Honda Supplier’s Guide to Onsite and Community Solar Procurement in the United States

TRIO™

Contributor Credits:

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Please note that all information in this report is based on publicly available information. Information is current as of December 15, 2023.

Guidance for Readers:

This report points readers to the resources they need to understand and pursue onsite and community solar procurement in the United States. It offers a deep dive into onsite and community solar programs and guides in 15 states that are most common to Honda suppliers. If any readers are looking for guidance on states or programs that are not covered in this report or are looking for additional support on conducting or analyzing onsite or community solar for a specific facility or a portfolio of facilities, Trio's advisory team can be hired for consulting services. The team can be reached at hondagreenexcellence@edisonenergy.com.

About Trio:

Trio (formerly Edison Energy) is a global sustainability and energy advisory company that helps large commercial, industrial and institutional organizations navigate the clean energy transition. A subsidiary of Edison International, Trio provides integrated strategy and implementation services – in sustainability, renewables, energy procurement, conventional supply, energy optimization and transportation electrification – to help the world's largest organizations meet their strategic, financial and sustainability goals. For more information visit www.trioadvisory.com.

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Introduction

U.S. buyers have more options than ever before to power their operations with renewable energy. However, buyers may find it challenging to find the right opportunity to procure renewable energy, as options vary geographically, and often by utility.

This guide serves as a decision support tool to help buyers evaluate and navigate their options for procuring renewable energy at or near their facilities. Buyers may also have the option to purchase renewable energy at scale, with specific guidance available in a separate publication, *Honda Supplier's Guide to Utility-Scale Renewable Energy Procurement In the United States.*

How to Use This Guide

This guide first reviews several fundamental concepts that drive the availability of renewable energy options for U.S. customers. Then, it offers a decision tree that enables suppliers to understand what their renewable energy procurement options look like for each of their locations in the U.S.

It includes detailed guidance across onsite and community solar renewable energy options available in the top 15 states most common to Honda suppliers. For the remainder of the states, this resource includes higher-level guidance on options available in each state, as well as how to research the finer details.

For any suppliers seeking assistance with planning their renewable energy procurement strategy, running competitive solicitations for onsite solar, navigating community solar openings and in-market contracting, or negotiating power or REC agreements, the Trio team is available for consulting engagements in these areas. Please contact hondagreenexcellence@edisonenergy.com to connect with a subject matter expert at Trio.

Renewable Procurement Options

At a high level, the side-by-side comparison of various renewable energy procurement strategies are noted in **Figure 1**. This guide highlights the high-level requirements of and opportunity for onsite solar and community solar in the United States. Readers interested in exploring the details of other renewable procurement options can refer to *Honda Supplier's Guide to Utility-Scale Renewable Energy Procurement In the United States* published in 2023.

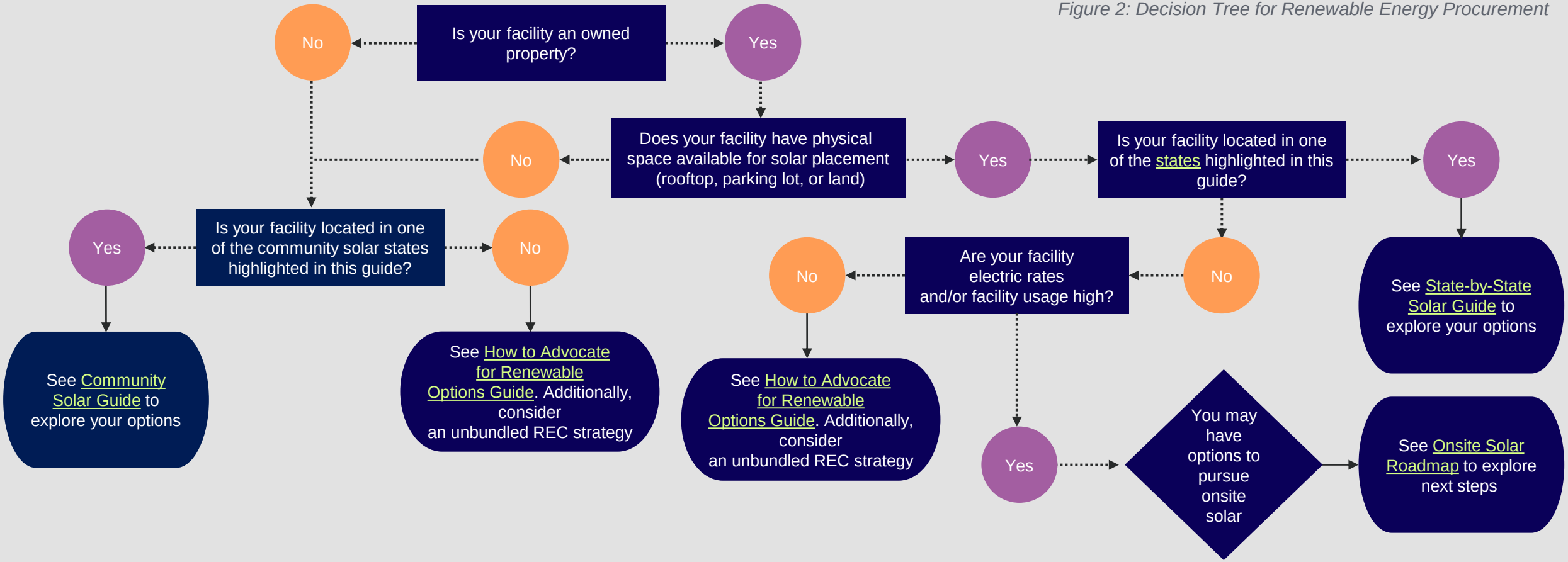
	Unbundled RECs	Utility Programs	Onsite Solar	Community Solar	Offsite Renewable Energy
Environmental Impact/ Additionality	**Low**	**Depends**	**High**	**Depends** (RECs)	**High**
Customer Visibility	**Low**	**Low**	**High**	**Medium**	**Low**
Investor Visibility/ Marketing Value	**Low**	**Low**	**High**	**Medium**	**High**
Complexity	**Low**	**Low**	**Medium**	**Low**	**High**
Scalability	**Low**	**Depends**	**Depends**	**Medium**	**High**
Overall Impact Considerations	Generally perceived as less impactful, but an important bridge strategy due to limited near-term availability of projects	Depends on utility programs available, but may offer a relatively uncomplicated local solution	Physical and visual demonstration of commitment; often reduces energy bills; can be scaled across portfolio	Local option that may or may not include RECs; potential for cost savings may help to fund other strategies	High impact, marketable renewable energy product; requires significant upfront effort to identify and contract

Figure 1: Comparison of Renewable Purchasing Options

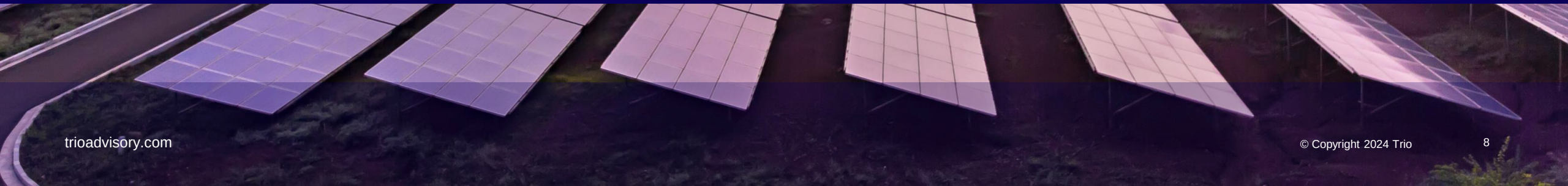
Finding Renewable Energy Options for Your Facility

To use this decision tree, focus on one facility at a time and follow the question prompts. It will point you to the best resource(s) to explore the relevant renewable energy options for your facility.

Figure 2: Decision Tree for Renewable Energy Procurement



Renewable Energy’s Role in Decarbonization

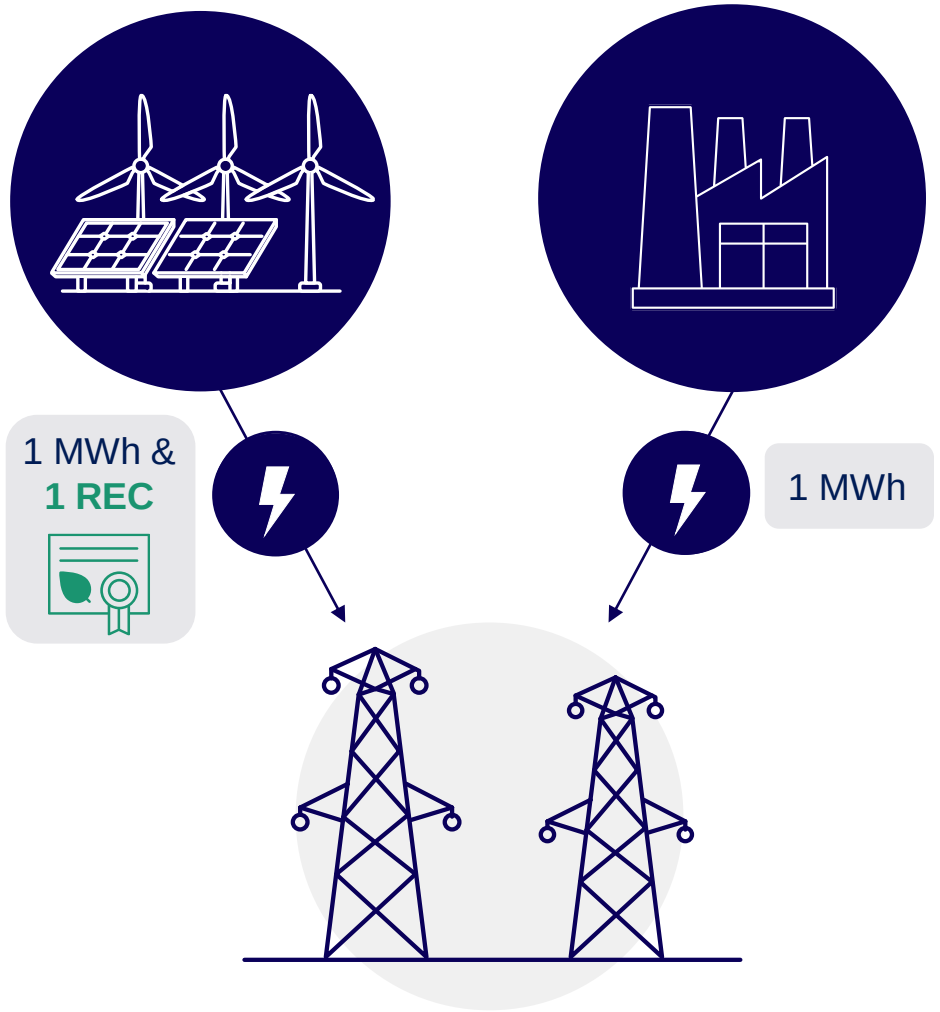


The End Goal: Retiring Renewable Energy Certificates

One of the major factors motivating many buyers to purchase renewable energy or to install their own renewable energy system is that it enables them to reduce their Scope 2 emissions as part of their carbon accounting.

Emissions are reduced under carbon accounting through the retirement of renewable energy certificates (RECs). A REC is created when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource. A buyer can reduce or eliminate their Scope 2 emissions by retiring a REC for every MWh of non-renewable power that they use.

This guide shows buyers how they can generate or procure RECs through on-site and/or community solar projects.



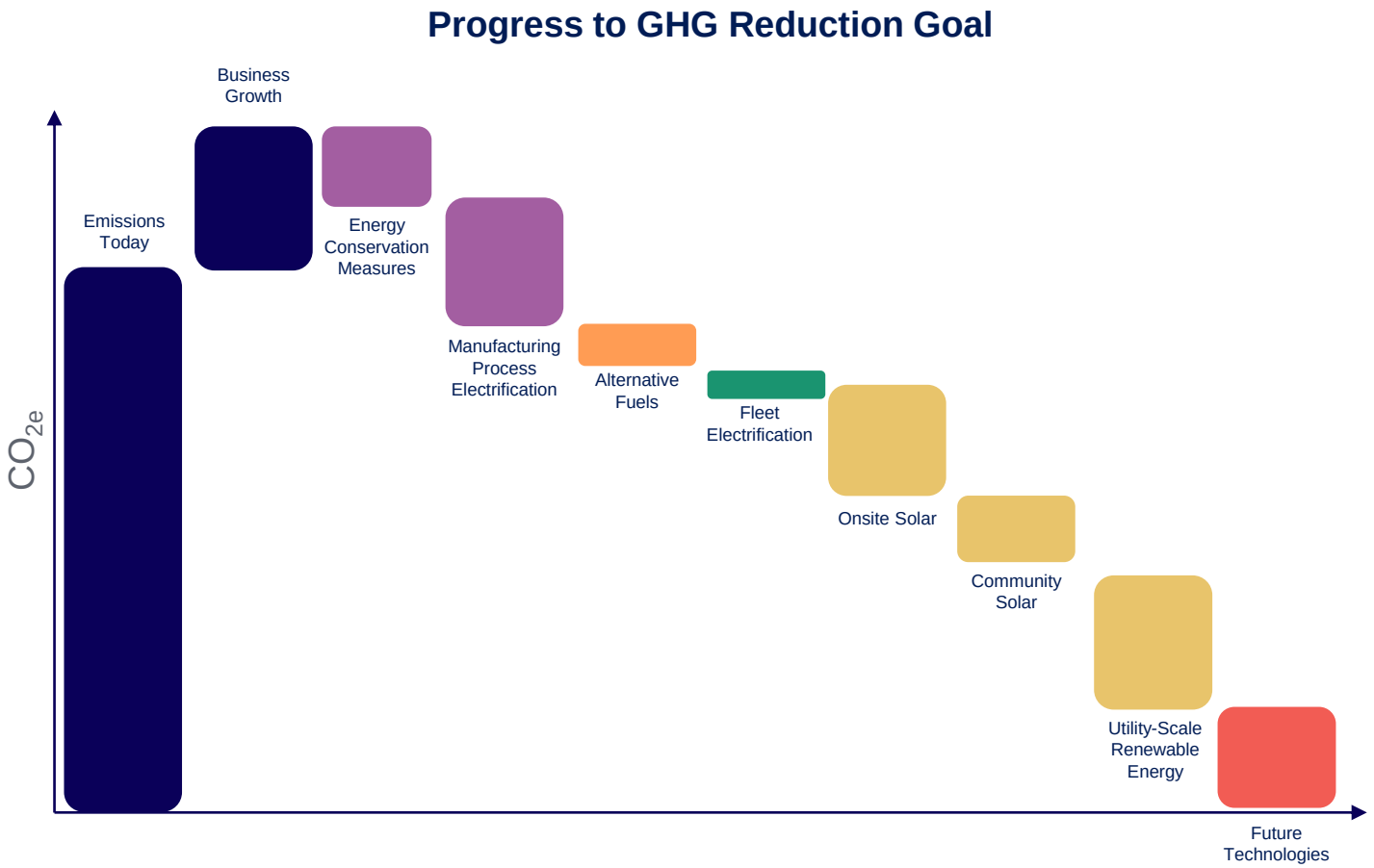
Onsite and Community Solar's Role in Decarbonization

Suppliers will likely need to employ multiple approaches to decarbonization in order to achieve the decarbonization objectives Honda has set. Onsite solar and community solar offer two pathways to emissions reductions.

Onsite solar enables suppliers to generate their own RECs. If the supplier retains these RECs, they can retire them and use them to reduce their Scope 2 emissions.

Community solar can be a pathway through which suppliers purchase RECs. Depending on the program, a company subscribing to community solar can purchase the project's energy and RECs, energy and a substituted REC, or energy only – which does not have a REC. The first two options would enable the supplier to retire the RECs and reduce their carbon footprint.

Figure 3: Illustrative Decarbonization Pathway



Onsite Solar

What is Onsite Solar?

Summary	• Solar asset built on or near facility
Value Proposition	• Avoid future energy supply costs • Potential sustainability benefits
Sustainability Claim	• Claim to project-specific renewable energy if project RECs are retained • Claim to renewable energy generally if project RECs are arbitraged for other RECs to increase solar project savings in specific markets
Site Compatibility	• Available rooftop space, usable land, or parking lot at a facility

Types of Onsite Solar

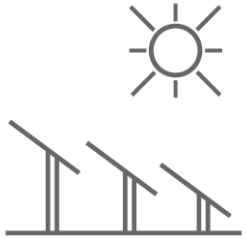
Rooftop

Benefits

- Most common
- Competitive pricing at 250+ kW
- Ease of construction
- Close interconnection point

Considerations

- Potential rooftop penetrations
- Snow load
- Structural integrity/roof age limitations
- Site ownership



Ground Mount

- Least expensive
- High visibility
- Optimizes generation with additional space

- Easements
- Interconnection location
- Environmental site assessments
- Significant land requirements

Carport

- Shading and visibility
- Direct EV integration potential
- Otherwise underutilized space
- Reduced hail impacts (insurance)

- Most expensive
- Parking lot orientations
- Snow loads
- Security

Facility Qualification Considerations

Qualifying Questions

Is the facility owned or leased?

- Seeking an owned facility

How much rooftop and/or land space is available?

- Seeking greater than 100k square feet

Age of roof?

- Seeking <5 years old
- Older roofs may be suitable

What is the facility's energy usage profile?

- Seeking enough usage to ensure the system production isn't significantly more than facility demand
- Consistent baseload vs. fluctuating profile impacts financial analysis

Benefits and Challenges of Onsite Solar

Benefits of Onsite Solar

- Reduces emissions while avoiding electricity consumption from the grid
- Visibly brings new renewables to the grid
- Potential for savings in energy and coincidental demand charges
- Allows claims to renewables if RECs are retained

Challenges of Onsite Solar

- Important to consider portfolio of sites when prioritizing projects
- Most state incentives have limited capacity
- Projects' limiting constraints include facility's space and energy consumption
- Time commitment to commercial operation is lengthy, likely 1+ year
- Term commitment to contract is lengthy, typically 10 – 20 years

Onsite Solar Contract Options

	Power Purchase Agreement (PPA)	Lease	Own	Land Lease
Summary	Energy purchased from developer per kWh produced	Fixed monthly charge; no direct payment for energy per kWh	System purchased upon construction completion with capital expenditure	Fixed monthly payment for developer to use land for renewables
Capital Cost	No upfront cost	No upfront cost	High upfront cost	No upfront cost
Project Economics*	Variable	Variable	Variable	Variable
Operations & Maintenance	Included in PPA	Included in lease	May or may not be included	None
Impact on Energy Use	Direct	Direct	Direct	None
Sustainability Claim	Project or replacement RECs	Project or replacement RECs	Project or replacement RECs	Not included

Project Economics will be determined by a variety of factors including state, utility tariff, system size, and cost of capital.

Net Metering

Net metering is a mechanism that credits solar energy system owners for the excess electricity they generate and add to the grid.

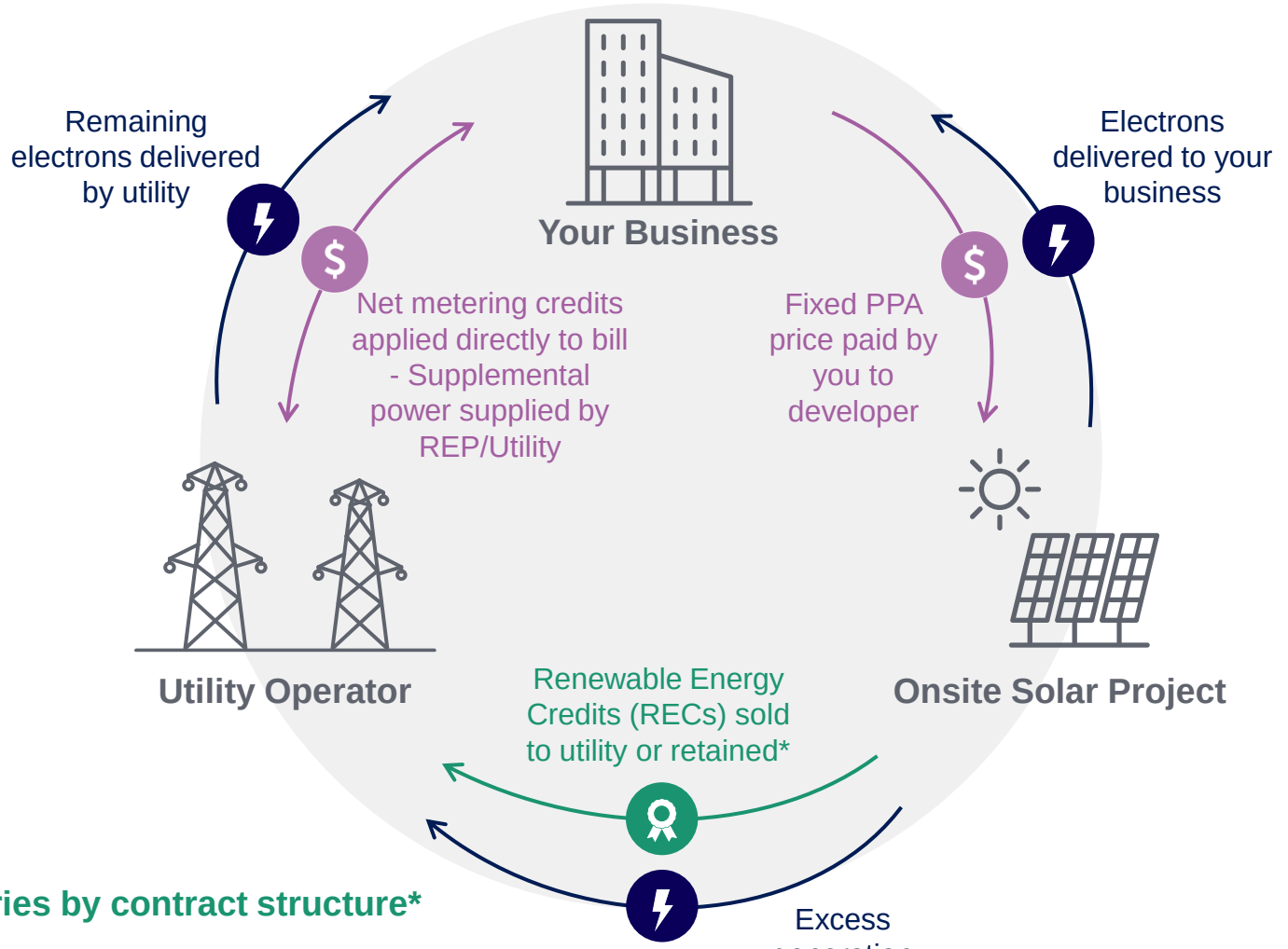
For electric customers who generate their own electricity with solar, net metering allows for the flow of electricity both to and from the customer. When a customer's generation exceeds the customer's use at a given time, the extra electricity from the customer flows back to the grid. The customer's electricity that flows back to the grid can offset electricity consumed by them at a different time during the same billing cycle or be compensated for by the utility.

In effect, the customer uses their excess created generation to offset electricity that the customer otherwise would have to purchase at the utility's full retail rate. Net metering allows for the benefit of solar generated electricity from a system owner to be accounted for even when the sun isn't shining. Net metering is required by law in most U.S. states, but state policies vary widely.

Net metering can impact the viability of a project due to size considerations with state limits, policy changes and urgency around programs, and affect compensation rates for net metered energy.

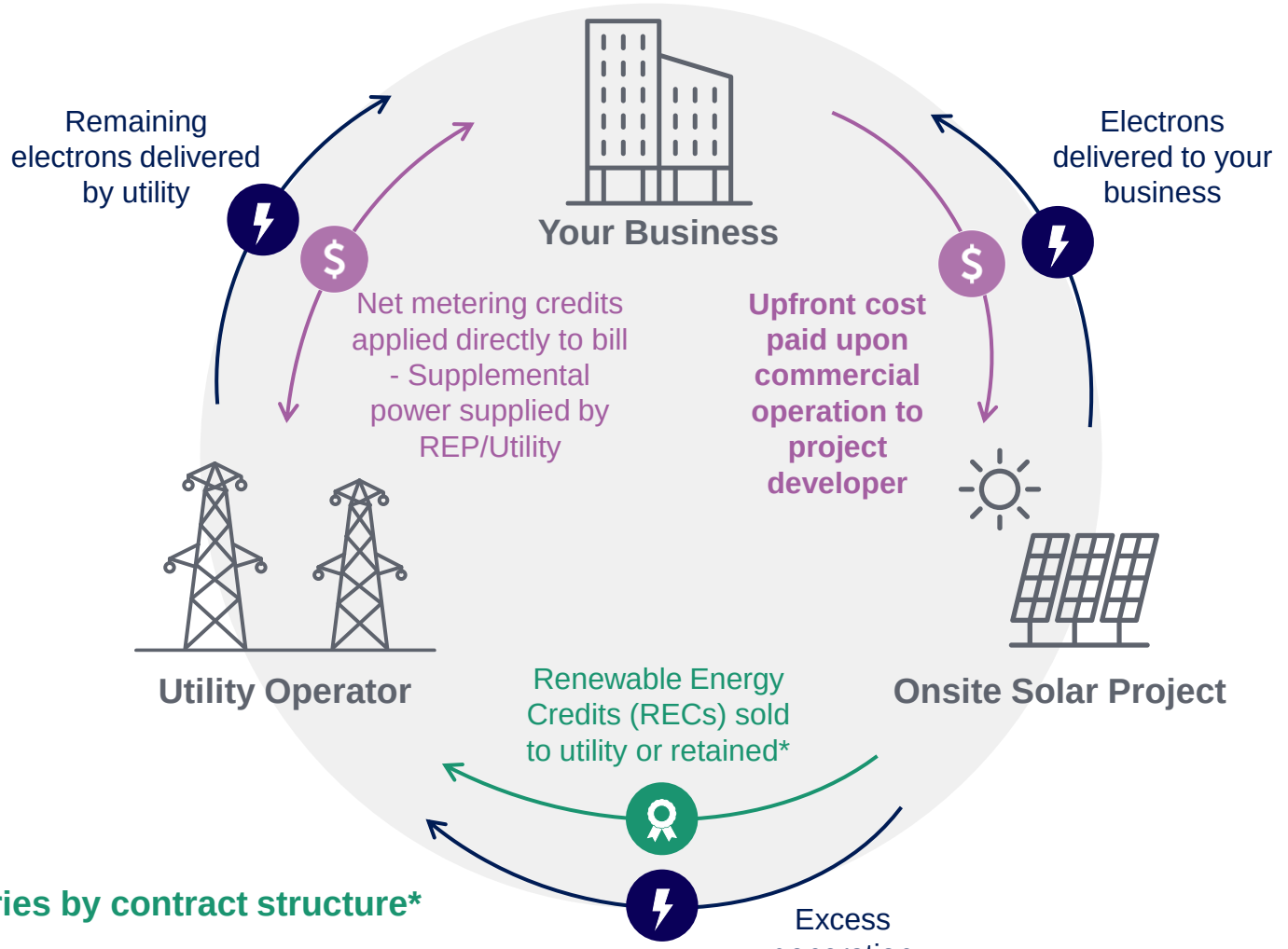
Source: Glossary - DSIRE (dsireusa.org)

Onsite **PPA** with Net Metering: How Does it Work?



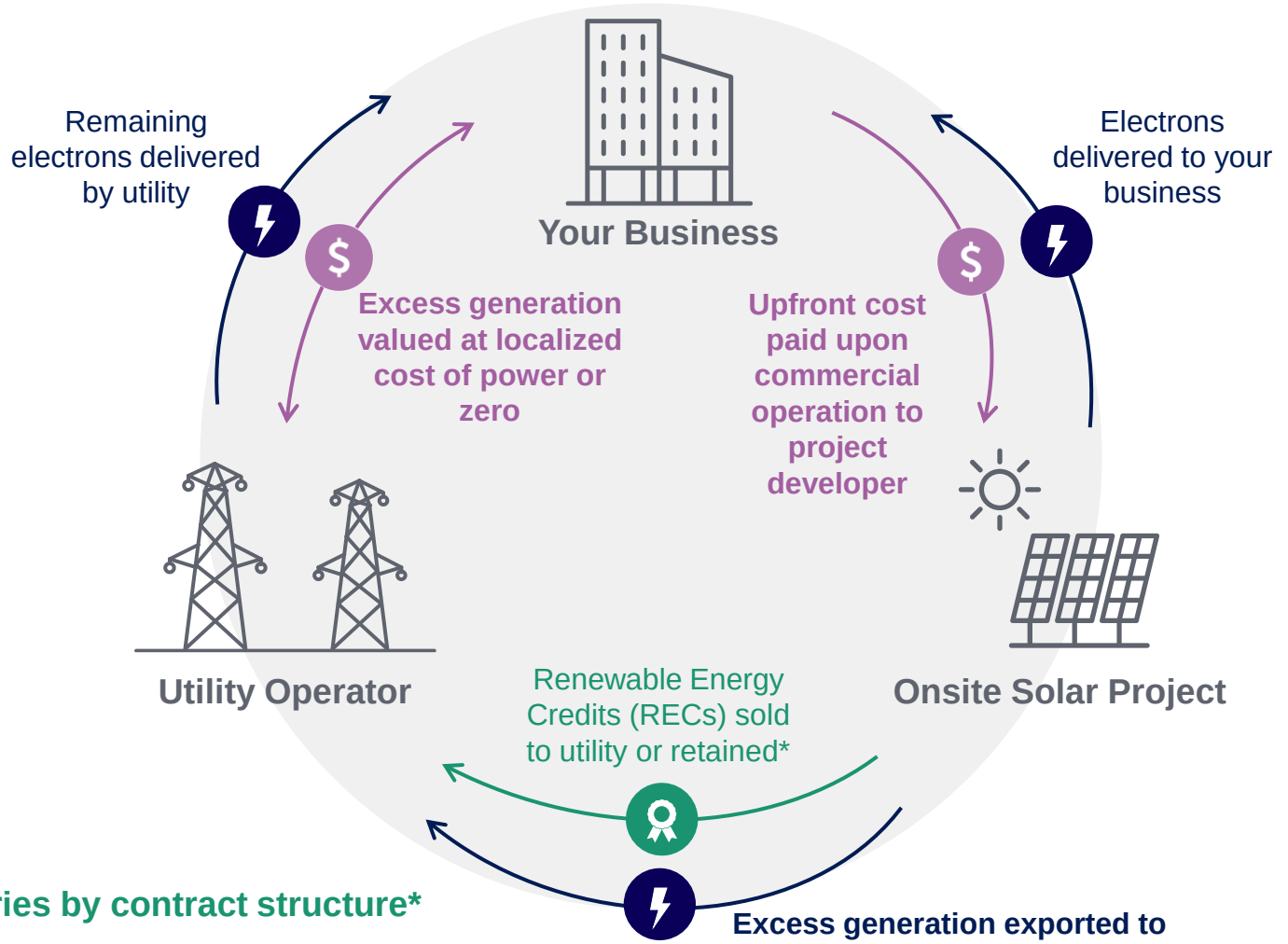
REC treatment often varies by contract structure*

Onsite **Owned System** with Net Metering: How Does it Work?



REC treatment often varies by contract structure*

Onsite Owned System **without** Net Metering: How Does it Work?



REC treatment often varies by contract structure*

Economically Attractive States for Onsite Solar

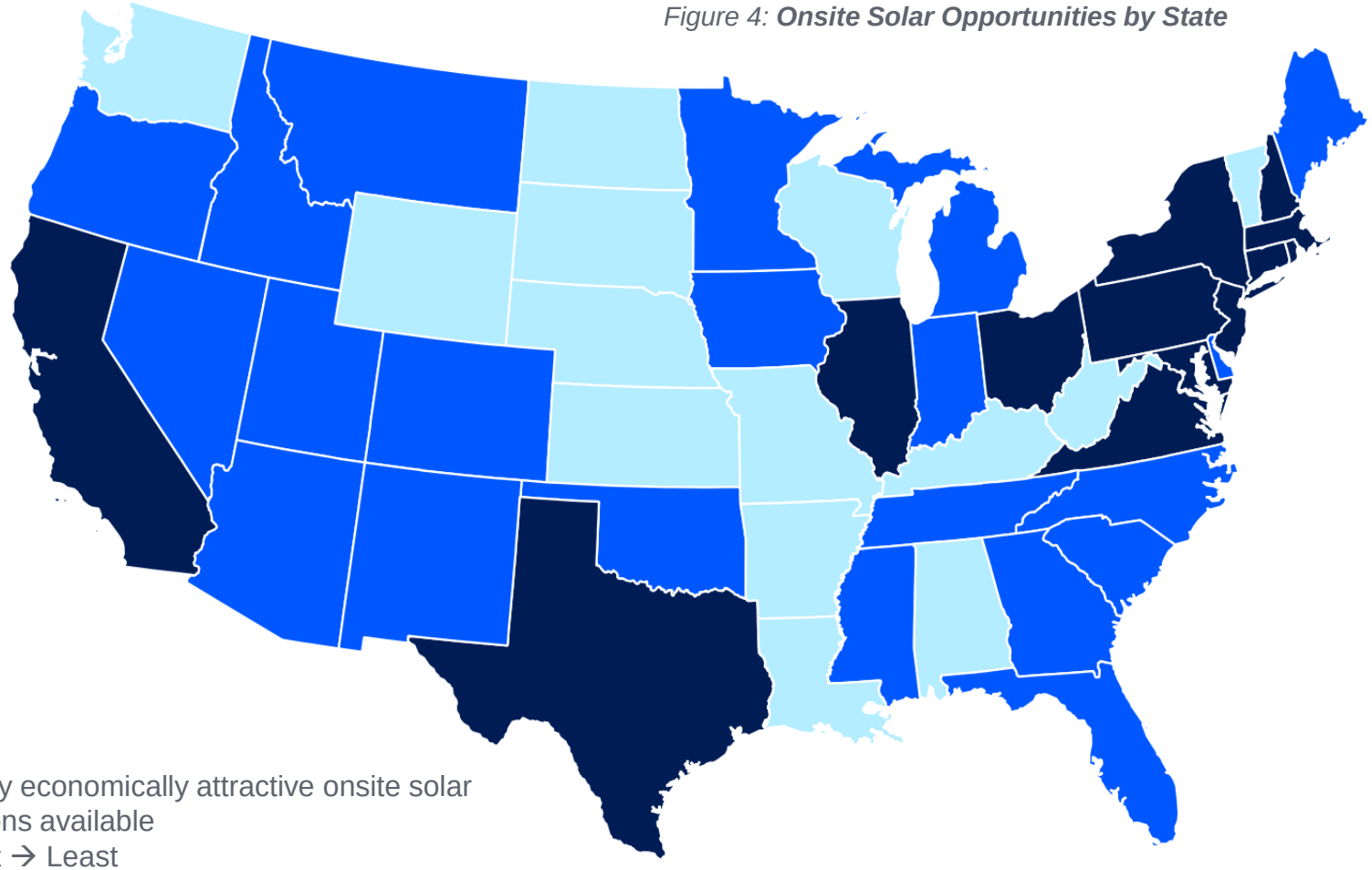
The strength of state markets is driven by various factors, including:

- State incentive programs
- PPA or lease availability
- Utility rates
- High state REC values
- Favorable net-metering limit

A deeper dive into onsite solar opportunities that may be a good fit for Honda suppliers is available in the State-by-State Onsite Solar Section.

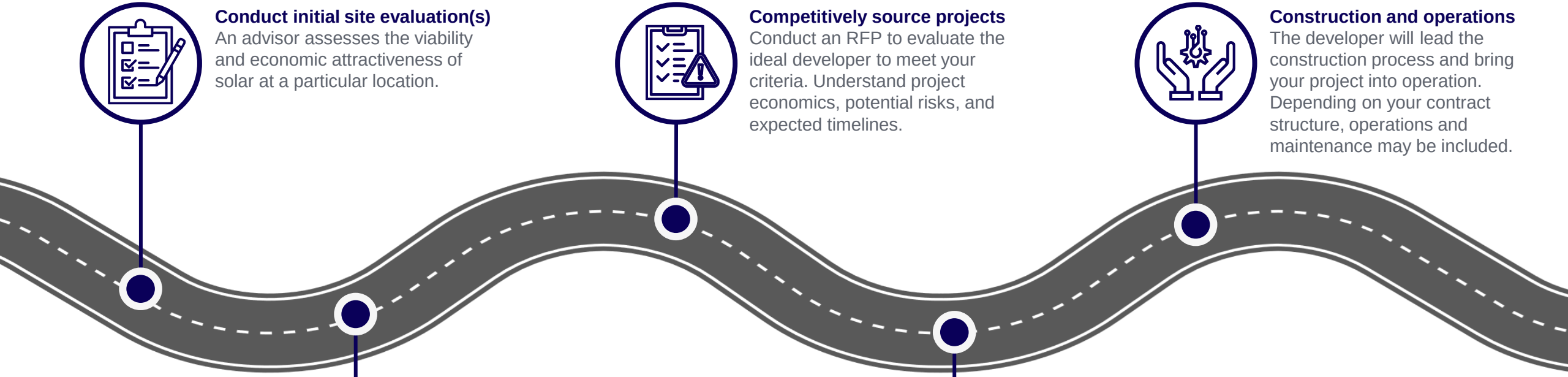
Project-specific economics will be determined by a variety of factors including state, utility rate, system size, and cost of capital.

Figure 4: ***Onsite Solar Opportunities by State***



Key:
Likely economically attractive onsite solar options available
Most → Least

Onsite Solar Roadmap



Conduct initial site evaluation(s)
An advisor assesses the viability and economic attractiveness of solar at a particular location.

Competitively source projects
Conduct an RFP to evaluate the ideal developer to meet your criteria. Understand project economics, potential risks, and expected timelines.

Construction and operations
The developer will lead the construction process and bring your project into operation. Depending on your contract structure, operations and maintenance may be included.

Determine whether to proceed with onsite solar
Based on the results of your evaluation(s), your company will understand whether any of your sites are a strong fit for onsite solar and can decide if you wish to proceed with implementation.

Contract onsite solar project(s)
Select a developer and proceed with project design and contracting. Your company will likely need legal support for contract negotiations, and management support to execute the contract.

Pursuing Onsite Solar - Developers

Next Steps for Onsite Solar

- To pursue onsite solar options, buyers can reach out to developers to identify options and quotes. Any buyer can speak with the solar developers in their area to understand their capabilities and the options they have available.

Identifying the Right Solar Developers

- Partnering with a reputable solar developer is key to ensuring successful projects for the long term. Buyers should look for developers with a long record of safe projects, high performing assets, and great communication. Some key qualities to look for include:
  - Safety
    - Safety managers overseeing personnel and site safety
    - Tier 1 inverters, modules, and connectors
    - Rigorous safety procedures for personnel and site quality checks
  - Long-standing reputation
    - High fleet-wide Performance or Availability Guarantees
    - In business for several years with many projects operational
    - Client references around good communication, project management, and operations

Secure the Help of an Advisor

Buyers interested in exploring onsite options can reach out to hondagreenexcellence@edisonenergy.com to connect with a subject matter lead.

Please note that Trio typically seeks to review 12 months of electric supply and utility invoices in order to assess financial and solar offset opportunities.

Pursuing Onsite Solar- Quote Review

Reviewing Developer Quotes

- When reviewing developer quotes, ask for a full list of included services, exclusions to the quotes, and what (if any) prices could change. It is best to compare quotes from several developers to ensure the best prices and terms.
- Determine equipment and labor warranties included with the project and frequency of Operations and Maintenance services after the system is built.
- Review if project RECs are included in quote or whether replacement RECs will be provided against your company sustainability goals.

How Advisors Can Support

- Securing the help of an advisor such as Trio can help buyers navigate the path of onsite solar including site and financial analysis, developing and managing an RFP, evaluating developers and bids, commercial negotiations, and navigating scope to determine the right strategy for their company.
- You may have been contacted by a developer before. Trio may be able to help you reduce overall project cost by evaluating and leveraging the competitive solar landscape.

Secure the Help of an Advisor

Buyers interested in exploring onsite options can reach out to hondagreenexcellence@edisonenergy.com to connect with a subject matter lead.

Please note that Trio typically seeks to review 12 months of electric supply and utility invoices in order to assess financial and solar offset opportunities.

Community Solar

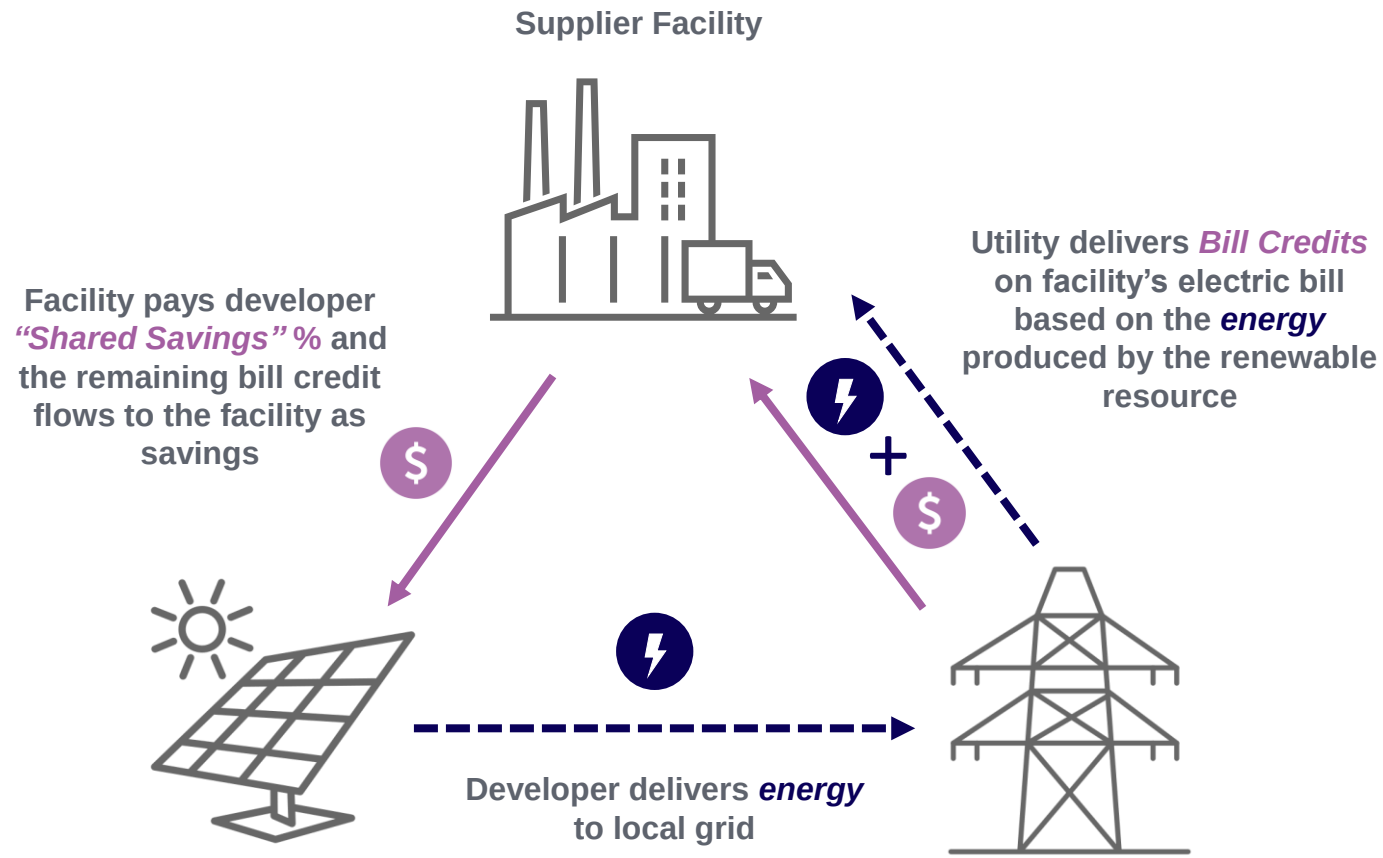
What is Community Solar?

Summary	• Typically 1 - 5 MW solar farms within the same county, adjacent county, or utility grid as the buyer's facility
Value Proposition	• Low risk, guaranteed savings possibilities • Potential sustainability benefits
Sustainability Claim	• Claim to project-specific renewable energy if project RECs are retained • Claim to renewable energy generally if project RECs are arbitraged for other RECs
Site Compatibility	• Close to facility load, but not required to be at the site

How Community Solar Works

Considerations when subscribing to a Community Solar program:

- Subscribed capacity should be sized according to energy spend, not necessarily facility usage
- If retail energy supply is billed separately from your utility transmission and distribution bill (“dual billing”), consider combining supply and delivery on one bill (“consolidated billing”) to maximize project size and savings
- RECs may be retained or sold based on project or program



Benefits and Challenges of Community Solar

Benefits of Community Solar

Provides guaranteed cost savings in selected markets

Bill credits are incorporated into utility bill

Contract duration commitment and overall programs are often more flexible than other renewable options

May allow claims to renewables from a specific project

Challenges of Community Solar

Only available in select states

In states that offer community solar, capacity may not be immediately available for subscription

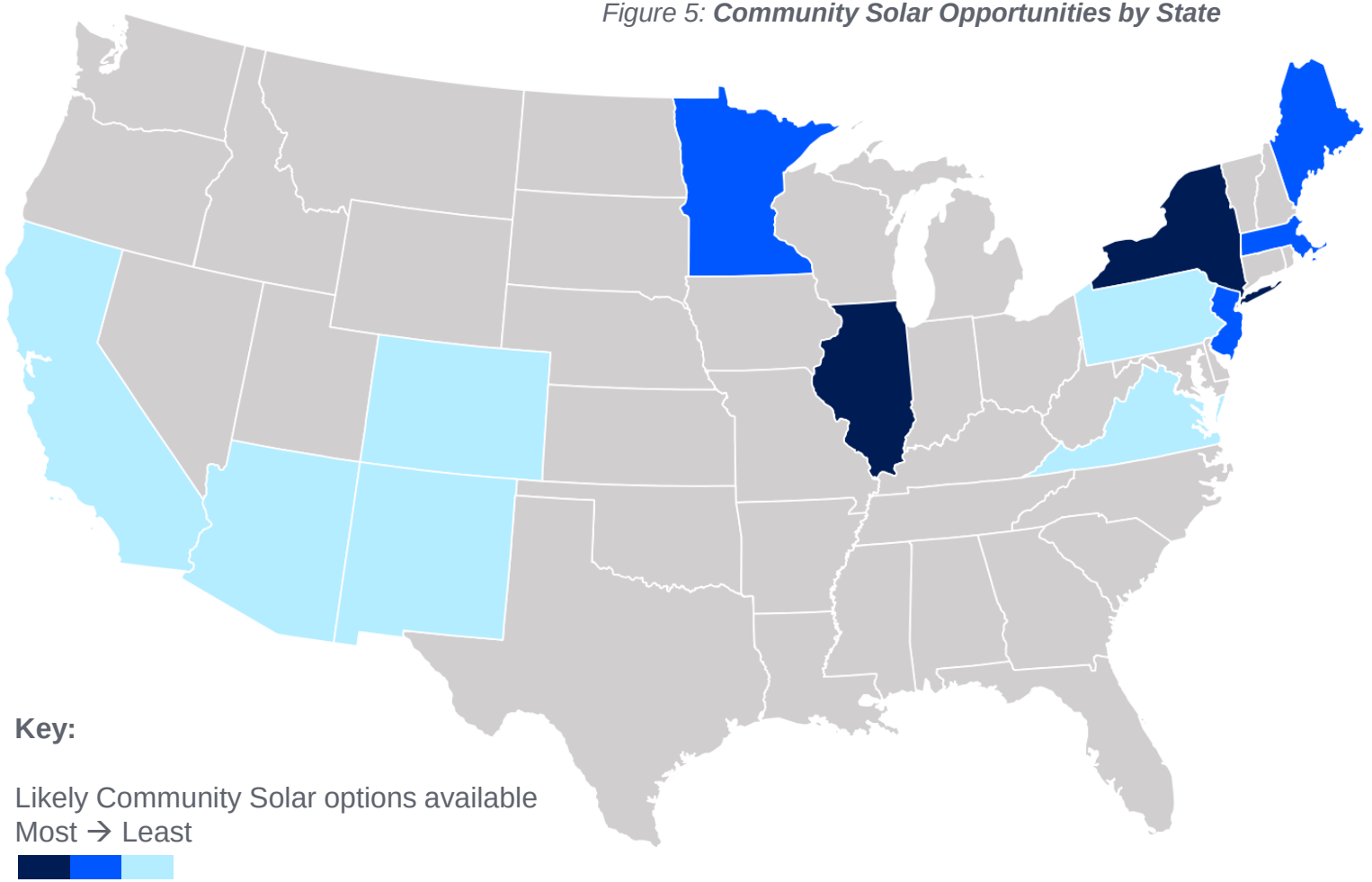
Program restrictions may limit the facilities that can participate

Projects may not allow for REC retention

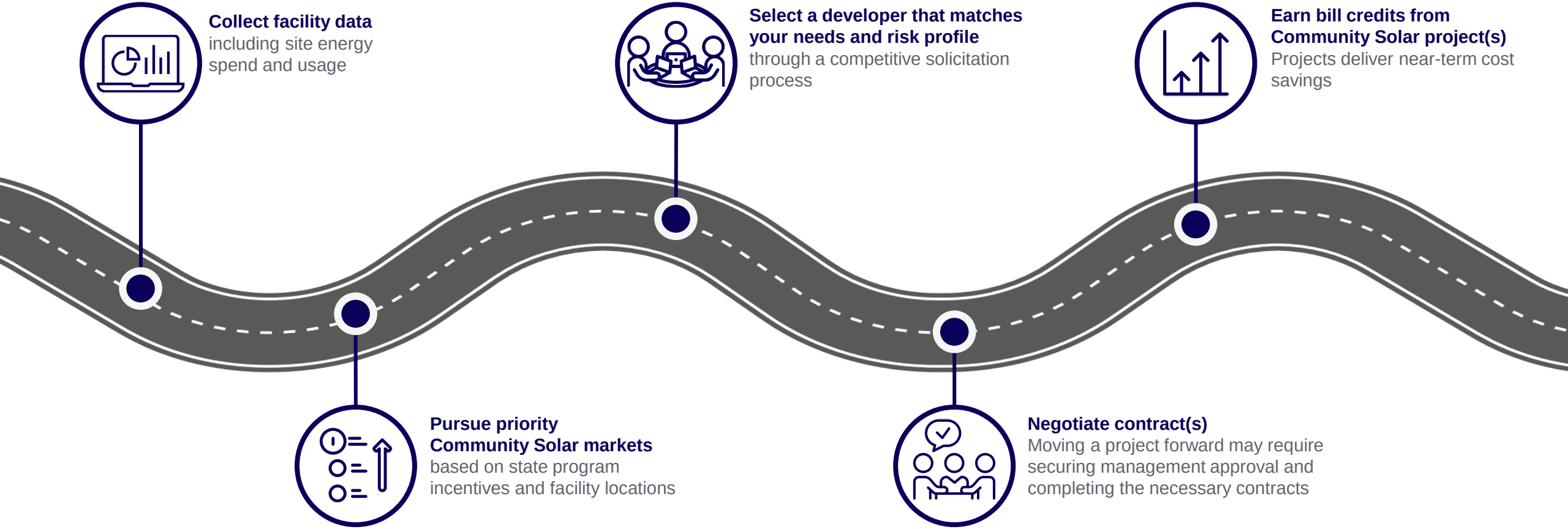
States Offering Community Solar

- Current Availability: IL and NY are the most currently active markets for community solar
- Limited Capacity: MA, MN, ME, and NJ have made program changes and/or are known to have limited capacity that would require more due diligence on subscription availability
- Anticipated Availability:
  - CA is developing program rules for community solar
  - CO has offered very limited annual capacity (~50 MW) to date
  - VA, PA, AZ, NM are nascent community solar markets or are developing community solar policies

Figure 5: ***Community Solar Opportunities by State***



Community Solar Roadmap



Collect facility data
including site energy spend and usage

Pursue priority Community Solar markets
based on state program incentives and facility locations

Select a developer that matches your needs and risk profile
through a competitive solicitation process

Negotiate contract(s)
Moving a project forward may require securing management approval and completing the necessary contracts

Earn bill credits from Community Solar project(s)
Projects deliver near-term cost savings

Pursuing Community Solar

Identifying Developers in Your Area

- Solar developers focusing on community solar in your area may have capacity available for a community solar subscription. Any buyer can speak with the developers in their area to understand their capabilities and the options they have available. Ensure potential partners have several successful projects completed and positive client references for communication and support.

Next Steps for Community Solar

- To pursue community solar options, confirm the amount of electric energy needed at a facility. Next, reach out to local developers to discover capacity availability and partnership considerations.

- If interested, secure the help of an advisor, such as Trio, to help you partner with reputable developers who offer locally available community solar capacity. Trio can support the navigation of fast-moving capacity openings, understand REC dynamics, confirm financial analysis, and negotiate in-market contract terms to optimize savings.

Secure the Help of an Advisor

Buyers interested in exploring community solar options can reach out to hondagreenexcellence@edisonenergy.com to connect with a subject matter lead.

State-By-State
Onsite & Community Solar Guidance

Onsite Solar: Methodology and Assumptions

The following is a list of the methodology and assumptions in the upcoming state-by-state reviews for Onsite Solar

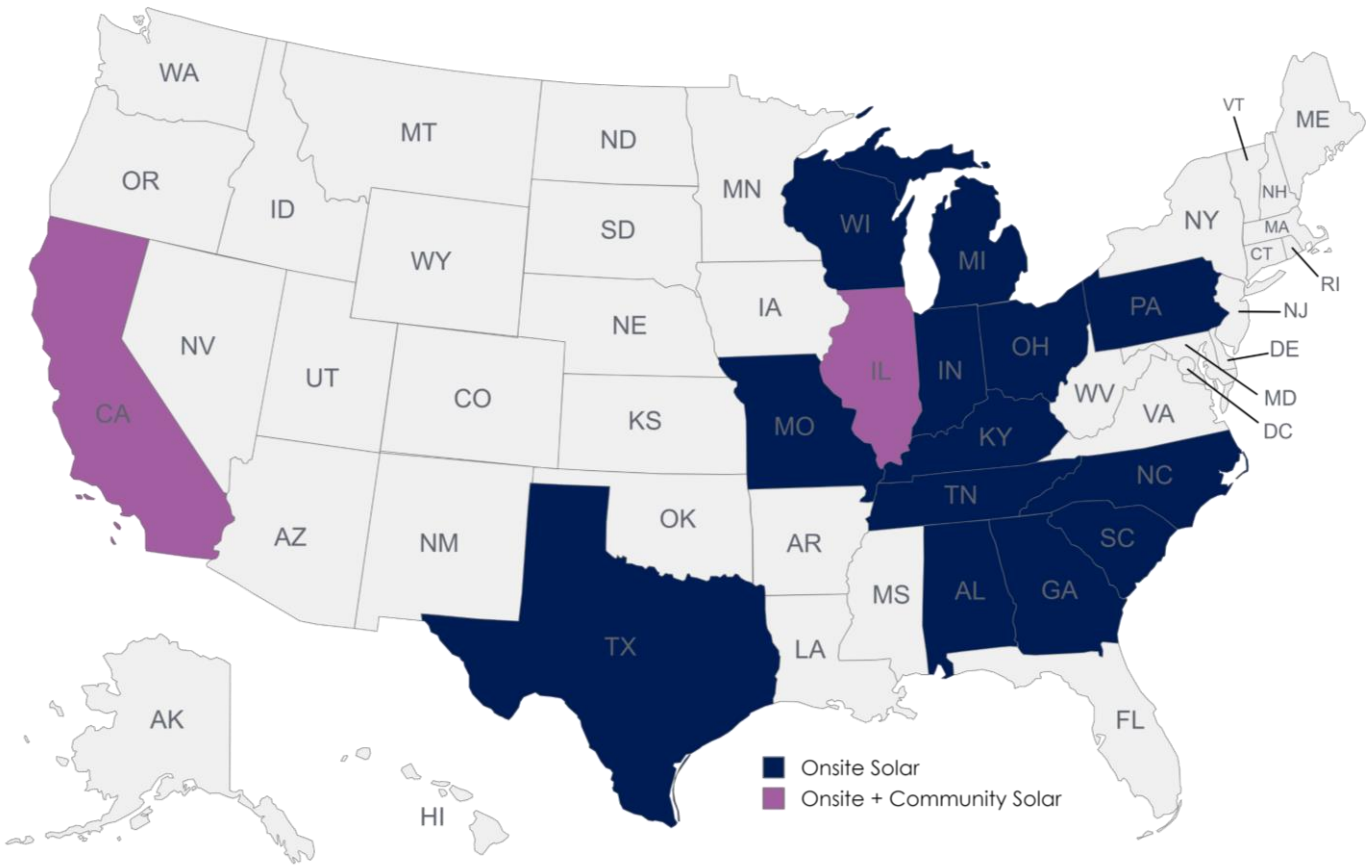
Summary	• Overview of solar program landscape and history in state • Scale, availability, timeline, or upcoming state program details • Additional program information; may include potential fees, future expansion, or unique characteristics
State Incentives	• State or utility-specific programs that allow for solar economic development incentives • Program information and history
Net Metering Program	• Net Metering program availability and dynamics • Capacity sizing limits for Net Metering • Net Metering value details for retail rates, credit, wholesale rates, etc.
PPA or Lease Availability	• Description of state and/or utility allowance for third-party Power Purchase Agreements • Lease availability options within states • Details around limitations or specifics of availability
REC Dynamics	• REC retention, values, swap details within states • State RPS (Renewable Portfolio Standard) or other goals that support Solar REC markets
Indicative Economic Classification	• Economic attractiveness potential for a generally positive economic outcome to develop solar • High Potential, Medium Potential, Low Potential

Community Solar: Methodology and Assumptions

The following is a list of the methodology and assumptions in the upcoming state-by-state reviews for Community Solar

Program Summary	• Overview of community solar program landscape and history in state • Scale, availability, timeline, or upcoming state program details • Additional program information; may include potential fees, future expansion, or unique characteristics
REC Dynamics	• REC retention allowances as part of program • Potential for replacement RECs as part of program
Term Length	• Description of program term lengths • Common market term lengths
Indicative Economics	• Range of common percent savings (actual savings may vary by project and developer negotiations) • REC inclusion, if desired and offered by developer, can reduce savings percentage depending on options

State-by-State Onsite & Community Solar Guide



Alabama | California

Georgia | Illinois

Indiana | Kentucky

Michigan | Missouri

North Carolina | Ohio

Pennsylvania | South Carolina

Tennessee | Texas

Wisconsin

**Limited options or availability in your state?*
Please see How to Advocate for Renewable Energy.

Alabama

Onsite Solar in Alabama	
Summary	The policy climate in Alabama is not conducive to considerable support for, and development of, solar generation, despite the potential of in-state solar. Alabama does not offer state-led onsite solar programs. It does not have a renewable energy portfolio standard or a voluntary renewable energy target. Just one electric utility, Alabama Power Company, falls under the Alabama Public Service Commission's regulatory authority.
State Incentives	There are no incentives offered by the state, but electric utilities, distribution utilities, and municipalities may offer rebates for onsite solar to qualifying customers. Some utility programs, as well as a property tax incentive program offered by the Alabama Department of Revenue, ended on December 31, 2023.
Net Metering Program	Alabama does not offer net metering policies, although the state does encourage energy efficiency through energy codes and building standards.
PPA or Lease Availability	Third-party PPAs and leases are not allowed in Alabama.
REC Dynamics	Project-specific RECs available. Alabama does not currently have a viable Solar REC (SREC) market, as it does not have RPS (Renewable Portfolio Standards).
Indicative Economic Classification	Low Potential

Updated December 2023

California

Onsite Solar in California	
Summary	Despite recent changes to the state incentive program and a transition to the new Net Metering (NEM 3.0) tariff, California remains a viable option for onsite solar due to high electricity costs and high resource availability. Industrial customers are less impacted by the change to NEM 3.0, especially for high energy users that are unlikely to export excess generation. California's recent policy changes are designed to incentivize the installation of storage technologies to be paired with onsite generation.
State Incentives	The California Public Utility Commission oversees the Self Generation Incentive Program , which is administered by the state's investor-owned utilities. This program no longer provides incentives for onsite solar, but instead provides incentives for battery storage covering ~ 35% of the average system cost.
Net Metering Program	California transitioned to a new Net Billing tariff (NBT) in April 2023, called NEM 3.0, which is available for systems up to 150% of historical load. Under the NBT, excess generation is netted on an instantaneous basis, with the compensation set as an avoided cost's value dependent on the time of day and time of year. This change will result in excess generation being credited below retail value. NBT incentivizes the installation of battery storage so that excess generation can be exported during higher value hours.
PPA or Lease Availability	PPAs and third-party leases are available in California.
REC Dynamics	Project-specific RECs available. California has a Renewable Portfolio Standard (RPS) program, and the California REC market is tracked by the Western Renewable Energy Generation Information System (WREGIS).
Indicative Economic Classification	High Potential

Updated December 2023

California

Community Solar in California	
Program Summary	California's Enhanced Community Renewables (ECR) Program is a part of the Green Tariff Shared Renewables Program (GTSR) that is overseen by the California Public Utility Commission (CPUC) and directly implemented by the state's three investor-owned utilities (IOUs). The ECR program is capped at 600 MW statewide with systems being limited to 20 MW, with customers eligible to subscribe up to 50-100% of their electricity demand from ECR resources. Customers work directly with developers to secure program capacity and receive a credit on their utility bill. The credit is determined using an avoided cost value and the production of the customer's share of the ECR system. In 2022, the state legislature granted the IOUs' permission to discontinue parts of the GTSR program due to lack of uptake and administrative difficulties but required the Enhanced Community Renewable Program to continue. Assembly Bill 2316 directs the CPUC to review for effectiveness all current renewable subscription programs by March 31, 2024, and to recommend changes to existing programs, development of new programs, or discontinuing the programs. This could lead to new programs becoming available in the coming years and should be monitored for updates.
REC Dynamics	Green-E certified RECs may be made available by the developer at a reduced economic incentive rate.
Term Length	There is no minimum term length set by the program. Term length will likely be determined during contract negotiations with the developer. 10-, 15-, and 20-year subscription term lengths are common.
Indicative Economics	A common range of savings on electricity is 8-10% over capacity agreed to in offer. REC inclusion factors can reduce this percentage.

Updated December 2023

Georgia

Onsite Solar in Georgia	
Summary	Georgia offers limited policy support for renewable energy but allows for utilities to offer their own net metering programs and incentives, which may improve project economics. Georgia does not offer state-led onsite solar programs. Georgia does not have a renewable energy portfolio standard or a voluntary renewable energy target.
State Incentives	There are no incentives offered by the state that are applicable to commercial customers, but electric utilities, distribution utilities, and municipalities may offer rebates for onsite solar to qualifying customers.
Net Metering Program	Georgia allows, but does not require, utilities to offer net metering programs. The state's regulated utilities offer net metering programs, with a system capacity limit of 125% of demand for commercial customers and net excess generation credited to the customer's next bill at a predetermined rate filed with the Georgia Public Service Commission. Net energy metering tariffs filed by cooperatives are recorded in Docket #31536 on the Georgia Public Service Commission's website; we recommend contacting the utility to understand whether net metering is offered for your site.
PPA or Lease Availability	Third-party PPAs and leases are legal in Georgia. Georgia House Bill (HB) 57 allows commercial customers to work with third parties to install, operate, lease, and/or finance solar systems, with a limit of 125% of the actual or expected peak demand of the premises. Commercial systems above 100 kW may be subject to additional compliance requirements.
REC Dynamics	Project-specific RECs available. Georgia does not currently have a viable Solar REC (SREC) market, as it does not have an RPS (Renewable Portfolio Standard).
Indicative Economic Classification	Medium Potential

Updated December 2023

Illinois

Onsite Solar in Illinois	
Summary	Illinois's market is deregulated, and the state has significant policies to support the deployment of renewable technologies. However, because the market is oversaturated, commercial customers only have moderately cost-effective options. Illinois Shines: Through Illinois's Adjustable Block Program (ABP), RECs from each solar project will be transferred to an Illinois electric utility, making it an attractive program for onsite PPAs and ownership models where the owner intends to monetize the RECs. Customers would likely pursue a REC swap using the value from the ABP to purchase less expensive national RECs, opening opportunity for potential cost savings. The blocks are divided into Group A or B based on location within utility territory and ISO. The program blocks open on June 1 of each year; with capacity being fully depleted for the program year of June 2023 through May 2024 (a waitlist is available).
State Incentives	Distributed Generation Rebates are available through the Climate and Equitable Jobs Act (CEJA): For commercial DG customers and community solar projects, customers may be eligible for a base rate of $250/kW DC for solar assets and a base rate of $250/kWh for paired storage. Potential adders to base rate will be determined by the Illinois Commerce Commission. The rebate will lower PPA prices offered by developers; however, without an associated project REC contract from the ABP, pricing will likely be at a premium.
Net Metering Program	Net metering is permitted in Illinois for sites with a system capacity limit of 5 MW, given it primarily serves location load. Illinois is currently in transition from a full retail value to statewide distributed generation compensation rules with a lesser excess generation value. This transition will occur on the later date of either December 31, 2024, or when utility tariffs setting new compensation values are approved. At this time, customers would be eligible for net metering of energy supplied to the utility and would apply for the distributed generation rebate.
PPA or Lease Availability	Third-party PPAs and leases are legal in Illinois.
REC Dynamics	Through the ABP, RECs are highly valuable in Illinois. Often, developers can lower project prices for providing project REC replacements for certified green-e RECs from other states.
Indicative Economic Classification	High Potential

Updated December 2023

Illinois

Community Solar in Illinois	
Program Summary	Community solar is available to waitlist in the state but is fit to buyers with medium or small business classification because the REC is based on the electric tariff, and the subscription is capped. The Traditional Community Solar (“TCS”) for the 2023-2024 Program Year has a revised capacity of 64 MW to Group A and 153 MW to Group B, with a 20% developer cap. New community solar projects are capped at 5 MW AC, which could lead to greater cost savings and scalable opportunities for commercial and industrial offtakers.
REC Dynamics	Through the Adjustable Block Program (ABP), RECs are highly valuable in Illinois. Some developers may be able to provide green-e certified non-IL RECs as part of buyer strategy, which would result in lower indicative savings from program deal.
Term Length	Customers have the option of 10, 15, or 20-year subscription terms, depending on the developer.
Indicative Economics	A common range of savings on electricity is 8-10% over capacity agreed to in offer. REC inclusion factors can reduce this percentage.

Updated December 2023

Indiana

Onsite Solar in Indiana	
Summary	Indiana has a Clean Energy Portfolio Standard with a goal of 10% clean energy by 2025 and offers a tax incentive for solar PV systems. Indiana is phasing out net metering in the state, making it a less favorable state for onsite solar.
State Incentives	Indiana offers a property tax exemption and sales and use tax exemption for solar photovoltaics.
Net Metering Program	Duke Energy Indiana, Indiana Michigan Power, NIPSCO CenterPoint, and AES Indiana customers are no longer able to participate in net metering programs, replaced by the Excess Distributed Generation tariff. The Excess Distributed Generation tariff credits excess energy at a lower wholesale market-based rate versus the retail rate. Customers of a rural electric member cooperative (REMC) or a municipal utility may be able to participate in net metering programs.
PPA or Lease Availability	Third-party PPAs are not available in Indiana. Third-party leases are available in Indiana.
REC Dynamics	Project-specific RECs available. Indiana does not currently have a viable Solar REC (SREC) market as there is no solar carve-out. However, solar owners in Indiana may be eligible to participate in the Ohio SREC market.
Indicative Economic Classification	Medium Potential

Updated December 2023

Kentucky

Onsite Solar in Kentucky	
Summary	Kentucky does not have a renewable energy portfolio standard but requires that for the construction and renovation of buildings funded by 50% or more by the state, the building must meet high-performance building standards. Kentucky provides a tax incentive and requires utilities to offer net metering but for smaller systems, making it a less favorable state for commercial and industrial onsite solar.
State Incentives	Kentucky offers a 100% sales and use tax exemption for solar projects larger than 50 kW.
Net Metering Program	Kentucky requires investor-owned utilities and electric cooperatives, exempting TVA utilities, to offer net metering to customers with capacity of up to 45 kW.
PPA or Lease Availability	Third-party PPAs are not available in Kentucky. Third-party leases are available in Kentucky.
REC Dynamics	Project-specific RECs available. Kentucky does not currently have a viable Solar REC (SREC) market as it does not have a solar carve-out. However, solar owners may be eligible to participate in the Ohio SREC market.
Indicative Economic Classification	Low Potential

Updated December 2023

Michigan

Onsite Solar in Michigan	
Summary	Michigan offers net metering, state incentives, and enacted the Clean Renewable, and Efficient Energy Act in 2023, which expanded its renewable and clean energy targets. Utilities must meet the 50% renewables and 80% clean energy benchmark by 2035. These requirements create value for the Michigan Renewable Energy Credit System (MIRECS). These incentives and programs make Michigan a favorable state for onsite solar.
State Incentives	Michigan authorizes local governments to create Property-Assessed Clean Energy (PACE) financing programs, which allows property owners to finance energy improvements with no upfront costs. Contact your local government to learn if they offer a PACE financing program.
Net Metering Program	Michigan offers net metering with a limit of 550 kW or 110% of a customer's electricity usage.
PPA or Lease Availability	Third-party PPAs and leases are available in Michigan.
REC Dynamics	Project-specific RECs available. Michigan does not currently have a viable Solar REC (SREC) market as there is no solar carve-out. However, solar owners in Michigan are eligible to participate in the OH SREC market.
Indicative Economic Classification	Medium Potential

Updated December 2023

Missouri

Onsite Solar in Missouri	
Summary	Missouri's current solar rules requiring incentives but only in exchange for project RECs are at odds with businesses installing renewable energy to reduce emissions and meet sustainability goals. This rule expired at the end of 2023, which could provide utilities with the option to launch new solar programs with different parameters, but it is unclear if utilities currently have plans to do so.
State Incentives	There are no statewide incentives offered in Missouri. Utilities that have remaining Renewable Portfolio Standard obligations are required to offer rebates for onsite solar, but the utilities own the RECs of any system that receives a rebate. This limits the ability to use utility rebate programs in Missouri to reach sustainability or renewable energy goals. Most utility programs ended December 31st, 2023.
Net Metering Program	Missouri law requires that all utilities offer net metering for systems up to 100 kW. Excess generation is credited to the customer's next bill at the utility's avoided cost rate.
PPA or Lease Availability	Third-party PPAs are not available in Missouri. Third-party leases are available in Missouri.
REC Dynamics	Project-specific RECs available. While Missouri has a 15% RPS (Renewable Portfolio Standard) target for 2021 and every year after, most utilities have met their obligations leading to a non-liquid SREC market.
Indicative Economic Classification	Low Potential

Updated December 2023

North Carolina

Onsite Solar in North Carolina	
Summary	North Carolina does not offer state-led onsite solar programs. The North Carolina energy market is regulated but, because of significant policy support for renewables, the state ranks as one of the leading solar markets, resulting in considerable cost-effective options.
State Incentives	There are no incentives offered by the state, but electric utilities, such as Duke Energy, and municipalities may offer rebates for onsite solar to qualifying customers.
Net Metering Program	North Carolina maintains net metering policy with state-developed mandatory rules for certain utilities, including system size limit of 1 MW for customer-owned systems and to the lesser of 1 MW or 100% of contract demand for leased systems. Duke Energy recently increased the system size limit to 5 MW from 1 MW.
PPA or Lease Availability	Third-Party PPAs are prohibited in North Carolina, but solar equipment leasing is allowed. Leasing of solar equipment is allowed for systems up to 1 MW or 100% of customer's contract demand, whichever is smaller.
REC Dynamics	Project-specific RECs available. North Carolina accepts Solar REC (SREC) registrations from facilities sited in all 50 states. This national acceptance of SREC registrations virtually guarantees that the local SREC program will be oversupplied as long as the market exists.
Indicative Economic Classification	Medium Potential

Updated December 2023

Ohio

Onsite Solar in Ohio	
Summary	Ohio has an Alternative Energy Portfolio Standard but eliminated the solar target beginning in 2020 under House Bill 6, which has led to lower REC values when compared to other states. Ohio does not have a statewide program for commercial and industrial solar, but utilities do offer net metering. Overall solar is feasible in Ohio.
State Incentives	Ohio does not have a state rebate for onsite solar.
Net Metering Program	Net metering is available in Ohio through Duke Energy and American Electric Power. The maximum system size allowed for net metering is 120% of the customer's average yearly usage. Customers may also select a competitive retail electric service (CRES) provider. CRES providers each have net metering agreements and may compensate differently than utilities.
PPA or Lease Availability	Third-party PPAs and leases are available in Ohio.
REC Dynamics	Project-specific RECs available. The Ohio Solar REC (SREC) market has a substantial number of systems sited in bordering states that sell SRECs in the OH market.
Indicative Economic Classification	High Potential

Updated December 2023

Pennsylvania

Onsite Solar in Pennsylvania	
Summary	Pennsylvania offers comprehensive policy support for onsite renewables with the Alternative Energy Portfolio Standard, increasing the value of project RECs, and a strong net metering program, making onsite solar an attractive option in the state.
State Incentives	There are no direct rebates offered by the state, but several grant and financing programs exist, which may be pursued to help lower the upfront cost of installation. Several utilities and the City of Philadelphia offer rebates for solar and other energy reduction measures.
Net Metering Program	Pennsylvania has a strong net metering policy, which requires all investor-owned utilities to offer net metering for systems up to 3 MW for commercial and industrial customers, with excess generation credited at the full retail rate. Virtual meter aggregation is allowed for meters within 2 miles of generation property.
PPA or Lease Availability	PPAs and third-party leases are allowed for systems up to 3 MW, or up to 5 MW if the system is made available to the grid during emergencies.
REC Dynamics	Project-specific RECs available. PA Tier 1 REC market is currently highly valued, making solar development lucrative. Often, developers will offer REC swaps to enhance the economic savings for the buyer.
Indicative Economic Classification	High Potential

Updated December 2023

South Carolina

Onsite Solar in South Carolina	
Summary	South Carolina does not offer state-led onsite solar programs. South Carolina's energy market is regulated and has few supportive policies for renewables, resulting in limited cost-effective options.
State Incentives	There are no incentives offered by the state applicable to commercial customers. Additionally, there are limited incentive opportunities offered by electric utilities, distribution utilities, and municipalities for onsite solar.
Net Metering Program	South Carolina maintains net metering policy with state-developed mandatory rules for certain utilities, including a capacity limit of the lesser of 1 MW AC or 100% of the customer's demand.
PPA or Lease Availability	Third-party PPAs are prohibited in South Carolina, but leasing of solar equipment is allowed up to 1 MW.
REC Dynamics	Project-specific RECs available. South Carolina does not currently have a viable Solar REC (SREC) market as it does not have an RPS (Renewable Portfolio Standard).
Indicative Economic Classification	Medium Potential

Updated January 2024

Tennessee

Onsite Solar in Tennessee	
Summary	Tennessee does not offer net metering and does not have a renewable energy portfolio standard. Tennessee does offer sales tax incentives and allows for the creation of easements for the purpose of ensuring access to direct sunlight for solar energy systems, making onsite solar feasible in the state.
State Incentives	Tennessee offers sales tax incentives for the purchase of technology used to generate electricity from solar sources.
Net Metering Program	Tennessee does not require that utilities offer net metering.
PPA or Lease Availability	The status of PPAs is unclear in Tennessee. Third party leases are available.
REC Dynamics	Project-specific RECs available. Tennessee does not currently have a viable SREC market as there is no solar carve-out.
Indicative Economic Classification	Low Potential

Updated December 2023

Texas

Onsite Solar in Texas	
Summary	Texas offers limited policy support for onsite solar but allows for utilities and municipalities to offer their own net metering programs and incentives, which helps to fill this gap. High resource availability in Texas, along with utility and municipal programs, can make onsite solar an attractive option in the state.
State Incentives	There are no incentives offered by the state, but numerous electric utilities, distribution utilities, and municipalities offer rebates for onsite solar.
Net Metering Program	There are no statewide or mandatory net metering rules in Texas, but individual utilities and retailers may have net metering policies.
PPA or Lease Availability	PPAs and third-party leases are allowed but limited to systems that produce no more than the site's average annual electricity consumption.
REC Dynamics	Project-specific RECs available. Texas does not currently have a viable Solar REC (SREC) market as there is no solar carve-out. Under the state's current Renewable Portfolio Standard (RPS), though, REC trading is allowed.
Indicative Economic Classification	High Potential

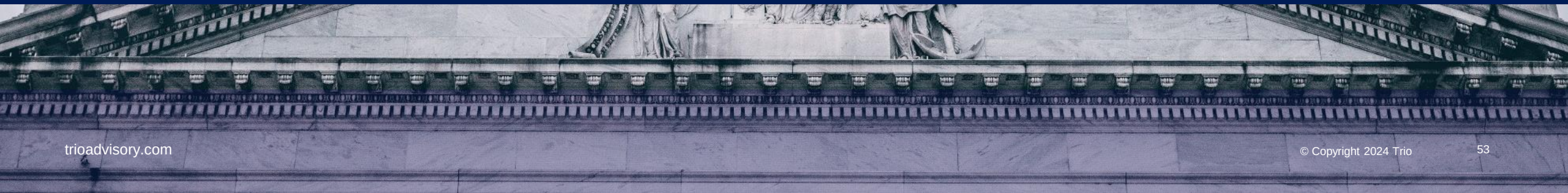
Updated December 2023

Wisconsin

Onsite Solar in Wisconsin	
Summary	Wisconsin's onsite solar market is held back due to the lack of clarity around the legality of third-party financing options for projects. This issue has been part of ongoing litigation and dockets at the Public Service Commission (PSC) and is expected to be resolved in the coming years. If the PSC rules in favor of third-party financing, it could lead to renewable energy investment in the state.
State Incentives	Wisconsin offers rebates for renewable through the Focus on Energy program with oversight from the PSC. Rebate value is determined by system size, with a maximum rebate of $50,000 for systems 500 kW or above.
Net Metering Program	State law requires all investor-owned utilities (IOUs) and municipal utilities to allow net metering for systems up to 20 kW. Individual utilities may offer programs that exceed this limit, with several IOUs having more expansive programs. Excess generation compensation rates vary by utility.
PPA or Lease Availability	PPA and third-party leasing is a legal gray area in Wisconsin, with some utilities allowing for financed systems to be interconnected, while others have blocked projects. The Public Service Commission is reviewing this issue in Docket 9300-DR-105.
REC Dynamics	Project-specific RECs available. Wisconsin does not currently have a viable Solar REC (SREC) market as there is no solar carve-out.
Indicative Economic Classification	Low Potential

Updated December 2023

How to Advocate for Renewable Energy Options



Advocating for More Renewable Options

There are two primary approaches to advocate for renewable energy options:

Direct Advocacy

Business representatives directly work with their electric utilities or Public Utility Commissions (PUCs) to influence programs and policies to expand access to renewable energy. Contact your utility account representative or work with your company's Government Affairs team to discuss a strategy for outreach.

Indirect Advocacy

Business representatives work through trade associations to expand access to renewable energy. Consider becoming a member of trade associations, such as the Clean Energy Buyers Association (CEBA) or RE100, to be able to support and influence the initiatives their government affairs teams are working on.

Get In Touch

Interested in discussing the information you read in this guide? Contact the Trio team at hondagreenexcellence@edisonenergy.com.

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