27% | 15% | 8% |
| | **June 2008** | **78%** | 41% | 37% | 13% | 9% |
| | **May 2007** | **81%** | 48% | 33% | 11% | 7% |
| With a solar electric system on your house, you can reduce your utility bill up to 60 percent | **Nov. 2008** | **69%** | 39% | 30% | 9% | 22% |
| | **June 2008** | **71%** | 40% | 31% | 8% | 22% |
| | **May 2007** | **NA** | NA | NA | NA | NA |
| The high cost of electricity has now become an important factor in my home buying decisions | **Nov. 2008** | **69%** | 45% | 24% | 30% | 1% |
| | **June 2008** | **71%** | 41% | 30% | 25% | 4% |
| | **May 2007** | **78%** | 45% | 33% | 18% | 4% |
| A homebuilder offering solar electric power as an option is most likely to be offering high quality construction throughout the home | **Nov. 2008** | **63%** | 36% | 27% | 24% | 13% |
| | **June 2008** | **59%** | 30% | 29% | 28% | 13% |
| | **May 2007** | **67%** | 36% | 31% | 24% | 10% |
| A solar electric system is just an expensive gimmick to get home buyers to pay more for a home | **Nov. 2008** | **26%** | 12% | 14% | 68% | 6% |
| | **June 2008** | **27%** | 13% | 14% | 65% | 8% |
| | **May 2007** | **24%** | 8% | 16% | 72% | 5% |

## Factors in choosing a new home

*The overall quality of construction* and *the purchase price* of a home were the most important factors in choosing a home across all three surveys. Respondents were asked to rate the importance of these and other factors on a scale of 1 to 7 where a "1" indicated the feature is not at all important and a "7" indicated it is "very" important. *The overall quality of construction* received a mean rating of 6.6 in November 2008 and 6.5 in June, with 75 percent giving it a "7" rating in both surveys. This is statistically equal to the mean rating of 6.6 and "7" rating from 76 percent in the 2007 study. *The purchase price* received a mean rating of 6.6 on the seven-point scale in November. This is up slightly from 6.3 in June and 6.4 in 2007. The proportion giving this factor a "7" rating rose from 68 percent in 2007 and 66 percent in June to 76 percent currently. This significant increase almost certainly reflects the economic uncertainties facing Californians and a struggling housing and mortgage market.

The *overall energy efficiency of the new home* ranks third in average rating, with a 6.0 rating in November, 5.9 in June, and 6.1 in 2007[6] on the 7-point scale. However, significantly fewer respondents considered this factor to be "very" important compared to other factors, with just 51 percent giving it a "7" rating in November. Yet this represents an increase from 43 percent in June (statistically equal to 48 percent in 2007).

While energy efficiency continues to be an important factor, *the cost of the monthly electric bill* is less so. This factor received an average rating of 5.2 on the 7-point scale in November, with 36 percent considering it very important (a 7-rating). These ratings are down slightly from June when this factor received an average rating of 5.5 and a "7" rating from 38 percent. The slightly lower importance of the cost of the monthly electric bill is somewhat surprising in the downward economy. However, it may also reflect dropping gas prices or less emphasis on energy prices as concern about other aspects of the economy take a more prominent position. Ratings from 2007 fall in between those from June and November 2008. Table 4 illustrates the results.

[6] In the current study, respondents were asked to rate the "overall" energy efficiency of the new home. In 2007, "overall" was not included in the question.

## Table 4: Importance of Factors When Purchasing a New Home, 2007 and 2008

| Statements | Year | Mean Score | 7-score | 5-6 | 4 | 1-3 |
|---|---|---|---|---|---|---|
| The overall quality of construction | **Nov. 2008** | **6.6** | 75% | 22% | 2% | 1% |
| | **June 2008** | **6.5** | 75% | 18% | 2% | 4% |
| | **May 2007** | **6.6** | 76% | 22% | 1% | 1% |
| The purchase price | **Nov. 2008** | **6.6** | 75% | 20% | 2% | 1% |
| | **June 2008** | **6.3** | 66% | 25% | 3% | 5% |
| | **May 2007** | **6.4** | 68% | 27% | 3% | 2% |
| The overall energy efficiency of the new home | **Nov. 2008** | **6.0** | 51% | 37% | 6% | 5% |
| | **June 2008** | **5.9** | 43% | 44% | 7% | 4% |
| | **May 2007** | **6.1** | 48% | 43% | 6% | 3% |
| The cost of the monthly electric bills | **Nov. 2008** | **5.2** | 36% | 35% | 11% | 17% |
| | **June 2008** | **5.5** | 38% | 38% | 11% | 11% |
| | **May 2007** | **5.3** | 31% | 39% | 16% | 13% |
| The quality of local schools | **Nov. 2008** | **5.4** | 50% | 25% | 5% | 19% |
| | **June 2008** | **5.5** | 47% | 30% | 7% | 15% |
| | **May 2007** | **5.2** | 39% | 29% | 8% | 19% |

# CHAPTER 3: Conclusions

The Go Solar California advertising campaign effort was greeted with an audience amenable to its message. Because of previous advertising exposure and public discussion in the news media, the value of solar energy generally and solar electric in particular was well established in the public's thinking before the pre-advertising study was conducted in June of 2008 and well before the Go Solar California advertising campaign was initiated in the summer of 2008. The pre- and post Go Solar California campaign surveys argue that, today, as well as when the Go Solar California advertising was underway, the public generally sees and appreciates the economic and environmental value in purchasing a solar electric system. And it appears that there is interest in and a willingness to consider a solar electric system as part of new construction despite current economic distress and uncertainties.

The post-advertising study conducted in November of 2008 suggests that communications specifically from the Go Solar California campaign reached a portion, albeit small, of its intended audience. The campaign's limited impact is most likely due to 1) a small media buy that was spread out across many markets, resulting in limited repetition of the message and 2) a cluttered information environment where the Go Solar California effort competed for attention with communications from other solar interests; news media information regarding alternative energy and the extensive advertising associated with the two energy initiatives on the November 2008 statewide ballot, which had expenditures in the aggregate of upwards of 35 million dollars between June and November 2008.

However, when respondents who recalled obtaining information about solar energy from radio ads and the Internet – the principal media for the Go Solar California campaign – are compared to respondents who attributed information about solar energy to other media, respondents who mentioned the Go Solar California campaign media sources were two to three times more likely to recall the Go Solar California website and sweepstakes.

These findings suggest that a larger advertising buy, very carefully targeted and designed to stand out amidst advertising competition, could be more effective, especially now that extensive advertising related to renewable energy statewide ballot measures is no long on the air.

Further, and especially in light of the current general downturn in consumer spending, reconsideration of the campaign's messages, for example a focus on federal and state tax rebates, could be critical for expansion of the effort to stimulate interest among new homebuyers to include roof-top solar electric systems as part of their housing purchase.

# Appendix A:
# Pre-Ad Tracking Survey

**FAIRBANK, MASLIN, MAULLIN & ASSOCIATES** **JUNE 19-23, 2008**

Interviewer _____ Station_____

Time Began_____Time Finished_____ Total Time _____

**NEW HOME BUYER PRE-ADS TRACKING SURVEY**
**320-333A UFT**
**N=800**

Hello, I'm_____ from FMMA, a public opinion research firm. We're conducting an opinion survey on issues that interest people in California. We are not selling anything, and we will not ask you for a donation. May I speak with_____ (**MUST SPEAK WITH RESPONDENT LISTED**. **IF NOT AVAILABLE, ASK:** "Is there another time I may call back to speak to _____?")

1. Have you purchased a single family home in the past 4 years, that is, since May 2004?

Yes ----------**ASK Q2**--95%
No ---------- **SKIP TO Q3**--5%
**(DON'T KNOW)** -------- **SKIP TO Q3**--0%

**(ASK ONLY IF CODE 1 IN Q1)**

2. Did you buy a home that was newly built and never occupied before, or did you buy an existing home that had been lived in before you bought it?

Newly built----------**SKIP TO Q4**--97%
Existing ---------- **ASK Q3**--3%
**(DON'T KNOW)** ---------- **ASK Q3**--0%

**(ASK Q3 ONLY IF CODE 2-3 IN Q1 OR CODE 2-3 IN Q2)**

3. In the next 24 months, how likely are you to buy a newly constructed home – one that has never been occupied before? Will you definitely buy or probably buy a newly constructed, never lived in home in the next 24 months? Or, are the chances 50-50 or less that you will buy a newly constructed home in the next 24 months?

Definitely buy---------- 17%
Probably buy ---------- 83%
50-50 or less ---------- **TERMINATE**
**(DON'T KNOW/NA)**------- **TERMINATE**

**(RESUME ASKING ALL RESPONDENTS)**

4. Do you recall hearing or seeing any advertisements about energy efficient solar homes in California? **(IF YES, ASK:** "And have you seen a lot of ads or just a few?")

Yes, a lot----------**(ASK Q5)**--14%
Yes, a few ----------**(ASK Q5)**--36%
No, haven't seen any ads **(GO TO Q9)** --------- 48%
**(DON'T READ)** DK/NA**(GO TO Q9)**---------- 2%

**(ASK Q5 & Q6 ONLY IF YES IN Q4)**

5. Please tell me if these ads about solar energy were on the radio, on the television, in newspapers or from some other source. **(DO NOT READ RESPONSE CODES; MULTIPLE ANSWERS OK)**

Television ---------- 40%
Newspapers ---------- 37%
Radio---------- 22%
Billboards ---------- 12%
Internet---------- 10%
From a homebuilder's ad, website or model home -------9%
In the mail delivered to my home ----------5%
At a Wells Fargo bank branch----------2%
From local utility company ----------1%
On a Wells Fargo bank website ----------0%
From a solar equipment installation company----------0%

Can't recall where----------5%
Any other source(s) ----------8%

6. In a few words of your own, can you tell me what these ads were saying**? (DO NOT READ PRE-CODED ITEMS. MULTIPLE RESPONSES OK. ALSO WRITE DOWN VERBATIM REMARKS FOR ALL RESPONDENTS)**

Any mention of the Go-Solar-California website **(ASK Q7)** ----------4%
Any mention of the Wells Fargo-Go-Solar-California sweepstakes **(ASK Q7)**----------1%
Any mention of solar saving money on monthly utility bills **(SKIP TO Q9)** ---------- 24%
Any mention of solar helping the environment **(SKIP TO Q9)**----------8%
Any mention of a builder **(SKIP TO Q9)** ---------- 11%
Any mention of a utility **(SKIP TO Q9)** ----------1%
Can't recall specifics **(SKIP TO Q9)** ---------- 20%

Any other remarks **(RECORD BELOW)**
Energy Efficiency / Saving Energy ---------- 29%
Solar Power/Panels---------- 29%

Home Installation ---------- 10%
Selling Power Back To Company ---------- 3%
Rebate ---------- 3%
Cost/Investment ---------- 3%
Generalization ways to make home energy ---------- 1%
Way of the Future ---------- 1%
Free ---------- 0%
Mandatory ---------- 0%

Other mentions ---------- 0%

**(ASK Q7 IF CODES 1 OR 2 IN Q6)**

7. Since hearing or seeing the advertising about the Go-Solar-California website and/or the Wells Fargo Go-Solar-California sweepstakes, have you…?

Gone to this website and taken a solar quiz, or ---------- 6%
Thought seriously about going to this website, or ---------- 24%
Not really thought much at all about going to this website **(ASK Q8)** --------- 47%
**(DON'T READ)** DK/NA ---------- --24%

**(ASK Q8 ONLY IF CODE 3 ON Q7)**

8. In your own words, is there any particular reason you can share with us why you haven't thought about going to the Go Solar California website?

**RECORD VERBATIM REMARKS**

Not time / Too Busy ---------- 38%
Not going to install / Not Interested ---------- 19%
Unfamiliar / Never Thought About it ---------- 19%
Cost / Too Expensive ---------- 19%
Not Interested in Websites / Don't Use Computer ---------- 0%

DK/NA/RF ---------- 19%

**(ASK Q9 ONLY IF NO MENTION OF ADVERTISING IN Q4 OR ANY CODE OTHER THAN 1 OR 2 IN Q6)**

9. Let me ask you more specifically, have you seen any advertising that mentions a "Go Solar Website" or a "Wells Fargo Go Solar California Sweepstakes?" **(IF YES, ASK:** "Have you heard a lot of advertising or just a little?")

Yes, a lot ---------- 2%
Yes, a little ---------- --12%
No, haven't seen/heard anything about either - -79%
**(DON'T READ)** DK/NA ---------- 7%

**(RESUME ASKING EVERYONE)**

**LET'S ASSUME THAT YOU SAW A NEWLY CONSTRUCTED SINGLE RESIDENCE HOME THAT YOU LIKED AND THAT YOU HAD THE OPTION OF ADDING A BUILT-IN ROOF-TOP SOLAR ELECTRIC SYSTEM TO IT. LET'S ALSO ASSUME THAT THIS SOLAR ELECTRIC SYSTEM WOULD ADD 13 to 15 THOUSAND DOLLARS TO THE PURCHASE PRICE OF THE HOME, THAT IT WOULD HAVE A 10-YEAR WARRANTY AND THAT USING IT WOULD CUT YOUR YEARLY ELECTRIC BILL IN HALF FROM WHAT IT OTHERWISE WOULD BE.**

10. With this information in hand, do you think you would purchase this option when buying a newly constructed single residence home? (**IF YES/NO, ASK:** "Is that definitely **YES/NO**, or just probably **YES/NO**"?)

| | |
|---|---|
| Definitely yes | 31% |
| Probably yes | 36% |
| **TOTAL YES** | **67%** |
| Probably no | 11% |
| Definitely no | 11% |
| **TOTAL NO** | **21%** |
| **(DON'T READ)** Need more information | 9% |
| **(DON'T READ)** Don't know/NA | 3% |

11. Next, let me give you some statements. After you hear each one, please tell me whether you agree or disagree with it. **(IF AGREE/DISAGREE, ASK:** "Is that strongly or just somewhat?")

**(ROTATE)**

| | STR. AGREE | S.W. AGREE | S.W. DISAG. | STR. DISAG. | (DK/NA) |
|---|---|---|---|---|---|
| [ ]a. A homebuilder who builds homes with solar electric systems is a green builder who cares about the environment | 45% | 38% | 7% | 5% | 5% |
| [ ]b. Using a solar electric system for your house helps the natural environment | 60% | 33% | 2% | 2% | 3% |

| | | | | | | |
|---|---|---|---|---|---|---|
| [ ]c. | With a solar electric system on your house, you can reduce your utility bill up to 60 percent | 40% | 31% | 5% | 3% | 22% |
| [ ]d. | The high cost of electricity has now become an important factor in my home buying decisions | 41% | 30% | 14% | 11% | 4% |
| [ ]e. | A solar electric system is just an expensive gimmick to get home buyers to pay more for a home | 13% | 14% | 26% | 39% | 8% |
| [ ]f. | Electric bills will continue to increase steadily in the years ahead | 65% | 25% | 5% | 2% | 4% |
| [ ]g. | A home builder offering solar electric power as an option is most likely to be offering high quality construction throughout the home. | 30% | 29% | 17% | 11% | 13% |
| [ ]h. | Having a solar electric system lets a homeowner start saving on monthly living costs immediately | 41% | 37% | 8% | 5% | 9% |

12. Next, I'm going to mention some factors that people may consider when purchasing a new home. Using a scale of one to seven, where one means **NOT AT ALL IMPORTANT,** and seven means **VERY IMPORTANT,** for each one, please tell me how important that factor is for you personally in choosing a newly constructed, never lived in single residence home.

| | **NOT AT ALL IMPORTANT** | | | | **VERY IMPORTANT** | | | **DK** | |
|---|---|---|---|---|---|---|---|---|---|
| **(ROTATE)** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **MEAN** |
| [ ]a. The overall quality of construction | 3% | 1% | 0% | 2% | 6% | 12% | 75% | 1% | **6.5** |
| [ ]b. The purchase price | 2% | 1% | 2% | 3% | 10% | 15% | 66% | 1% | **6.3** |
| [ ]c. The quality of local schools | 9% | 3% | 3% | 7% | 14% | 16% | 47% | 2% | **5.5** |
| [ ]d. The overall energy efficiency of the new home | 2% | 1% | 1% | 7% | 21% | 23% | 43% | 1% | **5.9** |
| [ ]e. The cost of the monthly electric bill | 4% | 3% | 4% | 11% | 19% | 19% | 38% | 2% | **5.5** |

13. Based on what you know today, do you think that home builders should make roof-top solar electric systems a standard feature in all new single residence homes they build? (**IF YES/NO, ASK:** "Is that definitely **YES/NO**, or just probably **YES/NO**"?)

Definitely yes ---------- 45%
Probably yes ---------- 26%
**TOTAL YES ---------- 72%**

Probably no ---------- 11%
Definitely no ---------- 11%
**TOTAL NO ---------- 22%**

**(DON'T READ)** Need more information --------4%
**(DON'T READ)** Don't know/NA---------- 2%

**HERE ARE MY FINAL QUESTIONS; THEY ARE JUST FOR CLASSIFICATION PURPOSES.**

14. In what year were you born?

1990-1984 (18-24) ----------3%
1983-1979 (25-29) ----------7%
1978-1974 (30-34) ---------- 11%
1973-1969 (35-39) ---------- 15%
1968-1964 (40-44) ---------- 14%
1963-1959 (45-49) ---------- 11%
1958-1954 (50-54) ----------8%
1953-1949 (55-59) ----------9%
1948-1944 (60-64) ----------7%
1943-1934 (65-74) ----------8%
1933 or earlier (75 & over)----------4%
**(REFUSED/ DK/NA)**----------5%

15. What was the last level of school you completed?

Grades 1-8----------1%
Grades 9-11 ----------1%
High school graduate (12)---------- 16%
Some college/business/
vocational school ---------- 20%
College graduate (4) ---------- 43%
Post-graduate work/
Professional school---------- 18%
**(DON'T READ)** Refused----------2%

16. With which racial or ethnic group do you identify yourself? (**READ RESPONSES)**

Hispanic or Latino---------- 18%
African-American or Black ----------7%
Anglo/White ---------- 50%
Asian ---------- 15%
Something else----------7%
**(DON'T READ)** Refused/NA----------4%

17. How would you describe your political outlook? Would you say that you are very conservative, somewhat conservative, moderate, somewhat liberal, or very liberal?

Very conservative ---------- 16%
Somewhat conservative ---------- 26%
Moderate ---------- 32%
Somewhat liberal ---------- 12%
Very liberal----------8%
**(DON'T READ)** Refused/DK/NA -------6%

18. Do you consider yourself to be an environmentalist?

Yes ---------- 54%
No ---------- 43%
**(DON'T READ)** Refused/DK/NA -------3%

19. Are there children under the age of 18 living in your household?

Yes ---------- 49%
No ---------- 50%
**(DON'T READ)** Refused/DK/NA -------2%

20. I don't need to know the exact amount, but please stop me when I mention the category that includes the total income for your household income before taxes in 2007?

Less than $30,000 ----------3%
$30,001 - $50,000 ----------8%
$50,001 - $75,000 ---------- 18%
$75,001 - $100,000---------- 19%
$100,001 - $150,000 ---------- 20%
More than $150,000---------- 12%
**(DON’T READ)(Refused)**---------- 20%

**THANK AND TERMINATE**

Gender: By observation

Male ---------- 80%
Female ---------- 20%

Name _____

Phone # _____

Address _____

Date _____

City _____

Rep # _____

Interviewer _____

Page # _____

Verified by _____

ZIP CODE _____

**SAMPLE**

Inland Empire (N=160)----------20%
Fresno DMA (N=160)----------20%
Sacramento DMA (N=160)----------20%
San Francisco DMA (N=160) ----------20%
San Diego DMA (N=160) ----------20%

**COUNTY**

San Bernardino ---------- 7%
Riverside ----------14%
Fresno---------- 8%
Kern---------- 0%
Stanislaus---------- 3%
San Joaquin ---------- 4%
Sacramento---------- 4%
Placer ---------- 5%
Solano ---------- 2%
Yolo---------- 2%
Sutter---------- 1%
San Francisco ---------- 1%
Santa Clara ---------- 4%
Alameda ---------- 0%
Contra Costa ----------12%
Marin ---------- 0%
San Mateo ---------- 1%
Los Angeles ---------- 0%
Orange ---------- 0%
San Diego ----------20%
Other ----------14%

# Appendix B:
# Post-Ad Tracking Survey

**FAIRBANK, MASLIN, MAULLIN & ASSOCIATES** **NOVEMBER 18-24, 2008**

Interviewer_____ Station _____

Time Began_____ Time Finished_____ Total Time _____

**NEW HOME BUYER POST-ADS TRACKING SURVEY**
**320-333B FT**
**FINAL**
**N=805**

Hello, I'm_____ from FMMA, a public opinion research firm. We're conducting an opinion survey on issues that interest people in California. We are not selling anything, and we will not ask you for a donation. May I speak with_____ (**MUST SPEAK WITH RESPONDENT LISTED**. **IF NOT AVAILABLE, ASK:** "Is there another time I may call back to speak to _____?")

1. Have you purchased a single family home in the past 4 years, that is, since November 2004?

Yes ----------**ASK Q2**--93%

No ---------- **SKIP TO Q3**--7%

**(DON'T KNOW)** -------- **SKIP TO Q3**--0%

**(ASK ONLY IF CODE 1 IN Q1)**

2. Did you buy a home that was newly built and never occupied before, or did you buy an existing home that had been lived in before you bought it?

Newly built----------**SKIP TO Q4**--96%

Existing---------- **ASK Q3**--4 %

**(DON'T KNOW)** ---------- **ASK Q3**--0%

**(ASK Q3 ONLY IF CODE 2-3 IN Q1 OR CODE 2-3 IN Q2)**

3. In the next 24 months, how likely are you to buy a newly constructed home – one that has never been occupied before? Will you definitely buy or probably buy a newly constructed, never lived in home in the next 24 months? Or, are the chances 50-50 or less that you will buy a newly constructed home in the next 24 months?

Definitely buy---------- 24%

Probably buy ---------- 76%

50-50 or less ---------- **TERMINATE**

**(DON'T KNOW/NA)**------- **TERMINATE**

**(RESUME ASKING ALL RESPONDENTS)**

4. Do you recall hearing or seeing any advertisements about energy efficient solar homes in California? **(IF YES, ASK:** "And have you seen a lot of ads or just a few?")

Yes, a lot ----------**(ASK Q5)**--21%

Yes, a few ----------**(ASK Q5)**--32%

No, haven't seen any ads **(GO TO Q9)**- ------- -47%

**(DON'T READ)** DK/NA**(GO TO Q9)**---------- 0%

**(ASK Qs 5 & 6 ONLY IF YES IN Q4)**

5. Please tell me if these ads about solar energy efficient homes were on the radio, on the television, in newspapers or from some other source. **(DO NOT READ RESPONSE CODES; MULTIPLE ANSWERS OK)**

Radio---------- 22%

Television ---------- 43%

Newspapers ---------- 30%

Internet ---------- 16%

Billboards ---------- 12%

From local utility company ----------4%

From a solar equipment installation company----------5%

From a homebuilder's ad, website or model home ---------- 12%

In the mail delivered to my home ----------8%

Other ----------3%

Can't recall where----------6%

Any other source(s) ---------- **RECORD BELOW**

6. In a few words of your own, can you tell me what these ads were saying**? (DO NOT READ PRE-CODED ITEMS. MULTIPLE RESPONSES OK. ALSO WRITE DOWN VERBATIM REMARKS FOR ALL RESPONDENTS)**

Any mention of the Go-Solar-California website **(ASK Q. 7)**----------8%

Any mention of the Go-Solar-California sweepstakes **(ASK Q. 7)** ----------6%

Any mention of solar saving money on monthly utility bills **(SKIP TO 9)**---- 45%

Any mention of solar helping the environment **(SKIP TO 9)** ---------- 20%

Any mention of a builder **(SKIP TO 9)** ----------5%

Any mention of a utility **(SKIP TO 9)**----------2%

Can't recall specifics **(SKIP TO 9)** ---------- 28%

Other----------2%

Any other remarks ---------- **(RECORD BELOW)**

**(ASK Q. 7 IF CODES 1 & 2 IN Q. 6)**

7. Since hearing or seeing the advertising about the Go-Solar-California website and/or the Go-Solar-California sweepstakes, have you…?

Gone to this website and taken a solar quiz, or ---------- 36%

Thought seriously about going to this website, or ---------- 19%

Not really thought much at all about going to this website **(ASK Q. 8)**-------- 43%

**(DON'T READ)** DK/NA----------2%

**(ASK Q. 8 ONLY IF CODE 3 ON QUESTION 7)**

8. In your own words, is there any particular reason you can share with us why you haven't thought about going to the Go Solar California website?

| | |
|---|---|
| Cost/too expensive | 30% |
| No time/too busy | 30% |
| Not interested | 13% |
| Unaware website existed | 4% |
| Already have | 4% |
| No reason/just haven't | 9% |
| Don't know/Refused | 9% |

**(ASK QUESTION 9 ONLY IF NO MENTION OF ADVERTISING IN QUESTION 4 OR ANY CODE OTHER THAN 1 OR 2 IN Q6)**

9. Let me ask you more specifically, have you seen any advertising that mentions a "Go Solar Website" or a "Go Solar California Sweepstakes?" **(IF YES, ASK:** "Have you heard a lot of advertising or just a little?")

| | |
|---|---|
| Yes, a lot | 3% |
| Yes, a little | 9% |
| No, haven't seen/heard anything about either | 86% |
| **(DON'T READ)** DK/NA | 2% |

**(RESUME ASKING EVERYONE)**

**LET'S ASSUME THAT YOU SAW A NEWLY CONSTRUCTED SINGLE RESIDENCE HOME THAT YOU LIKED AND THAT YOU HAD THE OPTION OF ADDING A BUILT-IN ROOF-TOP SOLAR ELECTRIC SYSTEM TO IT. LET'S ALSO ASSUME THAT THIS SOLAR ELECTRIC SYSTEM WOULD ADD 13 to 15 THOUSAND DOLLARS TO THE PURCHASE PRICE OF THE HOME, THAT IT WOULD HAVE A 10-YEAR WARRANTY AND THAT USING IT WOULD CUT YOUR YEARLY ELECTRIC BILL IN HALF FROM WHAT IT OTHERWISE WOULD BE.**

10. With this information in hand, do you think you would purchase this option when buying a newly constructed single residence home? (**IF YES/NO, ASK:** "Is that definitely **YES/NO**, or just probably **YES/NO**"?)

| | |
|---|---|
| Definitely yes | 33% |
| Probably yes | 33% |
| Probably no | 12% |
| Definitely no | 9% |
| **(DON'T READ)** Need more information | 11% |
| **(DON'T READ)** Don't Know/NA | 1% |

11. Next, let me give you some statements. After you hear each one, please tell me whether you agree or disagree with it. **(IF AGREE/DISAGREE, ASK:** "Is that strongly or just somewhat?")

| **(ROTATE)** | **STR. AGREE** | **S.W. AGREE** | **S.W. DISAG.** | **STR. DISAG.** | **(DK/NA)** |
|---|---|---|---|---|---|
| [ ]a. A homebuilder who builds homes with solar electric systems is a green builder who cares about the environment | 49% | 29% | 10% | 6% | 6% |
| [ ]b. Using a solar electric system for your house helps the natural environment | 69% | 23% | 3% | 2% | 3% |
| [ ]c. With a solar electric system on your house, you can reduce your utility bill up to 60 percent | 39% | 30% | 5% | 4% | 22% |
| [ ]d. The high cost of electricity has now become an important factor in my home buying decisions | 45% | 24% | 14% | 16% | 1% |
| [ ]e. A solar electric system is just an expensive gimmick to get home buyers to pay more for a home | 12% | 14% | 18% | 50% | 6% |
| [ ]f. Electric bills will continue to increase steadily in the years ahead | 69% | 20% | 4% | 3% | 4% |
| [ ]g. A home builder offering solar electric power as an option is most likely to be offering high quality construction throughout the home | 36% | 27% | 15% | 9% | 13% |
| [ ]h. Having a solar electric system lets a homeowner start saving on monthly living costs immediately | 51% | 27% | 9% | 6% | 8% |

12. Next, I'm going to mention some factors that people may consider when purchasing a new home. Using a scale of one to seven, where one means **NOT AT ALL IMPORTANT,** and seven means **VERY IMPORTANT,** for each one, please tell me how important that factor is for you personally in choosing a newly constructed, never lived in single residence home.

| | NOT AT ALL IMPORTANT | | | | | VERY IMPORTANT | | DK | |
|---|---|---|---|---|---|---|---|---|---|
| | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **MEAN** |
| **(ROTATE)** | | | | | | | | | |
| [ ]a. The overall quality of construction | 1% | 0% | 0% | 2% | 6% | 16% | 75% | 0% | **6.6** |
| [ ]b. The purchase price | 1% | 0% | 0% | 2% | 9% | 11% | 76% | 0% | **6.6** |
| [ ]c. The quality of local schools | 12% | 3% | 4% | 5% | 13% | 12% | 50% | 0% | **5.4** |
| [ ]d. The overall energy efficiency of the new home | 1% | 1% | 3% | 6% | 19% | 18% | 51% | 0% | **6.0** |
| [ ]e. The cost of the monthly electric bill | 5% | 5% | 7% | 11% | 20% | 15% | 36% | 0% | **5.2** |

13. Based on what you know today, do you think that home builders should make roof-top solar electric systems a standard feature in all new single residence homes they build? (**IF YES/NO, ASK:** "Is that definitely **YES/NO**, or just probably **YES/NO**"?)

| | |
|---|---|
| Definitely yes | 44% |
| Probably yes | 25% |
| Probably no | 14% |
| Definitely no | 9% |
| **(DON'T READ)** Need more info | 6% |
| **(DON'T READ)** Don't know/NA | 1% |

**HERE ARE MY FINAL QUESTIONS; THEY ARE JUST FOR CLASSIFICATION PURPOSES.**

14. In what year were you born?

1990-1984 (18-24) ---------- 1%

1983-1979 (25-29) ---------- 8%

1978-1974 (30-34) ---------- 12%

1973-1969 (35-39) ---------- 15%

1968-1964 (40-44) ---------- 13%

1963-1959 (45-49) ---------- 13%

1958-1954 (50-54) ---------- 9%

1953-1949 (55-59) ---------- 10%

1948-1944 (60-64) ---------- 5%

1943-1934 (65-74) ---------- 5%

1933 or earlier (75 & over) ---------- 3%

**(REFUSED/ DK/NA)**---------- 5%

15. What was the last level of school you completed?

Grades 1-8---------- 0%

Grades 9-11 ---------- 1%

High school graduate (12)---------- 15%

Some college/Business/
Vocational school ---------- 19%

College graduate (4) ---------- 43%

Post-graduate work/
Professional school---------- 21%

**(DON'T READ)** Refused---------- 1%

16. With which racial or ethnic group do you identify yourself? (**READ RESPONSES)**

Hispanic or Latino ---------- 18%
African-American or Black ---------- 4%
Anglo/White ---------- 52%
Asian ---------- 18%

Something else---------- 3%

**(DON'T READ)** Refused/NA---------- 5%

17. How would you describe your political outlook? Would you say that you are very conservative, somewhat conservative, moderate, somewhat liberal, or very liberal?

Very conservative ---------- 19%
Somewhat conservative ---------- 18%
Moderate ---------- 36%
Somewhat liberal ---------- 12%
Very liberal---------- 9%
**(DON'T READ)** Refused/DK/NA -------- 6%

18. Do you consider yourself to be an environmentalist?

Yes ---------- 56%

No ---------- 42%

**(DON'T READ)** Refused/DK/NA -------- 2%

19. Are there children under the age of 18 living in your household?

Yes ---------- 50%

No ---------- 49%

**(DON'T READ)** Refused/DK/NA -------- 1%

20. I don't need to know the exact amount, but please stop me when I mention the category that includes the total income for your household income before taxes in 2007?

Less than $30,000 ---------- 1%

$30,001 - $50,000 ---------- 7%

$50,001 - $75,000 ---------- 18%

$75,001 - $100,000 ---------- 21%

$100,001 - $150,000 ---------- 16%

More than $150,000---------- 14%

**(DON'T READ)(Refused)**---------- 25%

**THANK AND TERMINATE**

Gender: By observation

Male---------- 81%

Female ---------- 19%

Name _____

Phone # _____

Address _____

Date _____

City _____

Rep # _____

Interviewer _____

Page # _____

Verified by _____

ZIP CODE_____

**SAMPLE**

Inland Empire (N=160) ----------20%
Fresno DMA (N=160)----------20%
Sacramento DMA (N=160)----------20%
San Francisco DMA (N=160) ----------20%
San Diego DMA (N=160) ----------20%

**COUNTY**

San Bernardino ---------- 6%
Riverside ----------14%
Fresno ---------- 8%
Kern---------- 0%
Stanislaus ---------- 2%
San Joaquin ---------- 5%
Sacramento ---------- 5%
Placer ---------- 3%
Solano ---------- 0%
Yolo---------- 3%
Sutter ---------- 1%
San Francisco---------- 1%
Santa Clara---------- 7%
Alameda---------- 0%
Contra Costa ---------- 8%
Marin ---------- 0%
San Mateo---------- 1%
Solano ---------- 3%
Los Angeles---------- 0%
Orange---------- 0%
San Diego ----------20%
Tulare---------- 7%
Other---------- 8%