



## **Solar Energy Opportunities in Illinois' 104<sup>th</sup> District**

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Working with State Representative Mike Marron's  
and State Representative Brandun Schweizer's Office

Tessa Clarizio is a graduate student in Environmental Engineering at the University of Illinois who participated in the Policy and Research Legislative Fellows Program from 2023-2024.

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## **Solar energy opportunities in Illinois 104th district**

### **ABSTRACT**

There have been numerous incentive programs at a federal, state and local level to promote installation of solar energy. This document summarizes the opportunities available to residents, schools, businesses and farmers in Illinois 104th district.

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## Purpose

Through the Climate and Equitable Jobs Act (CEJA), Illinois has set a statewide goal of phasing out carbon emissions from the energy and transportation sectors and reaching 100% renewable energy by 2050, with interim goals of 40% renewable energy by 2030 and 50% by 2050. To achieve this goal, several state agencies such as the Illinois Environmental Protection Agency (Illinois EPA), Illinois Power Agency (IPA), and the Illinois Department of Transportation (IDOT) have been tasked to create and oversee programs that incentivize the use of renewable energy and electric vehicles, as well as invest in workforce development to support this transition. Additionally, the federal government is incentivizing renewable energy and electric vehicle adaptation, with legislation such as the Inflation Reduction Act anticipated to bring billions of dollars of investment to Illinois.

Currently, only 14% of energy produced in Illinois is from solar, wind and storage capacity. Therefore, to achieve 100% renewable by 2050 there needs to be tremendous growth in the renewable sector, and engaging with the public to adopt renewable energy is crucial. Not only does the state need to develop attractive incentive programs that meet the needs of Illinois residents, these programs must also be communicated effectively. With the rapid and recent investments from federal and state government in solar energy, it can be difficult for consumers to understand the full opportunities available to them. **Therefore, the purpose of this document is to provide a comprehensive overview of the different incentive programs for residents, schools, businesses and farmers to adopt solar energy.**



### Author Bio

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This document built upon the work of former PLRF fellow Mia Renna and was prepared with support from District Office Director Marguerite Bailey. If you have questions about the material presented in this document, Tessa can be reached at [tessac2@illinois.edu](mailto:tessac2@illinois.edu).

## Helpful Definitions

ABP	Adjustable Block Program
BIL	Bipartisan Infrastructure Law
CEJA	Climate and Equitable Jobs Act (Public Act 102-0662)
DOE	Department of Energy
EPA	Environmental Protection Agency
FHA	Federal Housing Administration
FOA	Funding Opportunity Announcement
HUD	U.S. Department of Housing and Urban Development
ILSFA	Illinois Solar for All
IPA	Illinois Power Agency
ITC	Investment Tax Credit
kWh	Kilowatt-hour
NEVI	National Electric Vehicle Infrastructure
PPA	Power Purchase Agreement
PV	Photovoltaic
REAP	Rural Energy for America Program
REC	Renewable Energy Credit
ROI	Return on Investment
RPS	Renewable Portfolio Standard
USDA	U.S. Department of Agriculture

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# 1 Solar Energy Background

There are environmental and economic benefits of solar energy in Illinois. Electricity generated from solar panels does not produce air pollutants generated from traditional fossil fuel-based power plants, such as sulfur dioxide, nitrogen oxides, particulate matter, and other pollutants. Economic benefits include job creation through the hundreds of Illinois companies that help build, sell, install and service solar panels for customers. Additionally, solar energy can reduce utility bills.

There has been tremendous investment in solar programs and incentives at a federal, state, and local level that has made purchasing and installing solar more affordable than ever. This section outlines the incentives available to those interested in investing in solar in Illinois 104<sup>th</sup> district for residents, schools, businesses and farms.

## 2 Residential Solar

There are federal, state-level and local resources to help install solar systems.

### 2.1 Federal incentives

The main federal incentive for residential solar installation is the Federal Solar Investment Tax Credit (ITC) for homeowners.<sup>1</sup> The U.S. Department of Housing and Urban Development (HUD) has also developed the Federal Housing Administration (FHA) PowerSaver loan,<sup>2</sup> which can be used for solar power system installation.

The Federal Solar Investment Tax Credit can be claimed on federal income taxes for up to 30% of a solar photovoltaic (PV) system paid for by the taxpayer. The installation of the system must be complete during the tax year. The tax credit is available to systems installed between 2022-2032, and it will decrease to 26% for systems installed in 2033, 22% in 2034, and will expire in 2035 unless renewed by Congress. There is no maximum amount that can be claimed. Expenses can include solar PV panels or cells, contractor labor costs for onsite preparation, assembly or original installation, balance-of-system equipment, energy storage devices with capacity rating 3 kilowatt-hours (kWh) or greater, and sales taxes on eligible expenses.

Eligibility requirements include:

- Solar PV system installed between January 1, 2017 and December 31, 2034
- Solar PV system located at a residence of yours in the United States
- Solar PV system is new or being used for the first time.
- Either:
  - You own the solar PV system

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<sup>1</sup> <https://www.energy.gov/eere/solar/homeowners-guide-federal-tax-credit-solar-photovoltaics>

<sup>2</sup> [https://www.hud.gov/program\\_offices/housing/sfh/eem](https://www.hud.gov/program_offices/housing/sfh/eem)

- You purchased an interest in an off-site community solar project, and if electricity generated is credited against and does not exceed your home's electricity generation<sup>3</sup>

The solar tax credit can be claimed by attaching the IRS Form 5695 to your federal tax return (Form 1040 or Form 1040NR). More information can be found on the Department of Energy (DOE) website: <https://www.energy.gov/eere/solar/homeowners-guide-federal-tax-credit-solar-photovoltaics>.

The PowerSaver Second mortgage is a loan for up to \$25,000, and borrowers cannot have an already-existing home equity loan, a second lien or second mortgage. The PowerSaver Energy Rehab loan is a 203(k) loan that can be added to a regular FHA-insured mortgage at the time of home purchase or refinance. To be eligible for the FHA PowerSaver Loan Program, homeowners must have a credit score 660 and maximum debt-to-income ratio of 45%.

## 2.2 State level incentives

### 2.2.1 Illinois Shines

Illinois Shines (<https://illinoisshines.com/>), legislatively known as the Adjustable Block Program (ABP), helps make solar energy more affordable for Illinois residents. Illinois Shines supports both distributed generation and community solar projects through providing incentives to solar vendors that can then be passed on to consumers. The incentives are in the form of payments for Renewable Energy Credits (RECs), which represent the environmental value of energy from renewable sources. The Illinois Renewable Portfolio Standard (RPS) requires electric utilities to purchase RECs to meet their obligations on renewable energy, and provides the financial value to the RECs in the Illinois Shines program. The Illinois Power Agency (IPA) manages the Illinois Shines Program.

Distributed generation<sup>4</sup> is where solar panels are installed directly at a home, school, house of worship or other customer site. Approved vendors<sup>5</sup> for Illinois Shines local to or serving the 104<sup>th</sup> district and surrounding areas at the time of this report in January 2024 are: Harvest Solar, HWS Energy Partners, Halo Solar, Sangamon Solar and Nelnet Renewable Energy (Table 1). However, the approved vendors list is updated regularly so it is recommended to review before investing in solar panels. Illinois Shines requires that solar vendors disclose REC values for a project to the consumer through Disclosure Forms, which allows the consumer to compare offers from different vendors. There are several ways to finance solar projects, including purchasing a system outright, leasing the system, and signing up for a power purchase agreement (PPA).

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<sup>3</sup> Certain conditions apply, as documented in the private letter ruling (<https://www.irs.gov/pub/irs-wd/201536017.pdf>) by the Internal Revenue Service. Would not qualify if you only purchase the electricity from a community solar project.

<sup>4</sup> <https://illinoisshines.com/exploring-panels-with-dg/>

<sup>5</sup> <https://illinoisshines.com/find-an-av-or-designee/>

Table 1. Approved Illinois Shines Vendors serving 104th District

Vendor	Website	Phone number
Harvest Solar	<a href="https://harvestsolar.com/">https://harvestsolar.com/</a>	(888) 907-6527
HWS Energy Partners	<a href="https://www.hwsenergy.com/">https://www.hwsenergy.com/</a>	(217) 356-3749
Halo Solar	<a href="https://halosolar.net/">https://halosolar.net/</a>	(309) 740-7861
Sangamon Solar	<a href="https://www.sangamonsolar.com/">https://www.sangamonsolar.com/</a>	(217) 649-0926
Nelnet Renewable Energy	<a href="https://nelnetenergy.com/">https://nelnetenergy.com/</a>	(312) 859-3417

Community solar<sup>6</sup> refers to projects where customers can benefit from energy from a solar panel array from an off-site location. This option can provide electricity to subscribers who are unable to install solar panels on their own property. By subscribing to a community solar project, customers will receive credits on their electric bill for their portion of energy produced by the project, and will pay a subscription fee to the project. At the time of this report, there are four community solar projects available or in development in Champaign or Vermilion County.

Table 2. Community Solar Projects in Champaign and Vermilion Counties\*

Project Name	City	Utility	Project Status	Subscription Status	Website
City of Urbana - South	Urbana	Ameren	Under Development	Waitlist	<a href="https://totalenergies.com/">https://totalenergies.com/</a>
IL Sidney Project 1	Sidney	Ameren	Energized	Waitlist	<a href="https://www.nexamp.com/community-solar/">https://www.nexamp.com/community-solar/</a>
USS Vermilion Solar 1 LLC	Fithian	Ameren	Under Development	Not Accepting Subscribers	<a href="https://us-solar.com/">https://us-solar.com/</a>
Vermilion Solar 2	Fithian	Ameren	Under Development	Not Accepting Subscribers	<a href="https://us-solar.com/">https://us-solar.com/</a>

\* at the time of this report

### 2.2.2 Illinois Solar for All

Illinois Solar for All (ILSFA) is designed for income-eligible homeowners, renters, non-profit organizations and public facilities. Participants pay no upfront costs for a solar installation or subscription, and will save money on electric bills. Any ongoing costs or fees will not exceed 50% of the value participants receive from the solar system. In other words, if a participant receives \$100 worth of electricity from their system in a month, the Approved Vendor cannot charge more than \$50 that month. To be eligible for ILSFA, household income must be 80% or less of the Area Median Income.<sup>7</sup> The state-run program pays incentives through RECs to approved solar companies who develop the solar installations, which helps drive affordability of solar energy as the cost-savings is passed down to the consumer.

ILSFA supports both residential and community solar. Residential solar would involve the installation of panels at a single-family or multi-family residential building. Community solar involves subscribing to a solar array within the local utility area and earning solar credits on energy bills.

<sup>6</sup> <https://illinoisshines.com/exploring-community-solar/>

<sup>7</sup> <https://www.illinoisifa.com/income-eligibility-lookup-tool/>



At the time of this report, the main ILSFA vendor serving the 104<sup>th</sup> District is Nelnet Renewable Energy.

### *2.2.3 Illinois Property Tax Rebates*

The State of Illinois offers property tax exemptions for homeowners who install residential solar. This means that even though property value increases with the solar installation, property taxes will not, according to Property Tax Code 35 ILCS 200/10-5 et seq.<sup>8</sup>

### *2.2.4 Net Metering Program & Rebates*

Residential and commercial customers of Commonwealth Edison (ComEd), Ameren and MidAmerican can participate in net metering.<sup>9</sup> This means that if the solar panels generate more power than is used, then the customer can receive credits on their bill. The utility will only charge for the net amount of electricity consumed, and any other fixed delivery charges. Currently, Illinois net metering law requires one-to-one net metering,<sup>10</sup> which means that you will be credited the electricity you send to the grid at the same rate you are charged for electricity (for systems < 2000kW). The one-to-one net metering is set to expire on December 31, 2024, so customers who sign up after that date are not guaranteed the same rate. Existing systems will continue to receive the one-to-one net metering for the lifetime of the system. Net metering credits do not last indefinitely, and usually expire at the end of an annual period either at the end of April or October billing period.

Ameren<sup>11</sup> and ComEd<sup>12</sup> also offer a rebate of \$300/KW-DC to its residential customers who use smart inverters to interconnect their renewable generator or energy storage system to the grid. However, taking advantage of rebates may affect the rate of net metering.

## **2.3 Local incentives**

Residents in Champaign, Piatt and Vermilion Counties can have additional savings through participating in the group buy program Solar Urbana-Champaign.<sup>13</sup> This is an annual program that provides educational resources about solar through “Solar Power Hours” and provides significant discounts on solar installation. Solar Urbana-Champaign is part of the larger “Grow Solar” initiative powered by the Midwest Renewable Energy Association.<sup>14</sup> Solar Urbana-Champaign has been running since 2016, and typically applications open in the summer or fall and close a few months later. In 2023, the sign up opened in August and closes November 30. The 2023 designated installer was Sangamon Solar. Solar Urbana-Champaign recently announced that the program will return for its ninth year in 2024.

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<https://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=003502000HArt.+10&ActID=596&ChapterID=8&SeqStart=17975000&SeqEnd=28800000>

<sup>9</sup> <https://www.citizensutilityboard.org/illinois-net-metering/https://www.citizensutilityboard.org/illinois-net-metering/>

<sup>10</sup> <https://www.ilga.gov/legislation/ilcs/fulltext.asp?DocName=022000050K16-107.5>

<sup>11</sup> <https://www.ameren.com/illinois/residential/supply-choice/renewables/rebates>

<sup>12</sup> <https://www.comed.com/smart-energy/my-green-power-connection/solar-energy/private-solar/solar-incentives-credits>

<sup>13</sup> <https://www.growsolar.org/solar-urbana-champaign/>

<sup>14</sup> <https://www.midwestrenew.org/>

### 3 Solar Power at Schools

Schools can benefit from solar energy through electricity cost reduction and educational opportunities for students.

#### 3.1.1 Federal incentives for solar at schools

The federal grant program Renew America’s Schools<sup>15</sup> funds eligible energy infrastructure projects related to renewable energy and energy efficiency. This program was launched by the U.S. Department of Energy (DOE) and funded by President Biden’s Bipartisan Infrastructure Law (BIL). The Funding Opportunity Announcement (FOA) was first launched in November 2022, with awardees selected in June 2023. It is anticipated a second round of applications will open in Spring 2024. The DOE offers several resources for technical assistance on its website to assist with the application.

Through the Inflation Reduction Act of 2022, public schools can use direct pay (or “elective pay”) to get up to 30% of the installation cost back, or more if it is eligible for bonus credits.<sup>16</sup> Direct pay enables tax-exempt entities such as schools to take advantage of clean energy tax credits.<sup>17</sup>

#### 3.1.2 State incentives for solar at schools

The main resource for solar energy for public schools is the state program Illinois Shines, also known as ABP. Other programs such as Illinois Solar for All have phased out public schools<sup>18</sup> in 2023, and the Illinois Clean Energy Community Foundation<sup>19</sup> likewise stopped accepting applications for new grants in 2023.

Illinois Shines has a public schools category, which similarly to the residential program, reduces the cost of solar system installation. Priority is given to Tier 1 and Tier 2 schools, and schools located in Environmental Justice Communities. Both on-site and community solar projects are supported by Illinois Shines. For community solar projects, the public school or school district at which the project is sited must be a majority (10-40%) to the community solar project. It should be noted that REC contracts have a term of 20-years, and therefore a school district must own the land the project is sited on for the lifetime of the REC contract. Recently, in December 2023 the definition of public schools was expanded to include Illinois public higher education institutions.<sup>20</sup> Schools may also fall under the distributed generation category.

Schools may also be eligible for net metering as described in Section 2.2.4.

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<sup>15</sup> <https://www.energy.gov/scep/renew-americas-schools>

<sup>16</sup> <https://www.whitehouse.gov/cleanenergy/directpay/#other>

<sup>17</sup> <https://www.irs.gov/credits-deductions/elective-pay-and-transferability>

<sup>18</sup> <https://www.illinoissfa.com/app/uploads/2019/01/Qualified-Critical-Service-Providers.pdf>

<sup>19</sup> <https://www.illinoiscleanenergy.org/>

<sup>20</sup> <https://illinoisshines.com/public-schools-category-update-public-act-103-0580-passed/>

## 4 Solar for Businesses

Businesses in Illinois have several incentives for solar panel installation on their property. These incentives help reduce the costs of solar through tax credits and rebate programs, helping businesses save on energy costs and improve environmental sustainability.

### 4.1 *Federal incentives for commercial solar installations*

Businesses can take advantage of either the Federal ITC for businesses or a production tax credit. Generally, they cannot claim both tax credits for the same property but could claim different credits for co-located systems. Businesses may qualify for bonuses on tax credits if certain qualifications are met for labor and location, such as the percentage of materials manufactured in the U.S. and building the solar array in an energy community.

Additionally, businesses can take advantage of accelerated depreciation because the solar array is considered an asset of the business. When the business ITC is claimed, depreciation rules allow the full tax basis minus half the ITC to be depreciated over a five-year depreciation schedule using a half-year convention. There is also bonus depreciation, where the percentage of capital equipment that can be expensed immediately is 60% in 2024, and drops every year until 0% in 2027.

More details on the ITC and accelerated depreciation can be found on the DOE website:

<https://www.energy.gov/eere/solar/federal-solar-tax-credits-businesses>.

### 4.2 *State & local incentives for commercial solar installations*

#### 4.2.1 *Illinois Shines*

Illinois Shines offers several types of solar projects that are suitable for businesses, including small distributed generation, large distributed generation or community solar.

Small distributed generation is most suitable for small businesses with systems up to and including 25kW in size. Similar to the residential program, Illinois Shines helps reduce the cost of the system through the sale of RECs paid to the solar vendor, who passes on the savings to the purchaser of the solar panels.

Larger businesses or factories may qualify for the large distributed generation (>25 kW to 5MW) category of Illinois Shines. Illinois Shines provides a financial incentives are \$35-\$50 per megawatt hour produced.<sup>21</sup> Projects constructed in this category will be subject to requirements in the Prevailing Wage Act.<sup>22</sup>

Businesses can also subscribe to community solar programs through Illinois Shines. As discussed in Section 2.2.1, customers will receive credits on their electric bill for their portion of energy produced by the project. For businesses, the maximum subscription is up to 40% of a community solar project.

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<sup>21</sup> <https://ipa.illinois.gov/renewable-resources/solar-incentives-for-illinois-companies.html>

<sup>22</sup> <https://illinoisshines.com/large-distributed-generation/>

#### 4.2.2 *Net metering & rebates*

Commercial customers of ComEd, Ameren and MidAmerican can also participate in net metering as described in 2.2.4. However, if the system is >2000kW, the utility may need to conduct a study to ensure the grid can accommodate the additional capacity. If not, the business installing the solar array may have to pay for the upgrades necessary to the grid.

Additionally, Ameren<sup>23</sup> & ComEd<sup>24</sup> offer \$250 - \$300 rebate for each kilowatt of solar capacity when smart inverters are utilized for both small commercial and large commercial customers.

Businesses can also take advantage of the Solar Urbana-Champaign group-buy program outlined in Section 2.3.

## 5 **Agricultural solar**

Agricultural businesses can take advantage of many of the programs discussed in the previous section, in addition to specific federal programs for rural areas. Farms especially benefit from solar power when the installation site can also be used for agricultural activities.

### 5.1 *Federal incentives for agricultural solar installations*

US Department of Agriculture (**USDA**) Rural Energy for America Program (**REAP**)<sup>25</sup> provides grants of up to \$20,000 to help farmers and rural small businesses obtain and install renewable energy systems or make improvements to existing energy efficiency systems. Potential funding opportunities include:

- Loan guarantees on loans up to 75% of total eligible project costs
- Grants for up to 50% total eligible project costs
- Combined grant and loan guarantee funding up to 75% of total eligible project costs

Projects must be in rural areas with less than 50,000 residents. The application windows for fiscal year 2024 are:

- March 31, 2024
- June 30, 2024
- September 30, 2024

While not a current requirement for receiving the REAP grant, agrovoltaics are strongly encouraged, and may be tied to incentives in the future.<sup>26</sup> Agrovoltaics involve co-locating solar panels on farmland in a way that agricultural activities such as animal grazing and crop/vegetable production can continue.

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<sup>23</sup> <https://www.ameren.com/illinois/residential/supply-choice/renewables/rebates>

<sup>24</sup> <https://www.comed.com/smart-energy/my-green-power-connection/solar-energy/solar-rebates>

<sup>25</sup> <https://www.rd.usda.gov/programs-services/energy-programs/rural-energy-america-program-renewable-energy-systems-energy-efficiency-improvement-guaranteed-loans/il>

<sup>26</sup> / <https://ipa.illinois.gov/content/dam/soi/en/web/ipa/documents/20230428-ipa-power-hour-webinar-3-agrivoltaics.pdf>

Farms may also qualify for the 30% federal investment tax credit.<sup>27</sup>

## ***5.2 State & local incentives for agricultural solar installations***

Farms can also participate in the distributed generation or community solar programs through Illinois Shines, details of these programs are discussed in Sections 2.2.1 and 4.2.1.

Additionally, the Illinois Department of Natural Resources provides a guidance on how to be recognized as a “pollinator friendly solar site”.<sup>28</sup> Being recognized as such could potentially help the farm qualify for federal conservation programs run by the USDA.<sup>29</sup>

Farmers can also take advantage of the Solar Urbana-Champaign group-buy program outlined in Section 2.3.

## **6 Challenges and Opportunities**

There are several challenges that one should consider before investing in a solar system, including the lifetime of the system relative to their roof, evaluating different offerings from solar providers, plans for relocation, and zoning regulations. However, there are many resources to help navigate these potential difficulties, and reap the benefits of solar energy.

One challenge for residential solar is that oftentimes the lifetime of the solar panels (20+ years) can be longer than the lifetime of a roof, and also adds weight to the roof. However, solar panels can safely be removed and re-installed when the roof is replaced. Programs like ILSFA require the roof be in good condition<sup>30</sup> and will not need to be replaced within 15 years to qualify for the program. Therefore, it is ideal to replace the roof ahead of solar panel installation, or potentially build a ground-mounted solar system. Ground-mounted systems are also supported by incentives, so long as they are not located in a high flood-risk area.

There has been several documented fraud and predatory practices by solar installers.<sup>31</sup> Therefore, it is important to meet with several solar installers and read contracts carefully to ensure terms and conditions are fully understood. Going through an approved vendor for Illinois Shines or ILSFA can also help reduce risk, as the State suspends vendors that are not in compliance and publishes this information in public disciplinary action reports.<sup>32</sup> Additionally, the IPA has a proposed restitution plan for any consumer financially harmed by a solar company in the Illinois Shines or ILSFA program.<sup>33</sup> As mentioned in section 2.2.1, Illinois Shines requires vendors

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<sup>27</sup> <https://www.energy.gov/eere/solar/federal-solar-tax-credits-businesses>

<sup>28</sup>

<https://dnr.illinois.gov/conservation/pollinatorscorecard.html#:~:text=To%20be%20recognized%20as%20a,of%20Natural%20Resources%20consultation%20process.>

<sup>29</sup> [https://www.fsa.usda.gov/programs-and-services/conservation-programs/index#:~:text=The%20Conservation%20Reserve%20Program%20\(CRP,that%20will%20improve%20environmental%20quality.](https://www.fsa.usda.gov/programs-and-services/conservation-programs/index#:~:text=The%20Conservation%20Reserve%20Program%20(CRP,that%20will%20improve%20environmental%20quality.)

<sup>30</sup> <https://www.illinoisfsa.com/programs/residential-solar/>

<sup>31</sup> <https://www.cbsnews.com/chicago/news/solar-power-illinois-program/>

<sup>32</sup> <https://illinoisshines.com/disciplinary-actions-report/>

<sup>33</sup> [https://ipa.illinois.gov/content/dam/soi/en/web/ipa/documents/procurement-plans/2024/2024-draft-long-term-plan-\(15-Aug-2023\).pdf](https://ipa.illinois.gov/content/dam/soi/en/web/ipa/documents/procurement-plans/2024/2024-draft-long-term-plan-(15-Aug-2023).pdf)

disclose REC values for a project for the customer in its Disclosure Forms, which allows the customer to compare multiple offers from multiple vendors.

Additionally, residents should consider their long-term plans when making a decision on whether to own the system, lease the system or do a PPA. Although purchasing solar panels is a high upfront investment, oftentimes this is the most economical method in the long-term. Customers are often reimbursed a substantial amount of this purchase through federal tax incentives and state programs like Illinois Shines. Additionally, there is no fixed contract with a supplier that can be difficult to navigate if the customer were to sell their house. The leasing or PPA options, on the other hand, provide little to no up-front investment and in exchange the user can potentially realize savings immediately. However, lease payments may change over time, or the amount paid per kWh in the PPA, or the value of electricity may change. This would affect the return of investment (ROI) of the system, so it is important that contracts are reviewed carefully. Despite this uncertainty, leasing or PPA's are still potentially a more affordable option for those that cannot pay the up-front price. Illinois Shines also provides a list of recommended questions to ask solar vendors, which will help provide a greater idea for what type of financial and contract system works best for you: <https://illinoisshines.com/exploring-panels-with-dg/>.

Zoning can be a challenge depending on the city or county. However, oftentimes solar providers will work with the customer to navigate this process. Illinois Shines recommends asking vendors who will secure the necessary permits and submit the net-metering and program applications.

The ROI of the systems installed after 2024 may be affected by any changes to the rate of net metering. Currently, the rate is one-to-one, meaning for each kWh of electricity generate by the panels, that amount is deducted from the customer's energy bill. However, this rate could be reduced in the future, as Illinois legislation only requires utilities commit to net metering for the lifetime of systems installed through 2024. Systems installed after 2024 may be subject to a different rate or to an alternate scheme such as net billing.

## **7 Conclusion**

There is tremendous opportunity with solar power investment in Illinois. For example, local vendor Harvest Solar stated in a presentation in January 2024 that their customers have a typical payback period of 2-6 years. Solar panels can improve energy independence, reduce electricity bills, and help reduce pollution. The incentives for solar are well supported by state and federal government, and this support is unlikely to change significantly in the coming years. However, with the potential update to net metering after 2024, it is clear the best time to invest in solar to maximize benefits is now.