



Save Energy and Money

Make Your Home and Business More Energy Efficient

Welcome!

The webinar will begin at 6:30PM

Presenters

City of Highland Park
 Rob Sabo – Assistant City Manager rsabo@cityhpil.com or 847.926.1004

- North Shore Gas Energy Efficiency Program
 Kevin Kopterski Program Manager
 Cristina Lopez Trade Ally Liaison
- The Power Bureau, LLC
 Mark J. Pruitt CS² Program Manager



General Info

- Enter questions using the Zoom Q&A button
- Q&A at end of presentations
- Recorded webinar will be posted online
- Slides to be posted on City's website
- Contact info for presenters included in slides

Highland Park Sustainability Plan

- Link to plan posted in the Zoom chat feature
- Mayor's Compact for Climate and Energy
 - > Reduce greenhouse gas by 5% by 2023

Equivalent of...

Taking 3,300 cars off the road
Powering 1,800 homes for one year
Consuming 36,000 barrels of oil
Burning 85 rail cars of coal
Carbon sequestered by 18,000 acres of forests



GHG Emissions Progress to Goal



GHG Emissions Progress to Goal



Community Solar

- SolSmart designated community
- Support solar development in Illinois
- Provide energy supply cost savings for consumers without onsite infrastructure or upfront costs



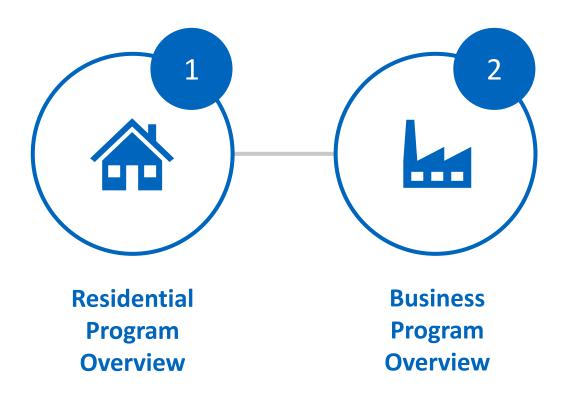


Save Energy and Money

Make Your Home and Business More Energy Efficient



Agenda





Residential Program Overview



Residential Energy Efficiency Offering

- Free personalized home energy assessment and free installation of energy-saving products
- Free products may include:
 - ✓ ENERGY STAR® certified LEDs
 - ✓ Honeywell Programmable thermostats
 - ✓ WaterSense® certified showerheads
 - ✓ WaterSense® certified faucet aerators
 - ✓ Pipe insulation















Discounted Products

- Products below are available for purchase at a discounted rate
- Smart Thermostats will be installed for free during the assessment
 - ✓ Nest Learning Thermostat
 - ✓ Nest E Smart Thermostat
 - ✓ Emerson Sensi Smart Thermostat
 - ✓ TrickleStar Advanced Power Strip











Nest Learning Thermostat

- Farsight
 - ✓ Lights up to show temperature/time when senses motion.
- Nest Leaf
 - ✓ Leaf appears on display or in Nest app when energysaving temperature is chosen.
- Learning
 - ✓ Nest learns preferred temperatures and builds a personalized schedule for the home.
- Home/Away Assist
 - ✓ Nest automatically saves otherwise wasted energy when owner is away.
- Airwave
 - ✓ Unique technology helps to use less air conditioning while remaining cool.
- **MSRP**: \$249
- **Discounted Price**: \$150





Nest E-smart Thermostat

- Frosted Display
 - ✓ Blends into the background and fits into any home.
- Home/Away Assist
 - ✓ Automatically adjusts temperature when the house is empty.
- Remote Control
 - ✓ Use the Nest app to change the temperature remotely.
- Energy History
 - ✓ Check the Nest app to see how much energy is used and why.



• **Discounted Price**: \$75





Emerson Sensi Smart Thermostat

- Smart Home Compatible
 - ✓ Works with Amazon Alexa, Google Assistant, Apple HomeKit (c-wire required), and Samsung SmartThings smart home platforms.
- Usage Reports
 - ✓ Monitor current day and historical heating, cooling and fan runtimes right in the app.
- Control from Anywhere
 - ✓ Control your home comfort remotely from your smartphone or tablet using the Sensi mobile app for Android and iOS devices.
- Smart Alerts
 - ✓ Sensi features smart alerts to help detect extreme temperature and humidity levels in your home.

MSRP: \$129

• Discounted Price: \$75





TrickleStar Advanced Power Strip

- For home offices and home entertainment centers
- Adjustable surge to allow for proper voltage
- 7 outlets available:
 - ✓ 2 Always On constantly receive electricity. (e.g., modem and router)
 - ✓ 1 Control controls whether Switched outlets receive electricity (e.g., TV or computer)
 - √ 4 Switched (green) rely on Control outlet for power (e.g., accessories used with Control, disc player, speakers, gaming console)

• **MSRP**: \$30

• **Discounted Price**: \$10





Honeywell T4 Programmable Thermostat

- 7-day program capability
- Programming can provide savings by automatically adjusting the temperature in the home.
- Replaces existing non-programmable thermostats.





Energy-Efficient Showerhead

- WaterSense® certified
- Uses about half of the water of standard showerhead
 - ✓ 1.5 gallon per minute
- Standard and handheld models available





Faucet Aerators

- WaterSense® certified
- Kitchen Aerator
 ✓ 1.5 gallons per minute
- Bathroom Aerator
 ✓1 gallon per minute



Pipe Insulation

- Available for pipes surrounding hot water heater
- Up to six feet installed
- Helps to prevent heat loss as water travels to the areas of the home where it is needed





LED Light Bulbs

- Available in many shapes and sizes:
 - ✓ A-Shape
 - **√**Globe
 - **√**Flood
 - ✓ Candle
 - ✓ Track Lights
 - √3-way



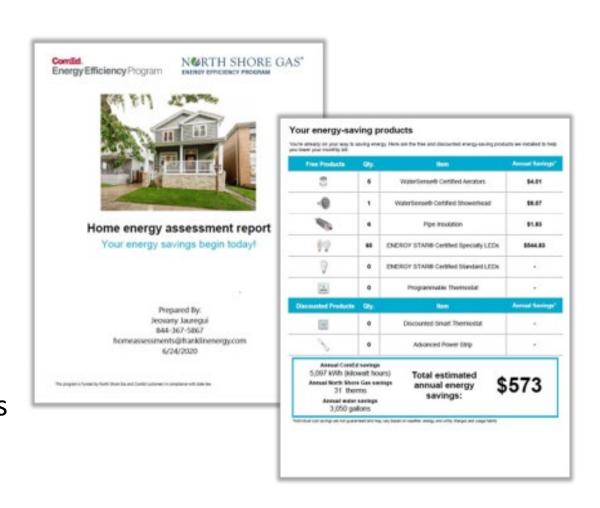






Home Energy Assessment Report

- Itemized list of products installed during assessment
- Provides estimated annual savings:
 - **√** Gas
 - ✓ Electricity
 - ✓ Water
 - ✓ Money
- Provides recommendations for larger upgrade projects and rebate opportunities





Virtual Home Assessment

- New residential offering
- Uses Surfly video-sharing platform
- Mirrors in-home assessment
- Includes contactless delivery
 - ✓ Products will be delivered for homeowners to install
 - √ Virtual installation support is available
- In-home follow up appointment required for customers interested in thermostats





Home Energy Rebates—HVAC

Qualifying Measure	Rebate Amount
Boiler + Integrated Domestic Hot Water Two-In-One Unit	\$500
Hot Water Boiler	\$350
Steam Boiler	\$150
High-Efficiency Furnace (95%+)	\$200
Tankless and Indirect Water Heater	\$150
Programmable Thermostat*	\$20
Smart Thermostat	\$25

^{*}Programmable thermostat installed in conjunction with a high-efficiency furnace does not qualify for rebate.

- HVAC contractor of homeowner's choice
- Submit rebate application via online portal, email or mail (application available in English and Spanish)
- Rebates are subject to random quality post-inspections



Weatherization



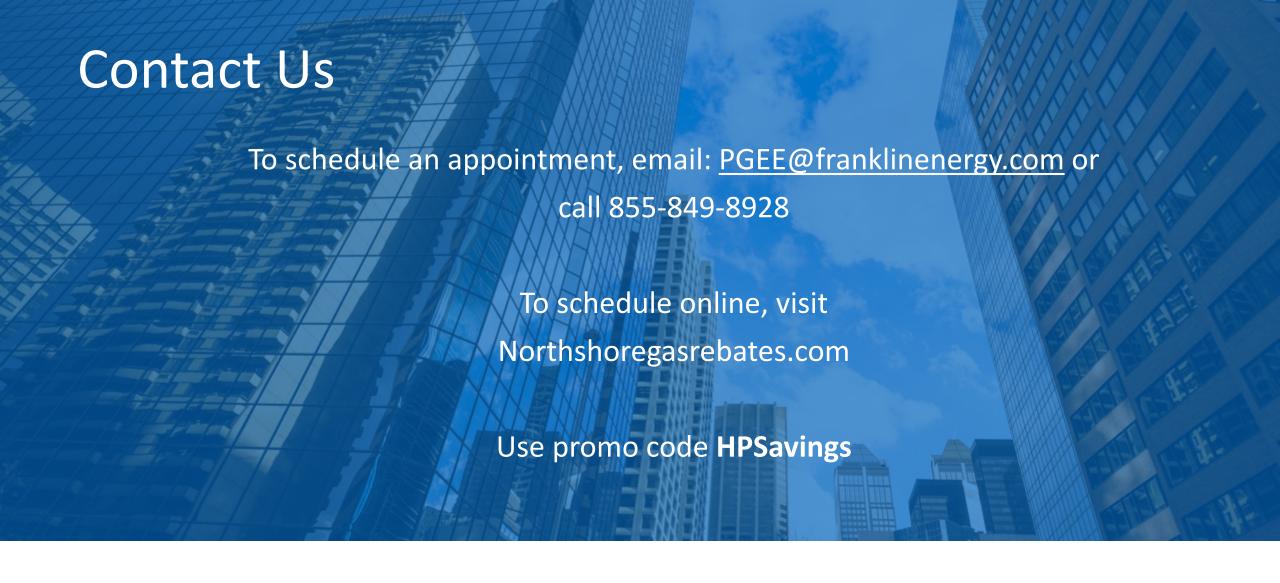


Home Energy Rebates—Weatherization

- Effective March 15, 2021, the maximum rebate per project will be \$400.
- Must work with an approved Partner Trade Ally (applicable credentials required)
- Rebate offered as instant discount on invoice
- Please reach out to Rick Hild to learn more:
 - ✓ rhild@franklinenergy.com
 - ✓312-878-0038 ext. 2609

Qualifying Measure	Rebate Amount
Air Sealing – can be standalone	Up to \$400
Attic Insulation – air sealing required (existing insulation must be R14 or below)	Up to \$300
Wall/Foundation Insulation – air sealing required	Up to \$400
Duct Sealing – can be standalone	Up to \$400





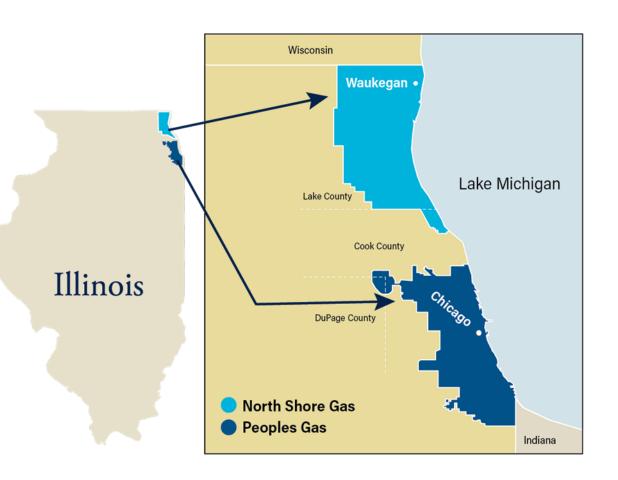


Business Program Overview



Who Qualifies?

- North Shore Gas Customers
 - ✓ Not a joint program with ComEd
- Customers in the North Shore Gas territory
 - ✓ Geographic Area: Most of Lake County
 - ✓ 54 communities North of Chicago to the Wisconsin border
 - √ 159,000 residential and business customers





Who Qualifies?

- Privately-owned business customers
 - ✓ Small Business (<400,000 therms used annually)
 - ✓ Commercial & Industrial (>400,000 therms used annually)
- Business types
 - ✓ Manufacturing
 - ✓ Office buildings
 - ✓ Hotels
 - ✓ Churches and non-profits
 - ✓ Dry cleaners and coin laundry facilities
 - ✓ Convenience/grocery stores
 - ✓ Restaurants
 - ✓ Auto shops











Why Should I Participate?

- Rate-payer funded
 - √ You are paying each month
- You save natural gas and money
- Use the money saved to invest in your business or organization
- It is good for the environment
- Opportunity for your project(s) to be featured in a case study

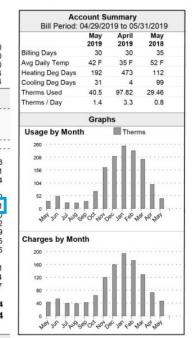
NORTH SHORE GAS*

Customer Service 24-Hour Gas Emergencies En Español TDD Line 866-556-6004 866-556-6005 866-556-6003 866-556-6007

Payment Due Date 06/28/2019

www.northshoregasdelivery.com

Bill Date	Account Number	Next Meter Read Date	Amount Due
06/04/2019	0613000000-0002	06/29/2019	\$46.04
Customer Name	JOHN Q CUSTOMER		
Service Address	123 MAIN ST WAUKEGAN IL 60085-2	2320	
Activity Since Last Bill			
04/29/2019 Previous Balan	ce		\$83.80
05/21/2019 Payment			-\$83.80
Balance Total Current C	harges		\$0.00 \$46.04
Total Current B			\$46.04
Gas Service			
Rate 1 - Small Residential	Heating		
Meter N9999999		Reading 05/31/2019	2382
	Actual R	Reading 04/28/2019	-2343
		Gas Use	39 CCF
Delivery Charge	39 CCF x 1.03	9 BTU = 40.5 Therms	
Customer Charge			\$24.53
Distribution Charge	40.5 Therms at	t \$0.11138	\$4.51
Storage Service Charge	40.5 Therms at	t \$0.00846	\$0.34
Cac Chargo	40.5 Thorms of	• ¢0 24266	\$12.02
nergy Efficiency Program	40.5 Therms at		\$0.41
nvironmental Charge	40.5 Therms at		\$0.10
ranchise Cost Adjustment JEA - Gas Cost Adjustment	30 Days at \$0.9 0.67% of \$13.9		\$0.52 \$0.09
olume Balancing Adjustme			-\$1.15
ax Cost Adjustment			-\$0.45
axes			95,50,433
Municipal Utility Tax	5.15% of \$42.8		\$2.21
State Tax	0.1% of \$42.82		\$0.04
State Gas Revenue Tax	40.5 Therms at	t \$0.024	\$0.97
		Sub	ototal: \$46.04
		Gas Service 7	otal: \$46.04





Program Offerings

- Assessments
 - ✓ Identify energy-saving opportunities
- Rebates
 - ✓ Prescriptive rebates for efficiency upgrades
 - ✓ Custom rebates based on calculated savings
- Studies
 - ✓ Gas Optimization Studies
 - ✓ Engineering Studies
 - ✓ Smart Check Studies
 - ✓ Staffing Grant

- New Construction
 - ✓ Prescriptive rebates for efficiency upgrades
 - ✓ Custom rebates based on calculated savings beyond code
 - ✓ Holistic studies with incentives for implementation



Prescriptive Rebates

- Prescriptive Program
 - ✓ Free energy assessment (now offering virtual)
 - ✓ Menu/Catalog of 1-for-1 upgrades for designated equipment
 - Steam traps: \$20 per trap surveyed, and \$100-\$200 per failed open trap
 - Boiler tune-ups
 - Pipe insulation
 - Equipment upgrades
 - ✓ Standard prescriptive rebate application
 - Program staff assist with all paperwork
 - Some measures require pre-approval

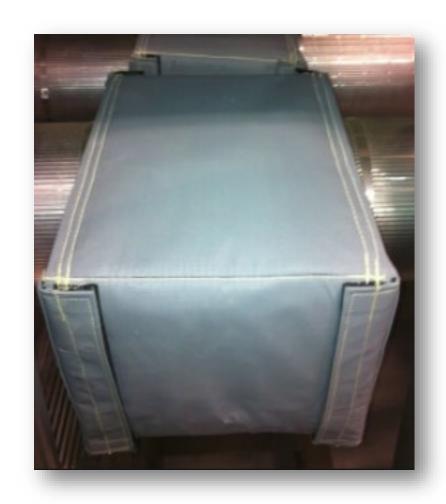






Custom Rebates

- If a project saves natural gas, it should be considered for a custom rebate
- Common custom projects include:
 - ✓ Process pipe insulation
 - ✓ Steam trap and valve jackets
 - ✓ Outdoor air damper control
 - ✓ Boilers controls
 - √ Heat recovery
- Not sure your project qualifies?
 - ✓ Send us proposals for work you are currently considering





Optimization Studies

- Free, expert analysis of facilities to ensure optimal performance of energy-using systems and identify no- and low-cost improvements as well as capital type projects
- Engineering services are covered by the program(s) while the customer commits to complete projects with a payback under 1.5 years (or less!)
- Four tracks:
 - ✓ Building optimization (HVAC/controls targeted)
 - ✓ Process optimization
 - ✓ Steam plant optimization
 - ✓ Retro-commissioning (joint with ComEd)



Staffing Grants

- Staffing Grants
 - ✓ Support dedicated energy efficiency project support
 - ✓ Up to \$50,000 per customer, per year





No-and Low-Cost Opportunities

- Boiler Tune-Ups
- Steam Trap Testing and Replacement
- Pipe Insulation
- Boiler Chemical Descaling
- Boiler Reset Controls
- Business Furnace and RTU Tune-Ups
- Programmable Thermostats







Boiler and RTU Tune-Up Requirements

- Pre- and post- combustion tapes
- Final invoice listing
 - √ Gas service address
 - ✓ Boiler make and model
- Boiler tune-up checklist
- Final signed application
- Payback after rebate less than 1 year







Steam Traps

- Steam traps are used in steam systems to discharge condensate and noncondensable gases like air and CO2 without the loss of live steam
- Over time, these traps tend to "fail" stuck open (energy, water, chemical losses)
- You will not know that the trap is not operating correctly because the radiator will still get heat!
- Payback after rebate less than 1 year



Pipe Insulation

 Keeps water in your water pipes warm longer, helping you lower water consumption and energy used by your hot water heater.

 This incentive can be lucrative, and it is one of the most rapid ROIs in the program.



Energy Saving Kits

Free energy savings products included in these kits:

- General Kit
 - √ Houses of worship, offices
 - ✓ Bath aerators
 - √ Weatherstripping
 - ✓ Switch and outlet gaskets
 - ✓ Pipe Insulation (6 ft)
- School/Grocery Kit
 - ✓ Kitchen faucet aerators
 - ✓ Bath aerators
 - ✓ Pre-rinse spray valve















Energy Saving Kits

- Restaurant Kit
 - ✓ Estimated natural gas and water savings will be close to:
 - Pre-Rinse Sprayer (1): \$200 per year
 - Faucet Aerators (5): \$80 per year
- If you are interested in any of the kits, email <u>SMB.peoplesnorthshore@franklinenergy.com</u>
 - ✓ Include the following information:
 - Name
 - Address
 - Type of kit





Small and Midsize Business New Customer Bonus

- For a limited time, new customers can receive \$500
 - ✓ Email SMB.peoplesnorthshore@franklinenergy.com to apply. Include the following:
 - Email subject line: Customer Bonus
 - Name
 - Address, city, and zip code or email address of where gift card is to be sent
 - Project details (location, description, rebate amount)
 - ✓ After the program team reviews application and verifies it is the customer's first project, gift cards will be mailed





Small and Midsize Business Multi-Measure Bonus

- For a limited time, a 20% bonus is available toward the second project at the same address. Bonus can be applied as follows:
 - ✓ 20% bonus on two projects combined and submitted at the same time.
 - ✓ 20% bonus toward the second project.
 - ✓ Incentive may not exceed 100% of project costs and bonus will be capped at \$2,000





Success Story: Zengeler Cleaners



Total savings: \$69,000

Total rebates: \$65,000

- The program team has been working with the owner to reduce energy consumption and costs
 - ✓ "To be honest, it was hard to believe that at virtually no
 cost we could get everything done. The assessment and
 installation were free and on top of that, we saved
 money with significant rebates that helped us lower
 our gas use."
- Projects include:
 - ✓ Boiler tune-ups
 - ✓ Steam traps (test and repair rebates)
 - ✓ Direct installation



Success Story: Saint Mary of the Lake



Total savings: \$106,525 **Total rebates**: \$246,517

- The program team has been working with the facilities team to reduce energy consumption and costs
 - √"The North Shore Gas Natural Gas Savings Program team was great from start to finish with their personal customer service and follow through."
- Projects include:
 - **✓** HVAC Controls
 - ✓ Steam traps (test and repair rebates)
 - ✓ Steam pipe insulation
 - ✓ Chiller Heat Recovery



Online Energy Assessment

- Find energy opportunities for your business
 - ✓ Complete the online energy assessment
 - ✓ Receive a unique energy report
 - ✓ Contact an Energy Advisor to review the report with you
 - ✓ Develop a plan for energy efficiency upgrades and work with one of our Trade Allies
- Visit us online to get started
 - ✓ Online Assessment
 - ✓ North Shore Gas Rebates
 - ✓ <u>Peoples Gas Rebates</u>





Proposal Place for Business Programs

- Let us help you complete the paperwork Simply email the proposal to PGLNSGproposalplace@franklinenergy.com and we will take care of the rest.
- There is likely work your company is performing that is not receiving rebates.
- Contact us to receive rebates for projects already underway or completed.
- Send us proposals for work you are currently considering.













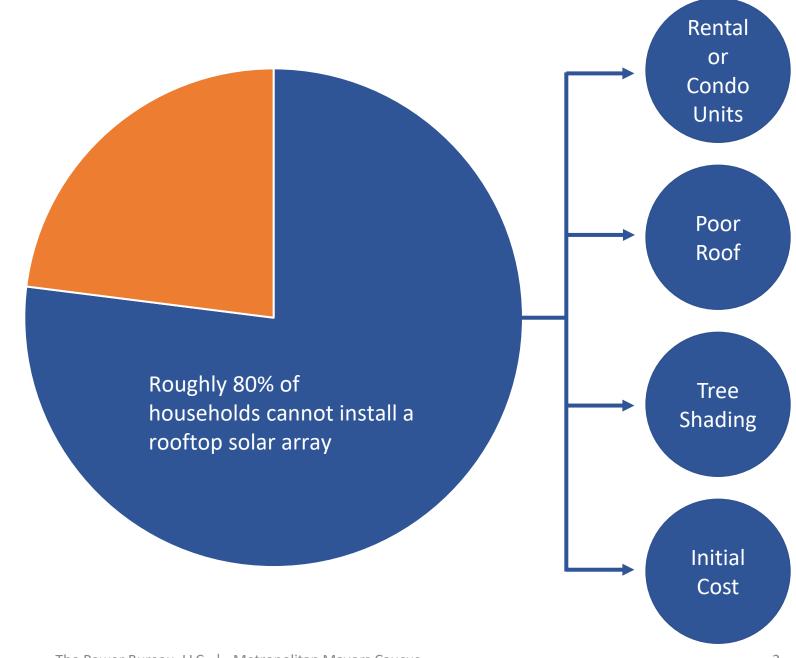
COMMUNITY SOLAR FOR HIGHLAND PARK

IN PARTNERSHIP WITH THE METROPOLITAN MAYORS CAUCUS

PROBLEM: ACCESS TO SOLAR

Real Barriers

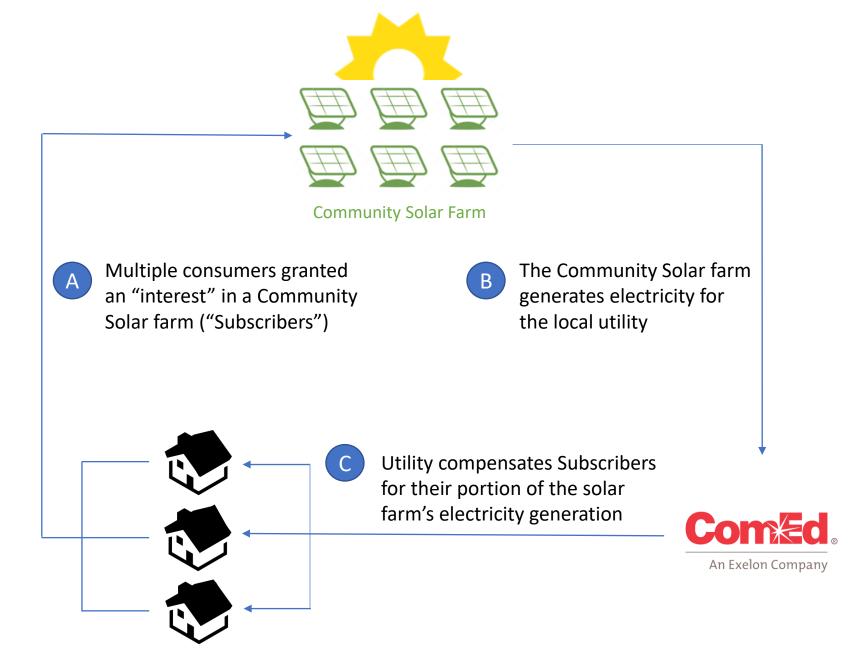
- Restrictions for renters and condo owners
- Many roofs cannot support weight of solar arrays
- Shade from trees prevents solar from generating electricity
- The initial cost of solar is still too high for consumers



SOLUTION: COMMUNITY SOLAR

Community Solar

- State law allows multiple consumers to share a single community solar farm (A)
- The generation from the community solar farm is delivered to the local utility (B)
- The local utility issues
 "net metering credits" to
 all consumers that
 subscribe to the
 community solar farm (C)



COMMUNITY SOLAR

Challenges

- Different offers from 75 different developers
- Termination fees
- Minimum credit scores
- Power of attorney
- Cumbersome sign-up and compliance

CS² Program

Municipalities asked
 Mayors Caucus for a
 program that offered safe
 and fair Subscriptions

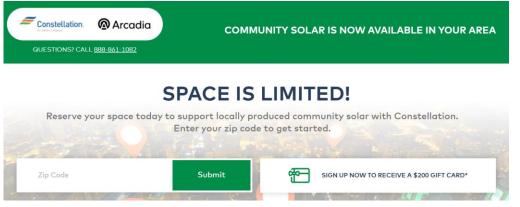


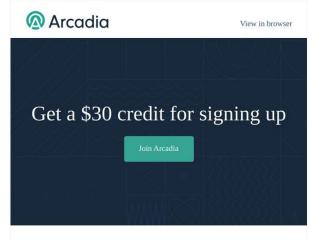


Save Money and Support Clean Energy. No Rooftop Panels Required.

Community Solar programs allow utility customers to subscribe to a local solar farm and save on their electricity cost without having to install solar panels.







Hi

Arcadia makes supporting clean energy easy, whether you're a renter or a homeowner. It's as easy as 1, 2, 3:

- 1. Estimate how much energy you use every month. Our calculator can help.
- Sign up to offset that energy every month for just 1.5c/kWh. For most households, that's about \$10/month.
- We buy renewable energy certificates on your behalf, so you're helping put more clean energy into the grid.

In just two minutes, you can make a big difference for the environment. And if you sign up by the end of the month, you'll get a \$30 credit.

CS² PROGRAM

Partnership Structure

- Mayors Caucus
 - Competitive bidding
 - Negotiations
 - Customer support
- City of Highland Park
 - Approve contract terms
 - Messaging
 - Consumer awareness
- CS² Program
 - No credit checks
 - No enrollment fees
 - No termination fees
 - Consumer electricity supply cost savings











CS² PROGRAM

Billing Structure

- Consumer receives all net metering credits on their ComEd bill
- Consumer separately billed for 80% of net metering credits

Requirements

- Electronic autopay
- Ensures accuracy
- Reduces operating costs to support consumers savings

Before Community Solar

Electric Bill



\$84

1200 kWh X \$0.07 = \$84



\$15 **TAXES & FEES**

\$144 **TOTAL COST**

Total Owed: \$144

After **Community Solar**

Electric Bill



SUPPLY

\$24

\$45

1200 kWh X \$0.07 = \$84

Net Metering Credit -1000 kWh X \$0.06 = -\$60

★ DELIVERY

\$15 **TAXES & FEES**

TOTAL COST \$84

Subscription Bill

Net Metering

\$60 Credits

Subscriber's

-\$12 Share (20%)

TOTAL COST \$48

Total Owed: \$131

Total Savings: \$12

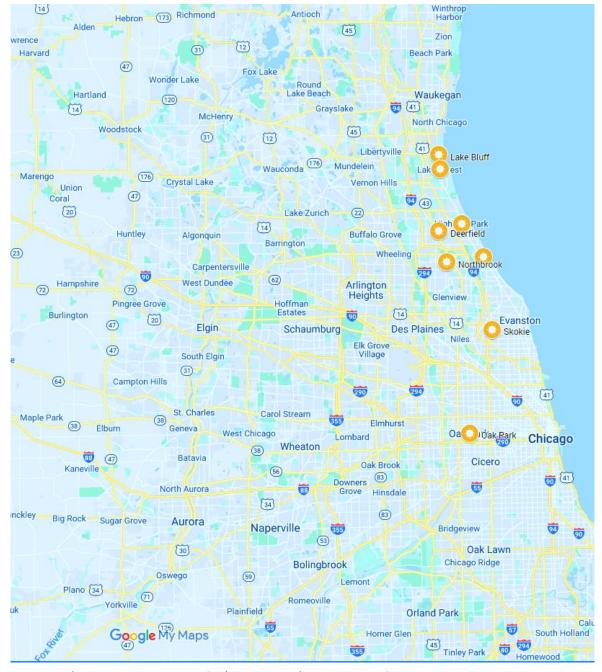
RESIDENTIAL CS² PROGRAM – AVERAGE SINGLE-FAMILY HOME (2020 VALUES)

	MONTHLY	COMED SUPPLY	CHARGES	MONTHLY	NET METERIN	G CREDITS	MON	THLY NET SAVIN	IGS
MONTH	Electricity Consumption (kWh)	Electricity Supply Charge (\$/kWh)	Energy Supply Cost (\$)	Solar Generation (kWh)	Net Metering Credit Rate (\$/kWh)	Net Metering Credits (\$)	Net Metering Credits (\$)	Monthly Subscription Cost (\$)	Net Consumer Savings (\$)
MATH	Α	В	C=A*B	D	E	F=D*E	G=F	H=F*80%	I=G-H
January	695	\$0.05747	\$39.97	458	-\$0.05747	-\$26.35	\$26.35	-\$21.08	\$5.27
February	801	\$0.06167	\$49.38	565	-\$0.06167	-\$34.86	\$34.86	-\$27.89	\$6.97
March	737	\$0.05512	\$40.60	767	-\$0.05512	-\$42.30	\$42.30	-\$33.84	\$8.46
April	583	\$0.05646	\$32.94	863	-\$0.05646	-\$48.72	\$48.72	-\$38.98	\$9.74
May	568	\$0.06352	\$36.11	998	-\$0.06352	-\$63.38	\$63.38	-\$50.71	\$12.68
June	709	\$0.05444	\$38.58	1,018	-\$0.05444	-\$55.42	\$55.42	-\$44.34	\$11.08
July	1,121	\$0.05549	\$62.20	1,012	-\$0.05549	-\$56.18	\$56.18	-\$44.94	\$11.24
August	1,405	\$0.05753	\$80.84	953	-\$0.05753	-\$54.82	\$54.82	-\$43.86	\$10.96
September	763	\$0.05299	\$40.43	853	-\$0.05299	-\$45.19	\$45.19	-\$36.15	\$9.04
October	570	\$0.05347	\$30.47	693	-\$0.05347	-\$37.07	\$37.07	-\$29.66	\$7.41
November	502	\$0.05347	\$26.83	481	-\$0.05347	-\$25.72	\$25.72	-\$20.57	\$5.14
December	600	\$0.05347	\$32.11	392	-\$0.05347	-\$20.97	<u>\$20.97</u>	<u>-\$16.78</u>	\$4.19
Annual	9,055	\$0.05638	\$510.46	9,055	-\$0.05638	-\$510.98	\$510.98	-\$408.79	\$102.20

RESIDENTIAL CS² PROGRAM

Track Record

- 8 communities
- Residential <u>and</u> municipal facilities subscribed
- Over 1,300 residents signed up for Community Solar Subscriptions
- Supporting development of four (4) new community solar projects in northern Illinois

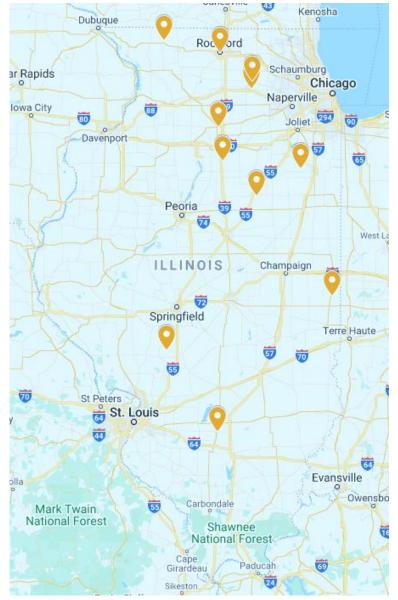


Active Residential CS2 Programs Deerfield Glencoe Highland Park Lake Bluff Lake Forest Northbrook Skokie Oak Park

RESIDENTIAL CS² PROGRAM

Developer Partnerships

- Pool of three (3) developers with eleven (11) projects throughout Illinois
 - All have agreed to current standard Subscription terms and conditions
 - Projects at or near completion
- Negotiations with other developers for additional volumes









RESIDENTIAL CS² PROGRAM

Reservation List

- Municipally branded
- More detailed information (FAQ, sample bills, videos)
- No obligation sign up form

www.Northshorecommunitysolar.com















North Shore Electricity Aggregation Consortium

Support Renewable Energy and Secure Guaranteed Savings with Community Solar

Residential and Small Commercial consumers located in the North Shore can capture the benefits of solar without any investment or installing any solar panels on your roof.

With the CS2 Program, North Shore consumers can:

- · Support new solar development in northern Illinois
- Save off ComEd energy supply costs with a guaranteed 20% savings off net
- Sign up for \$0 cost
- · Stay with your current utility
- Terminate at any time for \$0 cost.

With Community Solar, a typical* North Shore home can support the deployment of 30 solar panels at a community solar farm and secure as much as \$130 per year in their net metering credit value.

* Average single family residential home using 1,000 kWh's per month

How does Community Solar in Illinois work?



Large scale* community solar gardens are developed at off-site locations by private developers to generate clean, carbon-free electricity

* Maximum of 2,000 kW's of capacity per site.

No solar rooftop panels are required on your residence.

Signing up for Community Solar is Easy and Costs Nothing

There is no cost or obligation to put your name on the CS2 Program using the form below. Once you've submitted your information, the CS2 Program Administrator – MC Squared Energy Services – will review you account for the following:

- · Ensure that your account qualifies under ComEd's rules; and,
- Identify the Subscription size that is right for your account.

MC Squared Energy Services will inform you by email once your account has been confirmed, and again when a community solar farm that is participating in the CS² Program is ready to commence operations. At that time, you may choose to complete the enrollment process and start receiving your net metering credits.

Name on Utility Bill: What is this?	
First Name:	
Last Name:	
Address:	
City:	
State:	IL 🗸
State: Zip Code:	IL V
	IL V
Zip Code:	



FAQs

What is Community Solar?
What is the CS² Community Solar Program?
What is the Illinois Future Energy Jobs Act (FEJA)?
How does Community Solar work?
What are the benefits of Community Solar?
How does the billing work?
Is Community Solar available now?



Thank You!

Edith Makra
Director of Environmental Initiatives
Metropolitan Mayors Caucus
emakra@mayorscaucus.org
https://mayorscaucus.org

Mark J. Pruitt

CS² Program Manager

The Power Bureau

219/921-3828

markjpruitt@thepowerbureau.com