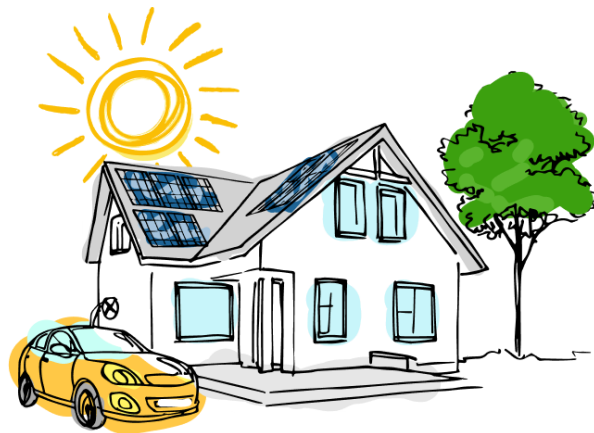


Your Guide to Solar Financing

Executive Summary

This guide provides an overview of two primary financing pathways for consumers (households and businesses) looking to install solar panels: bank loans and (third party) Power Purchase Agreements (PPAs), typically offered by solar installers.

Solar energy offers long-term savings, reduced carbon emissions, and increased energy resilience. However, the upfront cost can be a barrier. Bank financing is the recommended first step for most consumers. Banks offer a range of loan products, including green loans with 0–1% interest rates for the first 2–5 years, that make solar ownership more accessible and financially attractive. After the initial term, these loans typically revert to standard mortgage loan rates, which may not suit everyone, but the long-term benefits of owning the system do outweigh the short-term costs.



If bank financing isn't an option due to credit or financial constraints, a PPA may provide an alternative. PPAs allow consumers to access solar without upfront costs by the consumer paying a fixed rate per kWh to a third-party provider. However, PPAs are not the preferred route for most consumers, as they result in lower overall savings and many do not offer system ownership. Additionally, PPAs often include annual price escalations and may complicate property sales.

We recommend exploring bank loan options first to maximise long-term savings and system ownership. Consider a PPA only if financing is inaccessible and you still want to benefit from solar energy.

What are my options?

Installing solar panels is a smart way to reduce electricity bills, carbon emissions and increase resilience, however, the upfront cost can be a barrier. Fortunately, there are financing options available to help you go solar without paying for everything upfront. This guide outlines two of the most common models and helps you choose the one that best suits your needs.

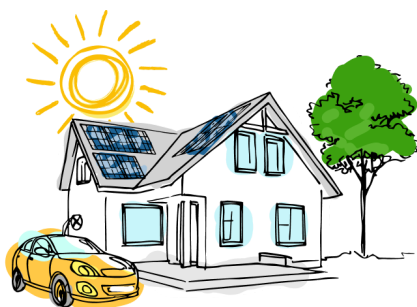
Option 1: Bank Loans

A bank loan allows you to borrow money to pay for the solar system upfront, then repay the loan over time with interest. You own the system from day one and benefit from all the electricity savings and export earnings. The types of loans available are:

- **Green Loans** – Offered by some banks specifically for energy-efficient upgrades, often with favorable terms, such as 0-1% interest.
- **Home Improvement Loans** – Secured against your property, often with lower interest rates.
- **Personal Loans** – Unsecured, easier to access but may have higher interest rates.

Pros	Cons
You own the system and all the benefits.	Requires good credit and financial stability.
Potential increase in property value.	Monthly repayments may offset short-term savings.
Long-term savings once the loan is repaid.	You bear the maintenance and performance risk.

Some bank loans to explore:



Homes

- [ANZ Good Energy Home Loan](#)
- [Westpac Greater Choices Home Loan](#)
- [BNZ Green Home Loan](#)
- [ASB Better Homes Top Up](#)



Businesses

- [ANZ Good Energy Agri Loan](#)
- [ANZ Business Green Loan](#)
- [BNZ Green Business Loan](#)

Option 2: Power Purchase Agreement (PPA)

Under a PPA, a third party installs and owns the solar system on your property. You agree to buy the electricity it produces at a fixed rate, which is usually lower than your current grid electricity rate. The amount earned from any exported solar is often split between you and the third party, so you will receive a lower rate for exported solar than what electricity retailers would typically pay you.

How It Works:

- There are no upfront costs associated with the agreement.
- You pay per kWh of solar electricity consumed.
- The provider owns, maintains and monitors the system.

Pros	Cons
No upfront investment.	You don't own the system.
Lower electricity costs from day one.	Limited control over system design and upgrades.
Maintenance and performance are handled by the provider.	Long-term contracts may have restrictions or escalation clauses.
	Often, a low price is paid to you for solar exported to the grid, as the export earnings are split between you and the third party.
	PPAs often include an annual indexation, so the rate you have to pay the third party increases every year. If this increases at a faster rate than grid electricity, the annual savings you make will reduce every year.
	If the property goes up for sale, the new owner must agree to take on the PPA, which could affect the sale or valuation.

Summary and Recommendations

When considering how to finance your solar installation, **bank financing should always be your first option**. Many banks offer attractive green or home improvement loans, including zero to 1% interest rates for the initial term, typically between 2-5 years. These options can make solar ownership highly accessible and cost-effective.

After the initial term, these loans usually revert to the bank's standard personal loan interest rates. While this may not suit everyone, especially those with limited credit history or financial flexibility, it's still the most beneficial route in the long run. Owning your solar system means you'll reap the full financial benefits for the entire lifespan of the panels, which can be up to 30 years.

If bank financing isn't feasible, a Power Purchase Agreement (PPA) may be a viable alternative. However, it's important to understand that **PPAs are not the recommended route for most consumers**. While they offer no upfront costs and lower electricity rates, you never own the system (in most cases), and your overall savings are significantly reduced compared to ownership.

In short:

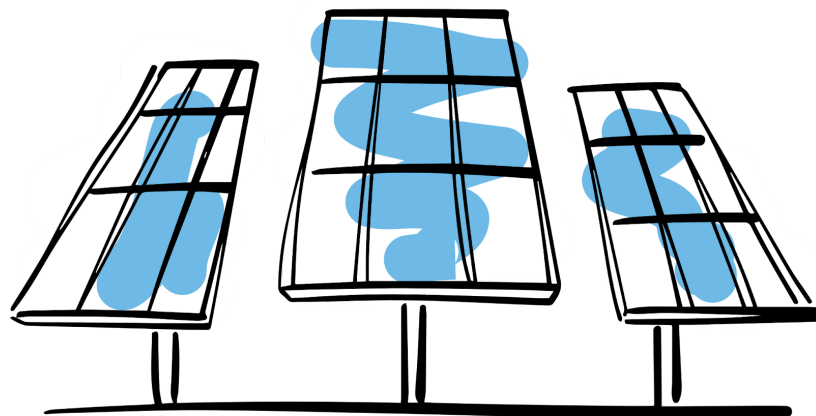
- Start by exploring bank loan options, they offer the best long-term value.
- Use PPAs only if financing is not accessible, and you still want to benefit from solar without upfront investment.



Case Study: Solar Financing for a Commercial Property

Executive summary

The Queenstown Electrification Accelerator assisted a local business to understand the best option for financing a new 136kW solar panel array. Various financing options were compared, including buying the system outright, a Power Purchase Agreement (PPA) and through bank loans of 5% and 8% for 15 years.



The table below summarises the savings achieved with each financing option over the panel lifetime (30 years), in comparison to having no solar.

	Saved with PPA	Saved with solar purchased at 8% finance	Saved with 5% finance	Saved with solar purchased upfront
	*Savings in comparison to having no solar			
Total electricity costs over 30 years	\$424,696	\$514,389	\$603,790	\$776,176

Significant savings can be achieved from financing the solar panels upfront, in comparison to the PPA financing option. Moreover, the two financing options evaluated also give significantly higher overall savings.

If financing the solar panels upfront is not a viable option, it is recommended that financing options through the banks are investigated, rather than a PPA agreement, due to the substantial savings that can be achieved long term.

Solar financing Evaluation

The table below compares total electricity costs and savings across four solar financing options: Power Purchase Agreement (PPA), bank financing at 8% and 5%,

and upfront payment, against a baseline of no solar investment over 10, 20, and 30 years.

	Do Nothing: grid electricity only	Option 1: PPA		Option 2: Financed with loan of 8% for 15 years		Option 3: Financed with loan of 5% for 15 years		Option 3: Self funded	
Total electricity costs over:	Electricity costs	Electricity costs	Savings compared to no solar	Electricity costs	Savings compared to no solar	Electricity costs	Savings compared to no solar	Electricity costs	Savings compared to no solar
10 years	\$1,311,602	\$1,242,261	\$69,341	\$1,407,080	-\$95,479	\$1,347,479	-\$35,877	\$1,304,870	\$6,731
20 years	\$3,111,645	\$2,902,315	\$209,330	\$3,041,206	\$70,439	\$2,951,804	\$159,841	\$2,779,418	\$332,227
30 years	\$5,491,121	\$5,056,425	\$434,696	\$4,976,732	\$514,389	\$4,887,330	\$603,790	\$4,714,944	\$776,176

10-Year Outlook: The PPA offers the highest savings due to no upfront costs, allowing immediate financial benefits. The two financed options result in negative savings compared to no solar, due to the time required to recover initial investments and the cost of finance.

20-Year Outlook: The upfront payment option becomes the most advantageous, yielding \$332,227 in savings, significantly higher than the savings from the PPA (\$209,330). Both financing options also enable positive savings.

30-Year Outlook: The upfront payment and bank financing options (both 5% and 8%) outperform the PPA significantly. This shift reflects the long-term payoff of owning the solar system outright, where savings compound after the initial investment is recovered.

Summary and recommendations

While the PPA offers immediate savings and avoids upfront costs, it delivers the lowest long-term financial benefit. To maximise savings over time, it is recommended that the business explore bank financing options, particularly at lower interest rates, or consider an upfront investment if feasible. These approaches significantly increase total savings over the system's lifetime.

Modelling assumptions

- The price of electricity from the grid will increase by:
 - Year 2025 - 2026: 8.54%
 - Year 2027 - 2030: 5.6%
 - Year 2031 onwards: 2.83%
 - Source for energy price inflation data: MBIE historic inflation reconciled with DPP4 allowances for EDBs and Transpower.^{1 2}
- PPA agreement pays 8c per KW exported (as per standard PPA).
- PPA agreement charges 15c per KW consumed (as per standard PPA). Note that many PPAs charge at a higher rate than this e.g. 10% off retailer prices.
- Electricity use remains the same as throughout the 30 year period.

1

www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/energy-prices/electricity-cost-and-price-monitoring&sa=D&source=docs&ust=1758667360534089&usg=AOvVaw0Wo3RTagSJuiMkojuHN9s9

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