

Understanding Solar Purchasing Options

Self-Owned System Options

	Cash Purchase	Loan or Line of Credit	GreenFinanceSF (PACE financing)
Eligible Customers	Residential, Commercial, and Non-Profit/Government	Residential, Commercial, and Non-Profit/Government	Non-residential, and multifamily rental w/ 5+ units. Visit www.greenfinancesf.org for more information.
Description	You buy and install the system outright, and enjoy reduced utility bills thanks to free solar electricity from the system.	A home equity loan or a secured line of credit. With loans you can often go solar without high upfront payments. Fixed and variable interest rates are available.	PACE, or Property Assessed Clean Energy financing, is a City-sponsored program that provides the ability for private project lenders to fund the upfront cost of the system (after any rebates and incentives), and you repay the financing for the system with a special tax for up to 20 years through a special line item on your property tax bill.
Advantages	<ul style="list-style-type: none"> No ongoing payments; free electricity from the sun reduces your utility bill. You own the system so you can take advantage of federal tax credits (and depreciation, for commercial owners). 	<ul style="list-style-type: none"> Low to no upfront payment. You own the system so you can take advantage of federal tax credits. Free energy after loan repayment. You can write off the interest on a line of credit. 	<ul style="list-style-type: none"> Low to no upfront payment. You own the system so you can take advantage of federal tax credits. Doesn't require good personal credit history, only that you're current on your mortgage payments, you've paid property taxes on time for the past 3 years, and don't have more property debt than your property is worth. Repayment period matches the useful life of the system (e.g. up to 20 years for solar), so payments should be equal to or less than utility bill savings. If you sell the property, the special tax stays with the property (as does the solar system), and the new owner automatically takes over payments.
Risks & Other Considerations	<ul style="list-style-type: none"> Other than warranties on the solar panels and electrical components, you are not protected against system underperformance; the amount of electricity your system will generate is not guaranteed. You are responsible for system maintenance. 	<ul style="list-style-type: none"> You use your assets as collateral for the solar system. You must pay interest on the loan. You are responsible for system maintenance. 	<ul style="list-style-type: none"> Other than warranties on the solar panels and electrical components, you are not protected against system underperformance; the amount of electricity your system will generate is not guaranteed. You must undertake energy efficiency improvements that demonstrate a 10% reduction in your energy use before you can finance a solar system through GreenFinanceSF. Requires a qualified energy efficiency audit (ASHRAE Level I for buildings <50K sq. ft., ASHRAE Level II for buildings <50K sq. ft.) You must obtain your mortgage lender's consent to participate in program. You must pay interest on the financing. You are responsible for system maintenance.
Upfront Costs	You are responsible for the full cost of the equipment and installation upfront.	Low to zero upfront. Varies, depending on structure of loan.	Low to no upfront payment, depending on your agreement with your installer during initial pilot period (costs covered by grant funds).
Monthly Costs	None.	Fixed monthly payments. For large energy users, savings on utility bills are greater than monthly loan payments.	Fixed semi-annual payments on your property tax bill. For large energy users, savings on utility bills should be greater than special tax payments.
Maintenance	Unless maintenance is included in your contract with the installer, you will be liable for maintaining the system.	Unless maintenance is included in your contract with the installer, you will be liable for maintaining the system.	Unless maintenance is included in your contract with the installer, you will be liable for maintaining the system.
Purchase Options	You own the system from day one.	You own the system from day one.	You own the system from day one.
Requirements	<ul style="list-style-type: none"> Building ownership Upfront capital 	<ul style="list-style-type: none"> Building ownership Good credit, plus typically 20% equity in your building 	<ul style="list-style-type: none"> Building ownership, and current on mortgage payments. 3 year history of on-time property tax payments. Can't be "underwater" with respect to property-based debt & property value. Energy efficiency audit, and 10% efficiency improvement as a condition for installing solar.

Understanding Solar Purchasing Options

Third-Party Ownership Options

	Lease	Power Purchase Agreement (PPA)
Eligible Customers	Residential and Commercial	Residential, Commercial, and Non-Profit/Government
Description	A solar lease is very much like a car lease, where you lease the equipment for a set period of time, and benefit from the electricity it produces during that lease period. Requires low or in some cases, no upfront payment. Payments in a lease are comparable to payments under a PPA.	A power purchase agreement is solar as a service. With a PPA you only pay for the electricity your solar system produces, plus usually an upfront fee. You host the solar system on your roof and pay for the energy it generates at a rate typically below your current utility rates. Payments under a PPA are comparable to payments under a lease.
Advantages	<ul style="list-style-type: none"> • Low to no upfront payment. • An option for those who do not have upfront cash, who do not qualify for or prefer not to take, a home equity loan. • System performance is normally guaranteed • Predictable lease payments over time (and thus stable electricity rates) • If system performance is better than expected, you get a lower electric bill for the same fixed lease payment. • Lease provider takes advantage of advanced depreciation and federal tax credits even if you have little or no tax liability, and pass the savings on to you. 	<ul style="list-style-type: none"> • Low to no upfront payment. • An option for those who do not have upfront cash, who do not qualify for or prefer not to take, a home equity loan. • Predictable electricity rates over time • Solar provider has incentive to ensure maximum system performance, as they are only paid based on solar electricity produced. • PPA provider takes advantage of advanced depreciation and federal tax credits even if you have little or no tax liability, or are tax-exempt, and passes the savings on to you.
Risks & Other Considerations	You pay the same amount per month regardless of how your system performs, although vendor typically offers a performance guarantee. If system output is lower than expected, your overall electricity bill (lease plus utility) may increase. If you sell the property before the end of the lease contract, you may have to buy the system or pay the remaining contract value if the new owner does not choose to take over the agreement.	If utility electricity rates unexpectedly decline over the term of your PPA, you may end up paying more for the electricity from your solar system than you would if you used only electricity from your utility. If you sell the property before the end of the PPA contract, you may have to buy the system or pay the remaining contract value if the new owner does not choose to take over the agreement.
Upfront Costs	Low to zero upfront, or lease can be fully prepaid if customer prefers. Varies depending on service provider.	Typically lower than a loan down payment, and sometimes zero. Entire PPA can also be fully prepaid upfront if customer prefers.
Monthly Costs	Savings on utility bills should exceed solar lease payments. Lease payments may escalate over time, but should not increase faster than utility rates.	Energy costs typically set at or below current utility rates. PPA rates may escalate over time, but should not increase faster than utility rates.
Maintenance	Usually covered by lease provider. Discuss with installer or lease provider.	Responsibility of solar PPA provider.
Purchase Options	Can purchase when property is sold or at fixed points of contract. For residential customers, purchase options prices are predictable and are set in advance. For non-residential customers, buyout prices are determined via third-party appraisal.	Building owner may purchase at fixed points of contract. At time of sale, system is appraised by a third-party and then sold at market current market rates.
Requirements	<ul style="list-style-type: none"> • Home/Building ownership: Owner occupied or long-term lease (15+ years) • Credit: must have good personal credit, be a publicly traded corporation or have auditable financials / D&B rating • Physical requirements: Large roof or open space for commercial property (minimum 50,000 sq ft for 50 kW system, but preferably 100,000 sq ft or more); roughly 100-500 sq. ft of roof with southern exposure for residential, with high household electricity use. 	<ul style="list-style-type: none"> • Home/Building ownership: Owner occupied or long-term lease (15+ years) • Credit: must have good personal credit, be a publicly traded corporation or have auditable financials / D&B rating • Physical requirements: Large roof or open space for commercial property (minimum 5,000 sq ft for 50 kW system, but preferably 100,000 sq ft or more); roughly 100-500 sq. ft of roof with southern exposure for residential, with high household electricity use.



For more information please visit www.sfenergymap.org or email renewables@sfgov.org
SF Environment. Our home. Our city. Our planet.

SF Environment is a department of the City and County of San Francisco