



**ENJOY THE BENEFITS OF  
AFFORDABLE, CLEAN ENERGY.**

PH: 1300 452 285

[www.solarbay.com.au](http://www.solarbay.com.au)



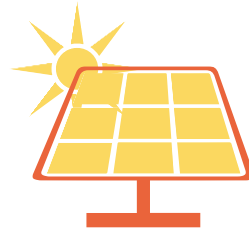
# THE FACTS



The cost of purchasing electricity from the national grid in Australia has increased substantially. The average cost between 2012-2016 was \$46.19MWh. For the 2017 calendar year, that figure is \$110.17, a **139%** increase.



That's **4.62c** to **11.02c** per kWh in 5 years



The cost of producing electricity from a solar system has reduced significantly. Over the same time period, the cost of a large scale solar installation has fallen from \$1.50 per watt to \$1.15 per watt, a **24%** reduction.



That's **\$1.50** to **\$1.15** per watt in 5 years



## WHAT THAT MEANS FOR YOU?

When you roll off your old energy contract you will be paying substantially more for the energy component of your bill. This will increase your total bill by 30-70% for a typical commercial or industrial building.

Thankfully there are now cost effective alternatives to purchasing energy from your retailer. In the majority of circumstances solar is now the cheapest way to procure energy during the daytime, you also don't need to pay for the transmission and distribution of the power to your building. Switched on. THAT'S WHERE WE COME IN.



## TWO OPTIONS FOR SOLAR



1

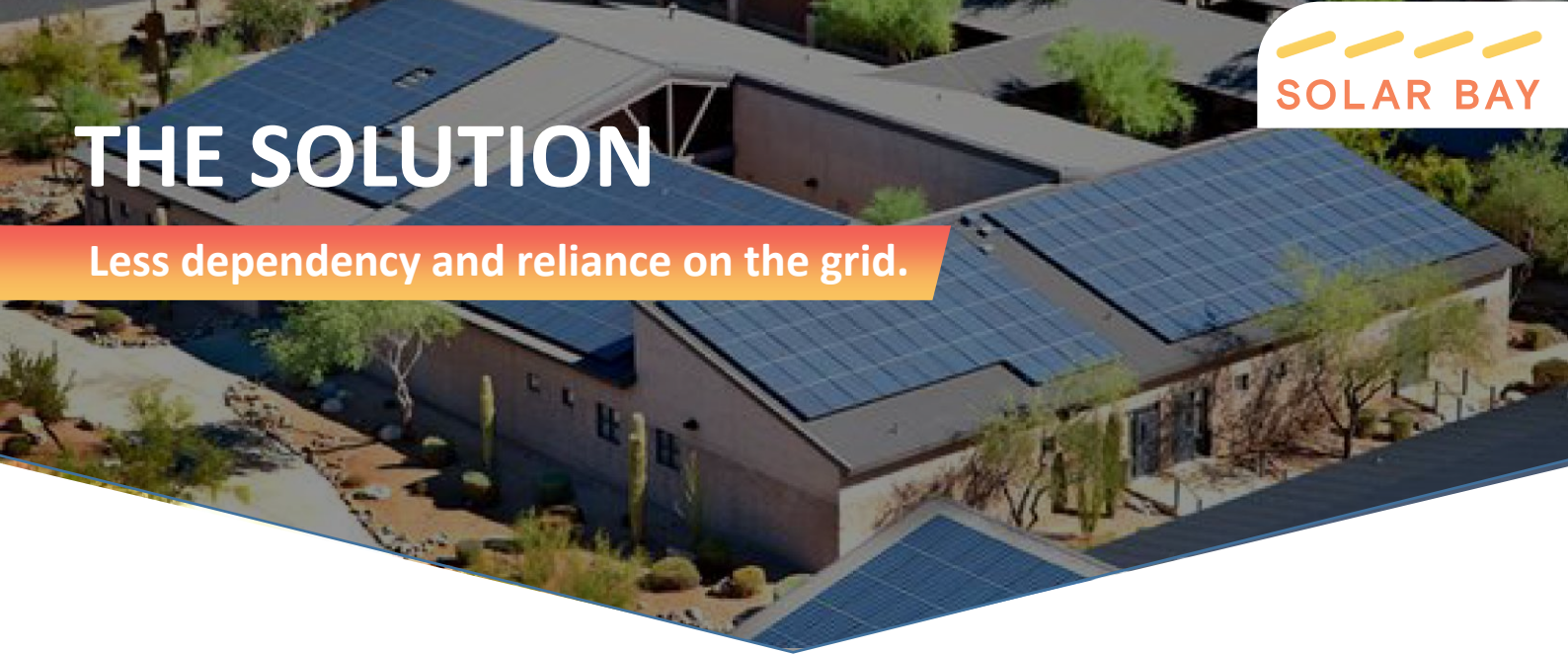
Solar Bay specializes in power purchase agreements (PPA), that's where we install, own and operate the solar system and provide a set price for the power we sell for a duration of 10-30 year. After that period the ownership of the system transfers to you, or we can rollover the PPA contract.

2

Alternatively, if you would like to own the solar system we can install the system for a one off cost. The system is identical to one that we would install and own under a PPA so you know the equipment and installation is of the highest quality.

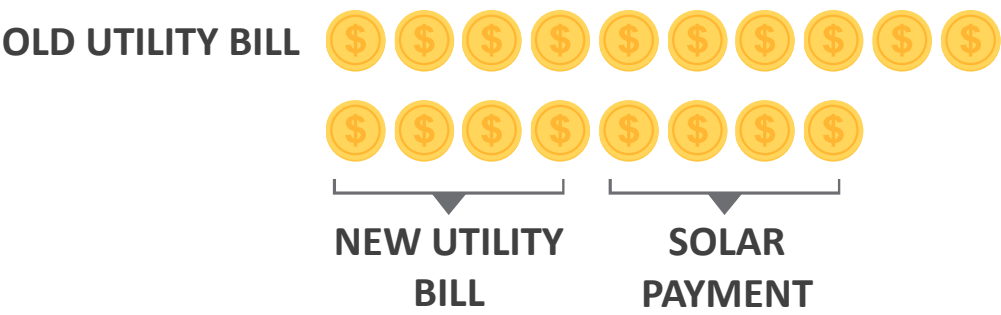
# THE SOLUTION

Less dependency and reliance on the grid.



## SOLAR BAY'S SOLUTION SOLAR POWER PURCHASE AGREEMENT

So what is, and how does a Power Purchase Agreement work?



### FEASIBILITY

Solar Bay assesses your energy usage profile, building suitability, and current electricity procurement arrangements.

### INSTALLATION

Solar Bay manages the installation end-to-end. Including negotiations with the distribution network and electricity retailers.

### PROPOSAL

Solar Bay puts together a proposal on the recommended installation size and sets out a schedule with the cost for all the solar energy produced over the next 10-30 years.

### UPGRADES

We will remotely monitor the system to ensure optimal operation, and recommend improvements such as batteries, load management or more solar will as the distributor energy industry develops.



# NO UPFRONT INVESTMENT


A solar power purchase agreement is a long term contract between two parties, one party (Solar Bay) designs, finances, installs, maintains & upgrades the solar PV system. The other party agrees to purchase the power produced for a set period of time, usually at a cheaper rate than they are currently paying. This allows Solar Bay to invest in solar for you, so you don't have to spend time, capital, & resources on non-core business activities. Depending on the site location and solar irradiance, we may mount the solar modules on the rooftop, on ground mounts, or on solar car shades.




The power purchase agreement also gives you more control over rising power bills as you become less dependent on the grid for power.


## EXAMPLE CASE STUDY

### Dudley Hotel Bathurst

 Power Purchase Agreement

**25kW** 25 KW System

 Meet's up to 30% of total energy needs.

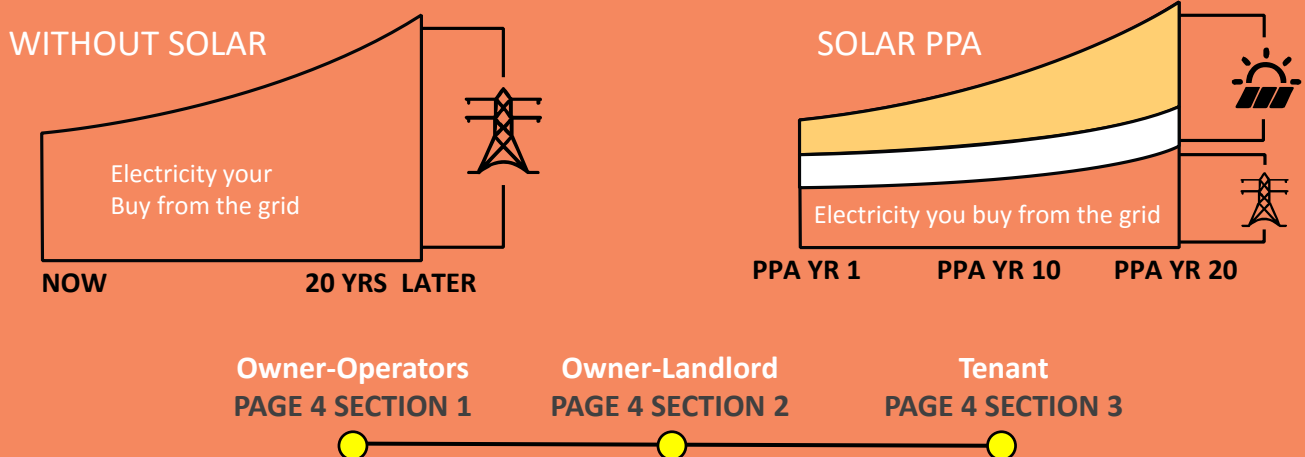
 \$0 up front.

*"I am saving up to \$400 a month now, but I wouldn't care if it was only \$100 because there have been no upfront costs, and after the agreement, the whole lot will be mine with no penny outlay."*

*Robert 'Stumpy' Taylor*

## WHAT ARE THE BENEFITS FOR YOU?

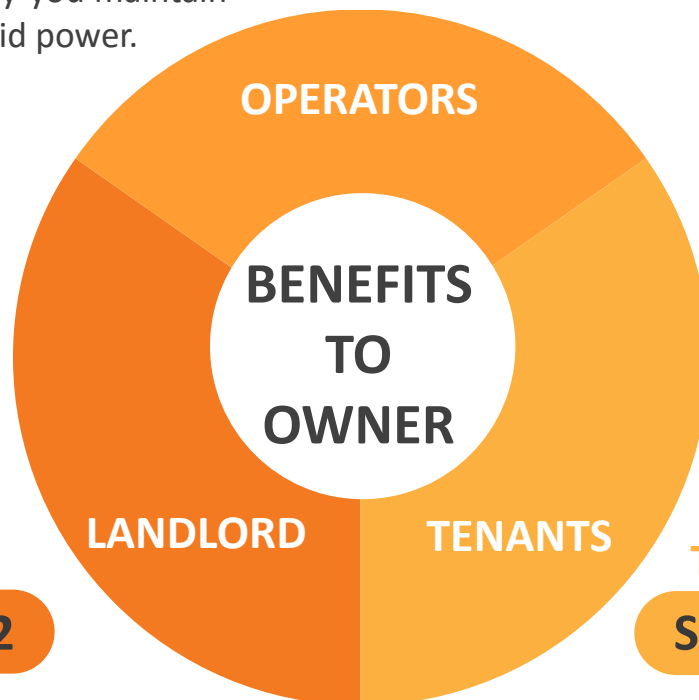
The benefits of a solar power purchase agreement depends on a number of variables, with the biggest being the ownership structure of the property. We have many clients in multiple scenarios so we like to break them up into categories. Please identify with one of the categories below and go to the correlating section to see what benefits you'd enjoy with solar PPA's from solar Bay.



## LANDLORD

### SECTION 1

- Removal of the burden of ownership of a system.
- Reduced reliance on the grid.
- Immediate savings on electricity cost.
- Electricity remains an operational expense.
- Zero monitoring with ongoing power saving recommendation.
- Built in redundancy-you maintain access to mains grid power.
- Potential to easily expand and/or add on new technologies as required.
- Only deploy hard earned capital to core projects
- Become a progressive company and advertise that facts
- Potential increase in property value.
- Potential improvement of NABERS rating.



## LANDLORD SECTION 2

- New revenue source from the rental of your roof space.
- Potential improvement of NABERS rating.
- Potential to charge a higher lease.
- Potential increase in property value.
- Partial expense hedge if tenant is on a gross lease which includes electricity.
- Potential increased access to capital due to improved energy rating of buildings.

## TENANTS SECTION 3

- Removal of the burden of ownership of a system.
- Reduced reliance on the grid.
- Immediate savings on electricity cost.
- Electricity remains an operational expense.
- Zero maintenance of the system.
- 20/7 remote monitoring with ongoing power saving recommendations.
- Built in redundancy-you maintain access to mains grid power.
- Potential to easily expand and/or add on new technologies as required.
- Only deploy hard earned capital to core projects
- Become a progressive company and advertise that facts.

# REDUCING YOUR ENERGY COSTS HAS NEVER BEEN SO EASY.

Go with Solar Bay and future proof your building and business with the power of solar



## INTERDEPENDENCE

Take charge of your energy cost and remove entire dependence on the grid. On average a solar system reduces grid use by 20-40%



## SAVING

Solar is often the cheapest method to procure electricity. Depending on your energy consumption profile you can save up to 30% off your bill.



## REPUTATION

Show you're serious about helping the environment to your clients and prospects by reducing your carbon emissions.



## CONTROL

Enjoy predictably lower energy cost while having your own tailored dashboard to keep tracking your saving.



## OPTIONS

Either pay \$0 upfront with a PPA, or purchase the system outright. We love options as much as the next guy.



## FUTURE PROOF

We want an ongoing relationship. That's why our research and development team are always monitoring your energy usage to proactively help you save even more money.

## DID YOU KNOW WHAT AFFECTS YOUR ENERGY

### +ENERGY CHARGES



This is cost of generating the electricity at a power station, multiplied by how many units (kWh's) you have used. The price of electricity varies in each state and fluctuates every 30 minutes in the wholesale energy markets, your energy retailer will fix the rate that you pay for each unit for the duration of contract period.

### +NETWORK CHARGES



This is the cost of getting the energy from the power station to your premises. This includes Transmission (power pylons) and Distribution (power poles). Some of these charges will be fixed, such as a daily supply charge, and others will be variable, based on how many kWh's you've used.

### +METERING COSTS



The metering costs are the costs of installing and reading your electricity meter. This would usually be an insignificant cost on your bill.

### +CAPACITY CHARGES



A capacity charge is part of the network charges for large electricity consumers. This cost is generally based around the premises maximum electricity usage over a 30 minute time window, over rolling 12 month period. Capacity charges often make up 20-30% of a total energy bill if applicable.

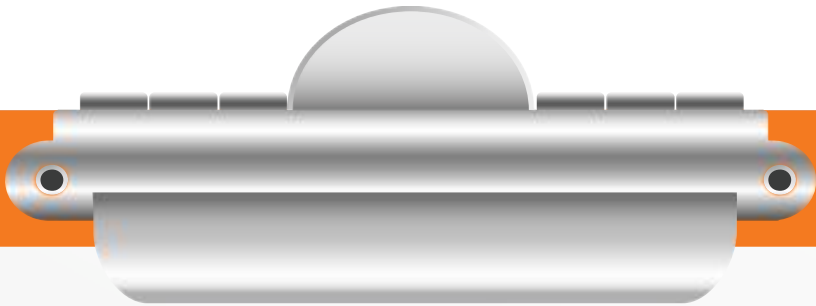
### +ENVIRONMENTAL CHARGES








This is the cost of operating the government renewable schemes such as the small-scale renewable energy scheme, and large-scale renewable energy target. These are based upon energy usage and will typically make up around 5% of a total energy bill.

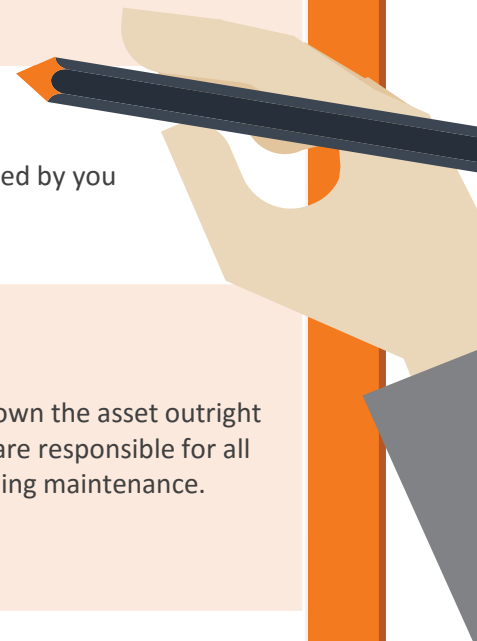
**Combined together, this leads to an extremely bloated bill that you're forced to pay.**

But, with the right technology, advice and external energy sources, we have the ability to significantly decrease your business energy bill. It's time to ask for a no-obligation energy audit by one of our team, so we can improve your companies bottom-line.



# PPA OR OUTRIGHT PURCHASE

OPTIONS	PPA MODEL	CAPITAL PURCHASE
 <p><b>COMPANIES THAT WANT THIS</b></p>	<p>Companies looking to add margin to their bottom line through energy savings. They want to go solar with zero upfront investment in their core business and to market themselves as green.</p>	<p>Companies looking to invest in their site to reduce operating costs. Safe mature technology with predictable returns can afford to deploy capital in assets other than their core industry</p>
 <p><b>TYPE OF AGREEMENT</b></p>	<p>Ongoing purchase of solar energy generated by the system at a competitive tariff for a specified term.</p>	<p>Upfront purchase of a solar energy system.</p>
 <p><b>WHO WILL FUND THE ENTIRE COST</b></p>	<p>Funded by Solar Bay</p>	<p>Funded by you</p>
 <p><b>WHO OWNS THE SYSTEM</b></p>	<p>The system is owned, operated and maintained by Solar Bay in accordance with the terms and conditions for the duration of the agreement.</p>	<p>You own the asset outright and are responsible for all ongoing maintenance.</p>
 <p><b>TAX CONSIDERATIONS</b></p>	<p>The cost of solar energy is an operating expense which may be tax deductible.</p>	<p>Asset may be able to be depreciated, generally over a 20 year deemed lifespan.</p>



# WHY WOULD YOU GO WITH SOLAR BAY'S POWER PURCHASE AGREEMENT?

## OPPORTUNITY COST.

Before going ahead with a significant investment, you have to think about the opportunity cost. We know you want to help the environment and create significant savings for your business, that's why we are providing the option for Solar Bay to fully fund the solar install, giving you the ability to have instant savings without the upfront capital cost.



## MAINTENANCE.

One of the brilliant things about solar power is the maintenance is minimal, but it's still a consideration. Solar Bay has electricians and specialized cleaners to maintain our solar panels on a regular bases. We can also supply a Maintenance program to your outright system at a low monthly fee.

## INSURANCE

Solar Bay only use products that have manufacturers warranties between 10-25 years. The things that are out of our control like extreme weather events often require insurance, if you buy the system outright you may need to consider the extra cost of that.

## RISK

Whether you are looking at a system under or over 100kW, there are different risks involved with the government subsidies available.

**100KW**

SOLAR SYSTEM	SYSTEMS BELOW	SYSTEMS ABOVE
WHAT'S THE DIFFERENCE?	Solar systems below 100kW are classed by the government as a non-commercial system.	Solar systems above 100kW are classed by the government as a commercial system.
GOVERNMENT SUBSIDY	Small-scale Technology Certificates	Large-scale Technology Certificates
HOW DOES THE GOVERNMENT SUBSIDY WORK?	STC's are designed to be an upfront subsidy to the non commercial solar system. A government calculator provides the number of STC's available for the particular solar system which is then multiplied by the relatively fixed market STC value.	LS-REC's are an ongoing subsidy for a large commercial solar system. The LS-REC's are then traded on the open certificate market on a quarterly basis. The price's can be volatile at times and total value of the subsidy received is not guaranteed.
WHAT'S THE BEST FOR YOU?	To find out the best system for you we have to consider a number of following criteria: Your energy consumption profile   The capacity of your roof   The size of your roof/site   Your financial position & credit rating	



# WHAT'S THE NEXT STEP?

GET YOUR SOLAR SYSTEM INSTALLED IN FIVE STEPS

## 5 EASY STEPS

1

### SITE INSPECTION.

Solar Bay will conduct a thorough site inspection, ensuring the structural integrity of the building, and assessing the best location for the system.



2

### SYSTEM DESIGN.

Our accredited Clean Energy Council (CEC) engineers will design a tailored solution to suit your business.



4

### SYSTEM INSTALLATION.

Solar Bay's CEC accredited team will install the solar system. This usually takes one to two weeks depending on system size and complexity



3

### CONNECTION APPLICATION.

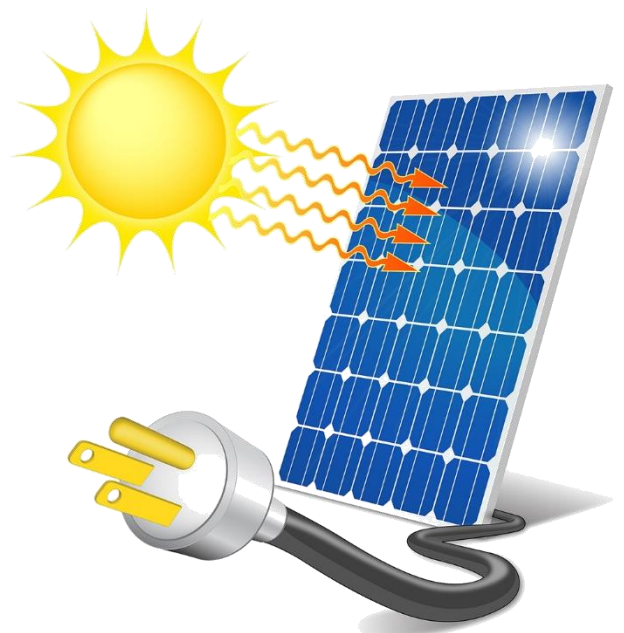
We'll do all the paperwork to arrange the solar system's grid connection.



5

### COMMISSIONING.

Solar Bay will arrange for the solar system to be activated and connected to the electricity network, and for your meter to be upgraded if required. The system is now ready to help power your business.



# THE SAVINGS OF SOLAR COULD BE A MILLION DOLLARS REVENUE?



POWER USAGE PER MONTH	EQUIVALENT REVENUE EARNINGINS			
	3 YEARS	10 YEARS	16 YEARS	20YEARS
\$2,000	\$54,000	\$180,000	\$288,000	\$360,000
\$4,000	\$108,000	\$360,000	\$576,000	\$720,000
\$8,000	\$216,000	\$720,000	\$1,152,000	\$1,440,000
\$20,000	\$540,000	\$1,800,000	\$2,880,000	\$3,600,000

**INVESTMENT \$0 ONGOING MAINTENACE \$0**

**ASSUMPTIONS ARE:**  
 1) 15% reduction of your electricity bill with a PPA.  
 2) Profit margin of the business is 20%.



# WHAT TO EXPECT FROM SOLAR BAY OVER THE NEXT 5 YEARS



## BETTER ENERGY STORAGE

While always in communication with battery solution manufacturers, we will be in the forefront of battery solution design and integration with solar. Connected into the global battery pricing index, we will pro-actively install batteries to improve the performance of the solar system on your premises.



## PEER-TO-PEER ENERGY TRADING

Peer to peer energy trading is just around the corner, with a solar system installed you can participate in this market when operational. We'll arrange for your meter to be upgraded, and any surplus electricity can directly be sold to an energy user, creating a new revenue stream for your business.



## INTELLIGENT TECHNOLOGY

Using the latest technology to create better efficiency is one thing. Using artificially intelligent software algorithms and new state-of-the-art software and hardware to reduce your energy consumption is a whole other thing.



## PRO-ACTIVE ENERGY SAVING

We will have both software and real humans assessing your power usage data on a regular basis which will allow Solar Bay to make recommendations on better power management within your business to save you further funds.



## CONTINUED RESEARCH AND DEVELOPMENT

The power purchase agreement also gives you more control over rising power bills as you become less dependent on the grid for power.



## SMARTER INTEGRATED TECHNOLOGY

Partnering with smart tech companies gives Solar Bay's customers the opportunity to integrate with external hardware like manufacturing equipment, air-conditioning, heating, lighting and hot water systems to save you even more money on your electricity costs.



# FREQUENTLY ASKED QUESTIONS

## **Does Solar Bay offer the opportunity to buy outright?**

Yes, if your business would like to purchase the solar system outright, you absolutely can. It will be exactly the same system we would install and own ourselves.

## **How do I qualify for a Power Purchase Agreement?**

Solar Bay has a list of criteria that is needed to assess the viability of a PPA agreement for Solar on your building. We strive to create a solution for all scenarios, and in most cases succeed, but sometimes we can't make a case. Speak with your consultant and they will be able to assist you with more information.

## **How does a Power Purchase Agreement hedge my electricity bill?**

The amount of electricity that a solar system will produce each year is relatively constant, and the price paid for each unit of energy consumed is known for the duration of the contract. Depending on a building's energy consumption profile the solar system could provide 20-40% of the total energy usage. Therefore the cost of this proportion of electricity is set, and known (hedged) for the duration of the contract period.

## **Will my roof leak?**

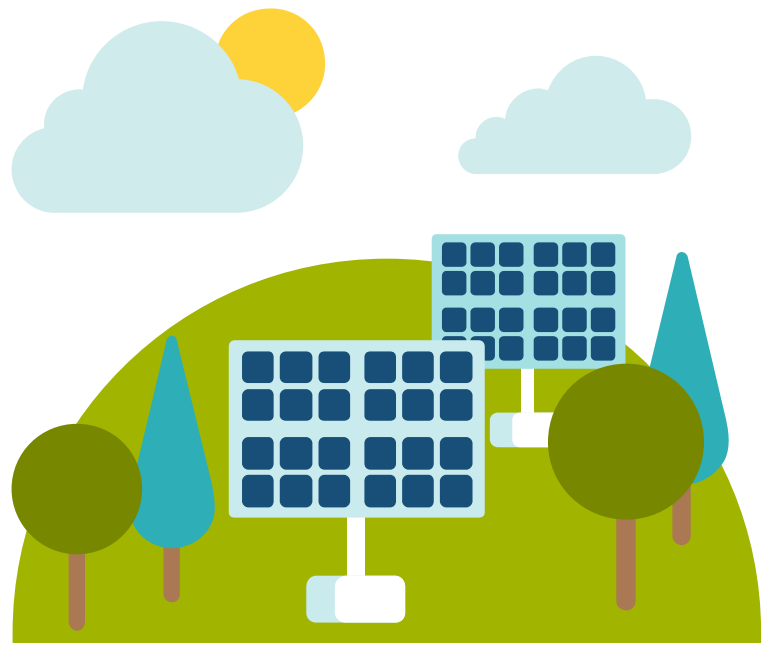
When installing solar panels on a roof there are several ways they can be attached. Depending on the design, and age of the roof we can use non-penetrative methods to attach the panels, this results in no manipulation to the water tightness of the roof. Alternatively, the racking can be bolted in place using the existing screws, a durable rubber EPDM pad is placed between the bolt and roofing sheet, and high grade sealant is used to ensure the fixture will remain watertight for the lifetime of the system. Depending on the site layout Solar Bay may propose installing solar car shades, often these are a more efficient method of capturing solar energy and will also not require any changes to the roof.

## **What maintenance needs to be done?**

Solar Bay uses top of the range equipment and Clean Energy Council accredited installers who install solar systems to meet our high standards. This, combined with solar systems having zero moving parts results in limited maintenance that needs to be completed. However, regular inspections are completed to ensure all components are operating as expected, and the system is operating at maximum efficiency. Inverters have an expected lifespan of between 15-20 years so these may be replaced at some period during the power purchase agreement period.

## **What if we start using more or less electricity?**

As a business's operations and tenants change over time there is the likelihood that the energy consumption profile will also change. Solar Bay will monitor the total energy consumption of the building and notify the stakeholders if there is the opportunity to add more solar to better address their power requirements.



# FREQUENTLY ASKED QUESTIONS

## What happens if we don't use all the energy the system produces?

There may be times when excess electricity is produced above the requirements of the building or business, this may occur at peak sunshine periods or when appliances/machinery are undergoing maintenance. Any Excess energy produced from the solar system will be sold into the grid, so the building owner/tenant will not be charged for energy produced but not consumed.

## How often will be billed?

Billing will be completed monthly or quarterly in arrears.

## Will someone need to read the meter?

No, the technology installed will provide remote readings of the amount of energy produced by the solar system, and the amount of energy consumed. All meters installed will comply to NEM Class 1 Accuracy standards

## What about batteries?

Batteries will play a key part of the transformation of the Australian Electricity Market, in some circumstances these are a profitable proposition for retail customers due to the pricing structure of small energy consumers. However at this point in time the cost of batteries is still too high for them to be profitably installed to complement a solar system. However Solar Bay is closely monitoring the progress in the industry and will contact a customer when batteries are a financially beneficial investment. These may use to store solar, off peak grid power, or to provide behind the meter supply management to reduce a client capacity charges.

## What's an embedded network, and can you install one?

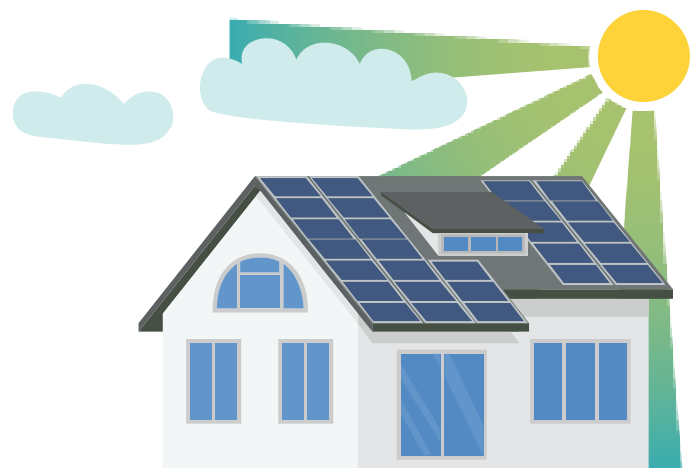
AN embedded networks is where several, often related tenants or business owners operating within the same building have their electricity connection combined from the grid point of view. So rather than each party individually negotiating a contract with a retailer and connecting to grid a third party will bulk negotiate their contract and provide all parties with a better rate. This also has the benefit of allowing solar to be combined into the embedded networks, and usually combines these with a sizeable solar system, contact us for more information if you're looking to install an embedded network or micro-grid.

## Why don't we own the system ourselves?

Other companies will design and install a solar system that is sold to the business owner, this is one method to receive the benefits of solar, however there is a conflict of interest between the seller and buyer under a transactional model. The seller is looking to maximize margins which usually involves minimizing the labor cost of the installation and equipment, which can potentially result in quality issues over 25-30 years lifespan of the system. There are also ongoing operational costs such as system maintenance, Large Scale Renewable Energy Certificate trading and complying with changing regulations. As Solar Bay retains ownership of the system and essentially sell's electricity rather than solar system these conflict of interests aren't present. Additionally, we have specialized team that can manage the ongoing operational aspects of a large scale solar system, and have access to competitive finance available for low carbon initiatives that allow us to sell electricity at significant discounts to current grid prices

## FAQ

Please have a look on our website for comprehensive range of frequently asked questions.





# SOLAR BAY



[www.solarbay.com.au](http://www.solarbay.com.au)



PH: 1300 452 285