



**SOLAR  
PROOF**

# 5.94kW SOLAR ENERGY PROPOSAL

Prepared for Smithy Corp  
by Chris Taeni

11/10/2018

**\$1,784**

FIRST YEAR SAVINGS ESTIMATE

**4.06 years**

PAYBACK PERIOD

**6,191.9kWh**

YEAR 1 ENERGY SAVINGS

\* Proposal based on an annual power price increase of 6%. Based on a feed in tariff of \$0.100/kWh. Subject to network approval and terms and conditions attached to this proposal.

# ABOUT THIS PROPOSAL

Dear Greg Farnsworth,

Thank you for taking the time to consider our proposal.

At Solarproof Consulting, we pride ourselves on delivering a highly accurate proposal so that you can make a fully informed decision when choosing what action to take.

Solarproof Consulting have a great depth of experience installing high quality solar systems in our region and beyond.

In the attached pages you will find we have done a complete analysis of your particular case and present you with an option for a 5.94kW solar system as an excellent option for you to both save money on your electricity expenses and do good for the environment.

Should you have any questions in regard to this proposal, please do not hesitate to contact us.

This proposal has been prepared for you by:

Chris Taeni (Solarproof Consulting)

**Phone:** 0411 549 054

**Email:** [chris@solarproof.com.au](mailto:chris@solarproof.com.au)

# EXECUTIVE SUMMARY

## Cost of Power

Total Annual Electricity Cost Now	\$3,385
Current Peak Energy Rate	\$0.265/kWh
Total Annual Electricity Cost After Solar	\$1,601/kWh
	\$1,601

## Solar Savings

Total First Year Savings Estimate	\$1,784
Average Cost of Solar Energy (LCOE)	\$0.079/kWh
Total 25 Year Savings Estimate	\$99,516

## Solar Energy

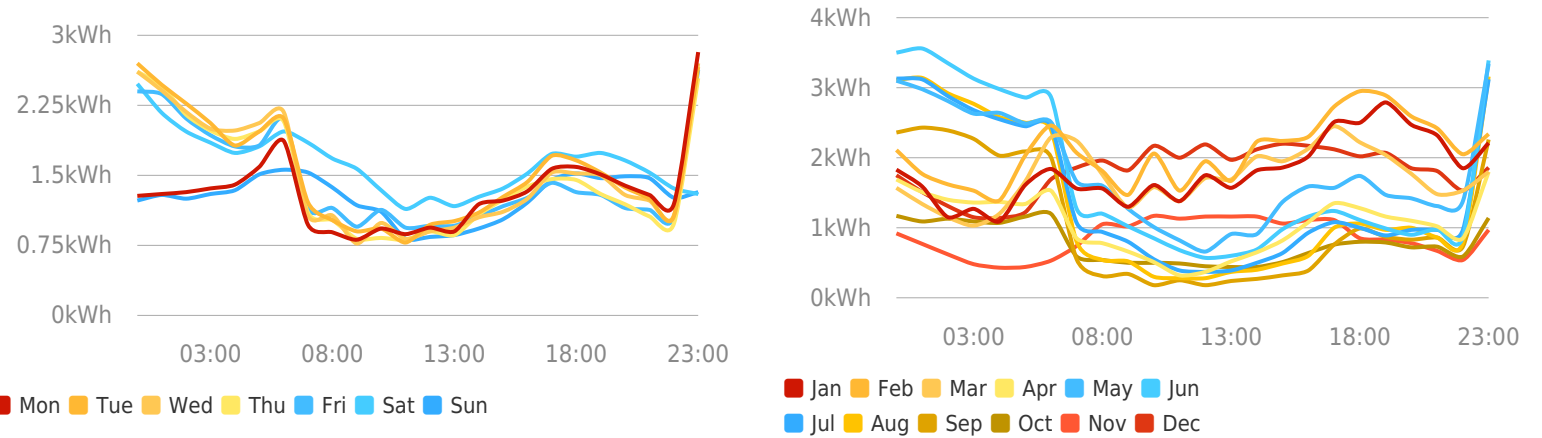
Amount of Solar Energy Produced	7,641 kWh
Percentage of Solar Energy Exported	37.53%
Amount of Solar Energy Offset (Consumed)	6,191.9kWh

## Investment Financials (CAPEX)

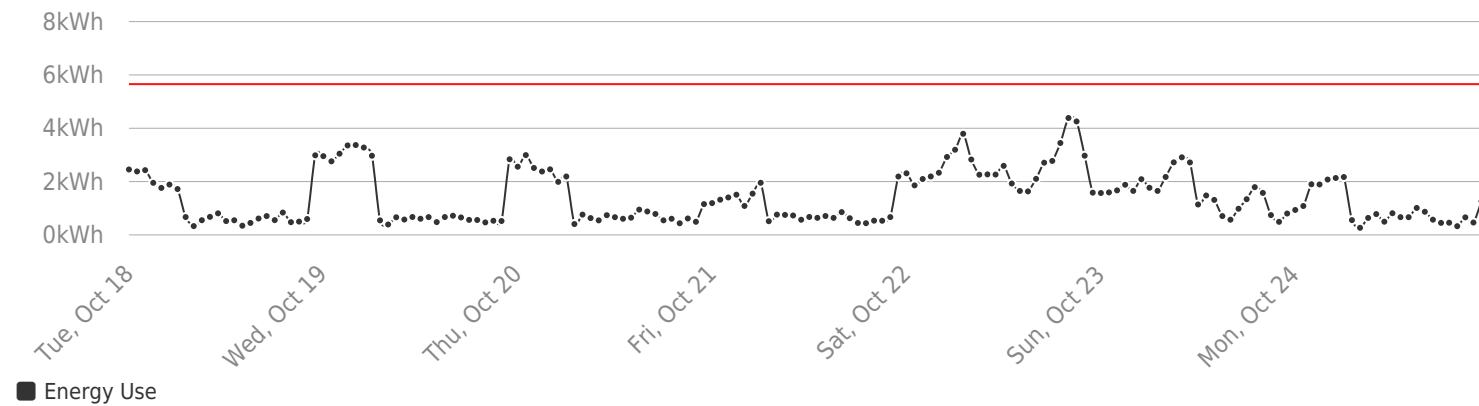
Return On Investment	21.31%
Internal Rate of Return	27.25%
Payback Period	4.06 years
Total System Value Excluding GST (Pre-Rebate)	\$11,283.64
Total STC Rebate Amount Excluding GST	\$2,912.00
<b>Total Investment Amount Excluding GST</b>	<b>\$8,371.64</b>

# YOUR ENERGY USE

Your energy usage patterns are shown below. This information has been used to help determine the best solution for your particular needs.



The chart below shows one full week of energy use and also indicates the highest demand hour in the year.



# SITE ANALYSIS

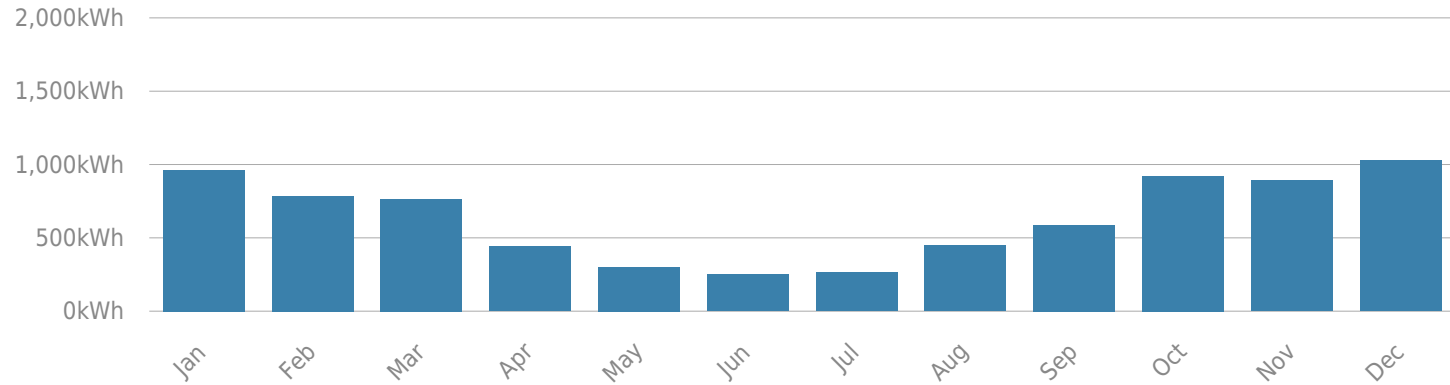
We have done a thorough assessment of your site and have determined the panel placement shown below:





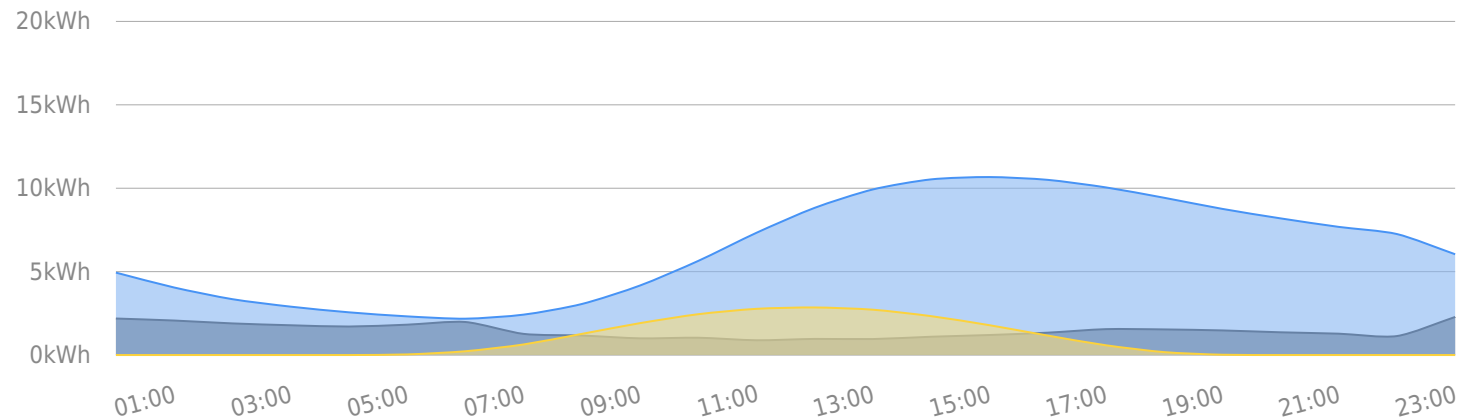
# SOLAR SYSTEM PERFORMANCE

We have run a full simulated solar performance estimate based on real hourly historical solar data. Here is your 5.94kW solar system's likely monthly energy production:



■ Total Solar Production

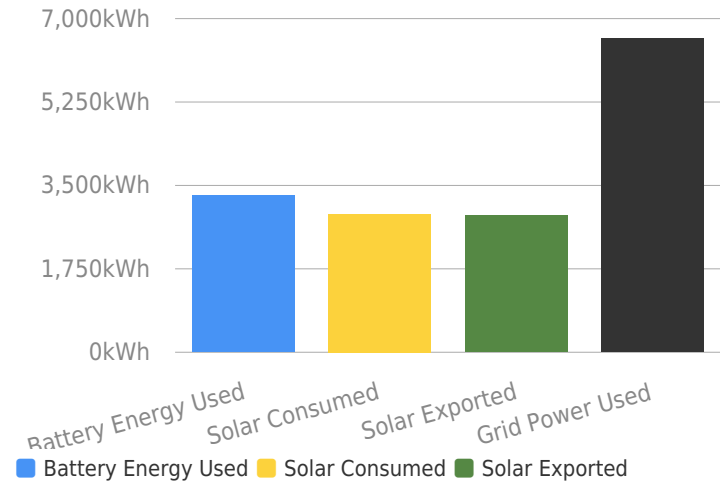
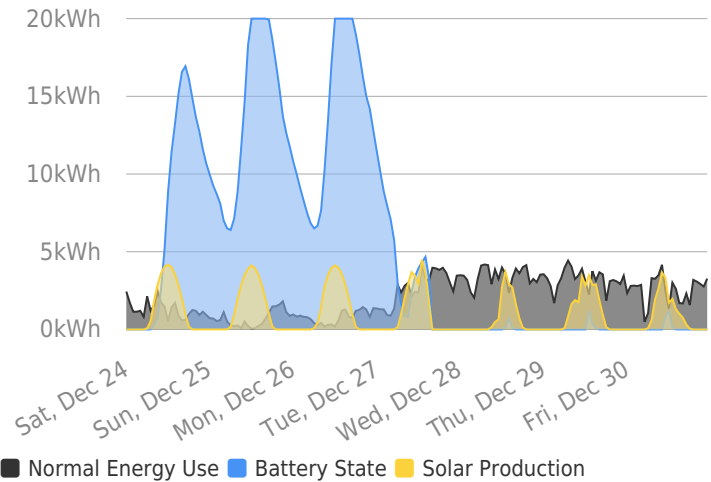
The chart below shows an average of your solar production and energy consumption analysis.



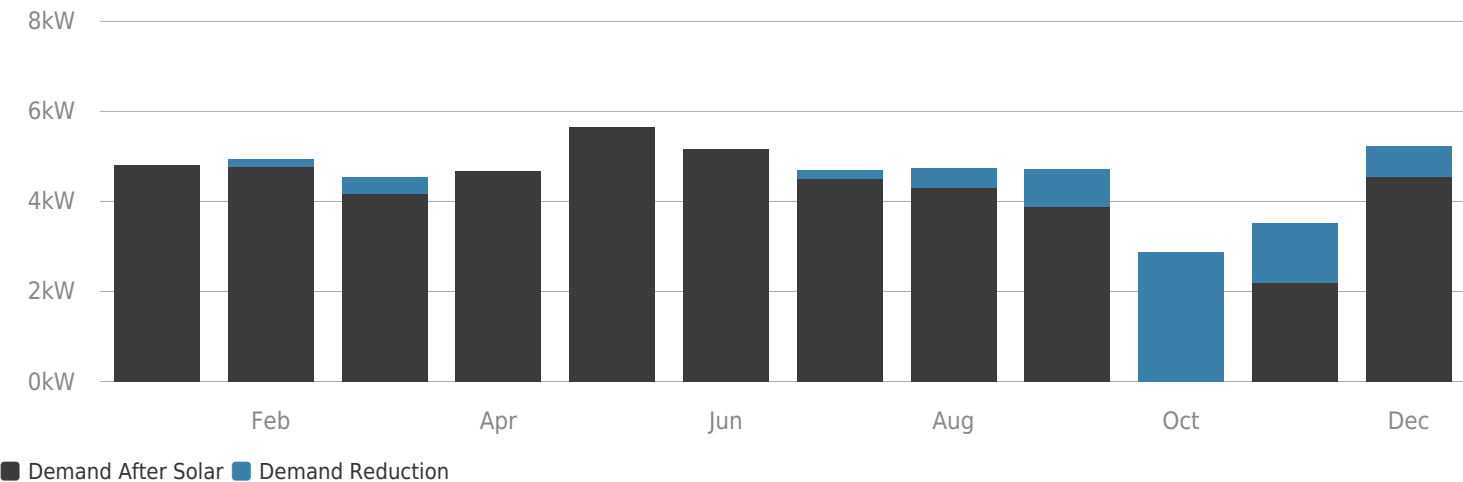
■ Average energy use by hour ■ Average solar production by hour ■ Average battery energy

# SOLAR IMPACT

The charts below have been derived through an extensive analysis of the information you've provided to us. They aim to show the impact a 5.94kW solar system will have on your energy usage.

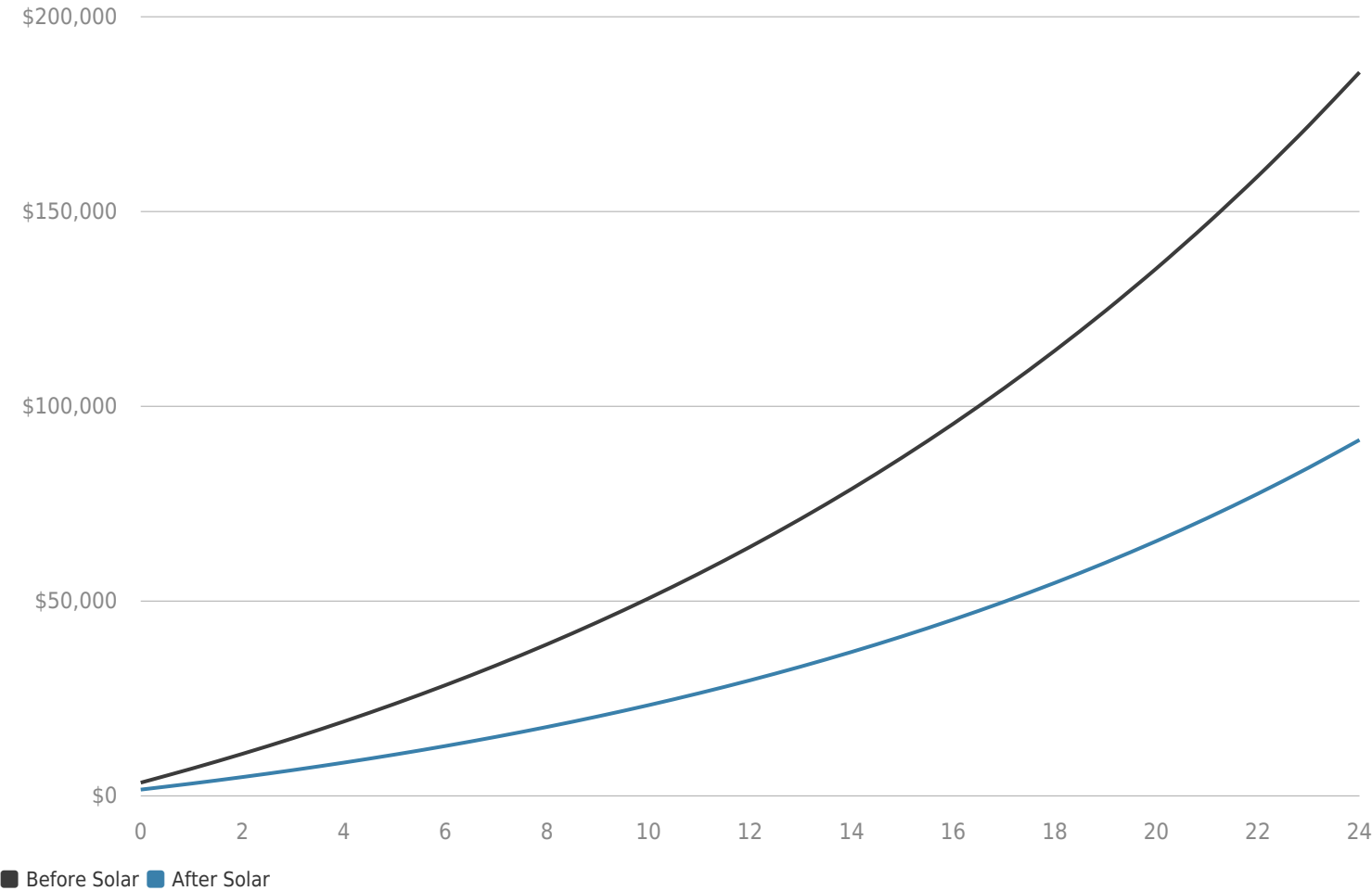


The chart below indicates how your energy "demand" component may reduce with solar



# FINANCIAL IMPACT

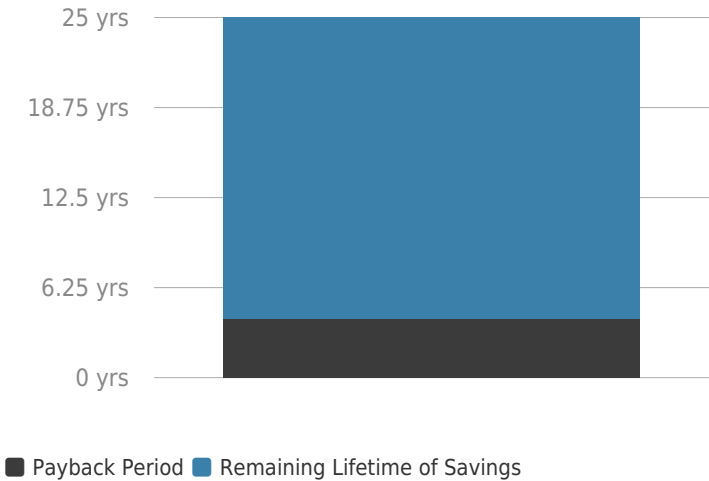
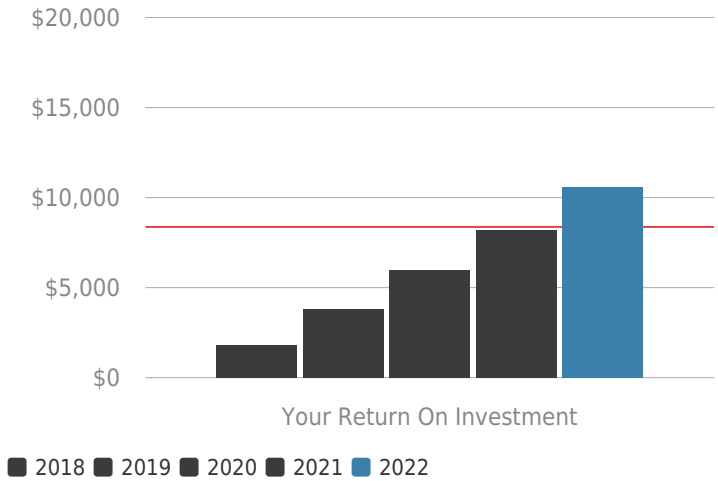
This chart gives you a clear picture of costs into the future in both cases with and without a solar energy system. This is based on what we believe is a conservative 6% power price increase per annum.





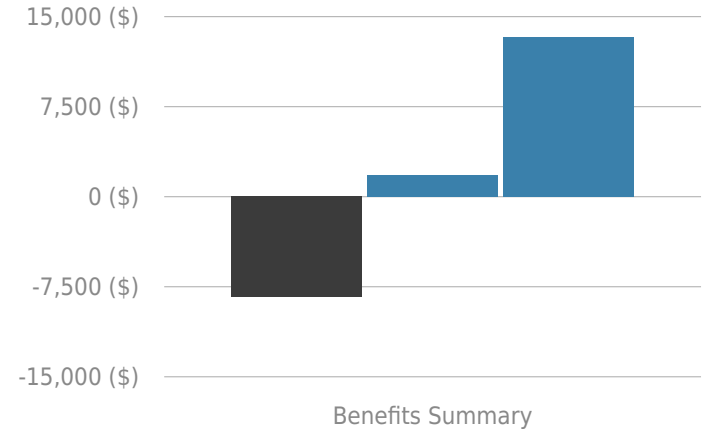
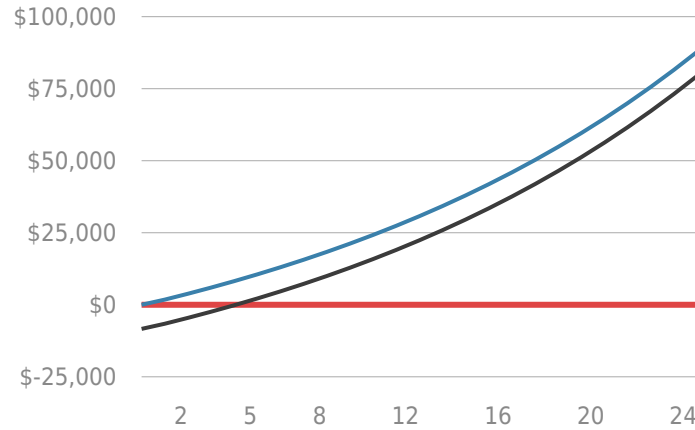
# RETURN ON INVESTMENT

The charts below indicate your likely Return On Investment (ROI) and Payback Periods. Your lifetime ROI is estimated at 1,188.7%!



# PROJECTED SAVINGS

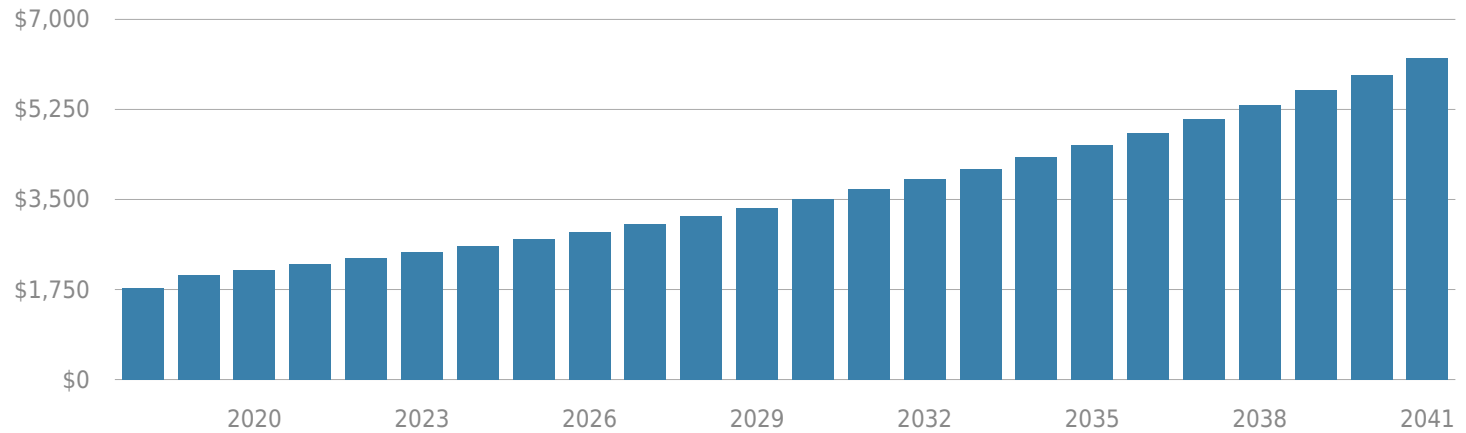
The charts below show the potential benefits of this solar system.



■ Net Cashflow (Financed) ■ Net Cashflow (Capex)

■ Total Investment ■ First Year Savings ■ 5 Year Benefit

Yearly Savings estimate shown below



■ Solar Savings

# COMPONENTS SUMMARY

## Solar System Inclusions

<b>Solar Panels</b>	22 x Trina Solar - 270W - (TSM-270DEG5.07(II)) Solar Panels
<b>Inverters</b>	1 x Fronius Australia Pty Ltd 5kW (5.0-3-S)
<b>Racking</b>	Clenergy
<b>Battery</b>	2 x Tesla Powerwall 2 10kWh (Powerwall 2) batteries

## Customer Information

<b>Energy Retailer</b>	Origin Energy
<b>Distributor / NMI</b>	Essential Energy / 40013304
<b>Site Address</b>	44 Farnham Street, Flemington, VIC, 3031

## Installation

<b>Roof Type</b>	Tin
<b>Roof Height</b>	Single Storey
<b>Inverter Location</b>	Inside Eastern Wall In Plant Room

## Warranty

<b>Solar Panels</b>	25 Years Guaranteed Performance 80% / 10 Years Material
<b>Inverter / Battery</b>	10 Years / 10 Years
<b>Racking</b>	10 Years
<b>Workmanship</b>	5 Years

# TERMS & CONDITIONS

Here is a good place to put terms and conditions.