

The MREA and CUB are partnering for Solarize Chicagoland.

Citizens Utility Board (CUB)

- Represents Illinois utility ratepayers & advocates for cheaper & cleaner energy
- Has saved consumers more than \$20 billion by fighting proposed electricity, natural gas, and telephone rate hikes.



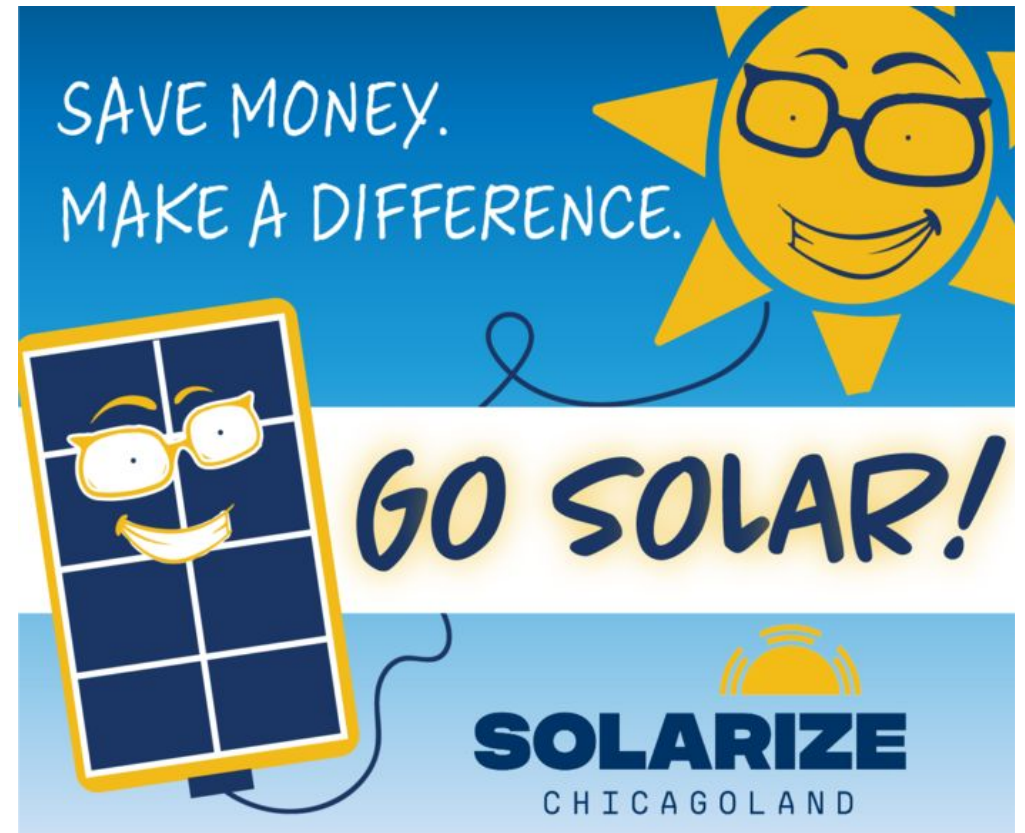
Midwest Renewable Energy Association (MREA)

- The Midwest Renewable Energy Association promotes renewable energy, energy efficiency, and sustainable living through education and demonstration.
- The MREA created the Solarize program, educational content, and is responsible for overall program administration.



Solar Power Hour - Agenda

- Benefits of Going Solar
- Solar basics
- Incentives for going solar
- Going Solar: Your Options
 - Leasing vs. Owning
 - Solar For All
 - Community Solar
- Solarize Chicagoland group buy





Benefits of going solar

The right time to go solar

The U.S. installed 23.6 gigawatts (GW) of solar PV capacity in 2021 to reach 121.4 GW of total installed capacity, **enough to power 23.3 million American homes.**

Solar accounted for 46% of all new electric generating capacity additions in 2021, more than any other energy source for the third year in a row!

Zillow found that **homes with solar panels sell for 4.1% more** than similar, non-solar homes. (Zillow Economic Research)

Going solar pays for itself!



A new solar array is installed every 84 seconds in the U.S.
<https://www.seia.org/us-solar-market-insight>

The average solar system offsets 260,376 lbs of CO2 in 25 years



287,672 miles driven by an average passenger vehicle



Carbon sequestered by 139 acres of forest



Switching 4,469 incandescent lamps to LED



CO2 emissions from burning 129,218 pounds of coal



Diverting 41 tons of waste from the landfill

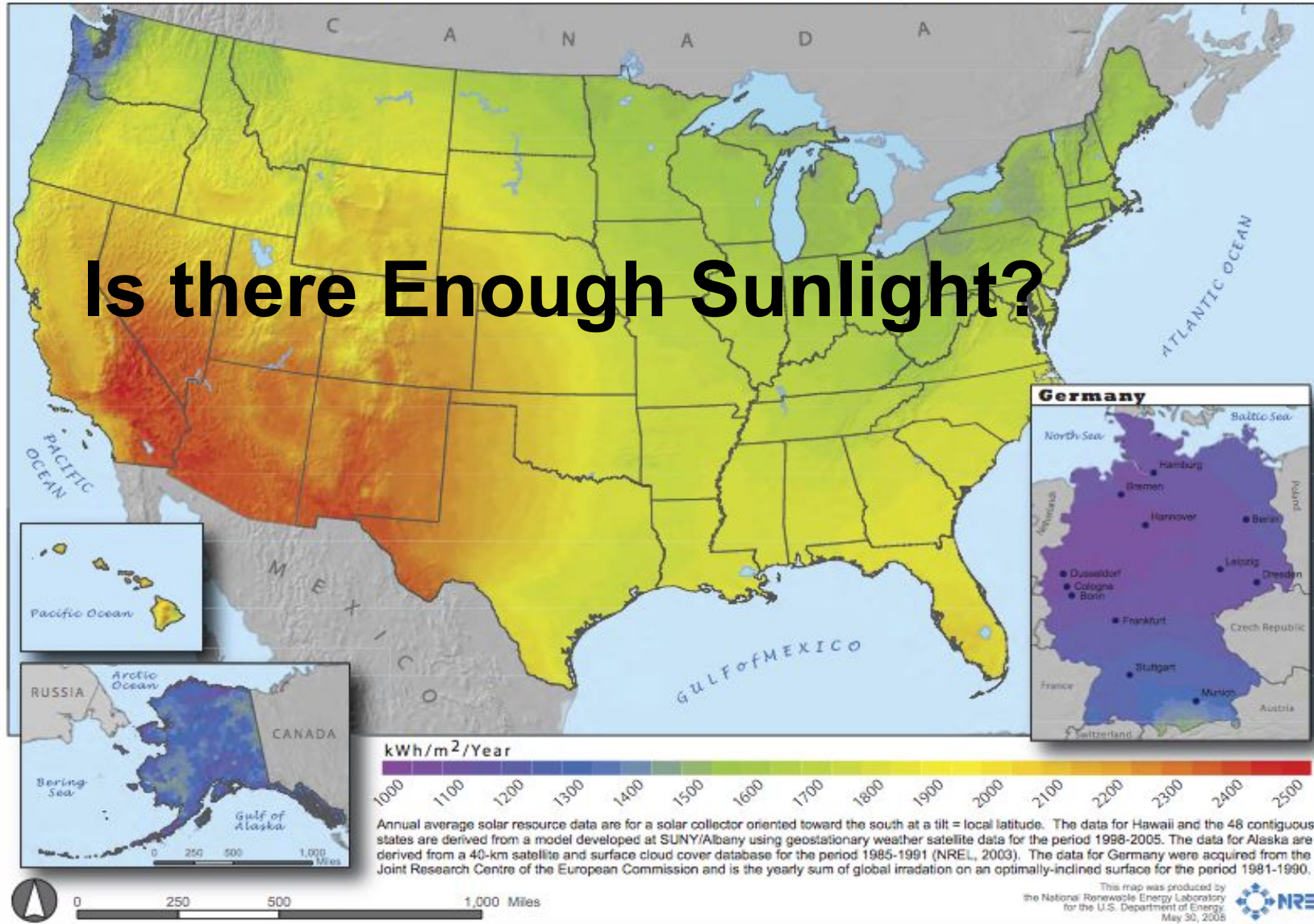


CO2 emissions from 13,239 gallons of gasoline



Solar Basics

Photovoltaic Solar Resource : United States and Germany



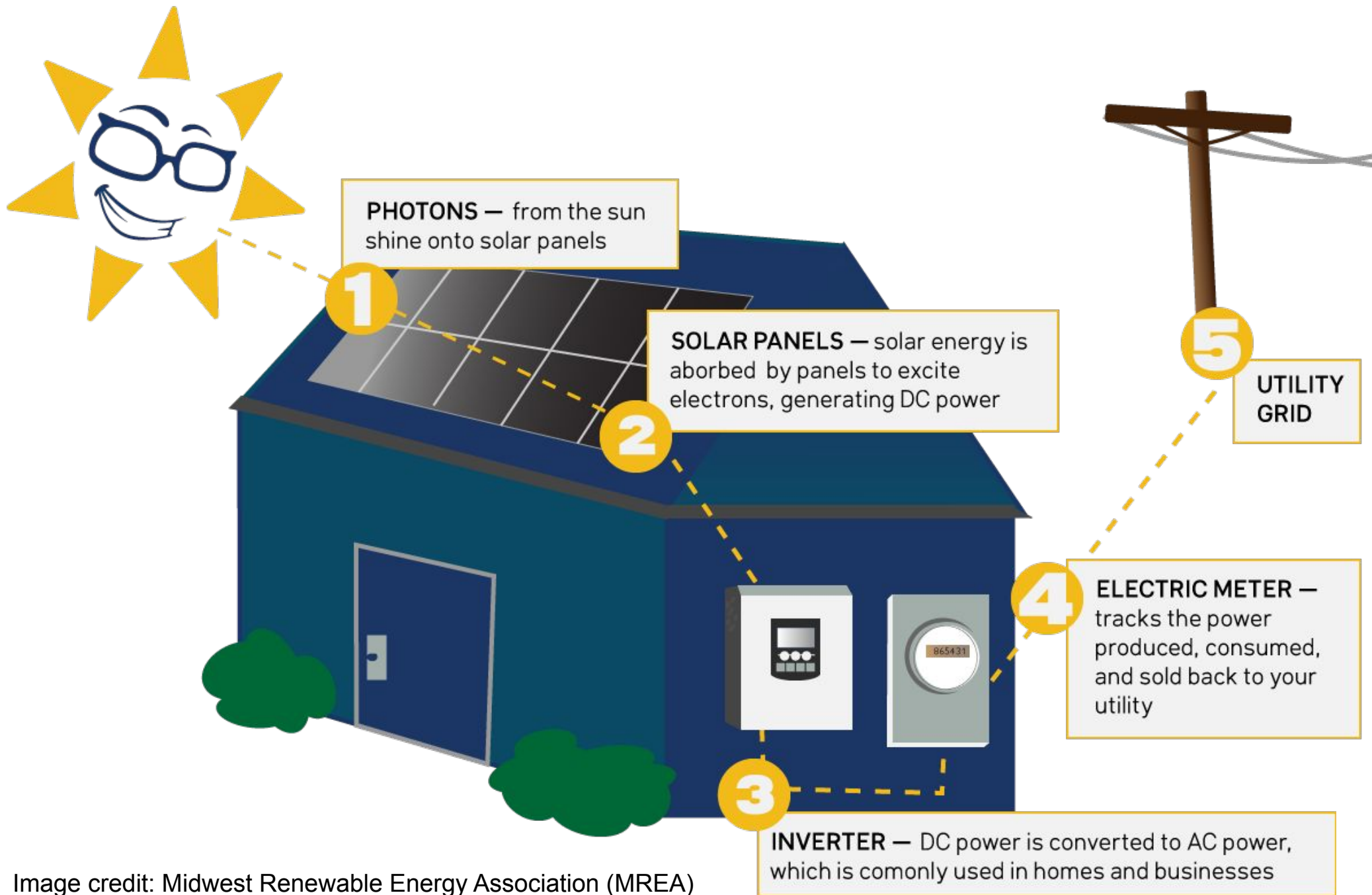


Image credit: Midwest Renewable Energy Association (MREA)

Unshaded, south-facing roofs are best for solar

Solar window: 9am-3pm.

- South-facing sun exposure is ideal.
- East or West-facing roofs also work for solar, but can require 20% more panels.
- Avoid shading: trees, buildings, poles.

Project Sunroof: Mapping Solar Potential.

- Search your home.
- Helpful to see your solar exposure, but pricing estimate may be inaccurate
- Talk to an installer for accurate pricing

Visit www.google.com/get/sunroof



Screenshot of Google's Project Sunroof.

Roof Mounted System: The most common type of installation.

Used for flat or pitched roofs:

- Typically attached via aluminum railing system.
- Roof penetrations require adequate sealing; installers assume responsibility for roof damage, leaks, mold.

Considerations for roof-mount systems:

- Snow / Hail / Wind Loading
- Roof Condition (age of shingles)
- Squirrels



Installers configuring a roof-mounted system.

Average residential solar install in Illinois is 6.5kW



27 Panel system - Image Credit: Windfree Solar

Estimated to produce **9,000 kWh** in the first year

Kilowatt (KW) = a measure of power

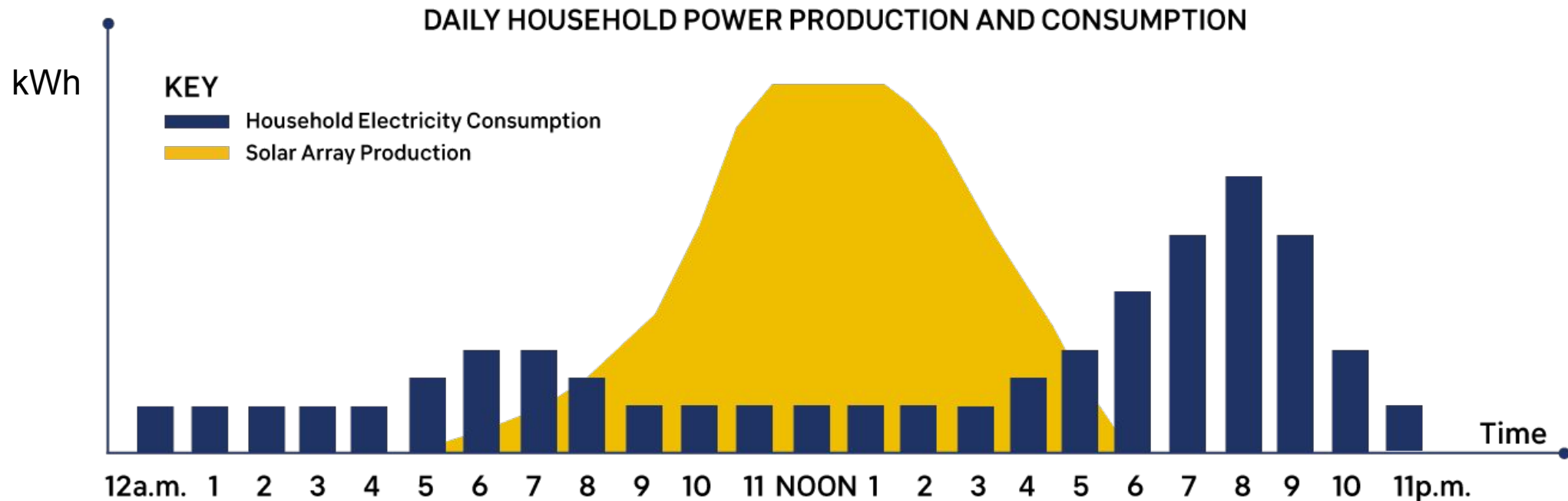
System size is measured in KW

Kilowatt hour (kWh) = a measure of electricity generated or used

Your system will produce kWhs of solar energy!

Net Metering: bill credits for electricity sent to the grid

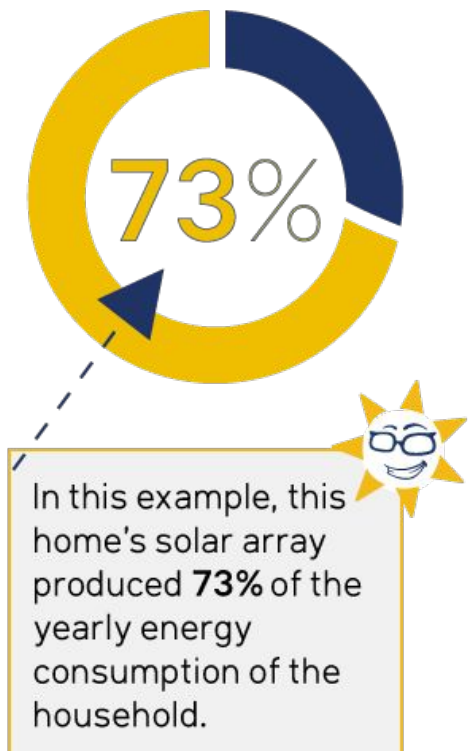
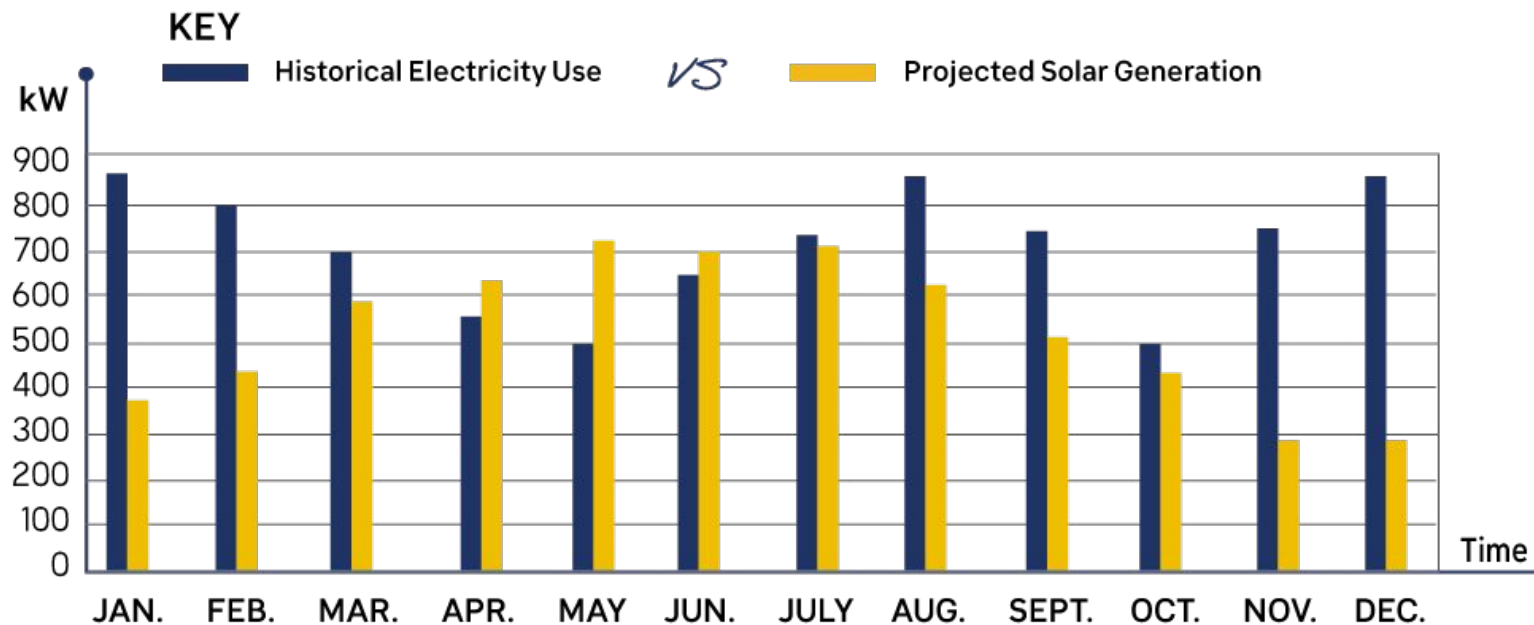
- Any excess electricity produced by your solar system is exported to the utility grid and you receive bill credits, reducing your overall electricity costs.
- For ComEd customers, you are credited at the same rate that you purchase electricity –1 to 1 net metering



Net Metering: bill credits for electricity sent to the grid

- Net metering will **never completely \$0 out your bill**, or eliminate it
- Credits roll over from month to month, excess credits expire in April.

"A Year in the Life" of a Grid-Tied / Net Metered Home



Sample ComEd bill with Net Metering

METER INFORMATION									
Read Dates	Meter Number	Load Type	Reading Type	Previous	Present	Difference	Multiplier	Usage	
2/21-3/22		I/O w/ Flow Thru	kWh From Grid	Actual	Actual			420	
2/21-3/22		I/O w/ Flow Thru	kWh To Grid	Actual	Actual			600	

CHARGE DETAILS		
Residential - Single 2/21/18 - 3/22/18 (29 Days)		
SUPPLY		-\$0.01
Electricity Supply Charge	420 kWh X 0.05844	\$24.54
Transmission Services Charge	420 kWh X 0.01351	\$5.67
Purchased Electricity Adjustment		-\$1.25
Net Metering Credit - Supply	420 kWh X -0.06898	-\$28.97
DELIVERY - ComEd		\$15.51
Customer Charge		\$10.87
Standard Metering Charge		\$4.64
Distribution Facilities Charge	420 kWh X 0.03181	\$13.36
IL Electricity Distribution Charge	420 kWh X 0.00121	\$0.51
Net Metering Credit - Delivery	420 kWh X -0.03302	-\$13.87
TAXES & FEES		\$0.08
Environmental Cost Recovery Adj	420 kWh X 0.00048	\$0.20
Renewable Portfolio Standard	420 kWh X 0.00189	\$0.79
Zero Emission Standard	420 kWh X 0.00195	\$0.82
Energy Efficiency Programs	420 kWh X 0.00015	\$0.06
Franchise Cost	\$14.92 X 0.80600%	\$0.09
Net Metering Credit - Other	420 kWh X -0.00447	-\$1.88
Service Period Total		\$15.58

MISCELLANEOUS	
Net Metering Excess Gen - Rollover	180 kWh
Thank you for your payment of \$85.88 on March 12, 2018	
Total Amount Due	\$15.58

UPDATES	
ComEd	
<ul style="list-style-type: none"> IT'S A SNAP - GET THE APP! ComEd's free app now offers fingerprint login, account alerts & notifications, and easy pay options on smartphones and tablets. Download the new app today at ComEd.com/App ILLINOIS COMMERCE COMMISSION CONSUMER DIVISION: (800-524-0795): The Consumer Services Division is available to help resolve disputes with ComEd. However, customers should contact ComEd before seeking assistance from the ICC. 	

Two line items, one for **electricity use** and one for **electricity output**

Sample ComEd bill with Net Metering

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ComEd	<ul style="list-style-type: none"> IT'S A SMARTER WAY TO GET THE APP! ComEd's free app now offers fingerprint login, account alerts & notifications, and easy pay options on smartphones and tablets. Download the new app today at ComEd.com/App ILLINOIS COMMERCE COMMISSION CONSUMER DIVISION: (800-524-0795): The Consumer Services Division is available to help resolve disputes with ComEd. However, customers should contact ComEd before seeking assistance from the ICC.

Rollover credits

Credits applied to bill



Invest in energy efficiency!

- Energy efficiency investments have a 3:1 return on investment
 - LED lighting
 - Energy Star appliances
 - Weatherization
 - Electricity usage habits
- See the virtual packet for more information
- **ComEd.com/WaysToSave**



CERTIFIED
PROFESSIONAL



Questions to consider before speaking with an installer.

- ❑ Does your roof have good solar exposure?
- ❑ Which direction is my roof facing (North, South, East, West)?
- ❑ When do you anticipate re-roofing?
- ❑ Is your home energy efficient?



Image Credit: [Windfree Solar](#)



Incentives for Going Solar

Current incentives can reduce total costs up to 60%

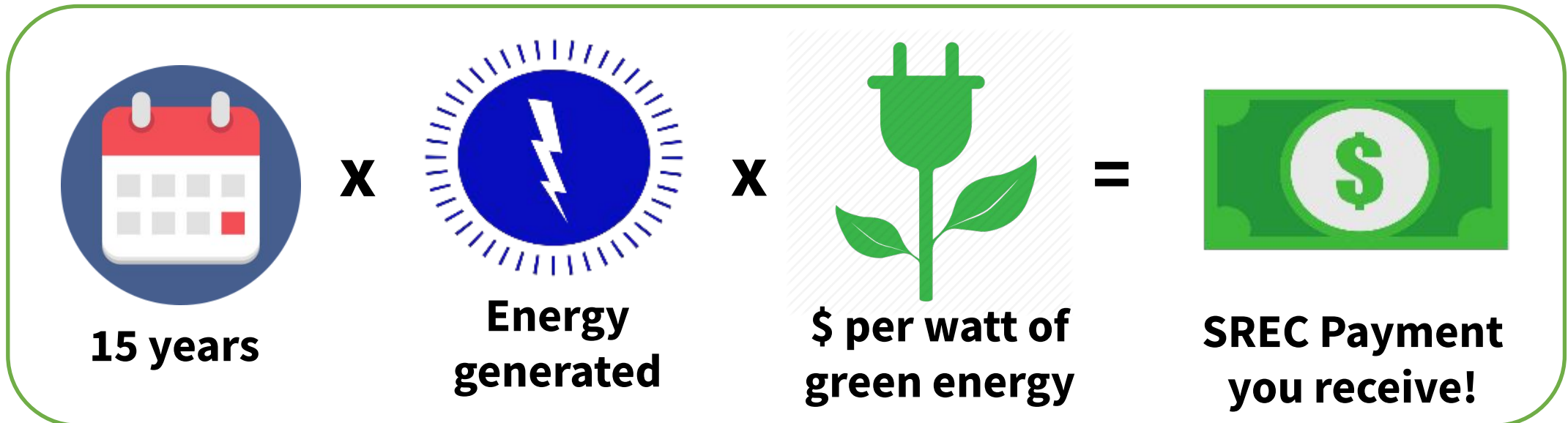
- State Solar Renewable Energy Credits (SRECs) - can cover up to 30%
- 26% Federal Tax Credit
- Utility Net Metering credits help you pay back your system faster!
- Note: Your homeowners' association cannot block you from going solar in Illinois



Image Credit: Windfree Solar

SREC: Solar Renewable Energy Credit

- Payment for the green energy you put on the grid
- Your solar panels help Illinois meet our overall renewable energy goals!
- Note: SRECs are considered taxable income



Federal Tax Credit: Covers 26% of Qualified Expenditures.

- Includes labor costs, system installation, interconnection wiring.
- Does not include new roof unless your roof requires structural reinforcement
- The home must be owned by the taxpayer but does not have to serve as the principal residence.
- If percentage of project cost is greater than total taxes paid, you get the remainder the following year

The image displays two tax forms. The top form is Form 5695, Residential Energy Credit, for 2018. It includes the Department of the Treasury logo and instructions to go to www.irs.gov/Form5695. The bottom form is Form 1040, U.S. Individual Income Tax Return, for 2018. It includes the Department of the Treasury logo and instructions to go to www.irs.gov/Form1040. The forms are partially filled out, showing fields for taxpayer information, filing status, and dependent information.

Form 5695 Residential Energy Credit (2018)

OMB No. 1545-0074
Attachment Sequence No. 158

Department of the Treasury
Internal Revenue Service

Go to www.irs.gov/Form5695 for instructions and the latest information.
Attach to Form 1040 or Form 1040NR.

Name(s) shown on return: _____ Your social security number: _____

Part I Residential Energy Efficient Property Credit (See instructions before completing this part.)
Note: Skip lines 1 through 11 if you only have a credit carryforward from 2017.

1	Qualified solar electric property costs	1	
2	Qualified solar water heating property costs	2	
3		3	
4		4	
5		5	
6		6	
7a			<input type="checkbox"/> Yes <input type="checkbox"/> No
11		11	
12		12	

Form 1040 U.S. Individual Income Tax Return (2018)

OMB No. 1545-0074
IRS Use Only—Do not write or staple in this space.

Filing status: Single Married filing jointly Married filing separately Head of household Qualifying widow(er)

Your first name and initial: _____ Last name: _____ Your social security number: _____

Your standard deduction: Someone can claim you as a dependent You were born before January 2, 1954 You are blind

If joint return, spouse's first name and initial: _____ Last name: _____ Spouse's social security number: _____

Spouse standard deduction: Someone can claim your spouse as a dependent Spouse was born before January 2, 1954 Full-year health care coverage or exempt (see inst.)

Spouse is blind Spouse itemizes on a separate return or you were dual-status alien

Home address (number and street). If you have a P.O. box, see instructions. _____ Apt. no. _____ Presidential Election Campaign (see inst.) You Spouse

City, town or post office, state, and ZIP code. If you have a foreign address, attach Schedule 6. _____ If more than four dependents, see inst. and check here

Dependents (see instructions):		(2) Social security number	(3) Relationship to you	(4) <input checked="" type="checkbox"/> if qualifies for (see inst.):	
(1) First name	Last name			Child tax credit	Credit for other dependents
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

Sign Here
Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.

Joint return? See instructions. Keep a copy for your records.

Your signature: _____ Date: _____ Your occupation: _____ If the IRS sent you an Identity Protection PIN, enter it here (see inst.) _____

Spouse's signature. If a joint return, both must sign. _____ Date: _____ Spouse's occupation: _____ If the IRS sent you an Identity Protection PIN, enter it here (see inst.) _____

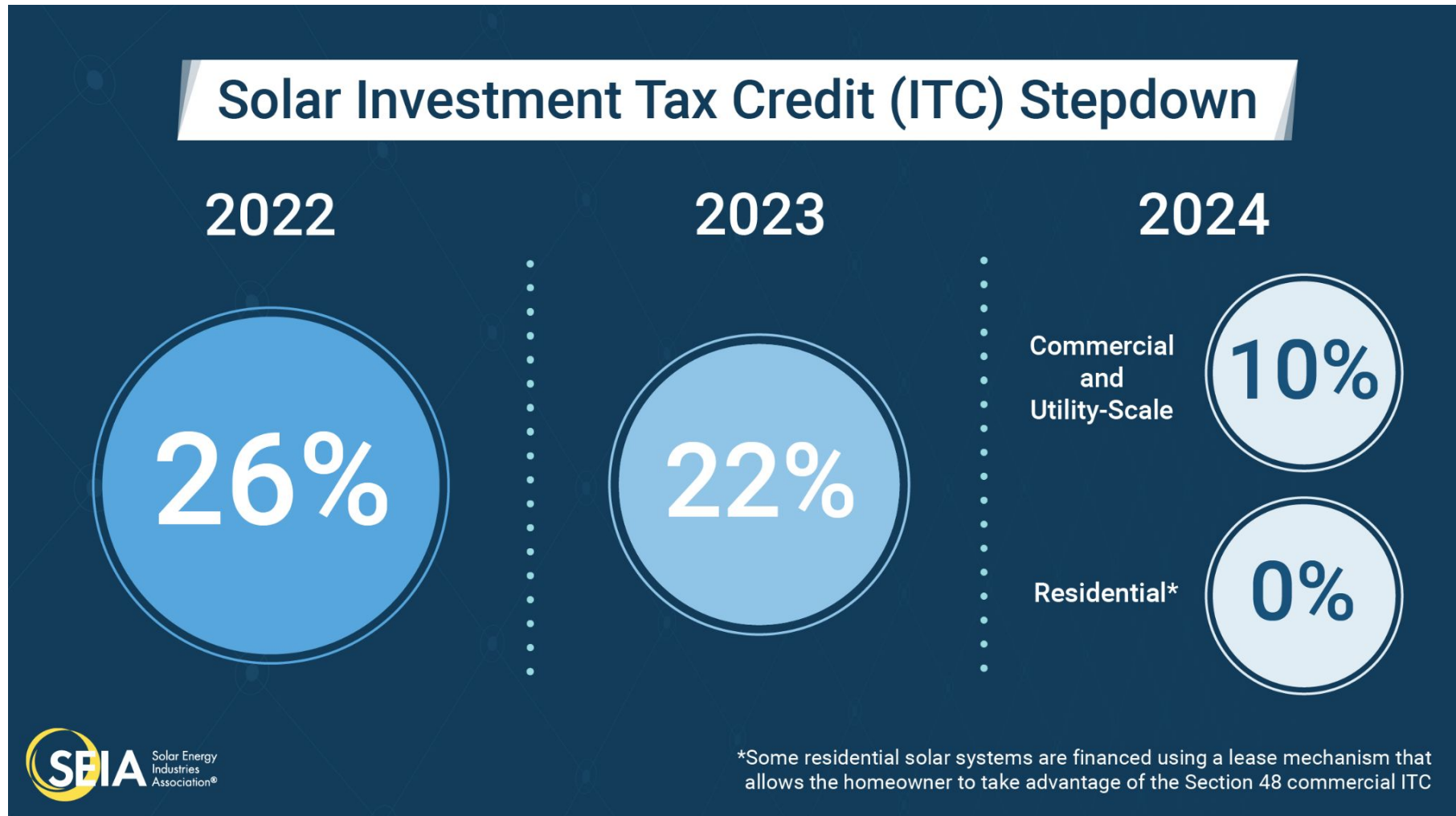
Paid Preparer Use Only

Preparer's name: _____ Preparer's signature: _____ PTIN: _____ Firm's EIN: _____ Check if: 3rd Party Designee Self-employed

Firm's name: _____ Phone no.: _____ Firm's address: _____

For Disclosure, Privacy Act, and Paperwork Reduction Act Notice, see separate instructions. Cat. No. 11320B Form 1040 (2018)

Federal Tax Credit: Due to expire at the end of 2022





Going Solar: Your Options

Residential Solar: Leasing versus owning

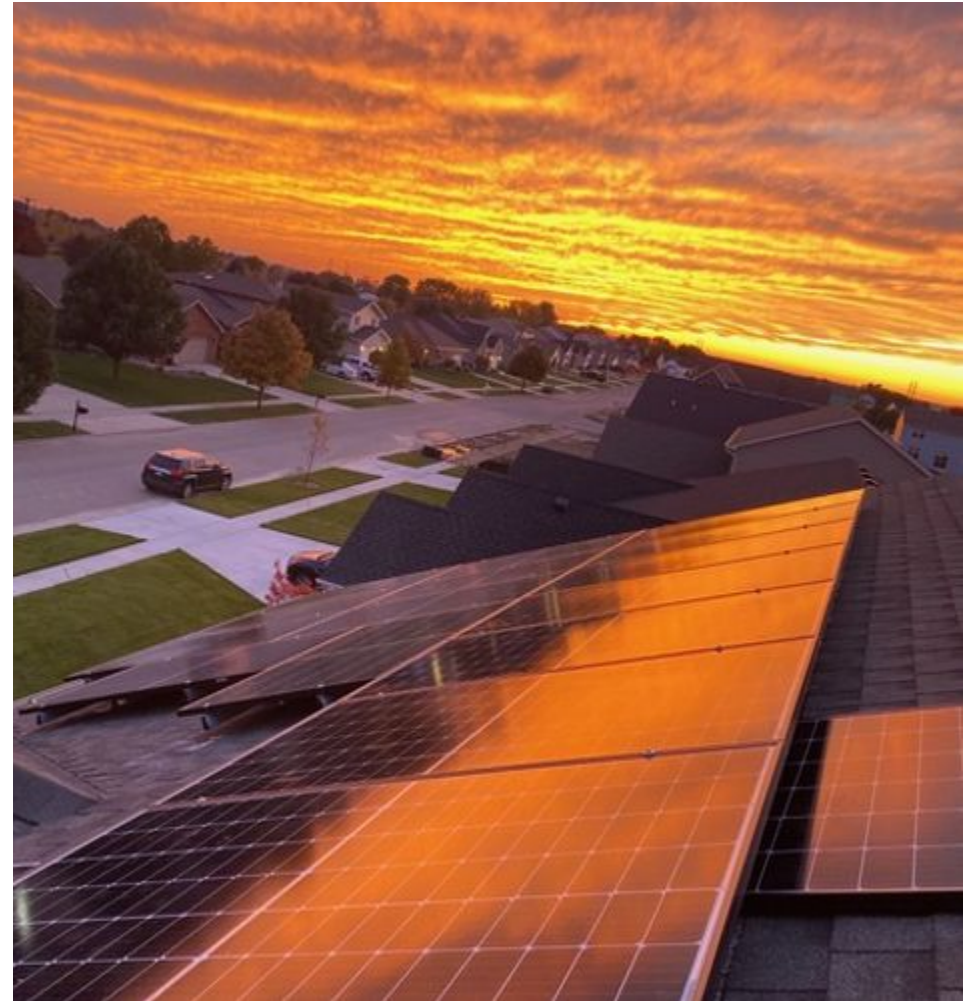
Three ways to go solar:

1. Purchase the panels outright
2. Lease the system
3. Power Purchase Agreement (PPA)

Things to look out for:

- Many leases and PPAs include cost escalators
- Check the contract. What happens if you move?
- Never sign a solar lease without first exploring your ownership options

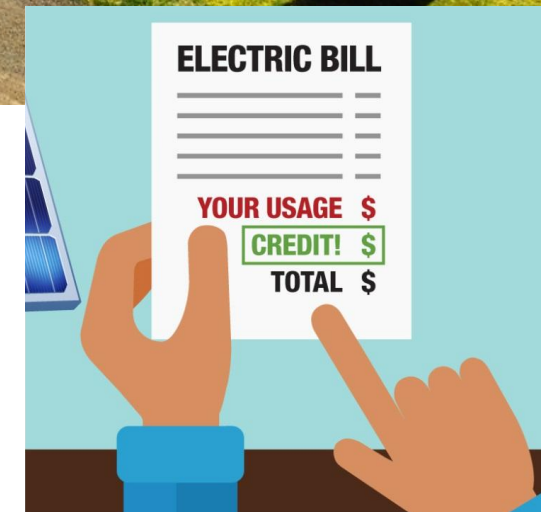
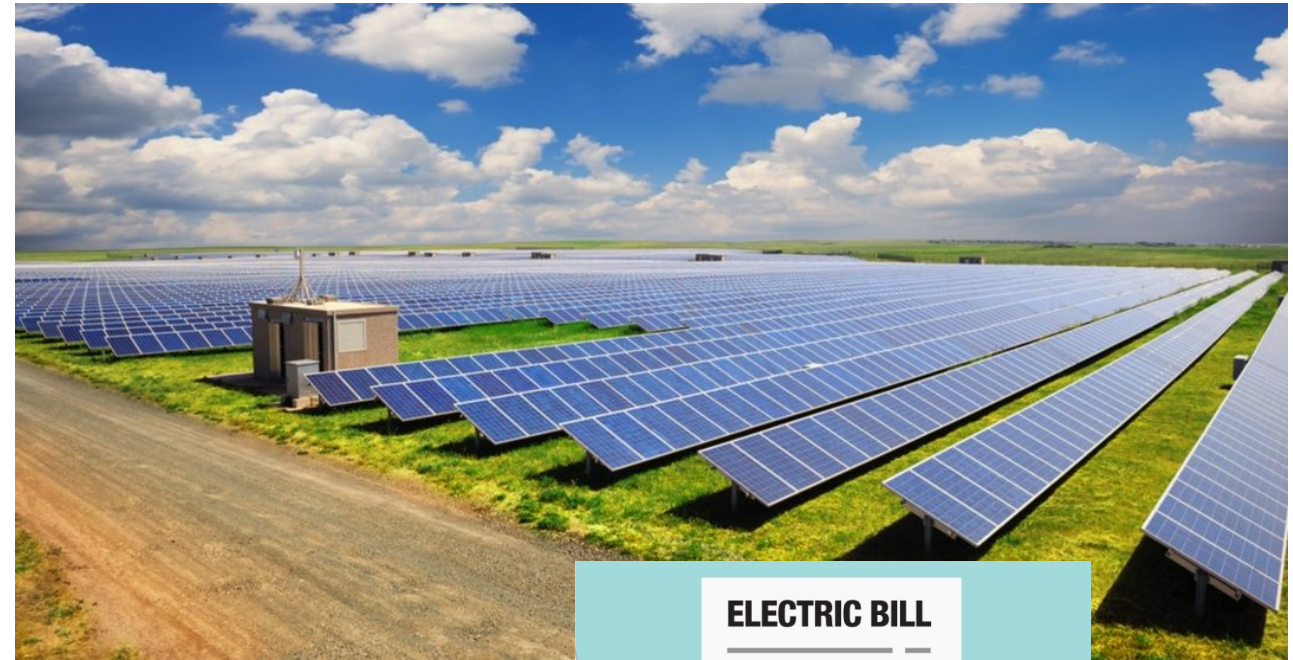
Image Credit: Windfree Solar



Community Solar

- A new option for people who can't install solar on their own property
- All offers guarantee savings
- Subscription size based off your usage
- Each month your subscription generates solar energy
- You will now pay two bills
 - Your existing electric bill
 - A monthly bill to your community solar company

Visit www.SolarInTheCommunity.com to learn more!



How does Community Solar Billing Work?

Issued 7/21/20 Account # 1234567890

How Does Community Solar Save You \$\$?

Without Community Solar

Electric Bill

SUPPLY	\$56
800 kWh x 0.07	\$56
DELIVERY	\$45
TAXES & FEES	\$8
Total	\$109

Total Owed: \$109

With Community Solar

Electric Bill

SUPPLY	\$6
800 kWh x 0.07	\$56
Solar Credits	
714 kWh x 0.07	-\$50
DELIVERY	\$45
TAXES & FEES	\$8
Total	\$59

Total Owed: \$99
Total Savings: \$10

Solar Provider Bill

Solar Credits	\$50
20% Discount	-10
Total Due	\$40

Total Amount Due by 8/5/20 \$221.22

For Questions, Support, and Outages visit ComEd.com

English	1.800.EDISON1 (1.800.334.7661)
Español	1.800.95.LUCES (1.800.955.8237)
Hearing/Speech Impaired	1.800.572.5789 (TTY)
Federal Video Relay Services (VRS)	Fedvrs.us/session/new

METER INFORMATION

Read Dates	Meter Number	Load Type	Reading Type	Previous	Present	Difference	Multiplier	Usage
6/23-7/21	111111111	General Service	Total kWh	37498	Actual 39396	Actual 1898	x 1	1898

RENEWABLE COMMUNITY SUPPLY DETAILS

This is where the community solar net metering credits appear on your ComEd statement.

Generation Period	Project Name	Phone Number	Generation kWh	Rate	Total
6/1 - 7/1	Community Solar Project	312.000.1234	252.21	-0.05668	-\$14.30

CHARGE DETAILS

Residential - Single 6/23/20 - 7/21/20 (29 Days)

SUPPLY		\$118.05
Electricity Supply Charge	1,898 kWh X 0.05168	\$98.09
Transmission Services Charge	1,898 kWh X 0.01305	\$24.77
Purchased Electricity Adjustment		\$9.49
Renewable Community Supply Credit		-\$14.30

DELIVERY - ComEd		\$86.39
Customer Charge		\$11.43
Standard Metering Charge		\$4.58
Distribution Facilities Charge	1,898 kWh X 0.03586	\$68.06
IL Electricity Distribution Charge	1,898 kWh X 0.00122	\$2.32

TAXES & FEES		\$16.78
Environmental Cost Recovery Adj	1,898 kWh X 0.00038	\$0.72
Renewable Portfolio Standard	1,898 kWh X 0.00189	\$3.59
Zero Emission Standard	1,898 kWh X 0.00195	\$3.70
Energy Efficiency Programs	1,898 kWh X 0.00132	\$2.51
State Tax		\$6.26

Service Period Total **\$221.22**

Total Amount Due **\$221.22**

UPDATES

- ComEd
- PRICE TO COMPARE: The ComEd electric supply price to compare is 6.473 cents per kWh. This price does not include a monthly purchased electricity adjustment factor that may range between +\$0.005 and -\$0.005 per kWh. For more information and supplier offers visit <https://www.pluginillinois.org/fixedrate.aspx>. For more information on ComEd bill line items go to [ComEd.com/UnderstandBill](https://www.comed.com/UnderstandBill).
 - COMED COVID-19 RESPONSE: For information, visit [ComEd.com/Coronavirus](https://www.comed.com/Coronavirus)
 - DON'T GET SCAMMED: We will never ask for personal information about your ComEd account or demand payment using prepaid cash cards. Learn more: [ComEd.com/ScamAlert](https://www.comed.com/ScamAlert)
 - WAYS TO PAY: Looking for ways to pay your bill? Visit [ComEd.com/PAY](https://www.comed.com/PAY)
 - ILLINOIS COMMERCE COMMISSION CONSUMER DIVISION: The Consumer Services Division is available at 800-524-0795 to help resolve disputes with ComEd. However, customers should contact ComEd before seeking assistance from the ICC.
 - Past due balances are subject to late charges.

Note that this is an EXAMPLE and savings will vary!

Created by
Citizens Utility
Board



Solar for All

- Illinois' new low income solar program
- Includes: Community solar, residential solar, solar for non-profits/public facilities
- No money down, and greatest savings on electricity bills
- To qualify you must be below 80% Area Median Income:
 - \$63,200 for a family for 4 in the Chicago area – varies by household size and region
- Visit: www.illinoisfa.com to learn more!



Illinois Solar for All



***Grow Solar Chicagoland
Group Buy***

MREA has run 50 Group Buy programs throughout the Midwest

Wisconsin

Central Wisconsin, Jefferson County, and Sauk Counties added over 800 kW of solar capacity on 125 properties.

Minnesota

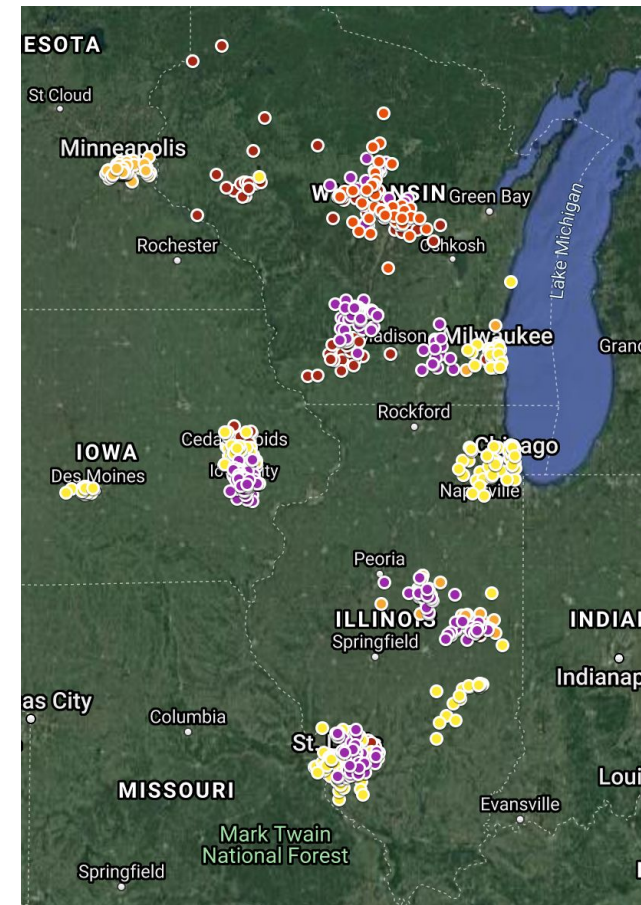
Solarize Twin Cities generated 261 kW of new solar capacity on 34 properties owned by homeowners and businesses in 2019.

Illinois

Programs across Bloomington, Urbana-Champaign and Metro East have resulted in over 1.5 MW of new solar.

Iowa

Solarize Johnson County, MREA's sole effort in Iowa in 2018, resulted in 1,125 kW on 180 properties.



<https://www.solarpowerworldonline.com/2019/01/midwest-solarize-programs-helped-482-property-owners-add-3-8-mw-of-solar-in-2018/>

Solar Group Buy programs bring buyers together to lower costs

How does a Solar Group Buy work?

- Host a series of free “Solar Power Hours” to educate communities about the benefits and affordability of Solar PV.
- The MREA manages an RFP process to competitively select a single solar installer.
- Interested participants sign up to further evaluate Solar PV for their home or business.
- Participants pool their buying power to secure significant discounts that make installing solar more affordable.



Sheila went solar through a Group Buy in Metro East.

Base price for the Group Buy

Includes:

- Permitting & engineering
- All incentive application & processing

Warranties

- 25 year power warranty on solar panels
- 12 year warranty on inverter
- 25 year warranty on power optimizers
- 15 year workmanship warranty

All installations are tailor-fit to the needs of our clients.

All materials use cutting-edge technology, including the best inverter and solar equipment available on the market

Group Buy participants save on cost per watt plus an add'l rebate.

Example

Pricing for

Option: Q. Cell panels with Solar Edge inverter

Base price: \$xxx,xxx for the average system size (pre-incentive)

Program Status	Go
	50
	\$0.
Rebate total (example)	\$32

Program Status	Goal 1	Goal 2	Goal 3	Goal 4
	50 kW +	150 kW +	250 kW +	500 kW +
Rebate per watt	\$0.05	\$0.10	\$0.15	\$0.20
Rebate total (example)	\$325.00	\$650.00	\$975.00	\$1,300.00

~ 23 homes

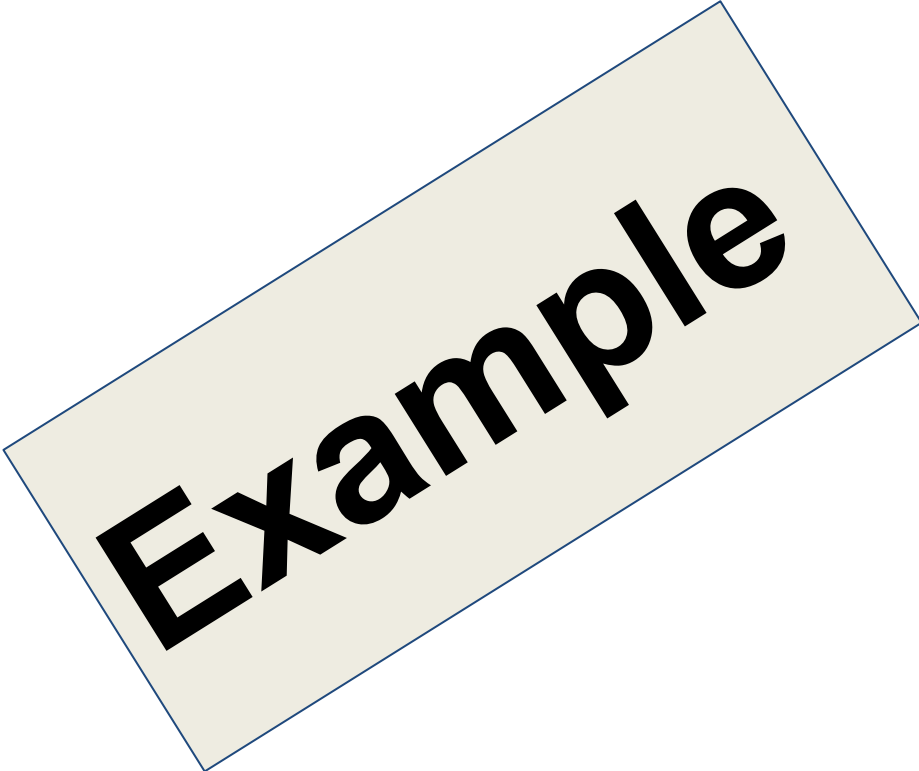
~ 77 homes

Rebate estimate based on a 6.5 kW system. Rebate depends on your system size.

Group Buy participants save on cost per watt plus an add'l rebate.

EXAMPLE 6.5 kW Residential Roof System
Pricing with Group Buy

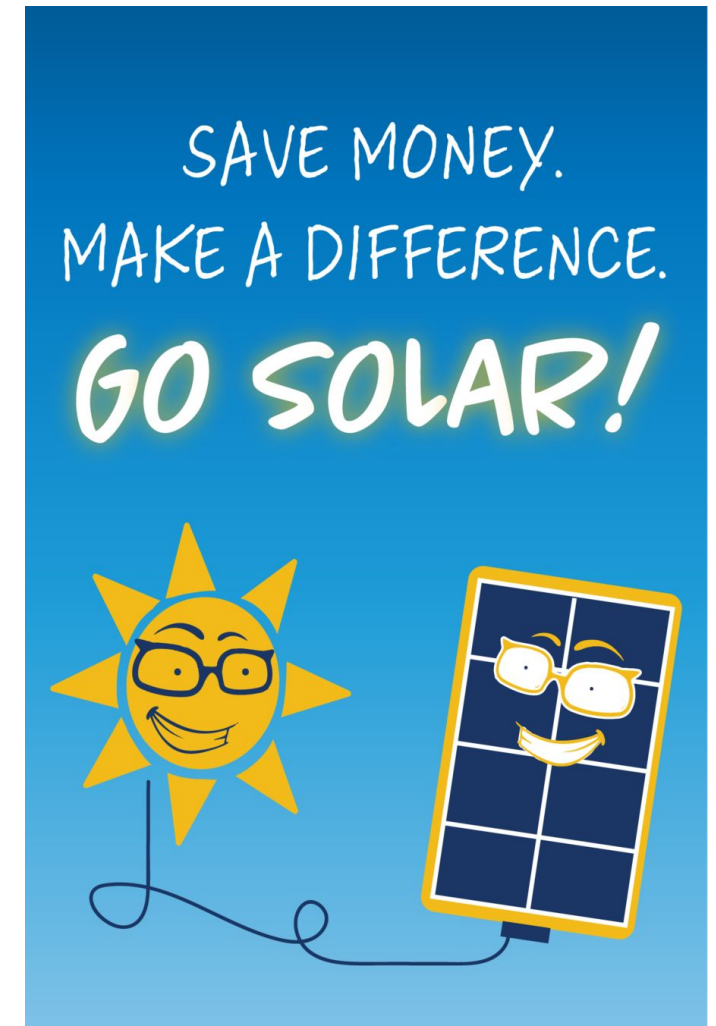
Installed Cost (\$3.20/Watt)	\$20,800
Illinois SREC	(\$8,849)
Tax Credit	(\$4,445)
Add'l Group Buy Discount	(\$975)
Net Cost	\$6,531



Note: Additional group buy discount assumes program reaches the 750 kW benchmark (approx 77 homes)

Next steps: You're on our list & will receive program updates!

- Fill out the follow up form we send out to get a free solar quote
- Be ready to share electric bills that show 12 months of usage
- Think about ways to become more energy efficient.
- Tell your friends to attend a Power Hour!

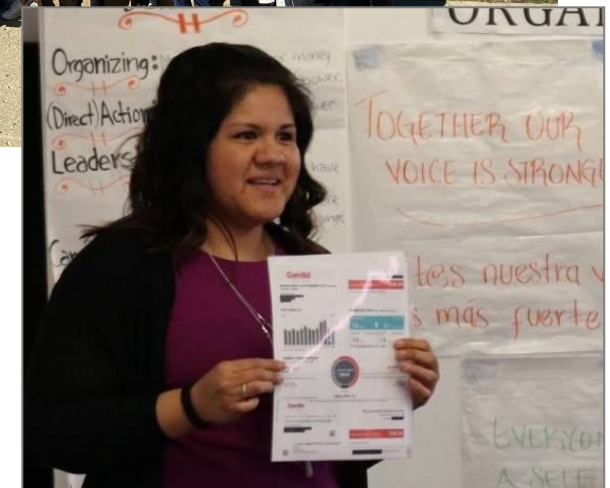


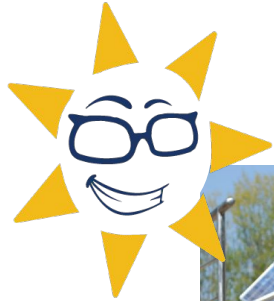
Learn more about the Citizens Utility Board

To join or learn more visit:

CitizensUtilityBoard.org

- Resources for energy efficiency & savings
- Information about new clean energy legislation in Springfield
- Hotline: 1 (800) 669-5556





Stay Informed: Become a Member of the MREA!



**Promoting renewable energy, energy efficiency,
and sustainable living through education and demonstration.**

Everyone who
goes solar through
the program gets a
**FREE Basic Family
Membership!**

- \$20 Off All Courses
- Invite to Virtual Membership Meeting
- Access to Clean Energy Credit Union
- Subscription to Newsletter
- Free Online Tutorials
- Free Rise Up! Publication Mailed to You

Thank you! Please spread the word!



Request a solar estimate, sign up for updates, and learn more:

www.SolarizeChicagoland.com

Questions: Contact Marina? @ CUB

[@citizensutilityboard.org](https://www.citizensutilityboard.org) - (312) 292-5871 (direct)