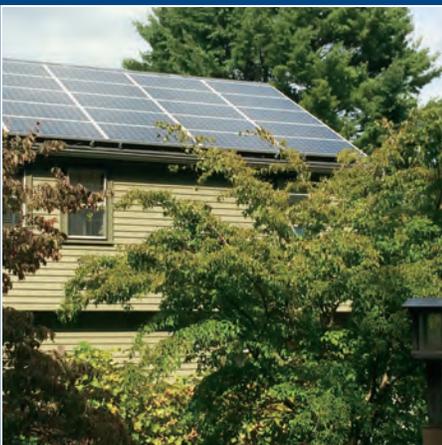




*A DC Consumer's*  
**GUIDE TO GOING SOLAR**



A PUBLICATION OF THE DC OFFICE OF PEOPLE'S COUNSEL

**APRIL 2018**

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### About the Office of People's Counsel

The Office of the People's Counsel (OPC) is an independent agency of the District of Columbia government. By law, it is the advocate for consumers of natural gas, electric and telephone services in the District. District of Columbia law designates the Office as a party to all utility-related proceedings before the Public Service Commission. The Office also represents the interests of District ratepayers before federal regulatory agencies. The Office is authorized to investigate the operation and valuation of utility companies independent of any pending proceeding. The Office's mandate is to advocate the provision of quality utility service and equitable treatment at rates that are just, reasonable, and non-discriminatory; to assist individual consumers in disputes with utility companies about billing or services; and to provide technical assistance and consumer education to lay advocates and community groups. In addition, in defining its positions while advocating on matters pertaining to the operation of public utility or energy companies, the Office shall consider the public safety, the economy of the District of Columbia, the conservation of natural resources, and the preservation of environmental quality.



### About the Clean Energy States Alliance

Clean Energy States Alliance (CESA) is a national, nonprofit coalition of public agencies and organizations working together to advance clean energy. CESA members—mostly state agencies—include many of the most innovative, successful, and influential public funders of clean energy initiatives in the country. CESA works with state leaders, federal agencies, industry representatives, and other stakeholders to develop and promote clean energy technologies and markets. It supports effective state and local policies, programs, and innovation in the clean energy sector, with an emphasis on renewable energy, power generation, financing strategies, and economic development. CESA facilitates information sharing, provides technical assistance, coordinates multi-state collaborative projects, and communicates the views and achievements of its members. Learn more at [www.cesa.org](http://www.cesa.org).

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### Disclaimers

This report is for informational purposes only and does not constitute legal or financial advice, nor promises regarding individual results from the U.S. Department of Energy, the Office of People's Counsel, and CESA. This guide is simply an informational tool to inform consumers of the available solar options and potential benefits available in the District.



## A Note from the People's Counsel



Dear District of Columbia Utility Consumers,

As People's Counsel for the District of Columbia, I invite you to read the valuable information in *A DC Consumer's Guide to Going Solar*, which we have developed for the everyday consumer.

The modern renewable energy marketplace has opened a wide range of options and sparked growing interest among consumers in managing their energy costs and personal impacts on the environment. In the District, more than 2,000 residents already have chosen to invest in solar energy systems. However, for many consumers who were among the first to bring solar power to their homes or businesses, the process was at times challenging, lengthy and expensive.

The landscape of distributed energy resources, particularly solar, has changed. The District has enacted aggressive policies and laws to advance the creation of a sustainable DC by utilizing and promoting distributed energy resources, including solar. In fact, DC was recognized as the first Leadership in Energy and Environmental Design (LEED) Platinum city in the world by the U.S. Green Building Council. OPC has developed this guide to provide you with important information to help simplify the process and open access even further. If solar and other distributed energy are deployed equitably across the District, there could be significant opportunities for consumers in all eight wards to benefit from lower energy bills.

I encourage you to contact OPC for help with any questions about solar, renewable energy, or any utility issue at (202) 727-3071, or visit us on the web at [www.opc-dc.gov](http://www.opc-dc.gov) and follow us on Facebook @DCPeoplesCounsel, Twitter @DCOPC, and Instagram @dcopc.

Sandra Mattavous-Frye  
People's Counsel  
District of Columbia

## Going solar

There are many ways to build and finance a solar PV system. This guide can help you decide whether it makes sense for you to go solar, and if so, how. You may want to buy solar panels and put them on your roof. You may want to lease panels, or agree to purchase the electricity from panels that belong to someone else. Rather than having panels on your own home, you may want to participate in a solar project located somewhere else in the District. Regardless of the approach you choose, solar panels are a big investment. Take some time to learn about solar, so you can be confident that your investment is a good one.

### Solar Benefits

- **Save money.** Though savings are not guaranteed, many people save money by going solar. The cost of solar panels has fallen dramatically over the last decade, and various federal and District programs can help you to save money on installation and to be compensated for the electricity your panels produce.
- **Reduce air pollution and fight climate change.** Most electricity in the United States is produced by burning fossil fuels, such as coal and natural gas. This creates air pollutants, including carbon dioxide, which helps cause climate change. Solar panels have no emissions and reduce the need for fossil fuels.
- **Stimulate the local economy and create local jobs.** Installing solar systems in DC creates solar jobs in DC. According to the Solar Foundation's *Solar Jobs Census 2017*, there were 1,294 solar jobs in DC in 2017 (<https://www.thesolarfoundation.org/national>). When more people go solar, more people are hired to build solar systems.

### Solar Cautions

- **Consider financial costs, up-front or long-term, depending on your contract.** In some cases, buying solar panels means paying up-front. In other cases, payments are made gradually, over time. While people who go solar generally save money overall, there are financial costs to consider.
- **Understand what you're signing up for.** Solar contracts can be complicated. Going solar requires careful attention to be sure that what you're signing up for really will meet your needs.
- **Be aware of potential future changes.** Many factors affect how much money you can save with solar, including federal tax credits, District laws and programs, and retail electric rates. There are no guarantees about what will happen with any of these things in the future. For instance, while most knowledgeable people expect retail electric rates to go up over time, it is impossible to know for sure if that will be the case or by how much. Because of such unknowns, there is always some risk in going solar.



***There are many ways to build and finance a solar PV system. Take some time to learn about solar, so you can be confident that your investment is a good one.***

## Is solar right for me?

Solar power has many financial and environmental benefits, but it may not be suited to everyone. Before you decide to go solar, consider your circumstances and what benefits you're looking for.

### Your Goals

Take some time to think about your goals. What is it about solar electricity that appeals to you? Are you most interested in the financial savings, the environmental benefits, or the community benefits?

### Efficiency

Whether your priority is saving money or tackling climate change, it often makes sense to first pursue energy efficiency measures. Efficiency improvements will reduce energy use by themselves, and will also save you money by reducing the size of the solar system you need. You may want to wait 12 months after making major efficiency improvements before installing solar panels, in order to track how your usage has changed. Alternatively, you can estimate how much your new efficiency measures will reduce your usage, and size your new solar system accordingly.

### Your Electric Bill

The higher your electric bill, the more money you can potentially save by going solar. See <http://www.opc-dc.gov/how-to-read-your-bill> for a detailed explanation of your electric bill.





## Roofing Material, Roof Age, and Roof Condition

If you want to put solar panels on your roof, you need to have the right kind of roof, and it should be reasonably new and in good condition. Asphalt and metal roofs, including standing seam, are good candidates for solar panels. It is not generally recommended to put solar panels on slate roofs, because of the potential to damage the slate. In addition to the material of your roof, you should think about its condition. Solar panels are usually warrantied to last 25 years, and may last longer. It may not make financial sense to install solar panels on a roof that will need to be replaced in the next 10 or 15 years. Have your roof professionally evaluated before your panels are installed. If your roof is not suited for solar panels, you can still consider participating in a community solar project. (See p. 17.)

## Roof Orientation, Tilt, and Shading

The amount of electricity solar panels generate is determined by the amount of direct sunlight they receive, which is in turn influenced by the orientation, tilt, and shading of the roof. **Orientation** refers to the compass direction your roof faces. The best orientation for solar panels is true south, but southeast or southwest can also work. **Tilt** refers to the slope of your roof. The best roof tilt for solar panels in DC is 30–45 degrees, but other slopes can also work. **Shading** refers to the extent to which trees, other buildings, or parts of your house, such as chimneys or dormers, cast a shadow on your roof. Partial shading can seriously reduce the output of the panels.

## Neighborhood Concerns

When you install solar panels, they may be visible to your neighbors. Some neighbors may like the way they look; others may not. If possible, talk with your neighbors before installing the panels.

## How Long Do You Expect to Be in Your Home?

Solar panels can increase the value of your home, especially if you own them outright. However, they can also make selling your home or moving to a new home more complicated, especially if you have a lease or a power purchase agreement. (See p. 10.) If you enter a long-term financing arrangement or sign a contract with a community solar project, read carefully the part of your contract that talks about what happens if you move to a new home.

## Help for Low-Income Residents

The District helps low-income residents go solar. Through grants from the Solar for All program, a variety of groups are exploring ways to connect low-income residents to solar. Go to [www.doee.dc.gov/solarforall](http://www.doee.dc.gov/solarforall) for the latest information on income-sensitive solar projects.

## How does solar work?

### Your Solar Panels and the Electric Grid

Solar panels create electricity from sunlight. If you have panels on your roof, the electricity from the panels will flow through a box called an inverter and into your home. When you're using electricity in your home, the electricity from the panels can replace, partly or entirely, the electricity you would otherwise buy from the electric company.

Sometimes, the panels on your roof may create more electricity than you're using in your home. Unless you have a special battery, there's no way to store the surplus electricity, so it flows out of your home and into the wires that belong to the utility, Pepco. At that point, it becomes part of Pepco's electricity supply. Pepco's wires are part of a larger electric grid serving all of North America. You will receive credits from Pepco for the excess electricity your system sends back into the electric grid.

At other times, such as at night or when it's cloudy, you will use more electricity than your panels are generating. At these times, you will need electricity from the grid.

### Net Metering

Net metering is an accounting and crediting system that keeps track of the electricity flowing out of your home into the grid, as well as the electricity flowing into your home from the grid. With net metering, at the end of every month, you receive credit for the amount you sent to the grid minus the amount you took from the grid. Credits built up during sunny months (or low-electricity-use months) can be used to pay for electricity months later, when you're generating less or using more.

### Connecting to the Grid

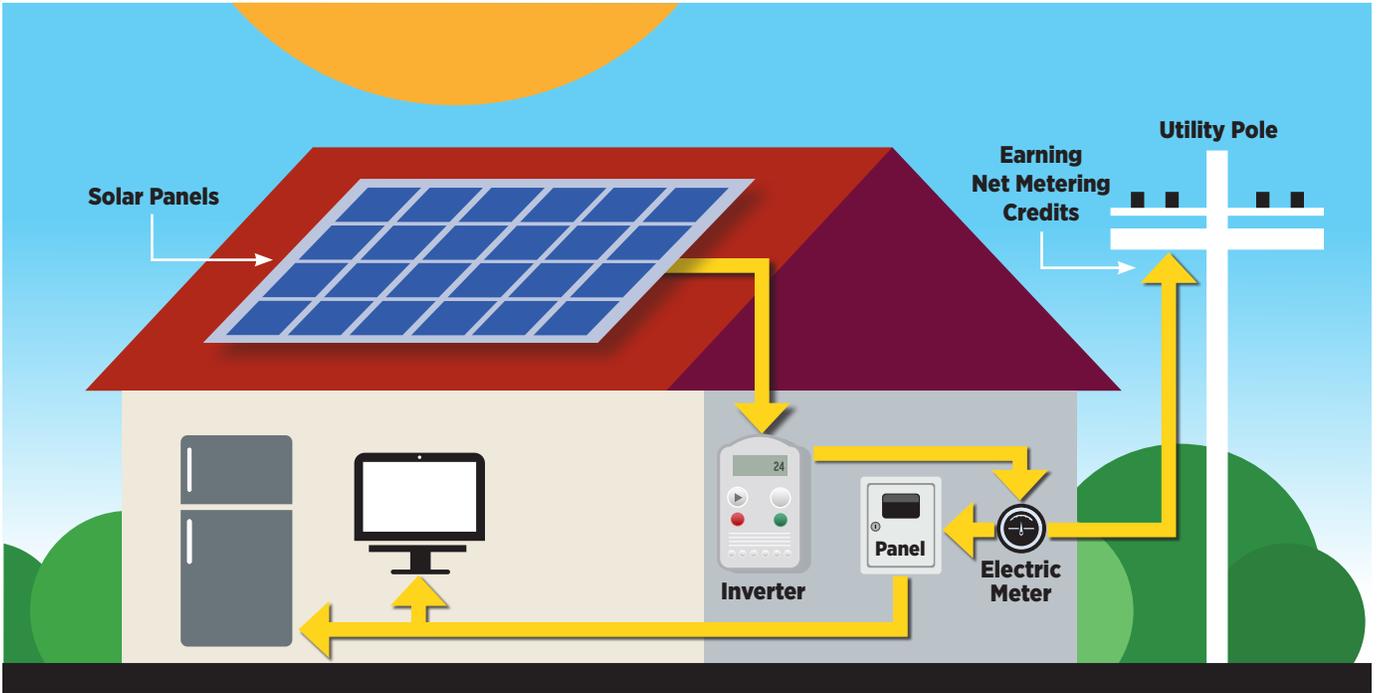
Going solar is not the same thing as being off the grid, which means not being connected to the electric grid. Although this may be an option in some rural areas, it's not really an option in the District of Columbia. Every home in DC is automatically connected to the grid.

Because your home is connected to the electric grid, your new solar system will also be connected to the grid. To ensure that your system won't damage the grid or cause safety problems for utility workers, you will need permission from Pepco to connect and turn on the system.

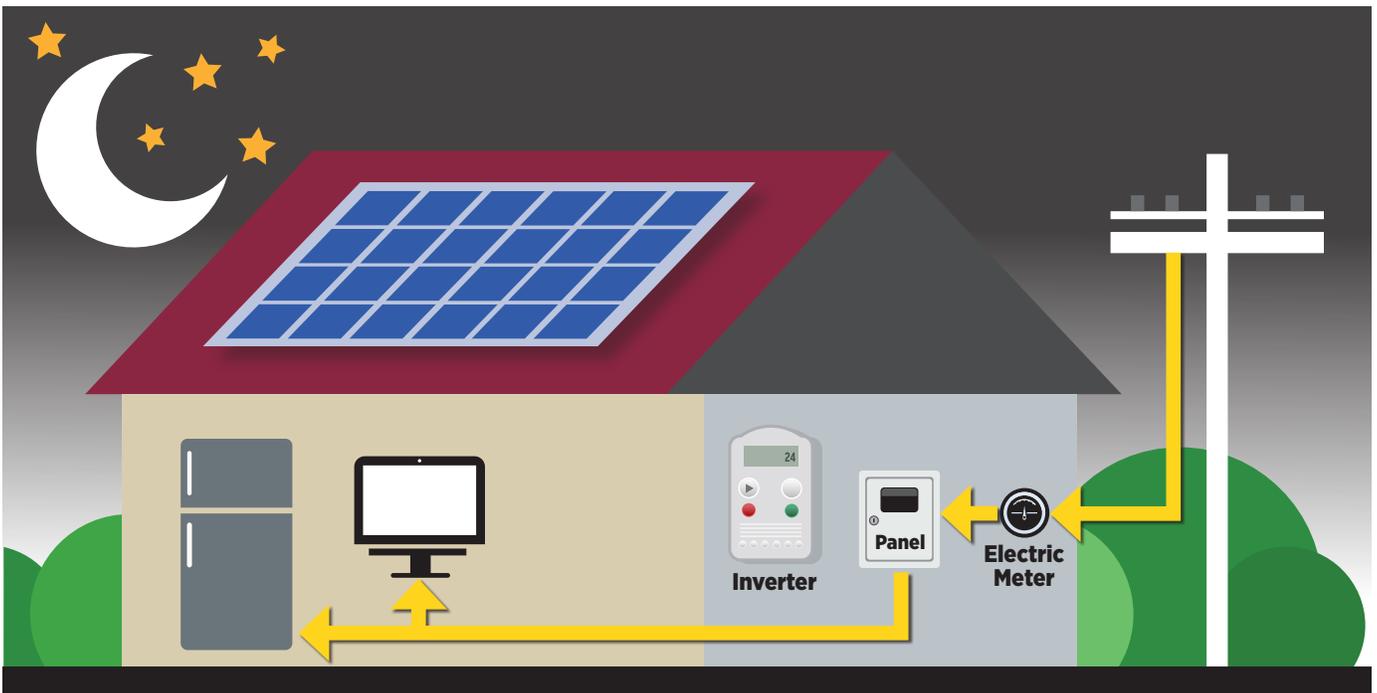
Get information from Pepco about interconnection procedures at <https://www.pepco.com/MyAccount/MyService/Pages/DC/HowtoApply.aspx>.

***When you're using electricity in your home, the electricity from the panels can replace, partly or entirely, the electricity you would otherwise buy from the electric company.***

*Electricity Generation and Net Metering*



The sun is shining and the solar panels are producing electricity. Some of the electricity is being used by the house. Any excess electricity that is not needed immediately is sent out to the electric grid, providing the homeowner with net metering credits.



When the solar panels are not producing electricity, all of the electricity that the house is using comes from the grid. The homeowner uses net metering credits and/or pays directly for the electricity.

## Paying for your system

There are several options for paying for solar:

### 1. Direct Ownership

- Pay the entire cost of the system at the start.
- Pay for the system over time by taking out a loan.

### 2. Third-party Ownership

- Lease a system.
- Sign a power purchase agreement.

**Direct ownership** means you buy the solar system, either by paying the entire cost of the system at the start or by taking out a loan. If you buy the system, you will receive all the financial benefits that go with the system, including net metering credits and other benefits described below.

A loan that you use to buy a solar system may be a traditional bank loan, such as a home equity loan. Alternatively, you may be able to apply for a special solar loan from a bank or other institution. Additionally, some solar installers provide loans to their customers.

**Third-party ownership** means that you do not own the system on your roof; you either lease it or you agree to buy the power generated by the system through a power purchase agreement (PPA).

A lease generally involves monthly payments from you to the third-party owner for the length of the contract, often 20 years. There may be no up-front cost, in which case you may be able to begin saving money immediately. You save money if the value of the electricity from the panels is more than the cost of the lease. Read your contract carefully before signing; your monthly payment amount could change over time.

With a PPA, you pay the third-party owner every month for the amount of electricity generated by the system that month, which will vary from month to month. Because there may be no up-front cost, this case too may yield immediate savings. You save money if the price you pay for the electricity from the panels is less than the price you would pay to buy the electricity from Pepco (or a competitive electricity provider). Read your contract carefully before signing; the amount you pay per kilowatt-hour (kWh) for the electricity generated by the system may change over time.

If you're buying a system, there are two programs that can help you pay for it: the federal income tax credit (ITC) and solar renewable energy certificates (SRECs). Note that you don't receive the money from the ITC right away when you install the system, and you may or may not receive the money from SRECs right away.

### The Income Tax Credit (ITC)

The federal government provides an income tax credit (ITC) to help with the cost of buying a residential solar system. The credit is worth 30 percent of the total cost of the system. In other words, if your system costs \$20,000, then the credit is worth \$6,000. You receive the credit when you file your income tax return.

TABLE 1. **Comparing Solar Leases, Solar PPAs, & Solar Loans/Direct Purchases**

	<b>Solar Leases</b>	<b>Solar PPAs</b>	<b>Solar Loans/Direct Purchase</b>
<b>Who buys the system?</b>	Third-party owner	Third-party owner	Homeowner
<b>Who owns the system?</b>	Third-party owner	Third-party owner	Homeowner
<b>Who takes advantage of most of the federal and state incentives available for solar?</b>	Third-party owner	Third-party owner	Homeowner
<b>Who is responsible for operations and maintenance of the solar system?</b>	Usually the third-party owner	Usually the third-party owner	Homeowner
<b>Who incurs the risk of damage or destruction?</b>	Third-party owner	Third-party owner	Homeowner
<b>What happens if the homeowner sells the home where the solar system is located?</b>	Depends on the contract	Depends on the contract	If the homeowner finances the system through a loan, the homeowner remains responsible for loan payments after the transfer unless negotiated with the buyer.
<b>Are financing payments fixed?</b>	Yes. The payments are pre-set but may include an annual escalator, increasing payments each year.	No. The payments to the third-party owner are on a per kilowatt-hour basis based on electricity generated by the solar array. Per kilowatt-hour prices may include an annual escalator.	With a loan, the payments may be fixed or may vary over time. If the homeowner decides to purchase a system outright, a contractor may sometimes offer several payment installments instead of one lump sum.
<b>What contract duration terms are available?</b>	Terms can vary, but are often in the range of 20-25 years.	Terms can vary, but often in the range of 20-25 years.	If the homeowner finances the system through a loan, the loan terms can vary.
<b>Do contracts provide minimum production guarantees?</b>	Yes, solar lease providers commonly provide minimum production guarantees.	Yes, solar lease providers commonly provide minimum production guarantees.	A loan contract does not include production guarantees; however, a solar panel manufacturer or developer/installer may provide a production guarantee.
<b>Are there escalator clauses in the contracts?</b>	Sometimes; therefore, check the contract for specific terms.	Sometimes, therefore check the contract for specific terms.	If the homeowner finances the system through a loan, interest rates may increase over time depending upon the specific terms of the loan.
<b>Is insurance coverage provided?</b>	Yes, usually.	Yes, usually.	No. Homeowners who directly own their solar system and want to be covered will need to find coverage either through a homeowner's existing insurance policy or through the purchase of a new or expanded policy.

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***Many contractors and online solar calculators will assume that you are eligible for the tax credit, and will include it in their calculations when they are determining your savings.***

However, if you don't pay any federal income tax, you won't benefit from the ITC. According to the Tax Policy Center, 45 percent of American households don't pay any federal income tax. Many contractors and online solar calculators will assume that you are eligible for the tax credit, and will include it in their calculations when they are determining your savings, so make sure that you know whether or not you can actually take advantage of it.

The federal ITC does not have to be taken in the single tax year that you install your solar system. If your tax liability is less than the value of the credit, you can carry the remainder of the credit forward to secure the full benefit of reducing the cost of the system 30 percent.

The ITC is scheduled to decline in coming years. The 30 percent credit is available for systems that are placed in service by the end of 2019. In 2020, the credit will be 26 percent. In 2021, it will be 22 percent.

The ITC is only available if you're buying a system. If you're leasing or signing a power purchase agreement, the financing company you contract with will own the system, and will likely receive any tax credit.

If you consider buying into a community solar project, note that eligibility of community solar customers for the 30 percent ITC is complicated. Consult a tax professional before assuming you are eligible for any tax credits.

**Renewable Energy Certificates (RECs) and Solar Renewable Energy Certificates (SRECs)**

Renewable Energy Certificates (RECs) are created whenever solar panels (or other renewable sources, like wind turbines) generate electricity; one megawatt-hour of generation equals one REC. They represent the environmental value of renewable power, and they can be bought and sold. Whoever owns the RECs has the legal right to say that they used that renewable power. This right is valuable to utilities which are required to supply a certain amount of their power from renewable resources. It is also valuable to businesses that want to be able to say they use renewable electricity.

In DC, there is a special kind of REC that goes with solar panels, called a Solar Renewable Energy Certificate, also referred to as an SREC. If you own your solar PV system, you have the option of keeping your SRECs or selling them. SRECs in the District are especially valuable, and selling them helps many DC residents save money with solar. If you want to sell your SRECs, your installer can help you with the necessary paperwork.

If you don't keep the SRECs that go with your installed solar system, you can't claim that the electricity you're using comes from solar panels. In that case, your panels are generating renewable solar electricity, but effectively, you're using regular electricity from the electric grid. Whoever buys the SRECs is using the solar electricity your panels generate. Additionally, if you're working with a community solar developer, they may not give you the option of keeping the SRECs.

## Finding a contractor and signing a contract

Buying solar panels, or signing a solar contract, is a major commitment, comparable to buying a car or undertaking major home renovations. Because a lot of money is at stake, it is very important to be careful and thorough in selecting a contractor.

Education and knowledge about the process is the key. Therefore, you should learn as much as you can before you begin talking to contractors. Understanding the difference between buying, leasing, and signing a PPA is very important, as well as understanding how net metering works, what the federal tax credit is, and what SRECs are. A good understanding of your electric bill is also important so that you will know what the potential is to reduce the bill with solar.

### Where to Look?

If you have friends or neighbors who have gone solar, ask them who they worked with, and whether they were pleased with the process and the result. Look at the work that was done.

The District Department of Energy and Environment (DOEE) has a list of area solar installers, available at [https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service\\_content/attachments/Solar%20Contractors%20and%20Installers%2008%2028%2017.pdf](https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/Solar%20Contractors%20and%20Installers%2008%2028%2017.pdf). Be aware that the District, DOEE, and OPC are not endorsing the installers on the list and make no claim regarding their performance.

Be cautious if you receive cold calls from solar installers and financing companies. You have no obligation to listen or to tell them anything. You are generally better off dealing with contractors you've identified as the ones you want to talk to.



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## Qualifications

Be sure that the contractor you choose has experience installing residential solar systems. Ask for the names and phone numbers of previous customers, and then follow up with those previous customers. Find out how many years the contractor has been installing solar systems, and how many systems they've installed. Ask for evidence that the contractor has workers' compensation insurance and liability insurance.

Make sure your installer has a home improvement salesperson license and a home improvement contractor license. You can confirm this at <https://eservices.dcrd.dc.gov/BBLV/Default.aspx> or by calling 202-442-4400 and pressing "4".

## Where to Check for Complaints

Check with the Better Business Bureau at <https://www.bbb.org/en/us/dc/washington> or (202) 393-8000 to see if there have been any complaints filed about a particular installer.

## Get Multiple Bids

As with any major project, you should ideally get bids from at least three different contractors before you decide who you want to install your system.

## What Bids Should Include

At a minimum, bids should include: total installation cost, including equipment and labor; system specifications, including system size in kilowatts; and estimated annual energy output, based on the orientation, tilt, and shading of the panels. Ask the contractor to supply a copy of the calculations for estimated energy output. For a leased system, or if the contractor will be providing financing, the bid should also include the amount of the monthly payments, and a schedule of changes to monthly payment amounts over the length of the lease. For a PPA, the bid should include the price per kWh, how that price will change over time, and an estimated monthly cost based on how many kilowatt hours the panels will generate.

It is helpful if bids also include your net financial savings over the life of the system. This is especially important if you're considering two different ownership or financing mechanisms, such as an owned system and a leased system, because it's difficult to compare them unless you know the potential net financial savings from each. Again, ask the contractor to include a copy of the calculations for net financial savings.

It is important that you make sure you understand the assumptions contractors made when they prepared their bids. For example, if you receive a bid to buy a system, is the total cost provided before or after you take the federal tax credit? If you receive a bid for a lease or power purchase agreement, does the bid assume that the solar financing company will take possession of the SRECs?

## Comparing Bids

Keep in mind that it's not just the numbers that matter. You might prefer going with a contractor that will install panels manufactured in the United States even if you have to pay a premium.

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You may also choose to hire a contractor with a slightly higher cost if they receive strong recommendations from past customers, or if they've been in business a long time and you're confident that they'll be around to help with any problems that arise in the future. If you're comparing a bid for a leased system to one for an owned system, you may decide that either owning or leasing a system is simply a better fit for you.

## The Contract

Be sure that you read your entire solar contract, and that everything you and the contractor have agreed to verbally is written in the contract before you sign it. Take your time and ask questions about anything you don't understand. Never let anyone pressure you into signing a contract before you're ready.

In addition to everything that's in the bid, the contract should include:

- **Warranties**—The contractor should provide you with copies of the warranties. Warranties should cover equipment and workmanship, and should include warranties for any damage to the roof during installation. Different parts of the system (like panels, inverters, and mounting equipment) may be warrantied for different amounts of time. Typically, the performance of the panels is warrantied for 25 years. Panel performance will degrade over time, but they should still be producing at least 80 percent of their original production after 25 years.
- **Payment schedule**—If the contractor will be paid in full when the project is built, the schedule may depend on construction milestones. If the contractor is involved in financing the project, the payment schedule may involve monthly payments.
- **Start and end dates of construction**—The contract should specify when construction will begin and when it will end.
- **Exact equipment to be installed**—It is important to know exactly which equipment a contractor plans to provide. Equipment quality varies. For instance, some solar panels operate more efficiently than others, and these will probably cost more. It may be worthwhile to invest in more expensive panels, but you should have a statement in writing of what you will get for your money.
- **Itemized budget**—The budget should include a detailed breakdown of equipment and other expenses.

## Bulk Purchasing

If you're a homeowner, one way you may be able to save money on a solar system is to participate in bulk purchasing through a solar co-op. Solar co-ops organize homeowners in a neighborhood to work together to get solar panels. All the homeowners in the coop work with the same solar contractor, and contractors compete to be selected by the coop. Once the contractor is chosen, each homeowner signs a separate contract for a solar system designed to meet their individual needs.

- **List of subcontractors**—It is important to know what work will be done by the contractor and what work will be subcontracted out. The contract should identify exactly who will be doing each part of the job.
- **Expected net financial savings**—Will you save money because of your solar panels? And if so, how much? Will you begin saving money right away, or not until you’ve had the system for years?

If your contract is for a lease or power purchase agreement, the contract should also answer:

- What is the length of the lease or power purchase agreement?
- What happens at the end of the lease or power purchase agreement?
- What happens if you want to end the contract early? Can you buy out the system? At what price?
- Does your contract include an escalation clause (a regularly scheduled increase in your payments over time)? How much is it? What will your monthly payments be each year?
- Who is responsible for system maintenance? What system maintenance responsibilities do you have?
- Who is responsible for removing and reinstalling the solar system if the roof needs to be repaired or replaced?
- Who do you notify if there’s a problem with your system?
- Does the contract include production guarantees? What happens if the guarantee isn’t met? How will you be compensated?
- Who insures the system?
- What happens if you sell your home? Are there fees to transfer the contract to the new owners? What happens if the new owner doesn’t want to assume the contract? Will you have to buy out the contract?
- What happens if you default on the contract? What happens if your payments are late?
- Can the company sell the contract to a new entity? Will you be notified if that happens?
- What happens to the system if the owner of the system goes out of business?

## Permitting

Your new solar system will require a permit from the District Department of Consumer and Regulatory Affairs (DCRA). Systems that are located in historic districts will also require approvals from the Historic Preservation Review Board. Make sure that your contractor is pursuing these permits.

Along with permits from the District, you will also need Pepco’s permission to connect your system to the grid. (See p. 8 on connecting to the grid.)

## Community solar

*Going solar without putting panels on your home*

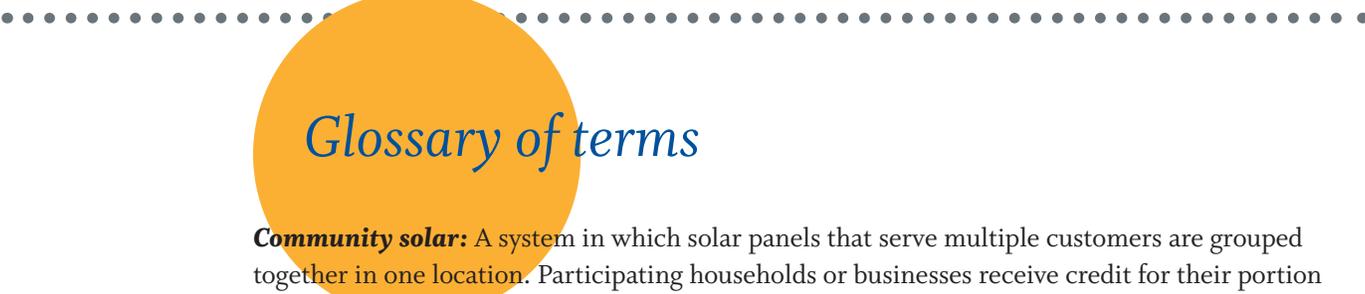


If you don't own a home, or your home isn't suited for solar panels, you can participate in community solar. Community solar is an arrangement in which multiple customers share the electricity and the economic benefits of solar power from a single project. A solar array large enough to serve multiple customers is built in a single location, and individual customers sign up to get part of the power the system generates. You can participate in a project that's located anywhere in the District.

Community solar contracts can be arranged in many ways. A community solar project could be organized, owned, or run by a company, by a community organization like a church, by a group of neighbors, by the owner of an apartment building, or by someone else.

When you participate in community solar in DC, you are credited on your electric bill for the electricity generated by your portion of the community solar array. Customers who have chosen to buy their power from a third-party supplier, rather than Pepco, can still participate in community solar.

As with any solar contract, it is important to read a community solar contract thoroughly before signing it. Some community solar contracts include long-term commitments of ten years or more. While community solar can be a good option that enables people without suitable roofs to enjoy the benefits of solar, including the financial benefits, there can also be downsides. It may be difficult to get out of a contract if you move away or simply decide that you don't want to participate any longer.



## Glossary of terms

**Community solar:** A system in which solar panels that serve multiple customers are grouped together in one location. Participating households or businesses receive credit for their portion of the output. See “Community solar” on page 17.

**Escalation clause:** A scheduled increase in monthly payments or in price per kWh, often included as part of a lease or PPA.

**Grid (or electric grid):** The coordinated network of electric wires, electricity generators (including big power plants and small solar systems), and electricity consumers. The grid delivers electricity wherever it’s needed.

**Kilowatt (kW):** A unit of power. Solar panels and solar systems are described in terms of kilowatts.

**Kilowatt-hour (kWh):** A unit of energy. Kilowatt-hours are kilowatts over an amount of time. If you use one kilowatt for an hour, you’ve used one kilowatt-hour. The output from solar panels is described in terms of kilowatt-hours. The energy usage of a home is also described in terms of kilowatt-hours.

**Lease:** A contractual agreement in which somebody else (a third-party owner) owns solar panels and you lease the panels from the owner.

**Net metering:** A system that allows a customer with solar panels to receive credits from the utility for excess electricity produced and exported to the grid. See “Net Metering” on page 8.

**Power Purchase Agreement (PPA):** A contractual agreement in which somebody else (a third-party owner) owns solar panels and you buy the electricity generated by the panels.

**Renewable Energy Certificate (REC):** A tradeable commodity representing the environmental attributes of renewable energy. See “Renewable Energy Certificates (RECs) and Solar Renewable Energy Certificates (SRECs)” on page 12.

**Solar Renewable Energy Certificate (SREC):** A type of REC specifically for electricity generated from solar panels.

**Tax credit:** A tax credit is an amount that you deduct from the income tax that you owe. There is a federal solar tax credit available for 30 percent of the cost of installing a home solar system. Not everyone is able to take advantage of this. See “The Income Tax Credit (ITC)” on page 10.

**Third-party owner:** A company that owns solar panels and either leases them to consumers or sells the power through a power purchase agreement. If you have a lease or power purchase agreement, the company you sign the contract with is the third-party owner.



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## Resources

DC Department of Energy and Environment (DOEE) solar information page:

<https://doee.dc.gov/solar>

DC Department of Energy and Environment (DOEE) Solar for All Program to provide the benefits of solar to low-income households: [www.doee.dc.gov/solarforall](http://www.doee.dc.gov/solarforall)

DC Office of People's Counsel (OPC) consumer assistance for problems with utilities:

<http://www.opc-dc.gov/consumer-assistance?view=landingpagemanager>

DC Office of Attorney General (OAG) consumer assistance for complaints about businesses, including solar installers: <https://dcforms.dc.gov/webform/oag-consumer-complaint-form#overlay-context=webform/oag-consumer-complaint-form>

DC Department of Consumer and Regulatory Affairs (DCRA) information about permitting:

<https://dcra.dc.gov/sites/default/files/dc/sites/dcra/publication/attachments/DCRA%20Solar%20Permitting%20Guidelines%20FINAL%2007-25-16.pdf>

# *A DC Consumer's* **GUIDE TO GOING SOLAR**



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