

What Realtors[®] Need to Know About Solar



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Mark R Buhler CMP Appraisal

Mark R. Buhler Appraiser

CMP Appraisal-Laguna Niguel

Appraising So Cal Since 1987

Appraiser, Legal and Lending Use

Review and Compliance

Educating Appraisers/Realtors



What Realtors® Need
to Know About Solar



The Basics

Why Buy Solar?

Marketability Issues

Demonstrating Value

Where Are We Headed?

The Basics
How Does Solar Work



Lets Start with the Basics



How Does Solar Work?



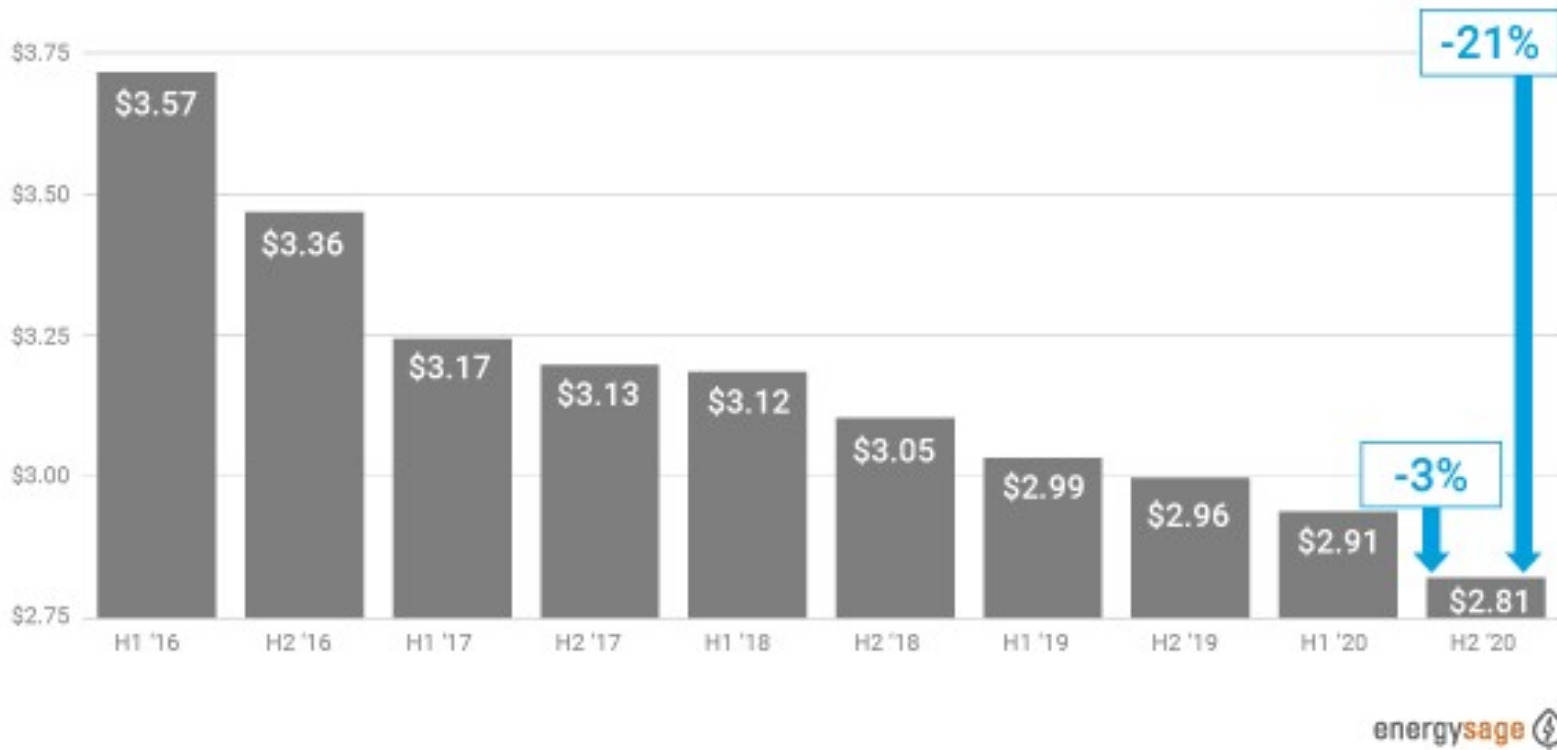
Why do Homeowners Buy Solar?

- * Hedge Against Utility Rate Increases
- * Utility Prices Increasing/Solar Prices Declining
 - * Return on Investment
 - * Increase Property Value

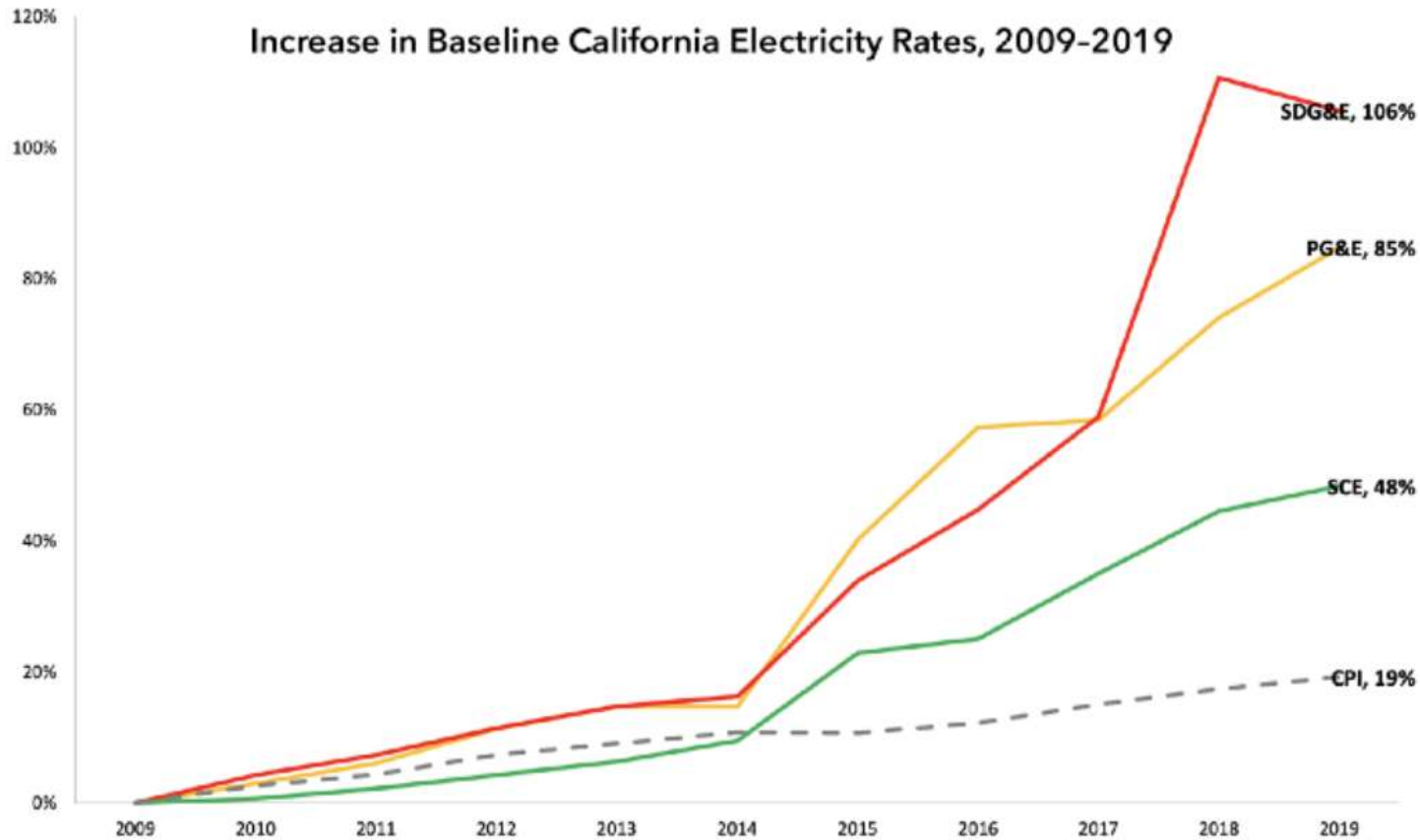


Solar Prices Declining

Gross Cost Per Watt, by Half Year



Utility Prices Increasing/Solar Prices Declining



<https://freopp.org/>



ROI?

Return on Investment

Calculate your solar payback period

Gross cost of system*
\$30,000

*This is the amount you pay upfront to install your solar panel system.

Upfront incentives*
-\$10,000

*Includes the 30% federal investment tax credit plus \$1,000 in local rebates



Combined costs
\$20,000

Savings per year*
\$1,200

*Assumes \$100 monthly pre-solar electricity bill and solar panels covering 100% of electricity use

Additional incentives*
\$1,500

*Income from selling SRECs



Annual benefits
\$2,700



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Your payback period
7.4 years

energysage.com

energysage.com

energysage   



ROI?

Cost of Solar PV Declining

Price of Energy Increasing=ROI shortening

Average Cost Nationwide \$2.81/watt energysage.com

Incentives: 26% Federal, Lowers Out of Pocket Expense

Technology: Roofs: Tesla, Certain Teed, Luma, Suntegra



Credit: Amanda Tobler

ROI?

Solar Roof



Premium Roof + Solar Panels



Roof	\$64,634	\$37,245
Solar Panels	\$0	\$29,681
Powerwall	\$10,050	\$10,050
Roof & Site Repairs	\$10,630	\$10,630
Purchase Price	\$85,314	\$87,619
Federal Tax Credit	-\$15,727	-\$11,919
Value Of Energy Over 30 years	-\$65,466	-\$65,466
Net Price Over 30 years	\$4,121 Cost	\$10,233 Cost

Marketability Issues



Marketability Issues

**Leased Solar
Power Purchase Agreements
Solar Loans**

PACE

Fannie Mae Guidelines

Fannie Mae will purchase or securitize a mortgage loan on a property with solar panels. If the property owner is the owner of the solar panels, standard eligibility requirements apply (for example, appraisal, insurance, and title).

If the solar panels are leased from or owned by a third party under a power purchase agreement or other similar arrangement, the following requirements apply:

1) The solar panels may not be included in the appraised value of the property.

Marketing the Solar Home

Describing solar PV in the MLS: Do's and Don'ts

Marketability Issues

Do:

Describe the system specifics. Leased or Owned, Size/Age

Describe: Lease or PPA Agreements. System Warranty

State the sellers utility cost savings. But make no Guarantees

Do Not:

"Solar panels cover the entire So Cal Edison electric bill"

"Solar panels installed electric bill of \$56.60 per month"

"Solar panels make the home an energy efficient home"

"This Green Home has Solar Panels"



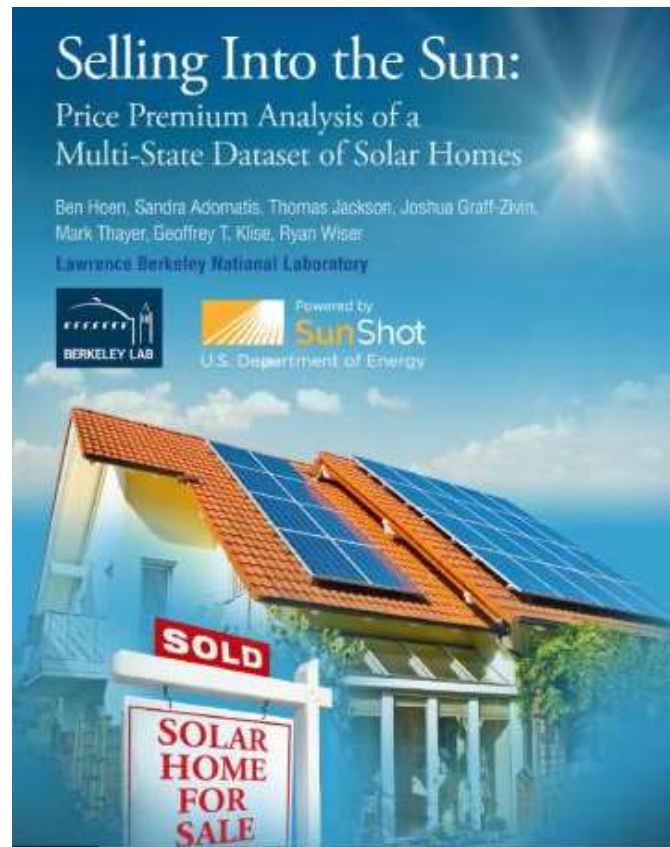
Demonstrate Value

Does Solar Really Increase Value?

Demonstrate Value



Does Solar Increase Property Value ?



Lawrence Berkeley National Laboratory
<https://emp.lbl.gov/publications/selling-sun-price-premium-analysis>

Solar Studies



"Selling into the Sun: Price Premium Analysis of a Multi-State Dataset of PV Homes"

Lawrence Berkeley National Laboratory (LBNL), 2015

Analyzed 22,000 home sales with Solar PV

8 states from 1999-2013

Almost 4,000 had Solar PV systems

Avg. resale premium of \$4 per watt of PV installed

<http://emp.lbl.gov/publications/selling-sun-price-premium>



Does Solar Increase Property Value ?

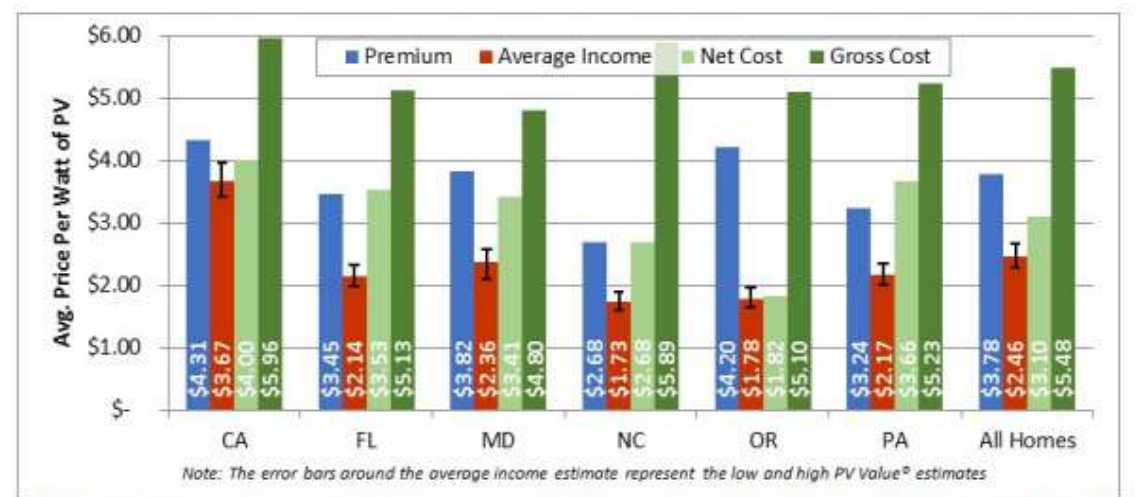
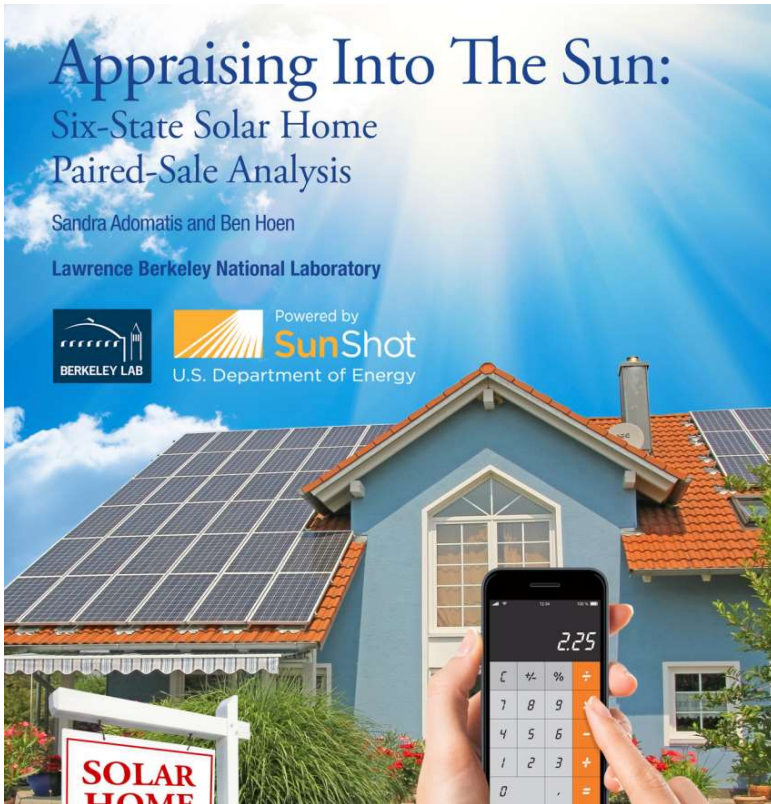


Figure 1. Average Paired-Sale PV Home Premiums and Contributory-Value Estimates (\$/W)

Lawrence Berkeley National Laboratory
<https://emp.lbl.gov/publications/appraising-sun-six-state-solar-home>






Solar Studies

"Appraising Into the Sun: Six-State Solar Home Paired-Sales Analysis"

Sandra Adomatis & Ben Hoen 2015. CA, FL, MD,
NC, OR, PA

43 paired sales Premium of \$3.78/watt

Does Solar Increase Property Value ?



Solar PV
How Much is it Worth?

Register to use PV Value® for free and find out!

[Quick Registration](#)

www.pvvalue.com/



Where Are We Headed?

- **Price of Solar Down, Price of Electricity Up**
- **Federal Solar Investment Tax Credit Expiring**
- **State Renewable Energy Goals**
- **Changes in Building Codes**
- **Competency May Be Required**

California
ZNE
2020
Residential

2030
Commercial

All new residential construction is now zero net energy (ZNE)

All new commercial construction will be ZNE by 2030

50% of commercial buildings will be retrofit to ZNE by 2030

50% of new major renovations of state buildings will be ZNE by 2025



Realtors®
Appraisers
Lenders

We all need Education

Realtors®, Appraisers, Lenders

Appraisers Value Solar

Lenders Underwriters are accepting
adjustments for Solar

Realtors® Can Sell the Value of Solar



Questions?

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