

# HEROIC SOLAR SYSTEMS



Clean, cost-effective, rooftop power  
generated from the sun.

1

HOUR

OF

solar energy

from the sun

=

1

YEAR

OF

power

for all humanity!

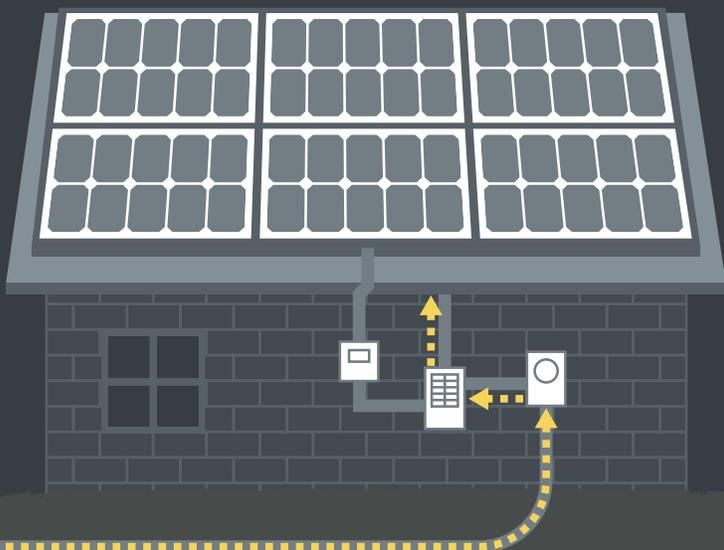
*(The sun will last another 5 billion years)*



# Solar at work in the home

While it's dark out, your home works like it would with a conventional electrical system. AC energy from the grid enters your meter, the device that measures how much you use (and pay for).

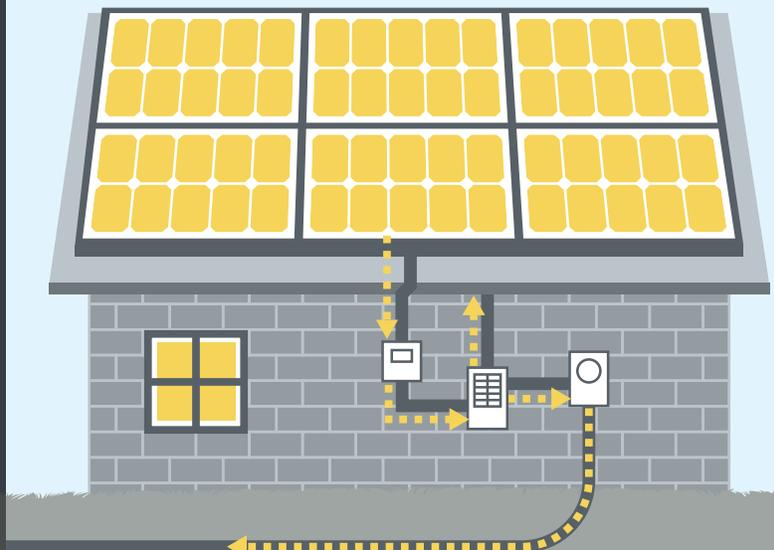
From there, it's connected to your breaker panel, where it's distributed to the various loads – lights, outlets, and appliances – in the house.



When the sun shines, photovoltaic panels on your roof push DC electricity through an inverter, where it's changed to AC. It then enters the breaker panel, where it's distributed throughout the house.

Energy you don't use runs back through the meter and to the utility, where it's credited to your bill.

*Your meter actually runs backward!*

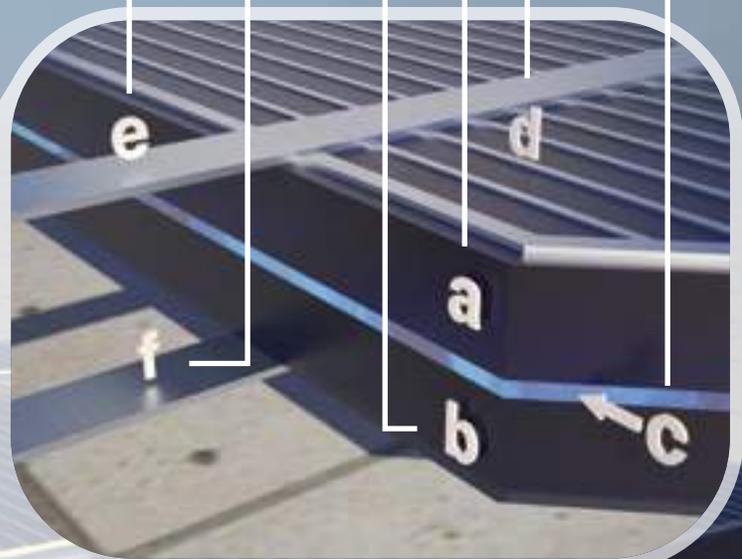


*FOR THE NERDS:*

# The Photovoltaic Process

This is how the magic happens. Chemical properties in the top layer (a) result in a bunch of electrons wanting to move into the bottom layer (b). Now, they don't just up and leave their molecule on their own; sunlight energy knocks them loose, and they begin their journey. They can't go directly into the bottom layer because we block them with a sort of one-way filter (c). They have to go the long way round, through the conducting grid (d), which is really just a bunch of little wires, into bigger wires (e), and thence to the "load" (lightbulbs, fans, bread makers, etc). After doing their job (making light, turning a motor, or whatever), the electrons come back through the return conductor (f) into the bottom panel (b).

Typically, they'd be happy there, but we add a catalyst that forces them back through the electromagnetic field into the top panel, where they make the trip again. And again. And again. Billions of times per second. It's so simple!



# TOP REASONS TO GO SOLAR



## Because...it's cool!

You get solar and you're instantly the hero of the neighborhood. Bob won't be bragging so much about his "yard of the month" anymore. Shut up, Bob.

## Save Money

Making home improvements is smart (and fun). But many of them can cost more than a solar array. And unlike solar, they don't save you any money!

## Protect the Planet

You know Mother Earth has been wondering how long it would take us to start utilizing all the free energy she absorbs every day.

## Promote Energy Independence

The more energy we generate on our own rooftops, the less we have to buy—and ship in—from overseas! Therefore, owning solar panels is very patriotic. Yay America!

## *Solar is affordable!*

### 10-year payoff

For those who want solar, the beauty is that there's a very clear financial case to be made. While the initial cost is significant, you'll see immediate savings on your utility bill – typically hundreds of dollars a month.

While it's historically been quite expensive, a solar array purchased today pays for itself in under a decade.

### Appraising Solar

A solar array is indisputably part of the house. And since it directly reduces cost of living, it's a valuable item. On both new builds and resales, there are appraisal guidelines in place to make sure the system is properly accounted for.

Good appraisers that are up to speed on their craft have plenty of precedent for making sure this valuable addition is appraised. If you're in a bind, contact KW Solar for loads of information.

### Financing

On a new build, it's easy to wrap the cost of solar into the mortgage. The energy savings will easily outweigh the slight increase on the note.

But retrofitting solar onto an existing house – and financing it – is also a very viable option. KW has close relationships with great lending institutions, so if you want the solar karma but don't feel like coughing up the price of a new car, we can help.

Configure your solar savings online!  
[wiz.kw.solar](http://wiz.kw.solar)

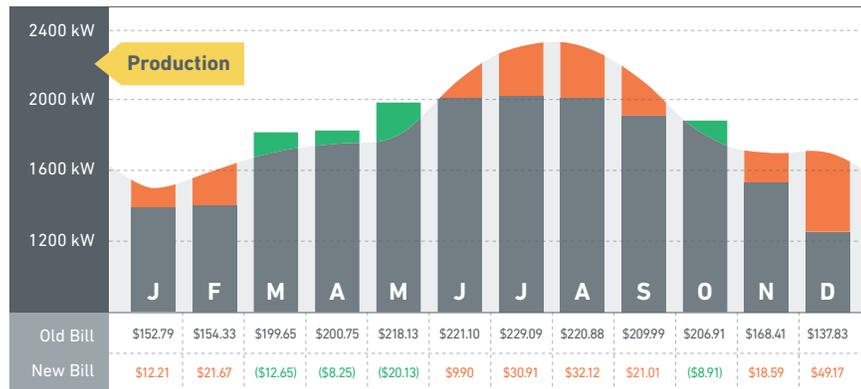
# Solar Economics 101

## KW Solar Customer Case - Houston, Texas

### Immediate returns on your investment

Solar energy you generate is power you don't have to buy! Although the initial investment is substantial, solar power systems installed nowadays pay for themselves within about a decade. Not to mention, it's hard to put a price tag on warm fuzzies.

<b>System Size</b> 15,105 W  <b>Grid Energy</b> 11¢ kwh  <b>Initial Cost</b> \$44,261		<b>Before Solar</b>	<b>After Solar</b>
	<b>Avg. monthly bill</b>	\$192.74	\$12.14
	<b>Year 1 tax credit</b>	-	\$13,278
	<b>Year 1 impact</b>	\$2,313	\$28,670
	<b>Year 2 impact</b>	\$2,382	\$148
	<b>Year 3 impact</b>	\$2,454	\$153
	<b>Payoff period</b>	-	10 years
		<b>Lifetime Savings: \$86,420</b>	



Based on prior energy consumption, and assuming Houston area climate, this system would all but eliminate the homeowner's utility bill. Some months would see a small charge, and others a surplus. This KW Solar-designed system is sized to maximize savings without an excessive up-front cost.

### NET METERING

When you generate more energy than you use, your solar system feeds the grid. Solar-friendly energy providers will credit your account, matching the kWh rate they bill you, dollar-for-dollar. But they're very unlikely to write you a check if you consistently overproduce.

A grid-tied system should be sized to all-but eliminate your energy bill, in order to maximize your investment.

### PEAK SUN HOURS

How do we know how well a system will produce? It's based on the efficiency of the panels, and local climate. Identical systems will produce much more energy in a sunny place like Texas than a dreary, overcast place like the Northwest.

To accurately predict just how much sun power you can expect each month, we use a metric called the Peak Sun Hour, a well-established climatology principle based on decades of data.

# The KW Solar Brainiacs

## Jimmy Garrett

In solar years, Jimmy is as seasoned a veteran as you're likely to find. He entered the solar business in 2007, shortly after graduating from college, committing himself to what was – at the time – a purely purpose-driven career. Over the course of his experience, he has led teams across the sales-operations spectrum, and watched numerous companies grow and thrive in this exciting industry before deciding he would go and do it even better. Jimmy is the proprietor of Green Light, a solar contracting/consulting company that handles the minutia of solar installation projects. He works very hands-on with each KW installation.

## Ted Hawkes

Formerly a green building project manager and LEED AP, he's spent the better part of a decade running Melaroo, an award-winning interactive design firm based in Houston. Ted's team spearheads process automation, marketing, and development of the software that KW uses in the day-to-day, to improve the customer experience and deliver faster, better projects. His technical acumen and talent for understanding and streamlining workflow contributes to KW's longevity and scalability as a company. A bona fide people person and master of user experience, Ted also composed this brochure.



# How do we transcend *the status quo?*

## We are among the most experienced in the game.

Solar isn't a new technology, but rooftop solar energy became a viable industry only recently. Technology has advanced sufficiently in the last few years that rooftop solar actually saves you money, whereas before it was prohibitively expensive. We at KW Solar were in the business way back when solar was more of a hobby.

## We love the hell out of this business.

The holy grail of life in the 21st century is to truly love – and find purpose in – your job. Solar is environmentally, economically, and emotionally superior to other forms of energy production, and proliferating the world with clean sun power is easy to adopt as one's life work, in addition to one's business. We believe in doing well by doing good.

## We employ a straightforward business model.

The first rule of business is simple: buy it for x, sell it for more. We strive to make a profit, to keep our company healthy and our kids fed. But we've found that doing a good, honest day's work is a fantastic way to limit our risk and maintain consistent, predictable finances. We offer premium solar panel installation services at a very fair price. No hidden fees, no rebates, no gimmicks. When you work with KW Solar, you get a beautiful, cost-reducing, planet-saving solar array, and we get fairly compensated for our efforts.

## We are owner-operated, and operator-owned.

Keeping ownership firmly concentrated in our company's leadership allows us to effectively serve one master: our customer. KW Solar has intentionally shunned enthusiastic investors, instead retaining all decision-making power for the people who live the realities of those decisions in the day-to-day. Detached, profit-hungry investors often make the wrong call for the long-term health of the company, so we stay far away from them. We're a bootstrapped, debt-free business focused 100% on our work.

## We operate on market forces, not policy.

The nascent solar industry is testing a variety of business models, many of which are likely to fail. Huge companies have bet the house on tax policies and creative profit structures, only to see fickle legislators suddenly cut them off at the knees.

KW Solar's economics are based simply on how much a solar system costs to install, and how much the market can afford to pay for it. The 30% federal tax credit, which was recently extended through 2019, is a big help to our customer base and opens the market considerably. But we stay far away from creative tax tricks, risky structures, and any gimmick that can be swept away by a congressman's pen.

## We optimize customer service and delivery.

It's like bringing the railroad to the frontier. Photovoltaic energy has been around for decades, but it has only recently become financially viable. The race for operational excellence is in its infancy, and we have the skillset to stay at the forefront. KW Solar is committed to maximizing our people's effectiveness by continually systematizing every aspect of our business, through superior training, cultivating a strong company culture, and process automation.



[www.kw.solar](http://www.kw.solar)

# We're Universally Adored

"The project was well done from day one. When providing us with the estimate, the project engineer was able to provide us with a business case that showed us how quickly we would earn back our investment in the system. We appreciated how knowledgeable he was – it was clear to us that he was truly enthusiastic about solar PV and wasn't just trying to 'sell us.' As others...have reported, we are getting even better performance from our system than they estimated."

*Paula Y.*

"The whole process was very transparent and easy. The entire company was honest, earnest, and professional. From pricing to install, the experience couldn't have been more pleasant. But even better than that? I'm saving so much money now that I've gone solar!"

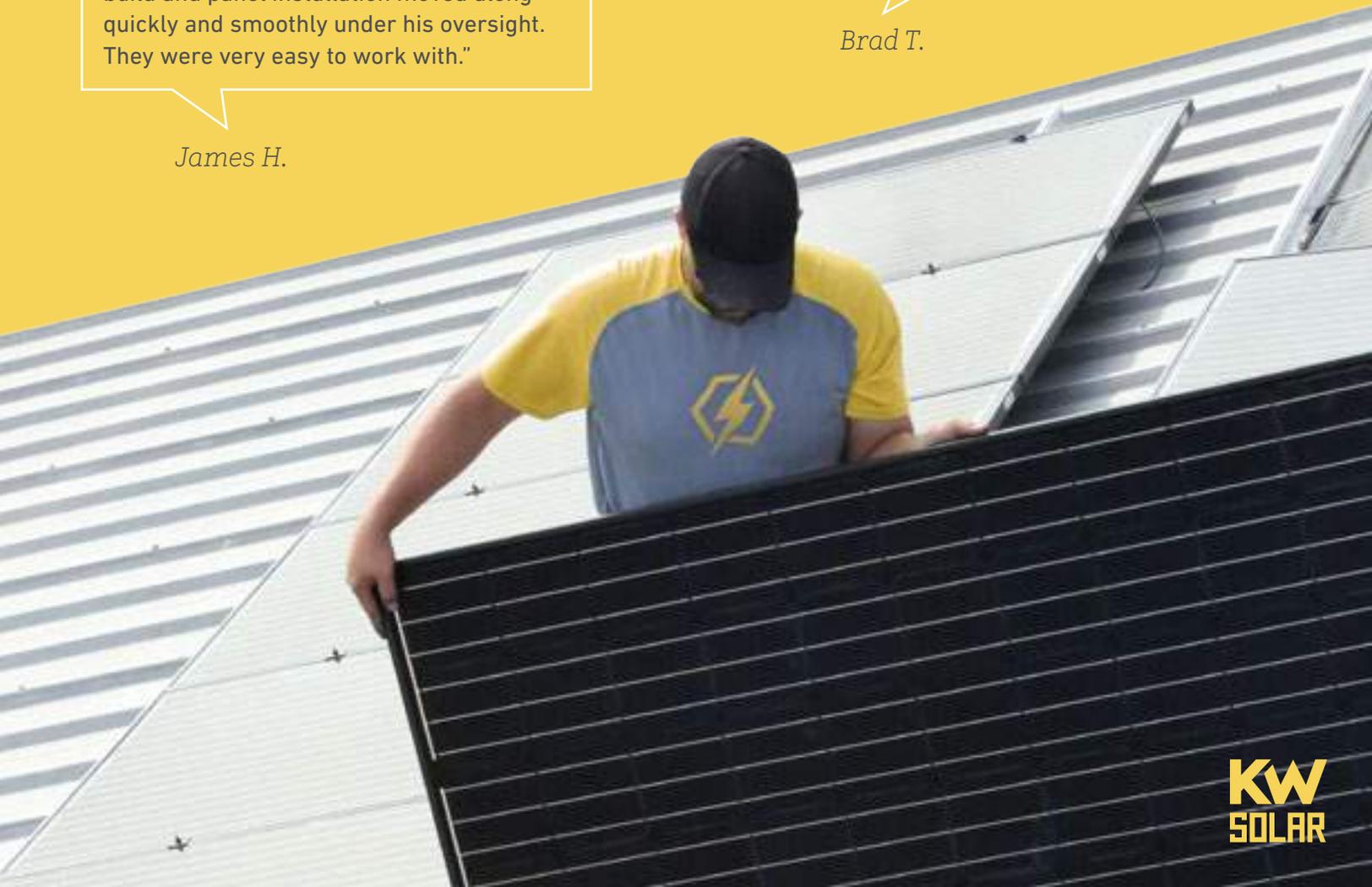
*Katie G.*

"The installation crew was quick and professional. We felt that the crew leader gave us timely updates and kept us in the loop on what was happening. The patio build and panel installation moved along quickly and smoothly under his oversight. They were very easy to work with."

*James H.*

"They made the whole rebate process easy (i.e., I just signed some forms they provided me, and then they handled it all with the City on my behalf... easy), and they also made the HOA approval process easy (other companies kind of suggested it was my obligation to navigate that process)."

*Brad T.*



**COOL  
PEOPLE  
GET SOLAR.**

(832) 844-5790

[www.kw.solar](http://www.kw.solar)



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