



Selling Solar Analytics

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DATE: August 2018



Introduction

About us



- >22,000+ sites
- Genuine solar veterans
- 20+ years R&D
- 10x growth per annum
- 38 staff and 9PhDs
- 4 countries
- 700 Resellers
- 4 energy utilities
- 2 university partnerships
- 1 amazing team

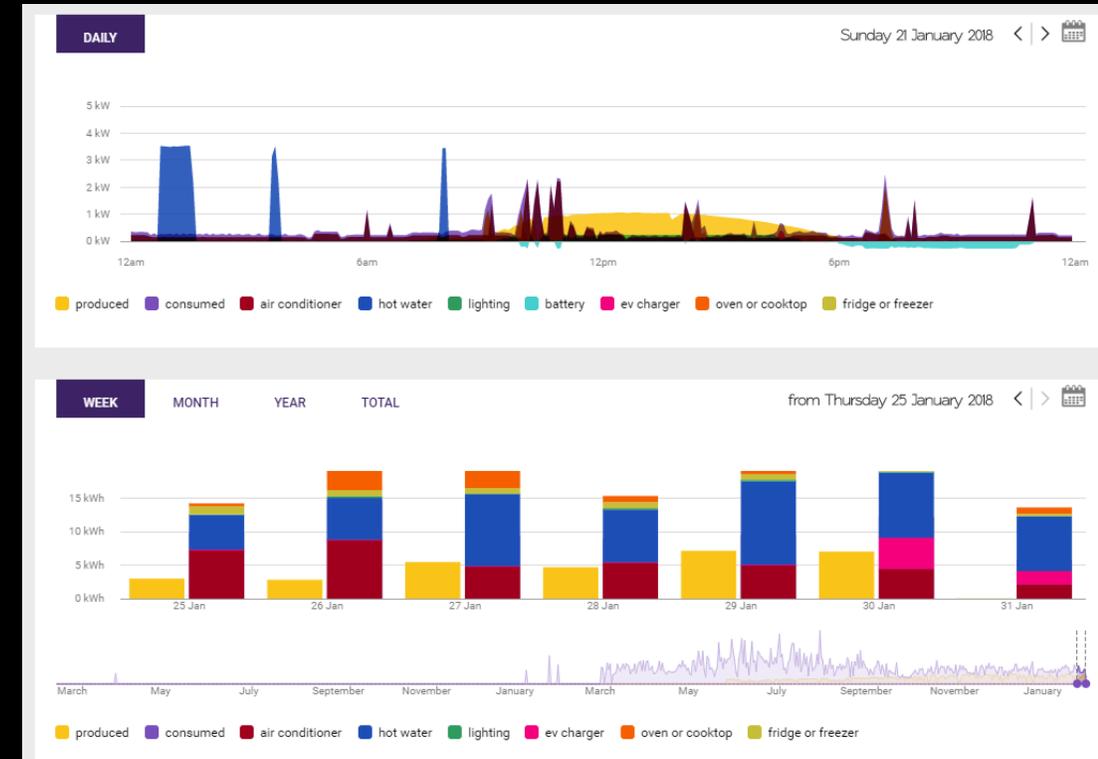
Incredible hardware

- Compelling, flexible & simple offer
- Residential and commercial
- 100% inverter and load agnostic
- Faster installation with lower costs
- Class 1 accuracy
- 3G (4G/LTE) for instant communications
- Reliable and affordable
- Locally assembled
- Huge in house support team



Incredible software

- Highly unique, patented software
- Advanced algorithms for sophisticated, automatic performance monitoring
- Shade analysis, performance monitoring
- Gamified notifications, alerts and warnings
- Economic analysis, data storage
- Detailed load and generation monitoring
- Battery calculator, lead generator
- PPA billing engine, LGC metering
- Highly developed fleet management

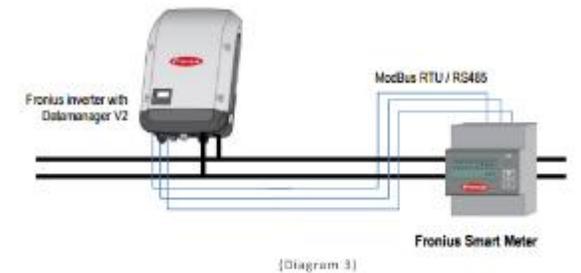


Competitive position

- Cheaper to support than troublesome wi-fi
- Simpler fleet management through a single monitoring dashboard for all system types
- Faster installation
- One device suits almost every application
- Lower cost in a growing number of applications
- Works with any inverter or AC load

2.1 Schematics and Wiring

Diagram 3 shows the system configuration

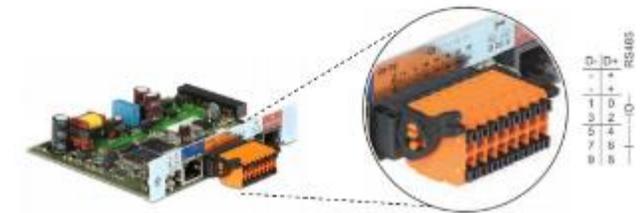


Please note:

/ Wiring between meter and inverter should use CAT5 or CAT6 cable (LAN cable)
/ Connection is a data line for Modbus RTU / RS485 using screw terminals on the meter
/ Maximum distance: 300 m (980 feet)

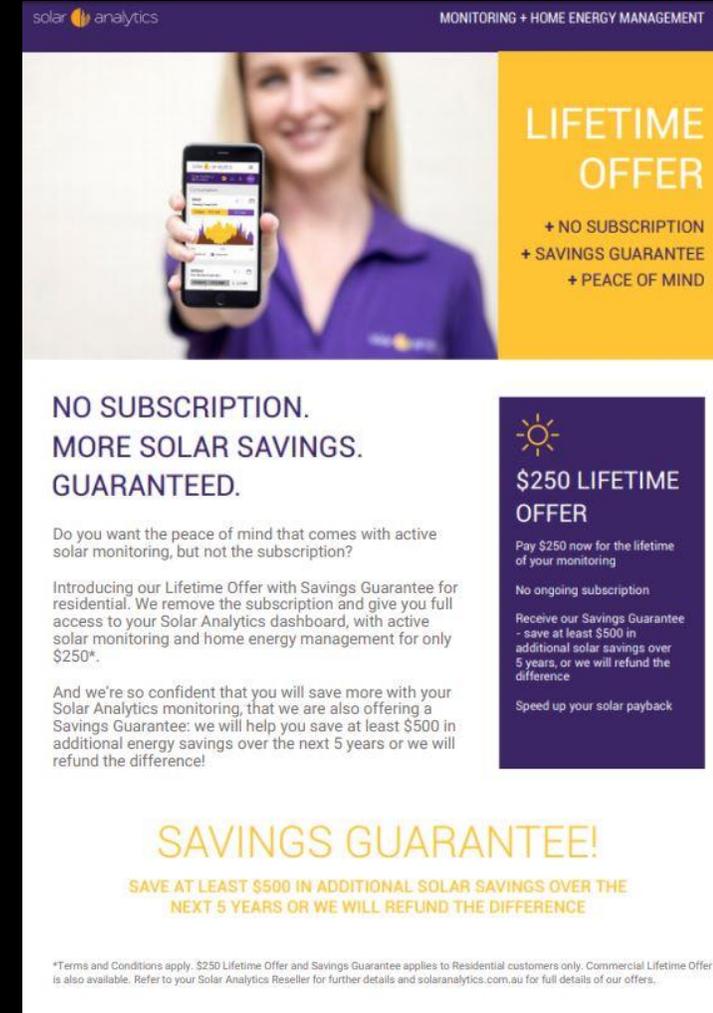
Meter connection on the Datamanager V2

The meter needs to be connected to the Datamanager's binary output, as shown in diagram 4.



Proven model

- Saved system owners more than \$2.5M in 2017, 10GWh of energy
- Savings Guarantee of \$500 on Residential offers
- 20,000 customers have shown they are willing to pay for support
- We back your company up to support and train the end user



solar analytics MONITORING + HOME ENERGY MANAGEMENT

LIFETIME OFFER

- + NO SUBSCRIPTION
- + SAVINGS GUARANTEE
- + PEACE OF MIND

NO SUBSCRIPTION. MORE SOLAR SAVINGS. GUARANTEED.

Do you want the peace of mind that comes with active solar monitoring, but not the subscription?

Introducing our Lifetime Offer with Savings Guarantee for residential. We remove the subscription and give you full access to your Solar Analytics dashboard, with active solar monitoring and home energy management for only \$250*.

And we're so confident that you will save more with your Solar Analytics monitoring, that we are also offering a Savings Guarantee: we will help you save at least \$500 in additional energy savings over the next 5 years or we will refund the difference!

\$250 LIFETIME OFFER

Pay \$250 now for the lifetime of your monitoring

No ongoing subscription

Receive our Savings Guarantee - save at least \$500 in additional solar savings over 5 years, or we will refund the difference

Speed up your solar payback

SAVINGS GUARANTEE!

SAVE AT LEAST \$500 IN ADDITIONAL SOLAR SAVINGS OVER THE NEXT 5 YEARS OR WE WILL REFUND THE DIFFERENCE

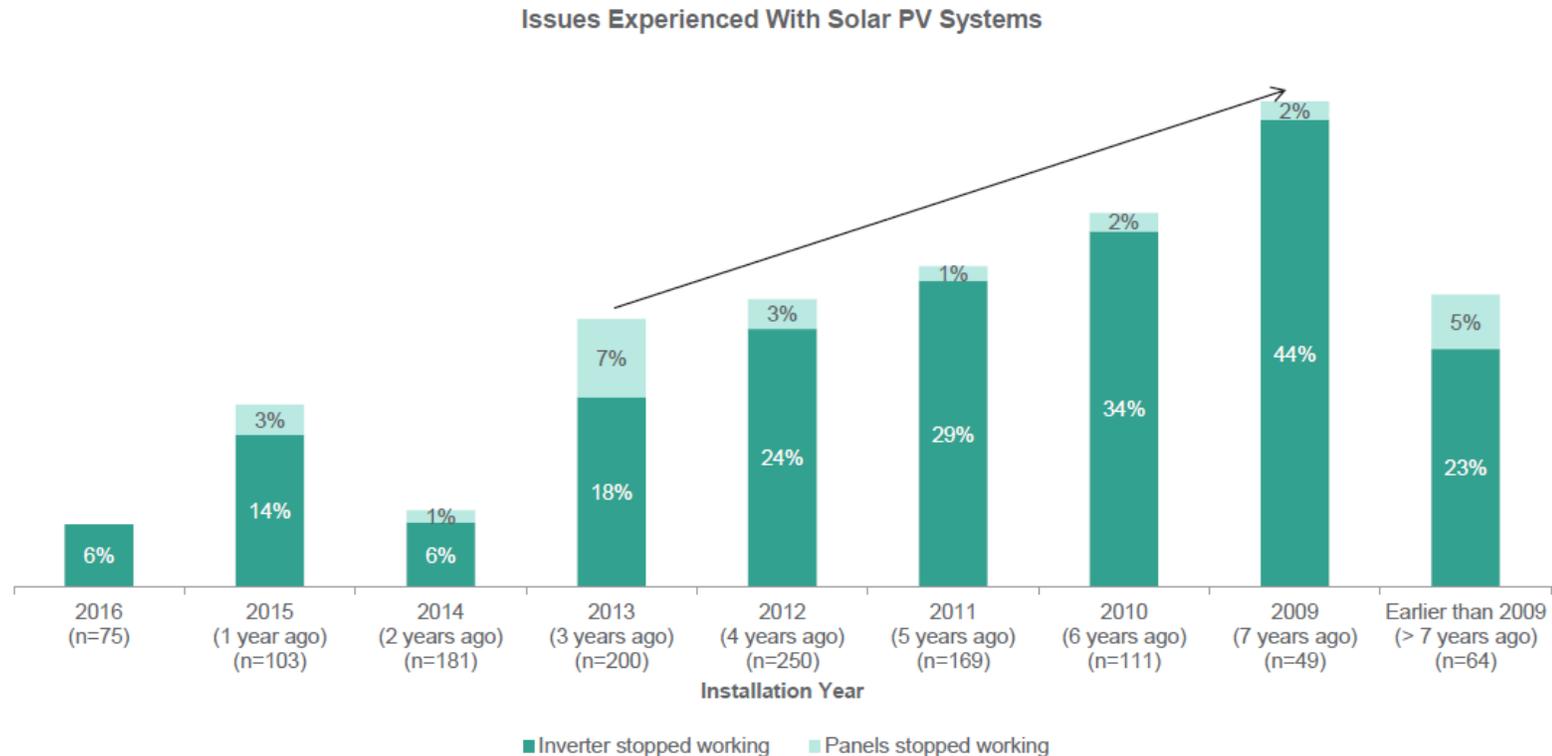
*Terms and Conditions apply. \$250 Lifetime Offer and Savings Guarantee applies to Residential customers only. Commercial Lifetime Offer is also available. Refer to your Solar Analytics Reseller for further details and solaranalytics.com.au for full details of our offers.

Why monitor?

“Why monitor?”



Issues with solar PV systems, particularly the inverter, steadily increase once systems reach three years old.



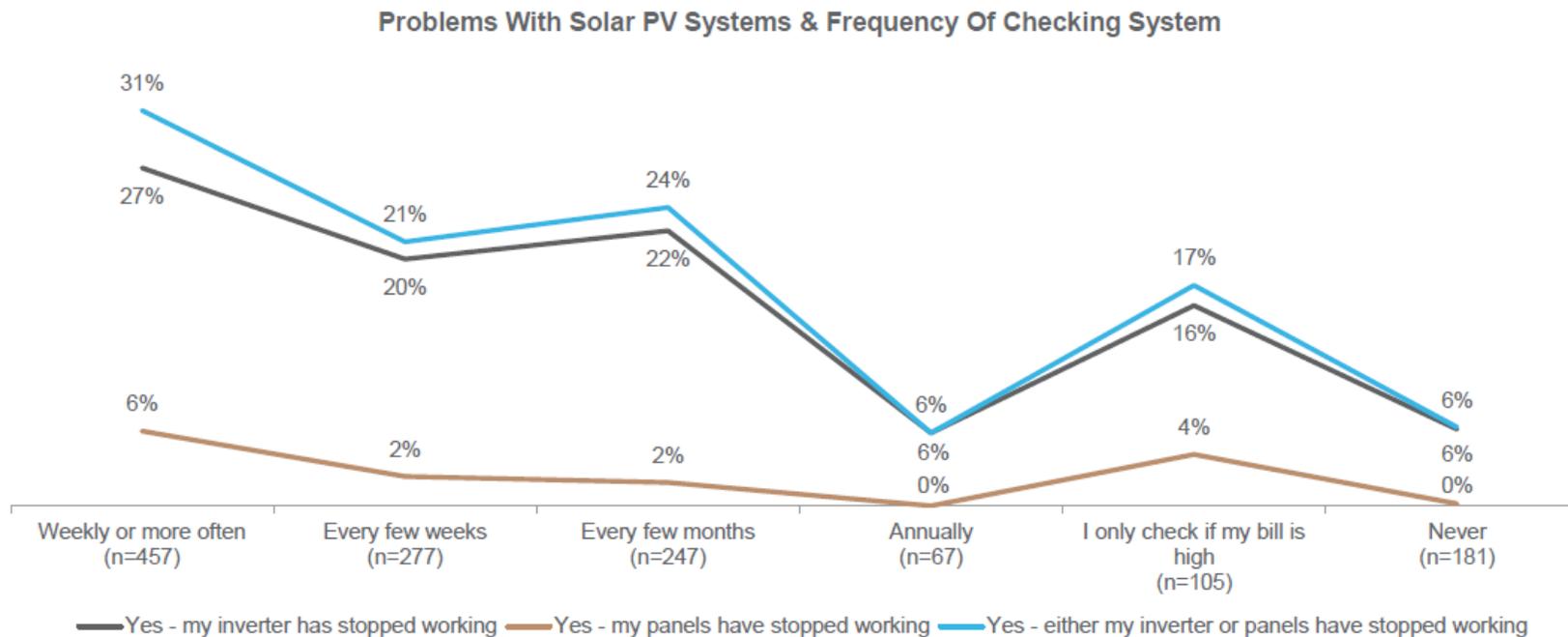
Source: 2016 Survey for Energex, Ergon Energy, Powerlink by colmar brunton research

“Why monitor?”



Households who check their solar PV system more frequently are more likely to have identified a problem.

This suggests either that those who check their system more frequently are more likely to identify problems or earlier problems prompt residents to check their solar PV system more frequently

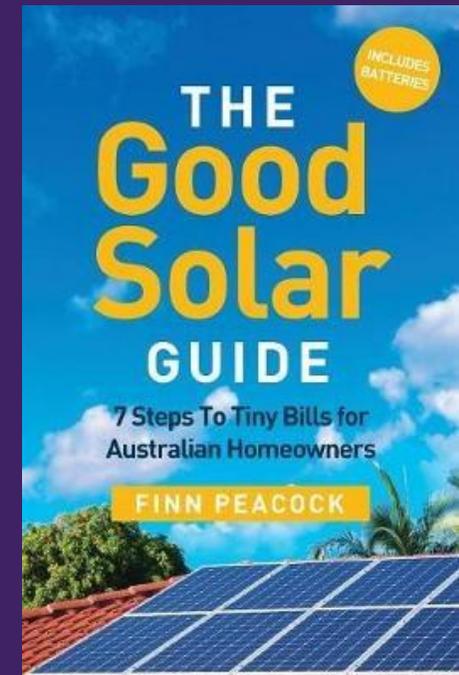


Source: 2016 Survey for Energex, Ergon Energy, Powerlink by colmar brunton research



Independent recommendations

“Many inverters come with monitoring. Almost all of them will let you monitor their solar production remotely these days, and some include consumption monitoring. I’ll let you in on a little secret: most of them suck compared to a good third-party monitoring system. Why? Because they’re made by inverter manufacturers, and the software is a side gig.”



Tips to sell Solar Analytics



“We made independent system monitoring part of your package so we can support you”

Focus on:

- How it helps you support customers
- Why independent monitoring beats inverter monitoring
- How our 3G helps reliability and wi-fi security
- Automated alerts, notifications and performance tracking



“If you are thinking about a battery, this system includes a free and accurate calculator”

Focus on:

- How accurate battery sizing requires detailed energy data
- That the function is free and gets more accurate over time through machine learning
- Can be used to monitor a growing number of AC batteries



“Think of it as like a dashboard for your car; it provides detailed warnings”

Focus on:

- How detecting faults fast saves money
- How automated warnings make it easy
- How incredibly detailed and accurate data makes all the difference



“Solar Analytics now offers a subscription free Lifetime Offer & Savings Guarantee”

Focus on:

- No ongoing costs
- Free Dashboard upgrades and new features (eg 5 Second Live)
- Includes Savings Guarantee for residential customers
- Pay as you go options are available as an alternative



“Solar Analytics is also an incredible energy monitor, not just solar”

Focus on:

- Detailed consumption monitoring including sub circuits
- Ability to see faults or unusual appliance consumption
- Helps optimise and save on consumption costs



“Keep track of your savings”

Focus on:

- Check your bills against real data
- Real time savings calculator for exports, imports and self consumption
- Savings come from optimised generation and,
- Savings also come from optimised consumption



“5 Second Live Data is absolutely unique to Solar Analytics ”

Focus on:

- No-one else offers such incredible resolution (usually 15min or worse)
- Enables instant checks on generation and consumption
- Saves time and increases accuracy



“By including Solar Analytics, you get additional support from an independent company”

Focus on:

- SA offers independent monitoring and advice
- Suggestions, notifications and alerts service
- Access to trained solar specialists



“Unique solar radiation and shade monitoring”

Focus on:

- Use of satellite data to analyse what the system should be producing
- Algorithms that detect and show shading impacts
- Absolutely unique to Solar Analytics for home applications



“Unobtrusive, compact and viewed from anywhere”

Focus on:

- Small device that does not get in your way
- Instant access from any device, anywhere you have a signal
- Elegant and intuitive cloud based Dashboard



“Avoids wi-fi hassles”

Focus on:

- Wi-Fi can be troublesome to stay connected
- Monitoring uses data, better on a customised plan
- Direct ultra fast connection



“Adds value to your system and home”

Focus on:

- How energy and solar monitoring add value through increased savings potential
- How detecting faults increases safety and reliability
- How things change over time – tree’s grow and components age

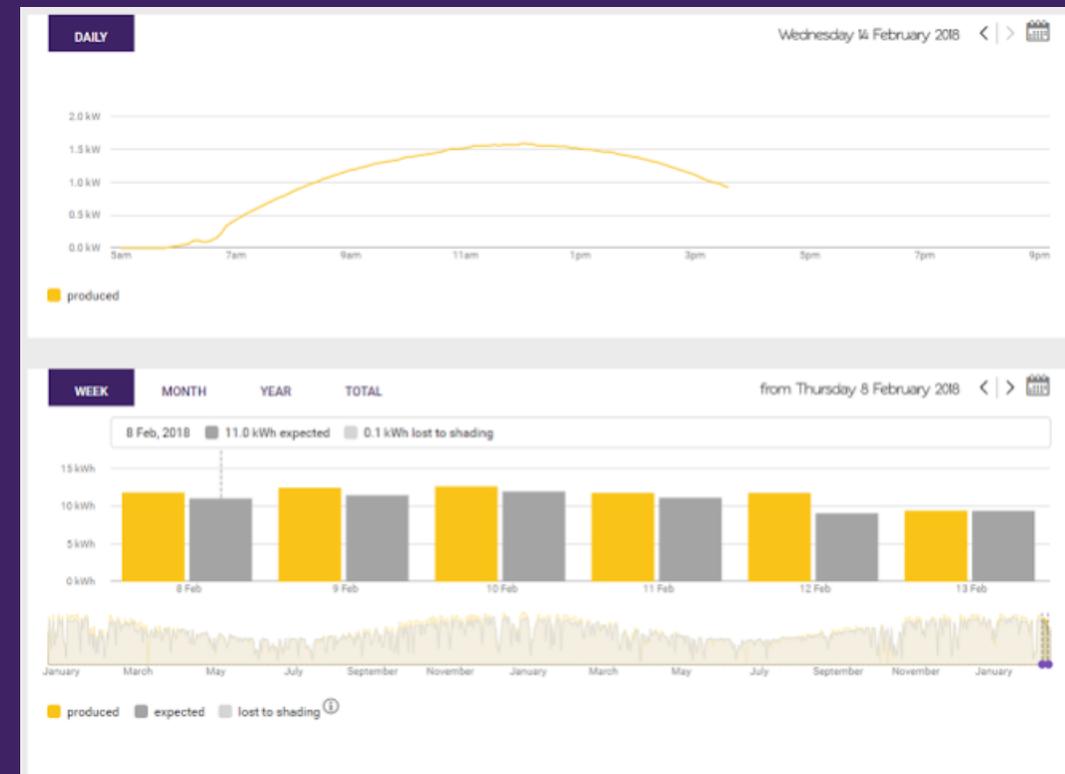
Examples of problems solved

Problem 1



“I suspect my solar system isn’t working properly.”

Great monitoring will show exactly how your system is performing in real time and if it’s generating the *right* amount of energy. We can remotely diagnose a wide variety of problems and help you get everything working again.



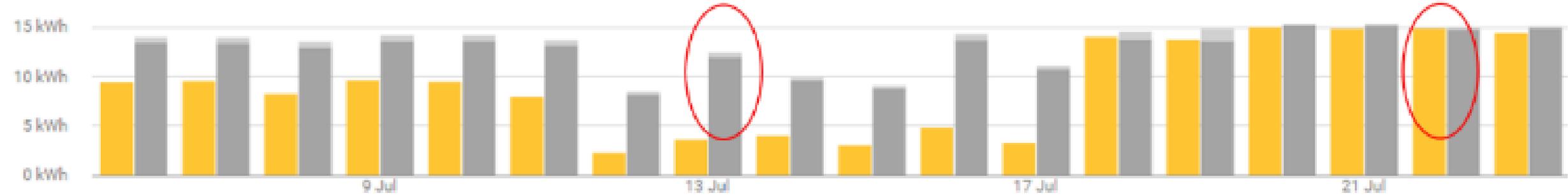


WEEK MONTH YEAR TOTAL

Thursday 6 July 2017 < | >

Solar Analytics detected under performance and shading.

Solar Analytics showing huge improvement after rectification



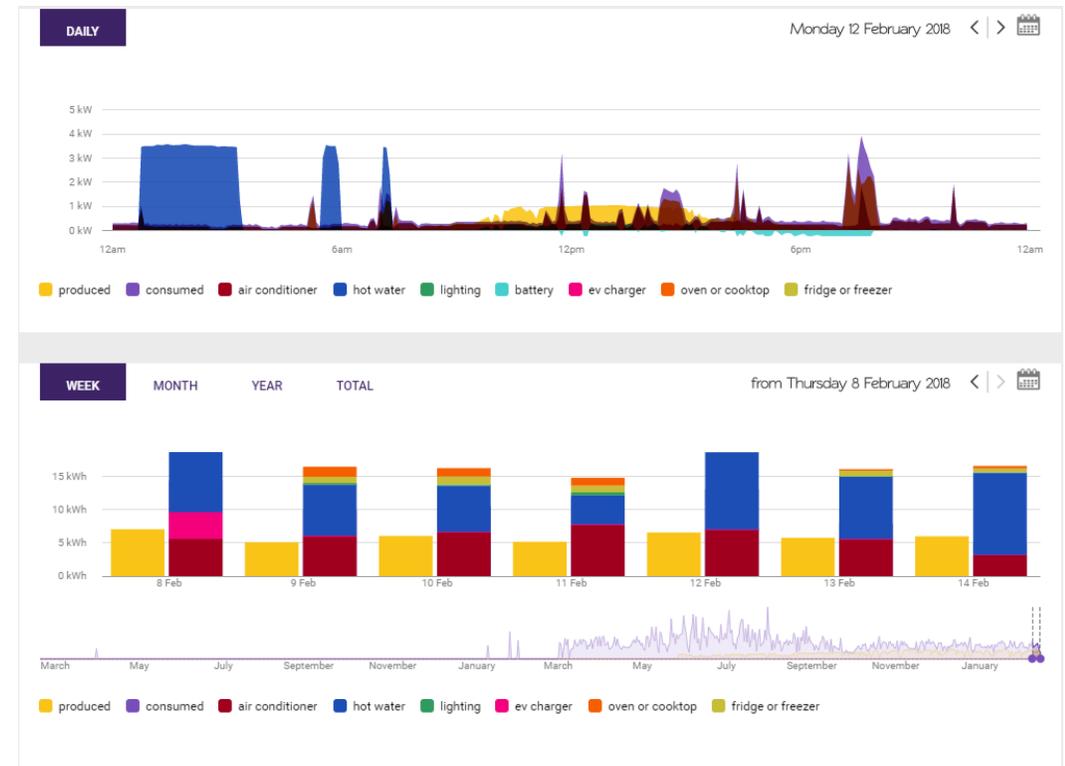
produced expected lost to shading ⓘ

Problem 2



“I want to run my building more efficiently and make better use of my solar power.”

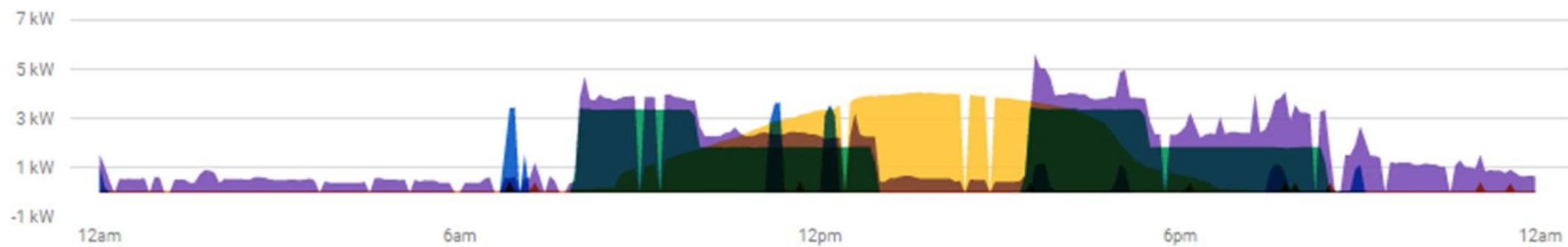
Great monitoring shows you exactly when your appliances are using energy. You can easily see how much you are consuming relative to your solar generation and then shift those loads to run during solar-producing hours.





DAILY

Monday 20 February 2017 < | > 



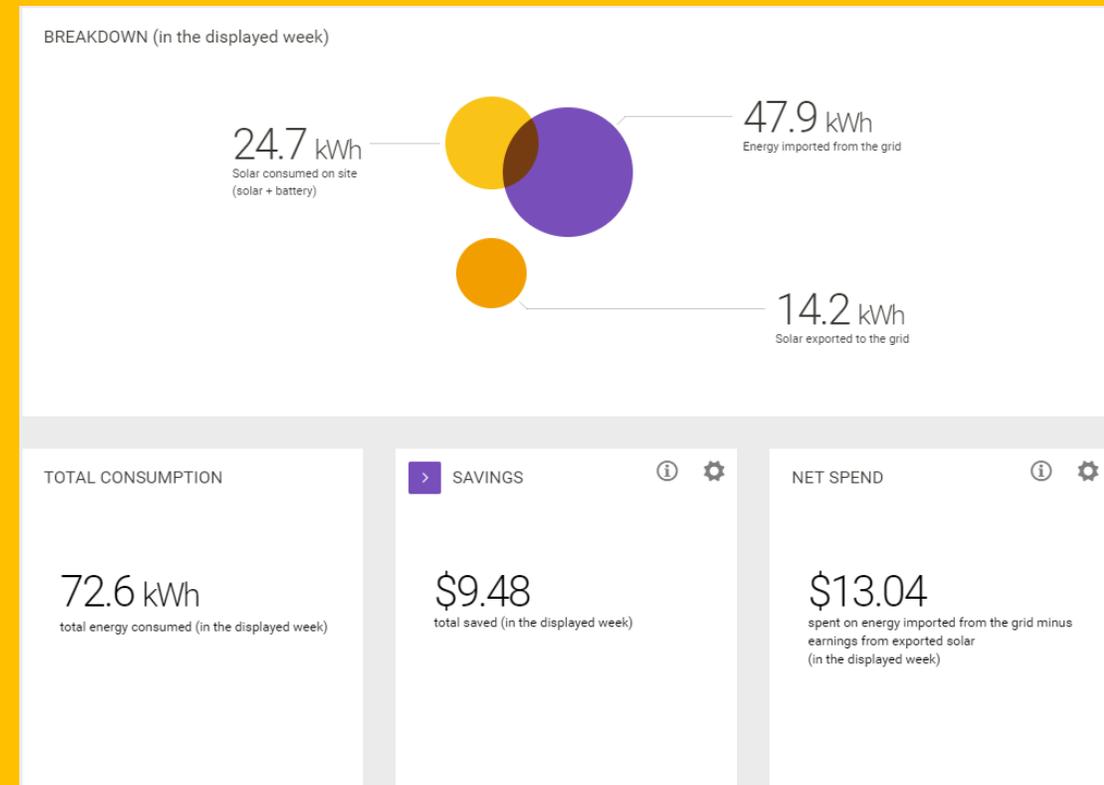
 produced  consumed  hot water  other  pool

Problem 3



“My inverter has a monitor, I don’t need anything else.”

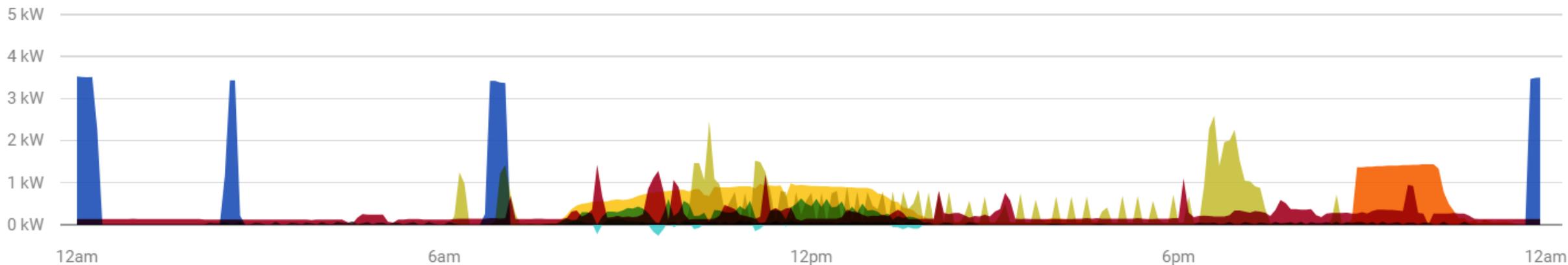
Great monitoring provides visibility into your entire buildings energy profile, showing you not just the solar production but also energy consumption, savings calculations, notifications with actionable insights, and performance monitoring to ensure your system is working at its best.





DAILY

Thursday 5 April 2018 < | > 



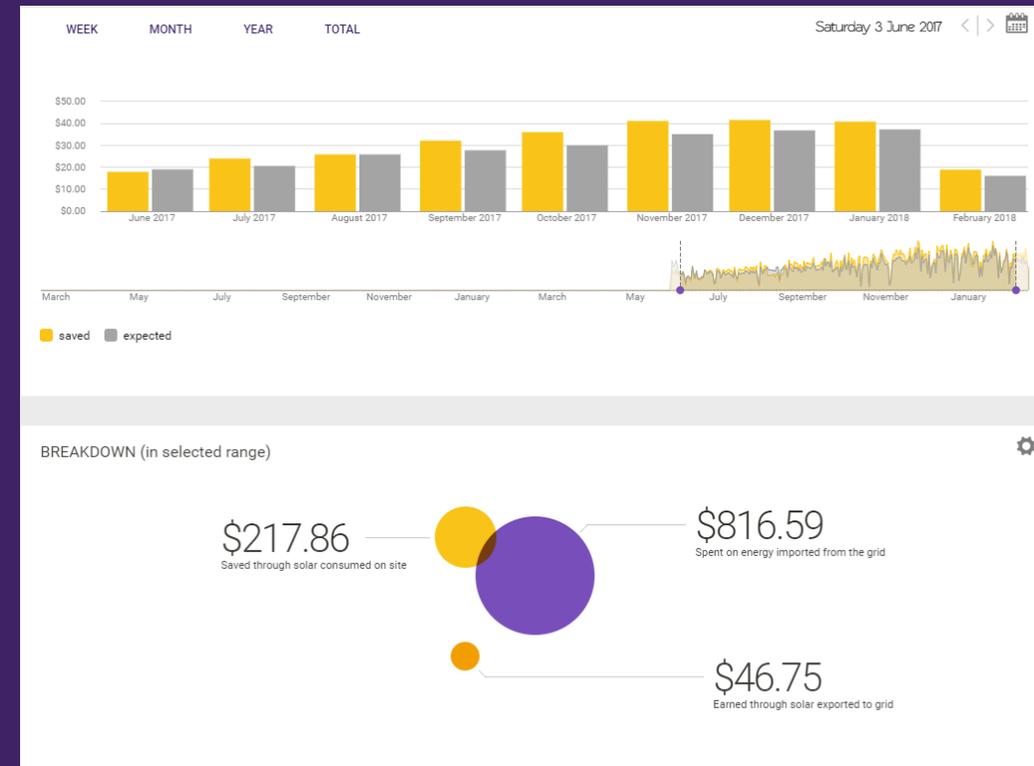
produced consumed air conditioner hot water solar hot water lighting battery ev charger oven or cooktop fridge or freezer

Problem 4



“I want to track the pay-back of my solar investment and keep my retailer honest.”

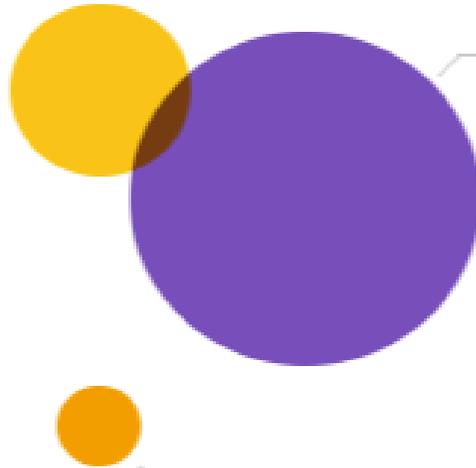
Great monitoring makes detailed savings calculations showing you how much money you have saved per day, week, month, year or even for the full life of the system.





\$217.86

Saved through solar consumed on site



\$816.59

Spent on energy imported from the grid

\$46.75

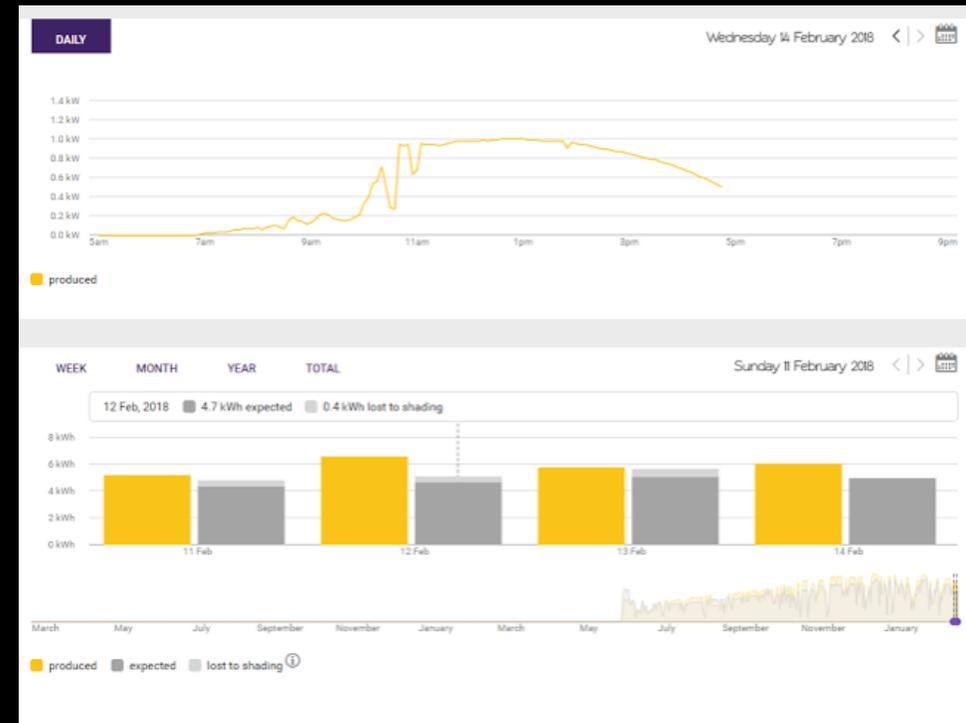
Earned through solar exported to grid

Problem 5



“I have some shading on my solar panels, but I’m not sure how much impact it’s having.”

Great monitoring will accurately measure and quantify the effect that shading has on your solar panels. You can easily see how much impact it is having, separate from other types of underperformance.

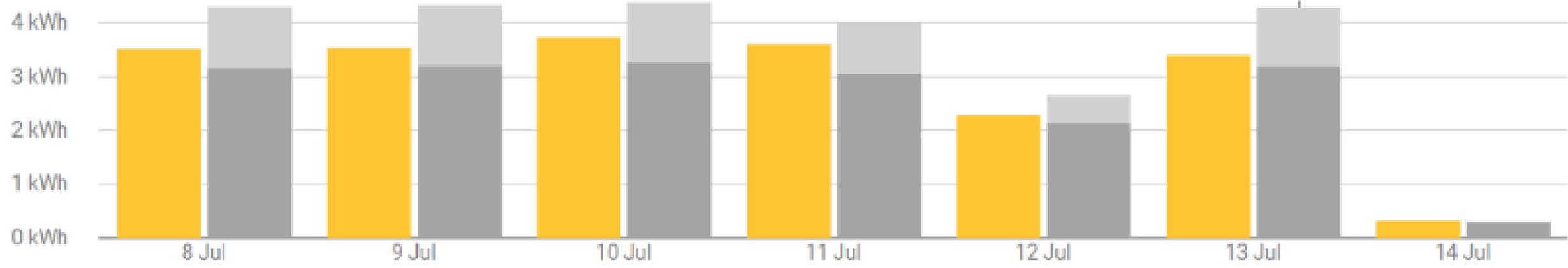




WEEK MONTH YEAR TOTAL

Saturday 8 July 2017 < | > 

13 Jul, 2017 3.2 kWh expected 1.1 kWh lost to shading



produced expected lost to shading 



Problem 6

“I can never get any help or support when I need it.”

Great monitoring companies have full time customer support staff based locally. A highly trained team is essential to help diagnose problems and get your system back on track fast. We provide phone and online support to customers, resellers and installers.



Problem 7



“I am thinking about batteries, but have no idea what size I need or if I even have enough solar.”

Correct battery sizing starts with understanding how much and when you produce and consume energy. Great monitoring companies collect and uses your data to estimate the ideal battery size and cost with built-in battery calculators.

THINKING ABOUT A BATTERY FOR YOUR HOME?
We can now tell you what size battery would be suitable for your home based on your power usage.

CALCULATE MY BATTERY

THE NATIONAL MOTORCYCLE MUSEUM BETA ⓘ
Based on your production levels and consumption history, a battery size appropriate for you would be:

BATTERY SIZE: 11 kWh	GRID USAGE REDUCED BY: 70.95 %	COST OF BATTERY: \$14800*	SAVINGS PER YEAR: \$1,032.88**
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* Approximate only. Prices will vary based on battery quality. Cost does not include installation fees.** Estimate only

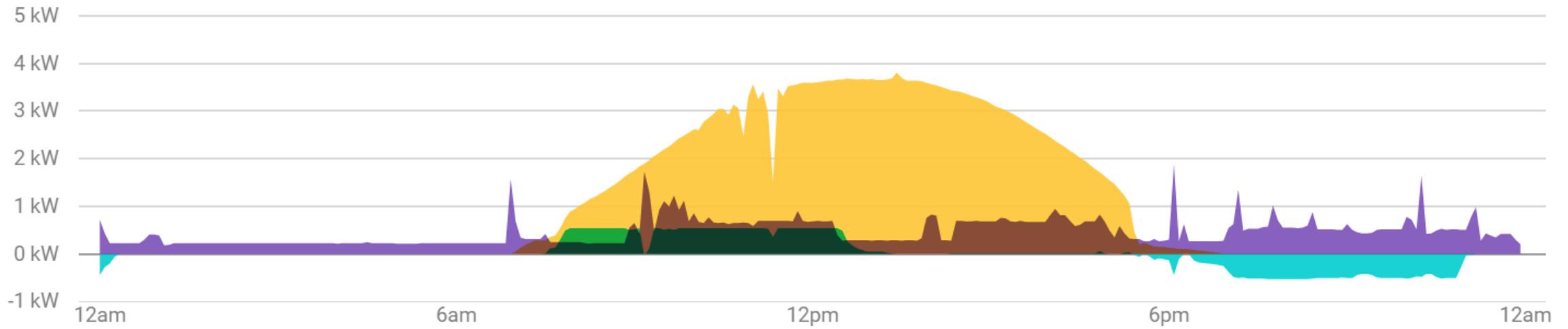
CLOSE ^

Battery ready?



DAILY

Saturday 17 March 2018



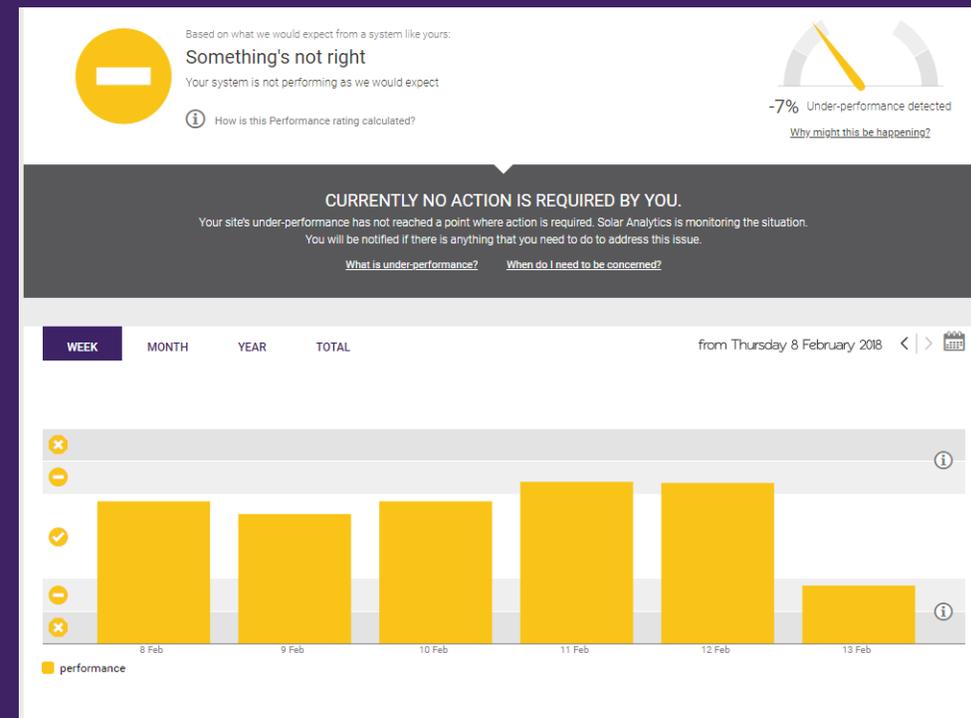
produced consumed battery



Problem 8

“If my solar system fails, I won’t know until the bill arrives and by then it’s too late.”

Great monitoring constantly monitors your system for faults and underperformance. Fault notifications and alerts are sent to both the installer and the customer allowing for fast response times to get the system working properly as soon as possible.





Based on what we would expect from a system like yours:

Something's not right

Your system is not performing as we would expect



How is this Performance rating calculated?



-7% Under-performance detected

[Why might this be happening?](#)

CURRENTLY NO ACTION IS REQUIRED BY YOU.

Your site's under-performance has not reached a point where action is required. Solar Analytics is monitoring the situation.

You will be notified if there is anything that you need to do to address this issue.

[What is under-performance?](#)

[When do I need to be concerned?](#)



Problem 9

“I’ve had monitoring before, but it was unreliable, kept going offline, and was inaccurate.”

Great monitoring companies have carefully chosen hardware to ensure that communications are robust and provide a continuous connection.







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