



H O B O K E N

Energy Savings Workshop

Hoboken Green Team

May 4, 2017

Hoboken Energy Savings Workshop Agenda

Vendor Setup	5:30 PM – 6:30 PM
Hoboken Solar Challenge Program	6:40 PM – 6:45 PM
New Jersey's Clean Energy Program™	6:45 PM – 6:55 PM
Direct Install Program	6:55 PM – 7:05 PM
“Around the Room”	7:05 PM – 7:15 PM
Vendor open house	7:15 PM – 8:00 PM
Vendor breakdown	8:00 PM

Join the Hoboken Solar Challenge!

hobokensolar.org



Solar Panel Systems – Key Components

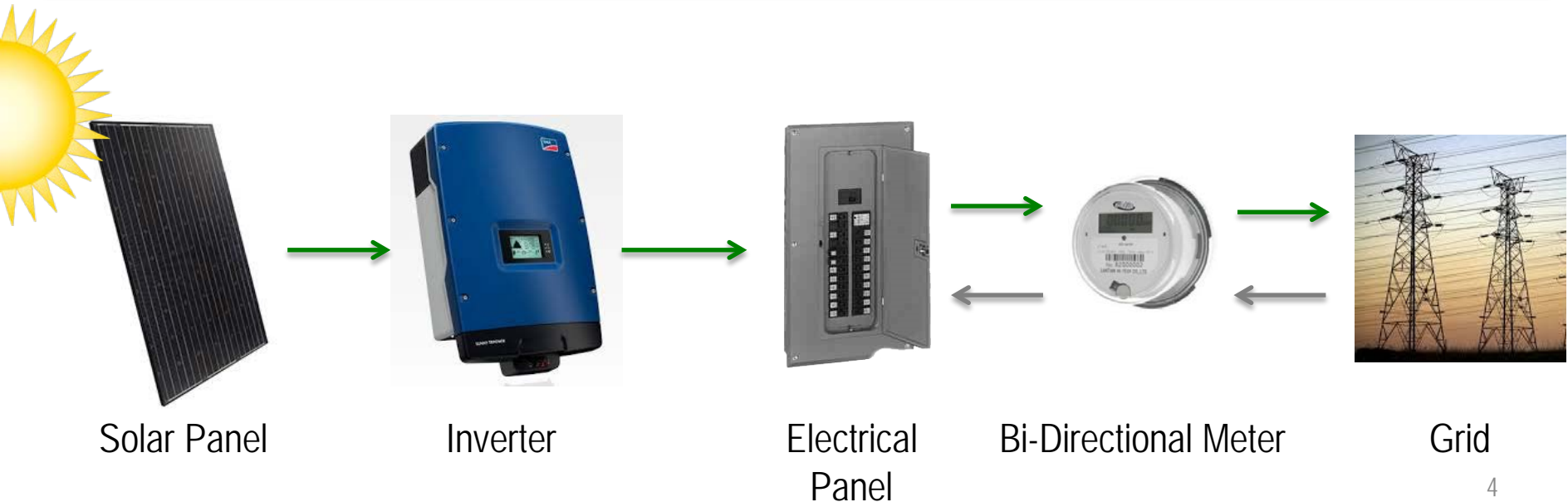
Racking



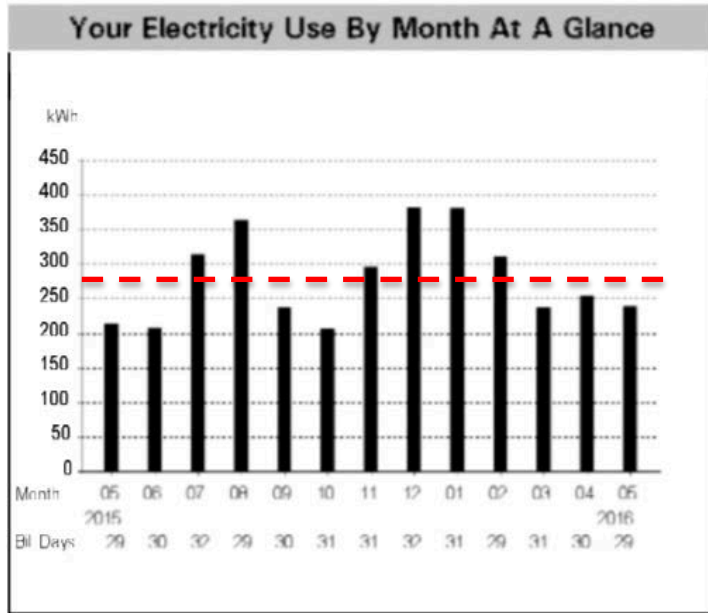
Solar Panels



Inverter



Utility Bills – the Basics



- Kilowatt-hour (kWh) is the billing unit
- 100 watt light bulbs on for 10 hours = 1 kWh (50 hours for a 100W LED!)
- Hoboken residents pay about 14.88¢/kWh
- \$100 average monthly bill is about 500kWh per month or 6,000 kWh per year

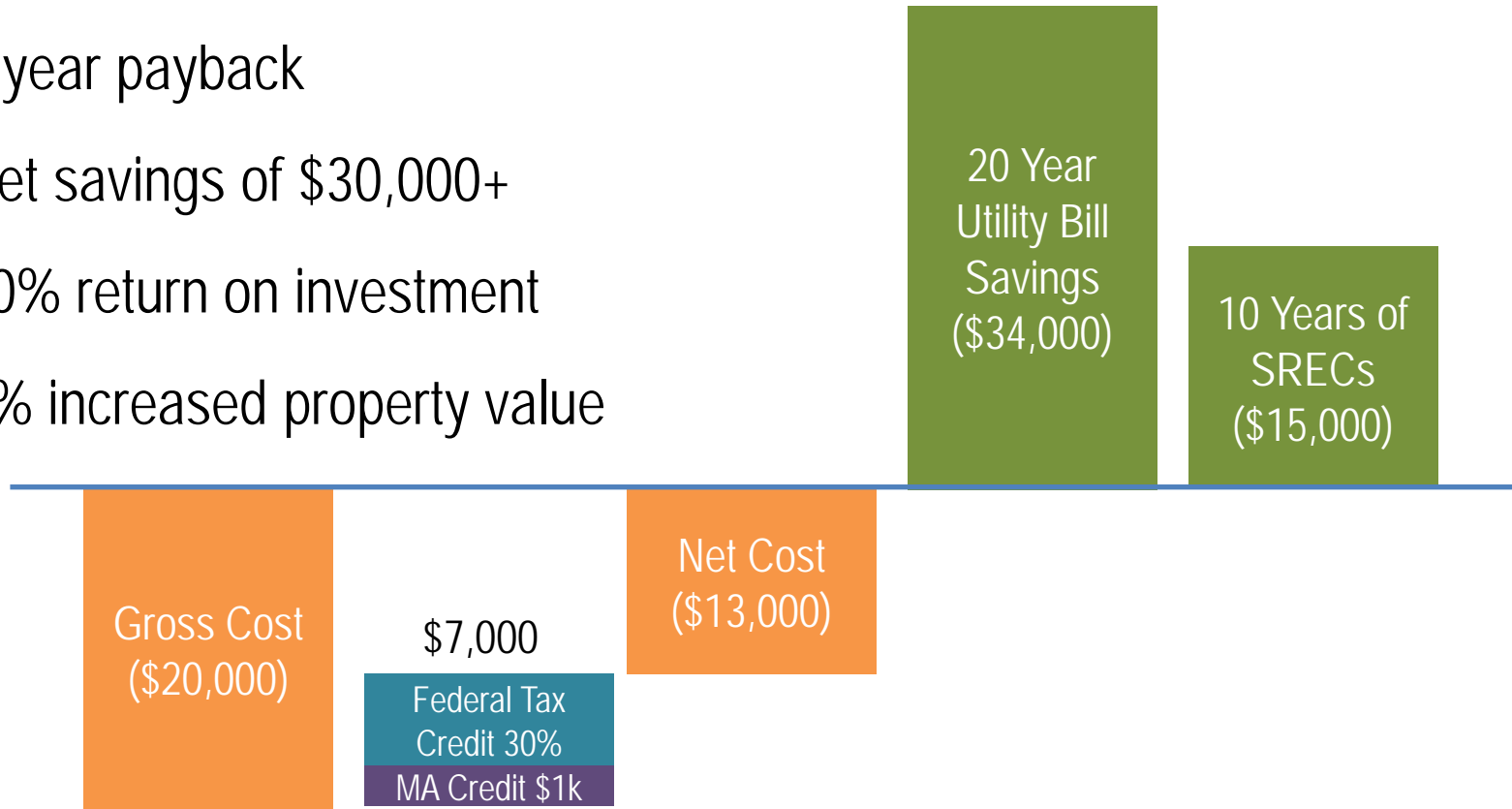


With inflation*, a \$100 monthly bill is about \$34,000 over 20 years!

*Assumes 3.5% annual inflation

Solar Economics – the Basics

- ★ 5 year payback
- ★ Net savings of \$30,000+
- ★ 20% return on investment
- ★ 3% increased property value



1,932

Number of trees
planted over 20 years



8,479

Gallons of gas not
burned over 20 years



181,451

Miles not driven
over 20 years

hobokensolar.org



Why participate?

- Review multiple solar quotes with ease
- Save up to \$46,000 over 20 years
- Solar pays back in 5-7 years from savings and incentives
- Lock in your electric cost for 25+ years
- Support local green jobs
- Increase your property value by 3% with solar




Hoboken Solar Challenge



energysage  About Solar  Solar Calculator Solar Loans [Join Solar Marketplace](#)

Explore your solar options today!

The City of Hoboken and EnergySage have partnered to help you go solar and save money!




Compare solar quotes online & get honest advice

[Get Started](#)

or start with an [Instant Estimate](#) of your solar savings

We're helping you go solar with confidence



The City of Hoboken has partnered with Sunny Jersey and Energy Sage to bring you a new tool to help you compare quotes from up to eight pre-qualified contractors. You'll see a range of options (including renting versus purchasing) provided in direct comparison, so you can choose the option that works best for you.

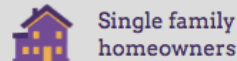
It is a "Challenge" because Hoboken is competing with other municipalities in NJ to achieve the highest number of new solar installations.

Join the Hoboken Solar Challenge today!

How the EnergySage Marketplace Works

The EnergySage Marketplace gets you quotes online from multiple, pre-screened local installers and helps you compare offers in an apples-to-apples format so you get the best deal.

Learn how solar works for your home type



Single family homeowners

You probably know that solar is good for the environment, but state and federal incentives can help your roof generate money along with power... [Read more](#)



Condo owners

Solar is a great investment for condos, and Sunny Cambridge has resources to help you through the installation process... [Read more](#)



Landlords

With Sunny Cambridge, you can enjoy all the benefits of solar if you are the landlord or a multi-family building... [Read more](#)



Commercial property owners

Solar works well for businesses, too! Save money by protecting against rising electricity costs and make your expenses more predictable... [Read more](#)

3 easy steps: simple, online comparison-shopping



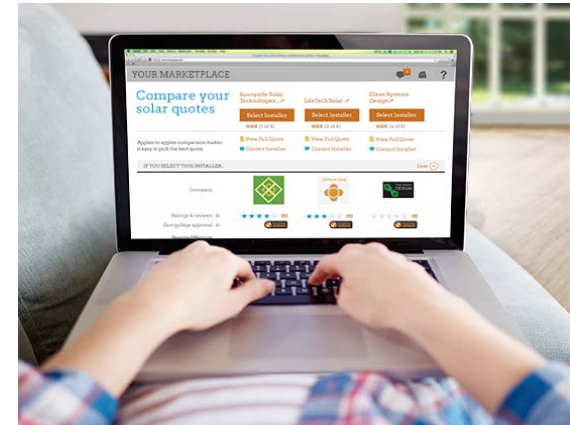
1. Homeowners create property profiles

- Specify property location
- Energy use
- System and financing preferences



2. Solar installers design systems, submit quotes




- Use aerial images
- Phone, email contact
- Submit quotes online via marketplace



3. Homeowners compare quotes & select one

- Apples-to-apples comparison of system & financing options
- Live decision support from solar advisors

Why compare quotes online?

	Installer 1	Installer 2	Installer 3
	Select Installer	Select Installer	Select Installer
SEE ALL (4)	HIDE (1 of 4)	HIDE (2 of 4)	HIDE (3 of 4)
Company ?			
Ratings & reviews ?	★★★★★ (11)	★★★★★ (8)	★★★★★ (7)
EQUIPMENT	More +		
Panel manufacturer ?	Suniva, Inc. ↗	Hanwha Q Cells ↗	LG ↗
Panel rating ?	E S P	E S P	E S P
FINANCING OPTION	Less -		
<input checked="" type="radio"/> → Cash Purchase ?	CASH PURCHASE	CASH PURCHASE	CASH PURCHASE
<input type="radio"/> View Purchase with Loan ?	Get A Loan	Get A Loan	Loan
Net System Price			
Gross system price ?	\$22,737	\$20,034	\$24,282
Less: Rebates ?			
= Out of pocket system price ?	\$22,737	\$20,034	\$24,282
Less: Federal ITC ?	-\$6,821	-\$6,010	-\$7,285
Less: State/Local tax credits ?	-\$1,000	-\$1,000	-\$1,000
= Net system price ?	\$14,916	\$13,024	\$15,998
Price per Watt			
Gross system price ?	\$22,737	\$20,034	\$24,282
/ System size in Watts ?	6,160	5,565	6,510
= Price per Watt (\$/W) ?	\$3.69	\$3.60	\$3.73

- ★ Standardized assumptions and financial metrics
- ★ Equipment quality
- ★ Installer experience and reviews
- ★ Simplified decision-support
- ★ Solar Advisor assistance

How much can you save by going solar?

Use the Solar Calculator to get a quick estimate of your cost and savings potential with solar!

Solar Calculator



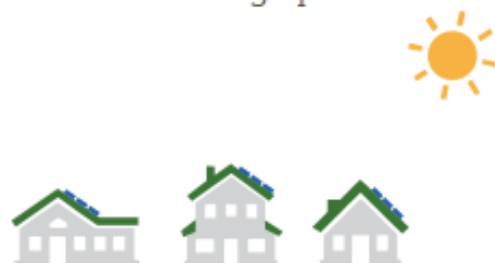
Learn how the direction of your roof affects solar production



See how solar cuts your electricity costs



Explore your solar financing options



Find out how you benefit from the Investment Tax Credit



Understand how much your panels could produce



Check out recent solar installations near you

Over 10,000 people use EnergySage each year to get solar quotes from pre-screened installers.



Enter your zip code

Get Started



hobokensolar.org

Join the Hoboken Solar Challenge!

Solar is easy, affordable and accessible
for all property types.

Thank you!

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