



Renewable Energy Buyers Forum

Sponsored by:



DLA Piper, Brisbane
26th July 2018

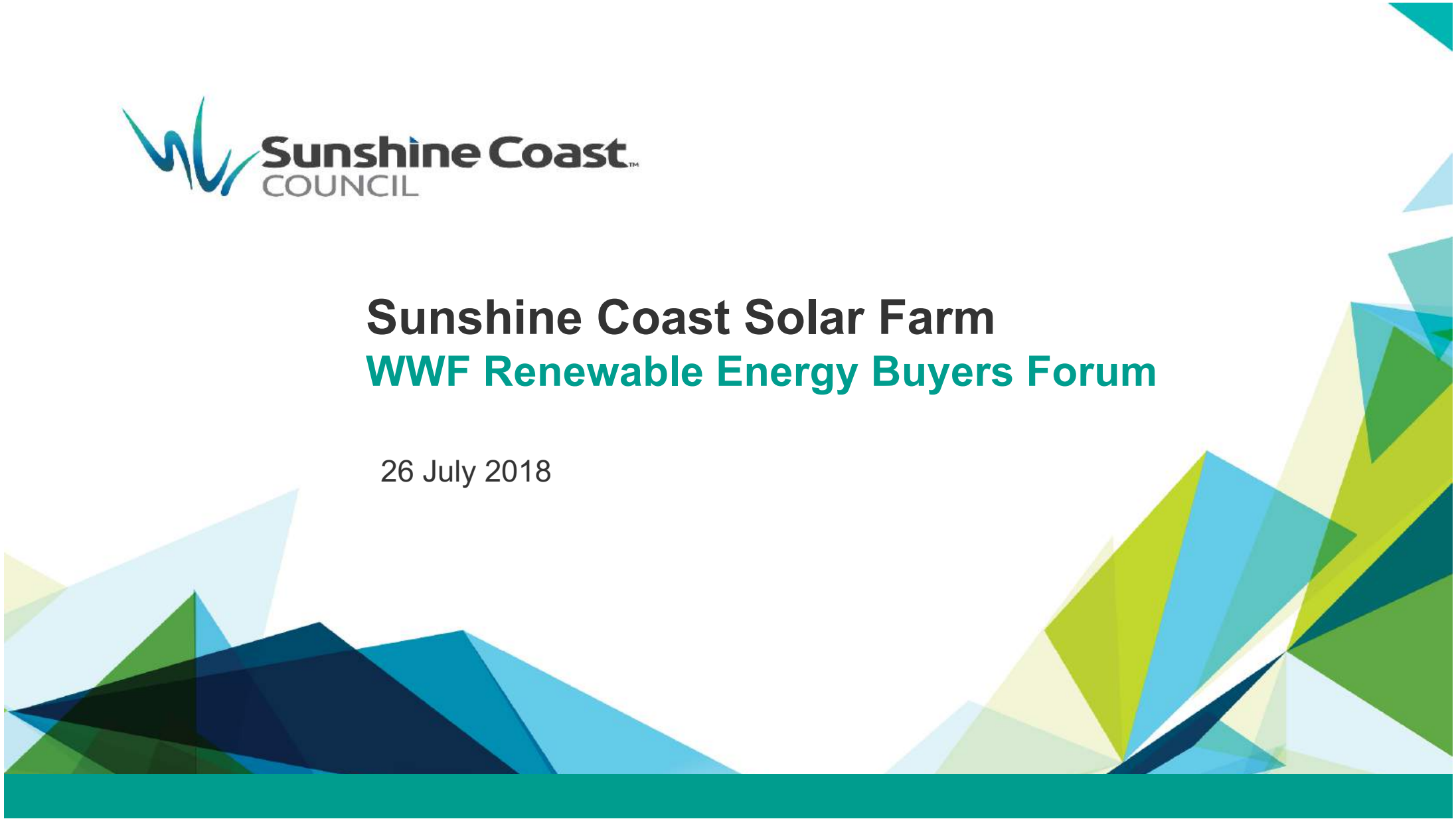




Sunshine Coast Solar Farm

WWF Renewable Energy Buyers Forum

26 July 2018



Why

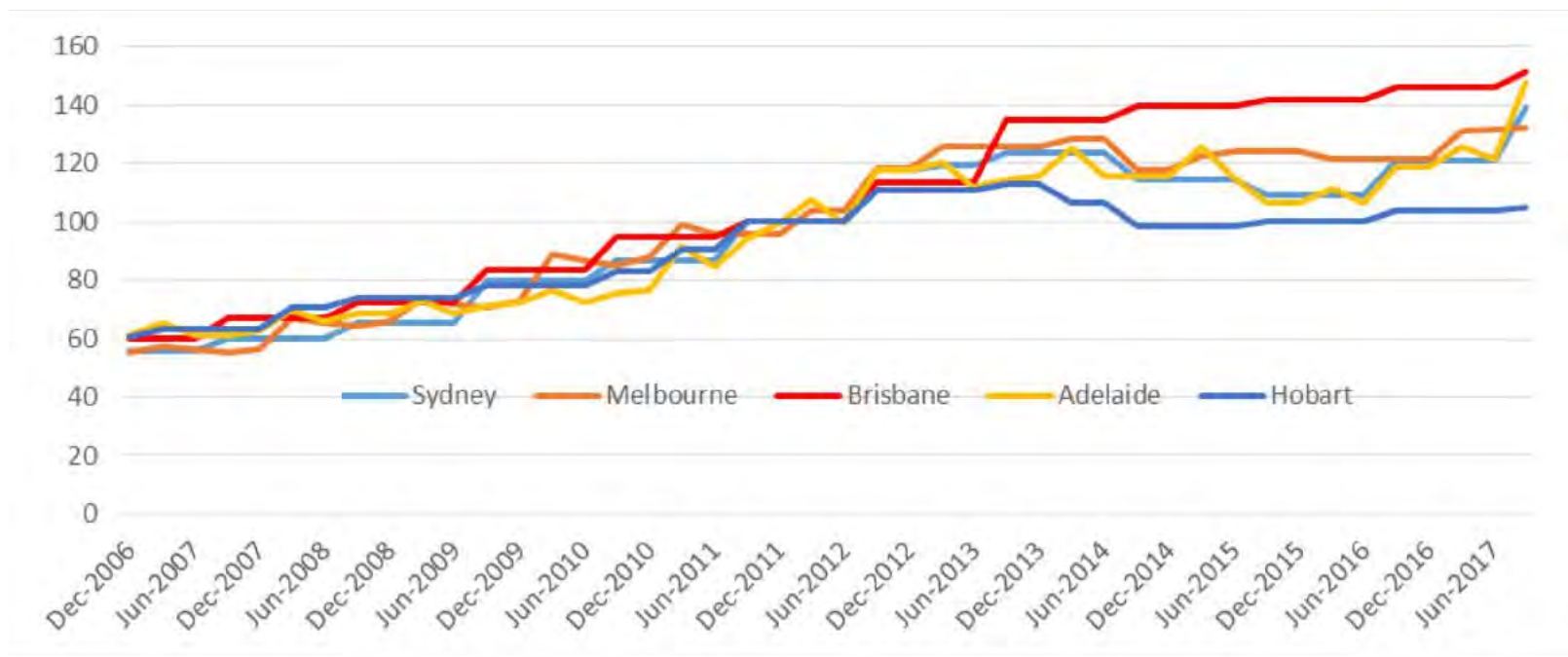
56

**To be Australia's most sustainable region –
healthy, smart, creative**

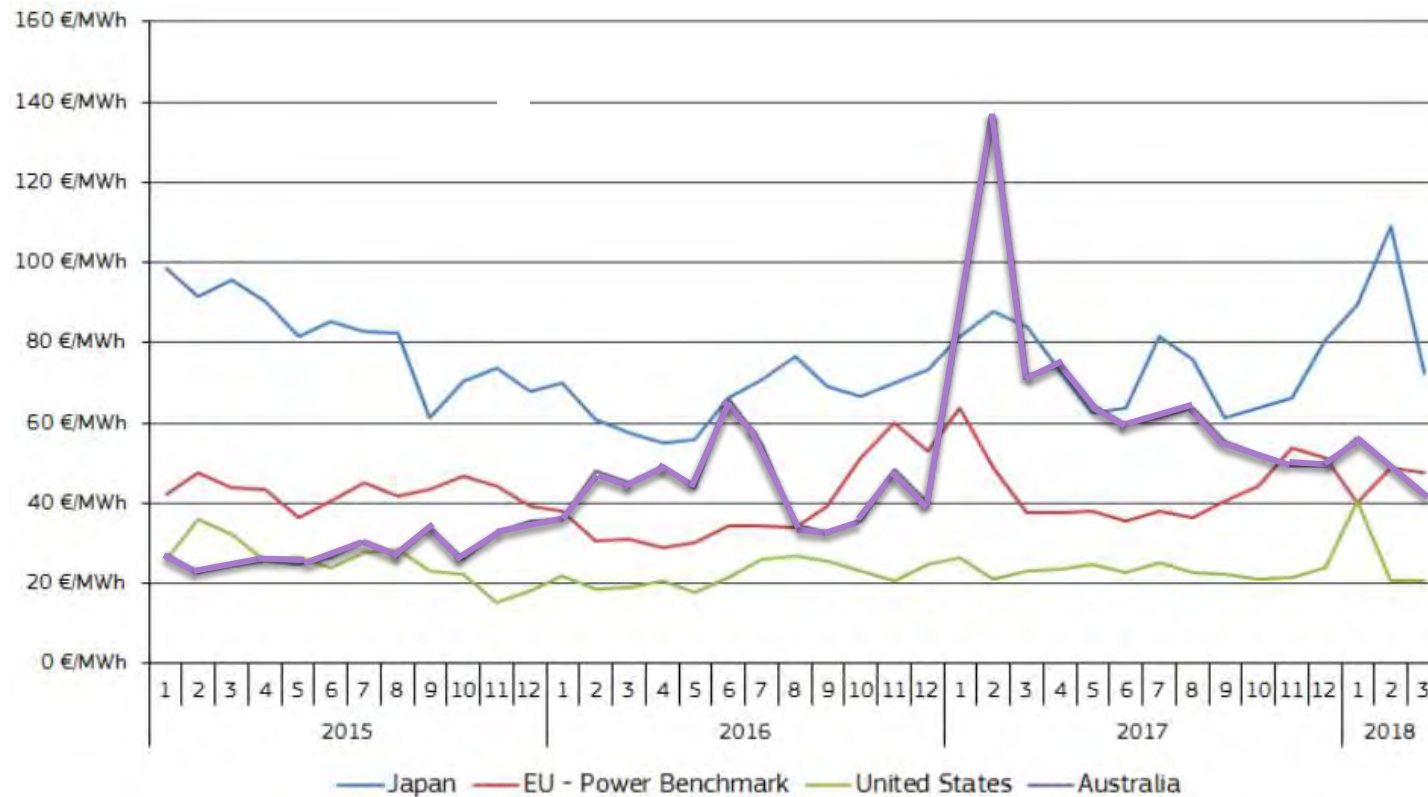




Electricity price index 2006-2017

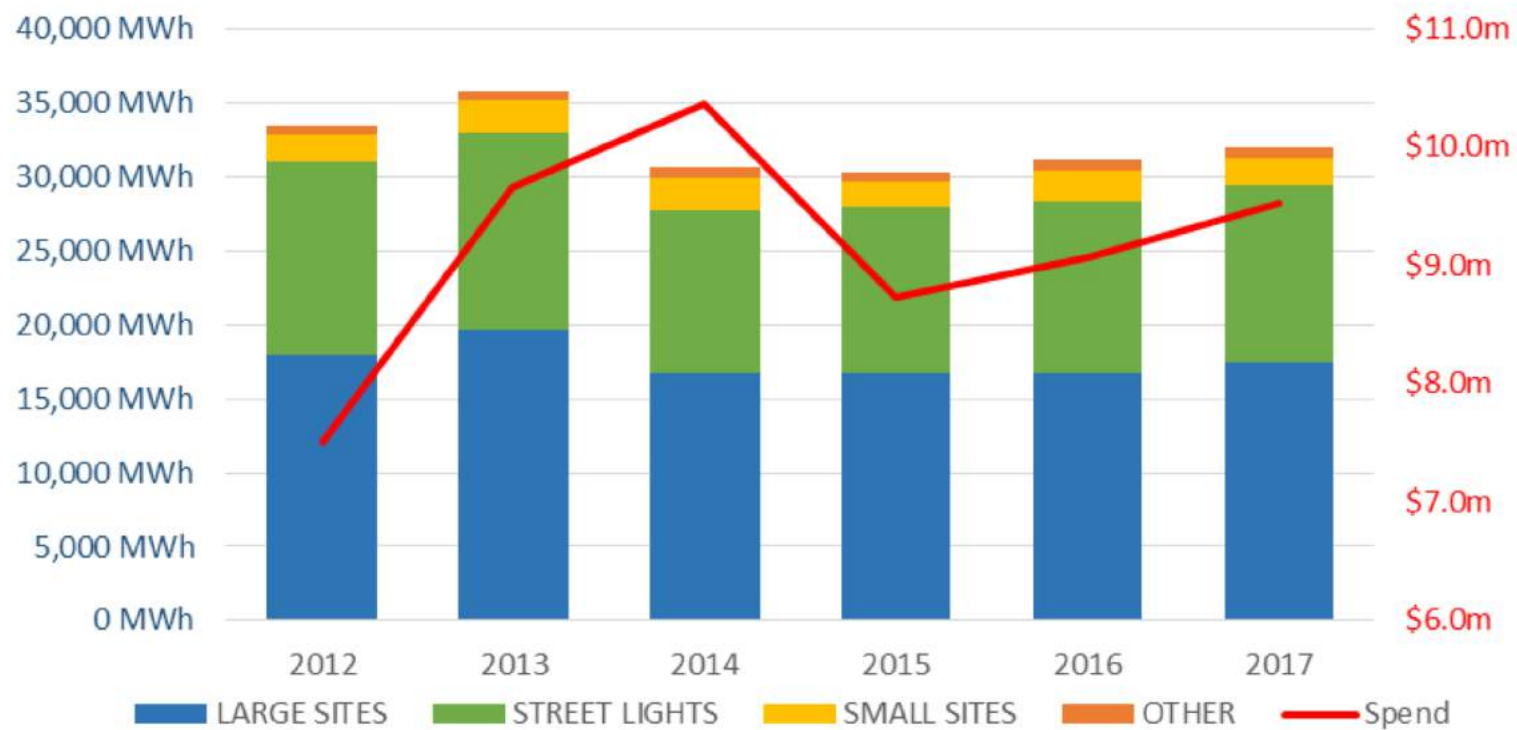


Wholesale electricity prices EU, US, Japan, Australia



Source: European Commission: Platts PEP, JPEX (Japan), AEMO (Australia) and the average of PJM West and ERCOT regional wholesale markets in the US

Electricity use and spend 2012 - 2017



How

If we take the on the risk can we release value?

30 minute irradiance & generation data 2004 - 2013

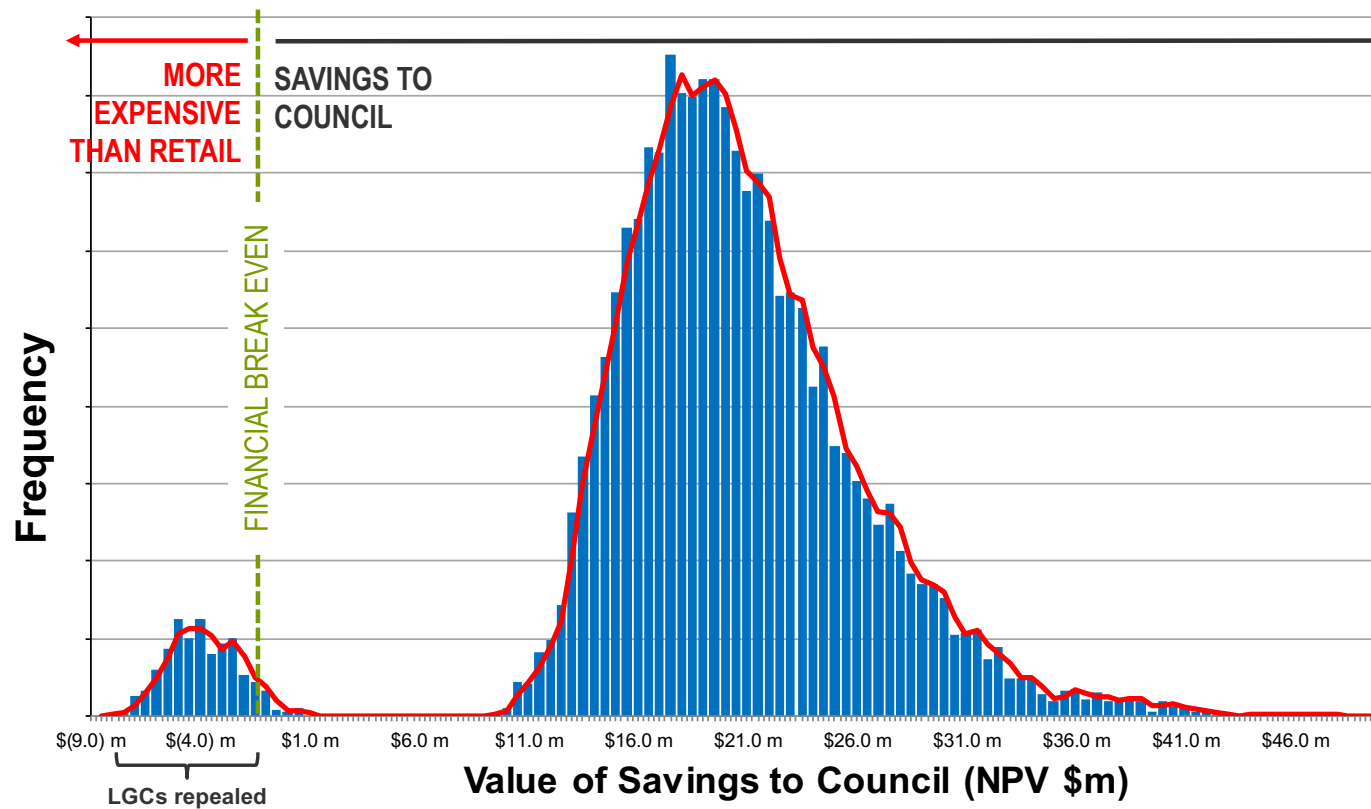


Business case for the solar farm - 2016

Type of Cost	BAU NPV \$millions
Energy Charges	\$(78.7) m
Carbon Charges	-
Network Charges	\$(132.8) m
ENERGEX Service & Maintenance	\$(98.5) m
Other Charges	\$(9.4) m
Total electricity costs	\$(319.2) m
Total Project Spend	-
Operating cost	-
Large scale generation certificates	-
Electricity Export	-
Solar farm terminal value	-
Total costs	\$(319.2) m

Testing our assumptions

Solar Farm Project Simulation (10,000 Trials)



Delivery

Project Partners



positive energy





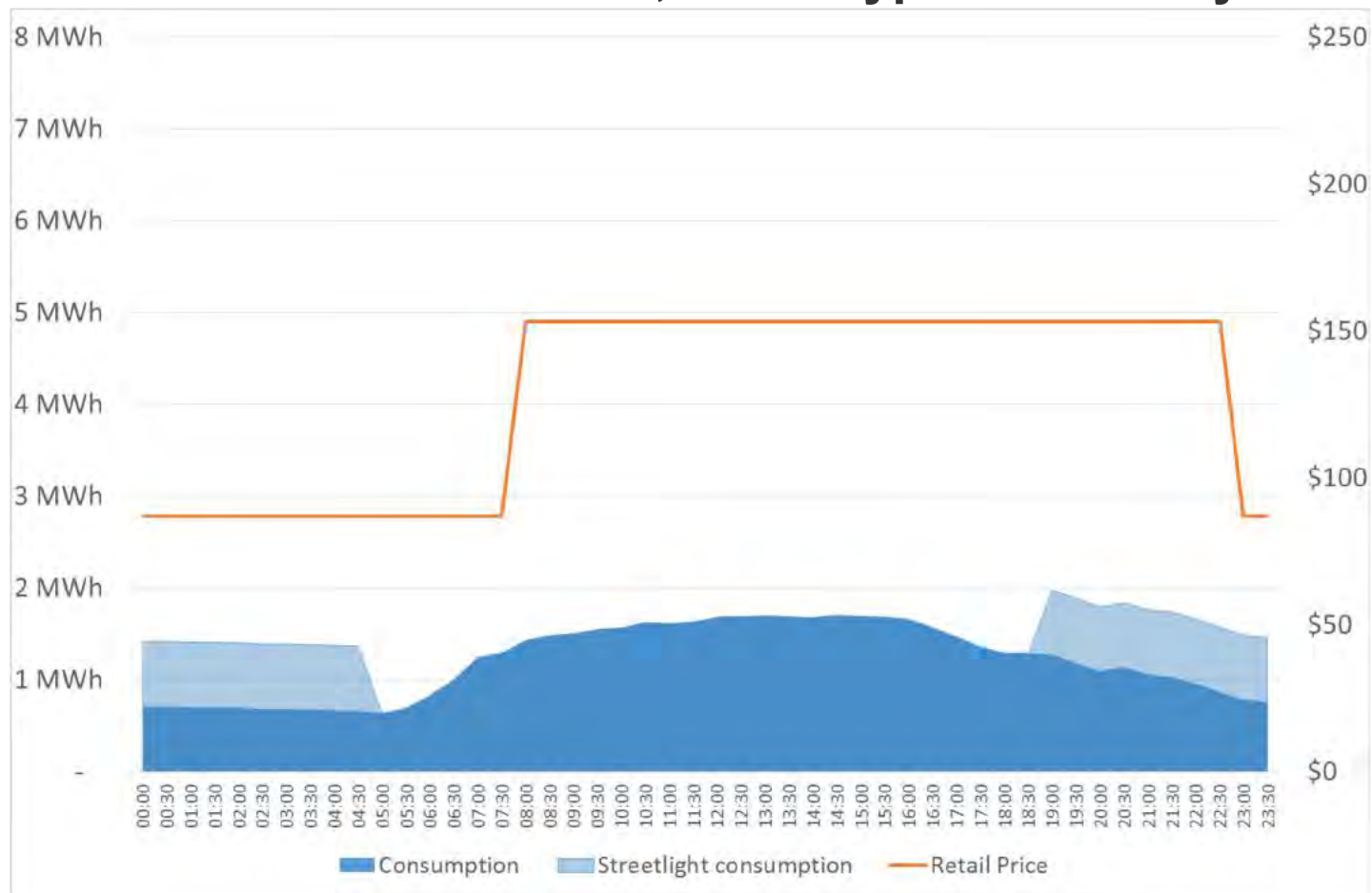




Retail Strategy

Pool Price Pass Through

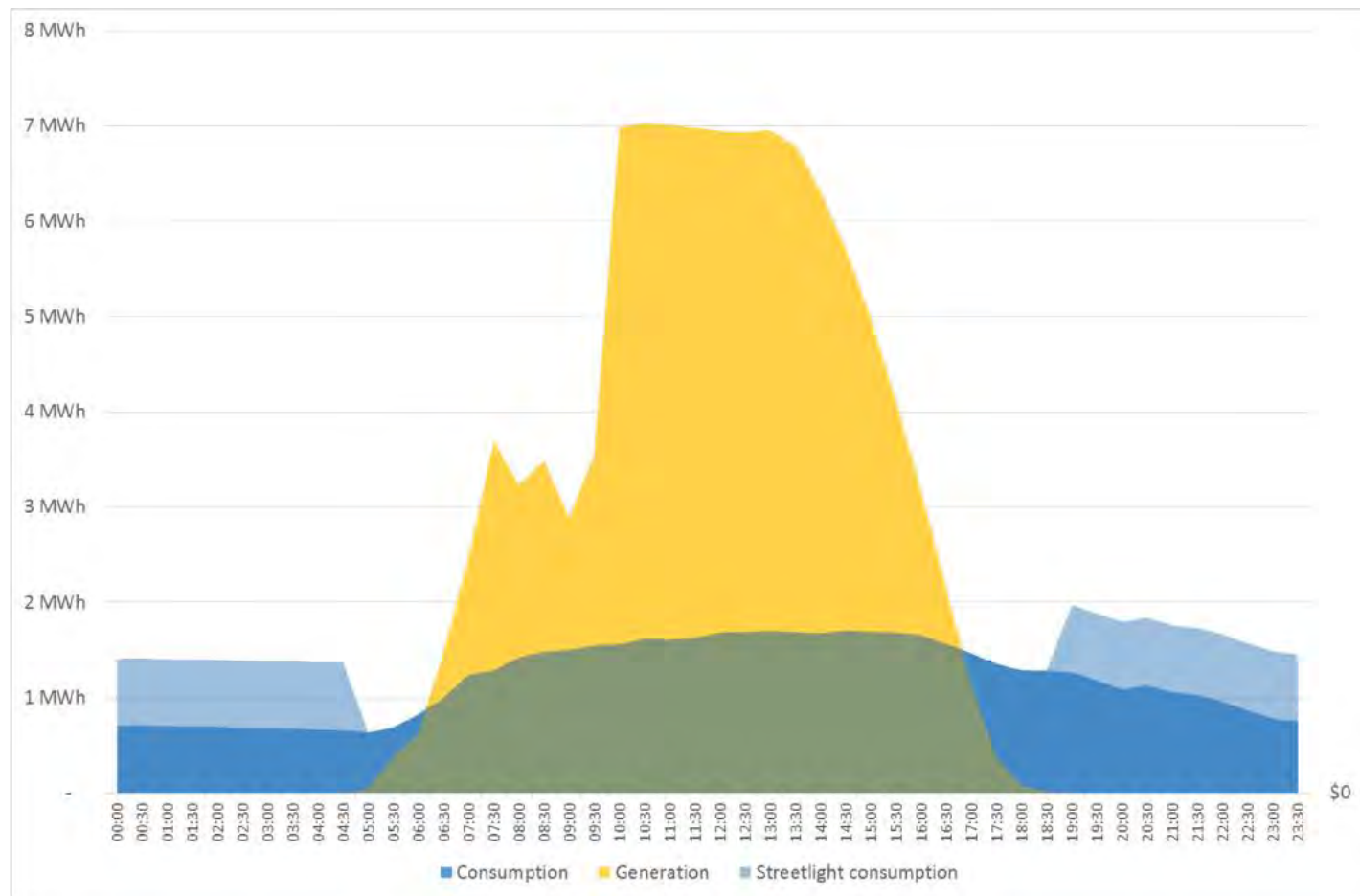
BAU Council load, ESA – typical weekday



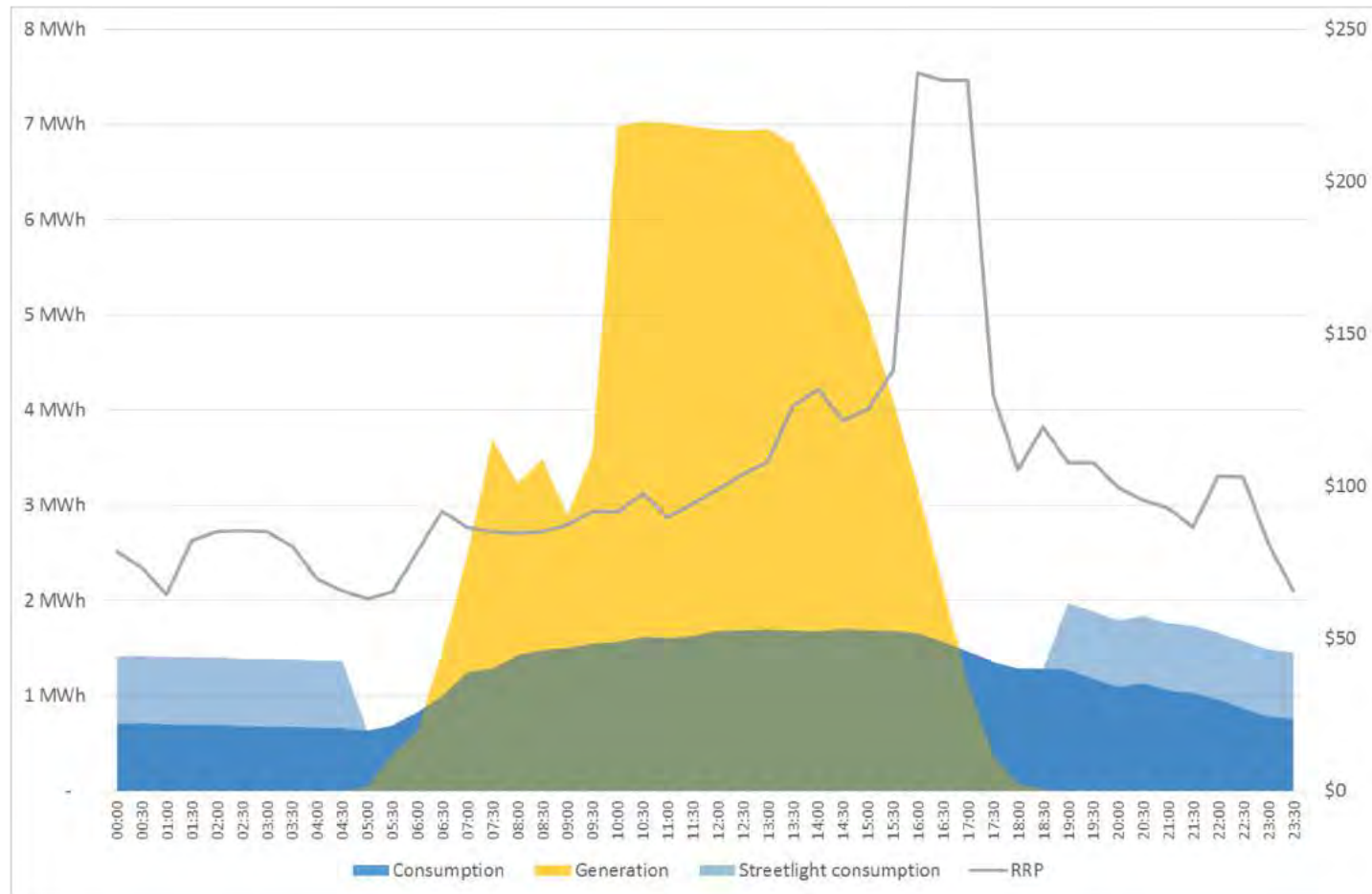
Retail options

Model	Risk	Margin to average spot	Margin to average spot
		Buy	Sell
ESA	Price	Premium	
PPA	Output		Discount
PPPT	Price & Output	Discount	Premium

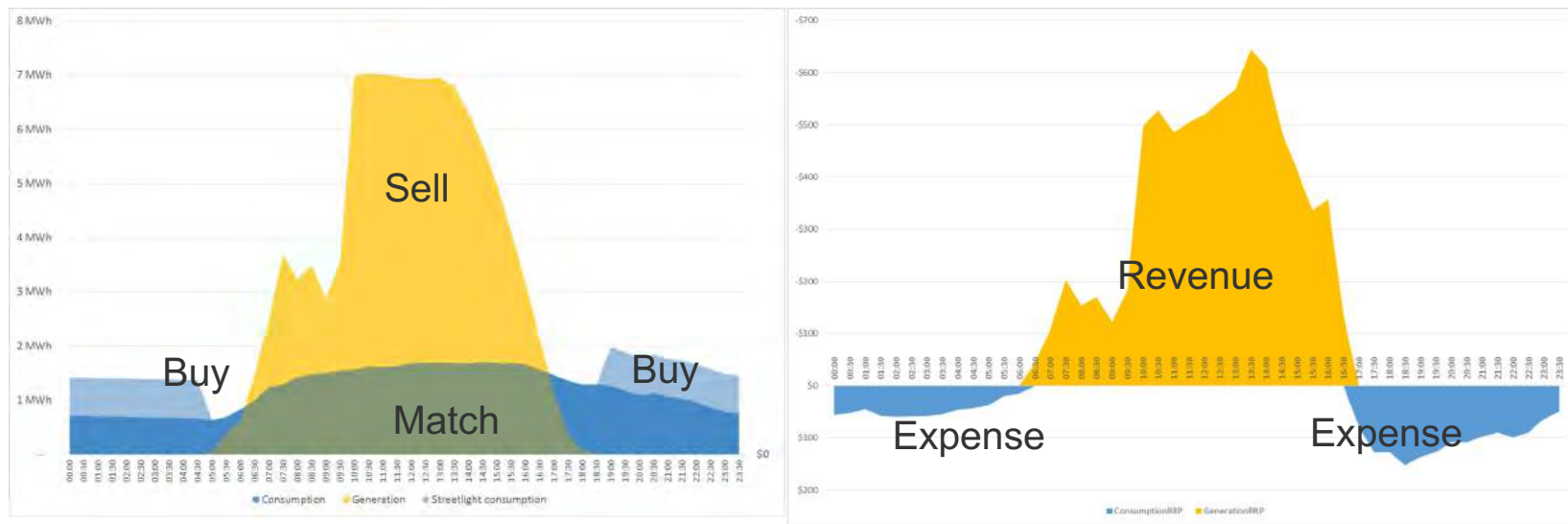
Solar Farm – typical day



Solar Farm – typical day



Solar Farm – typical day



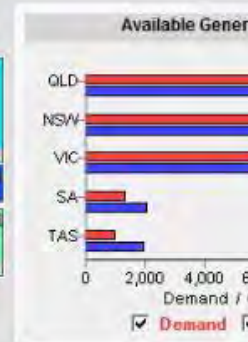
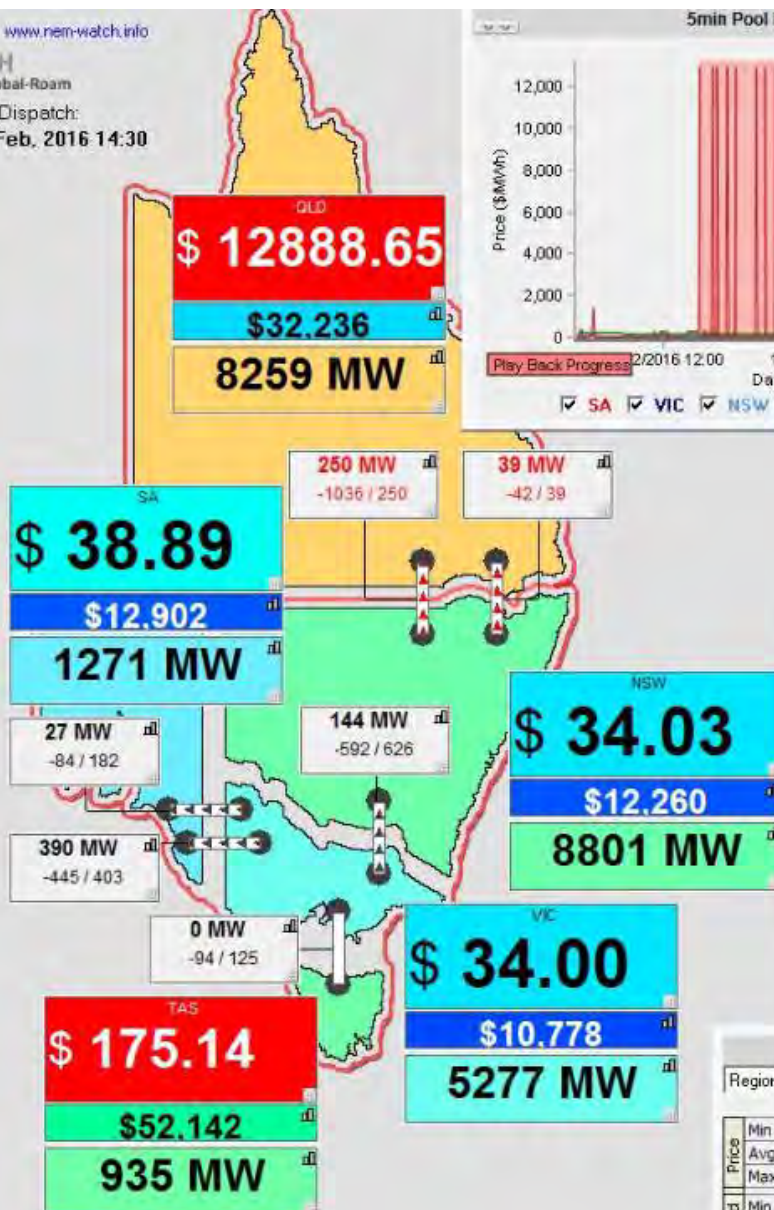


www.nem-watch.info

NEM
WATCH
by Global-Room

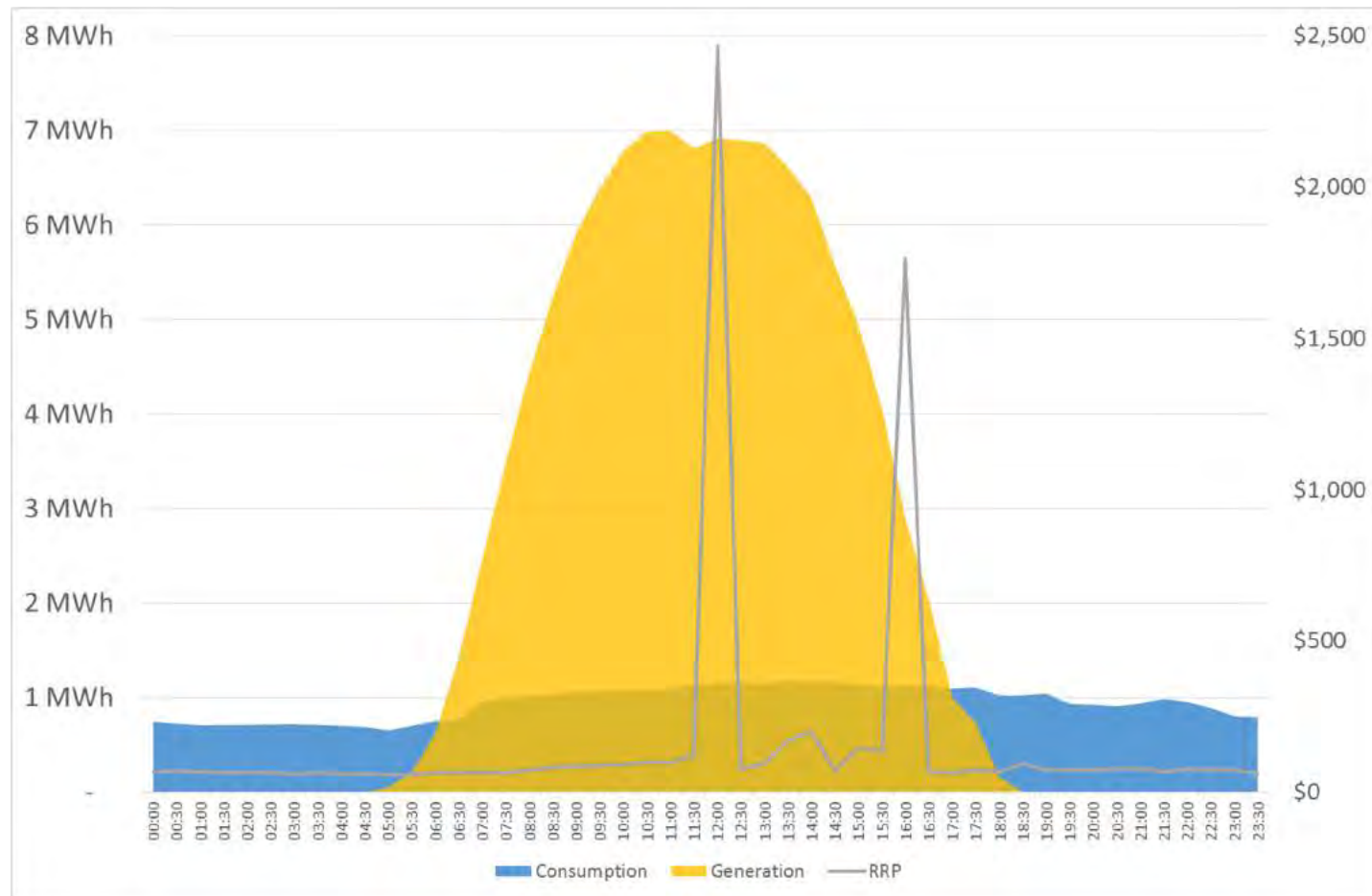
Playback Dispatch:

Wed 17 Feb, 2016 14:30

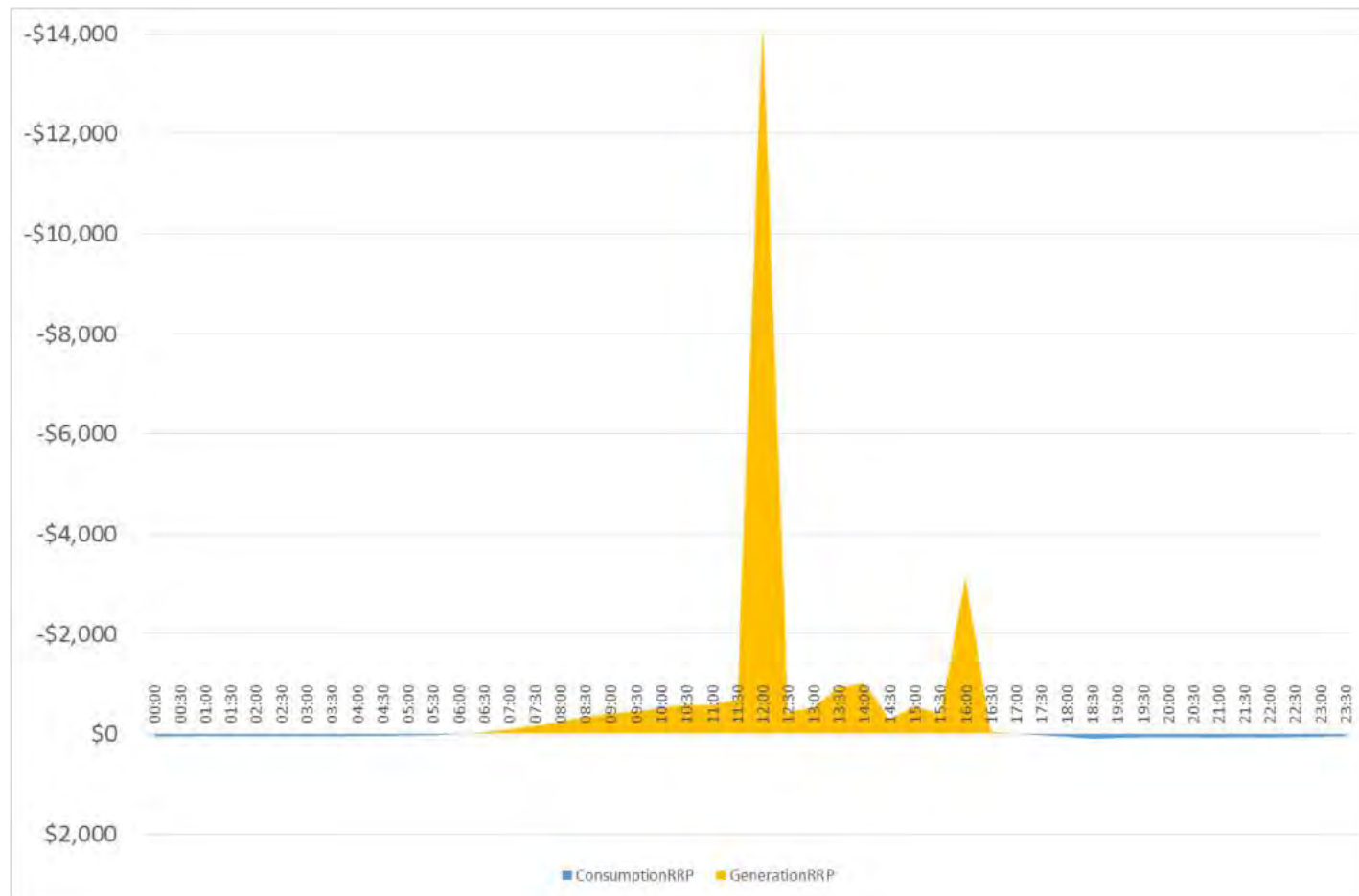


Region	Queensland	
	Today	Tomorrow
Price		
Min	32.88	
Avg	56.10	
Max	389.69	
Demand		
Min	5711	
Avg	6743	

Solar Farm – price spike

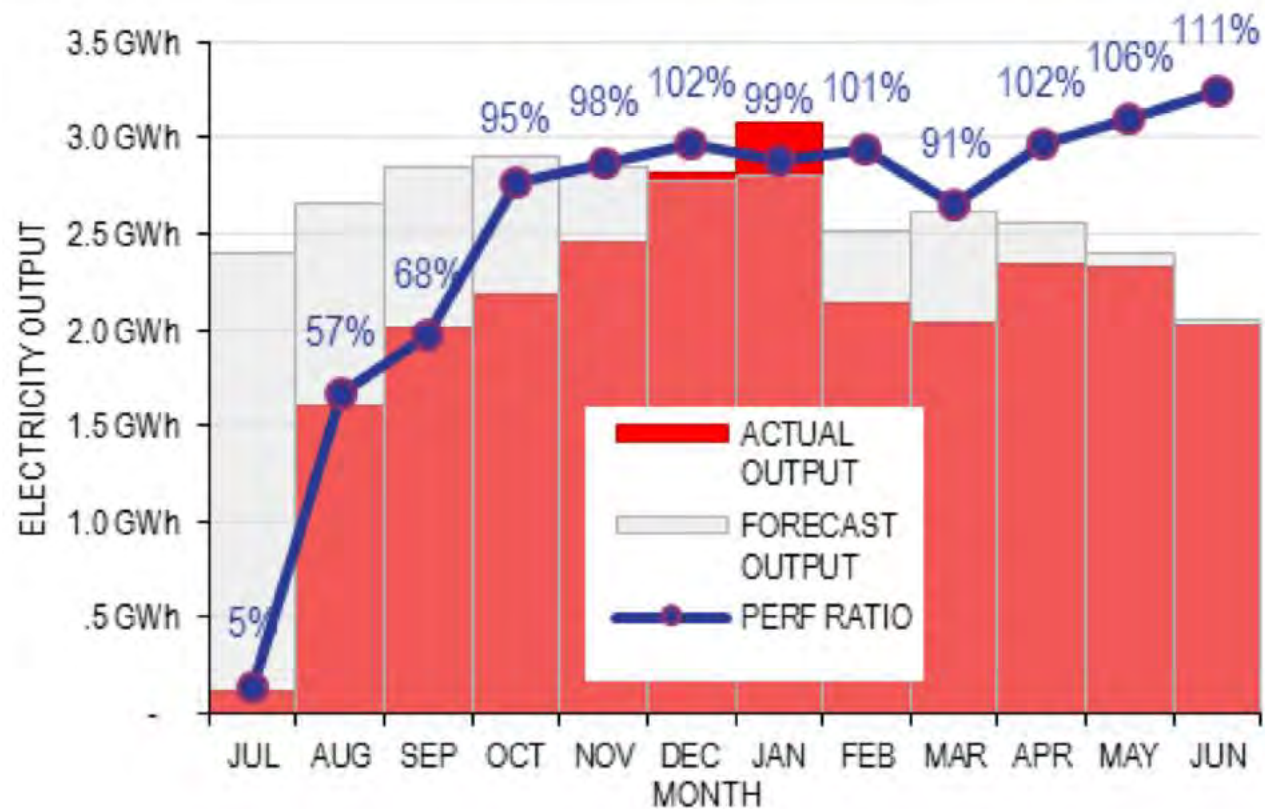


Solar Farm – price spike

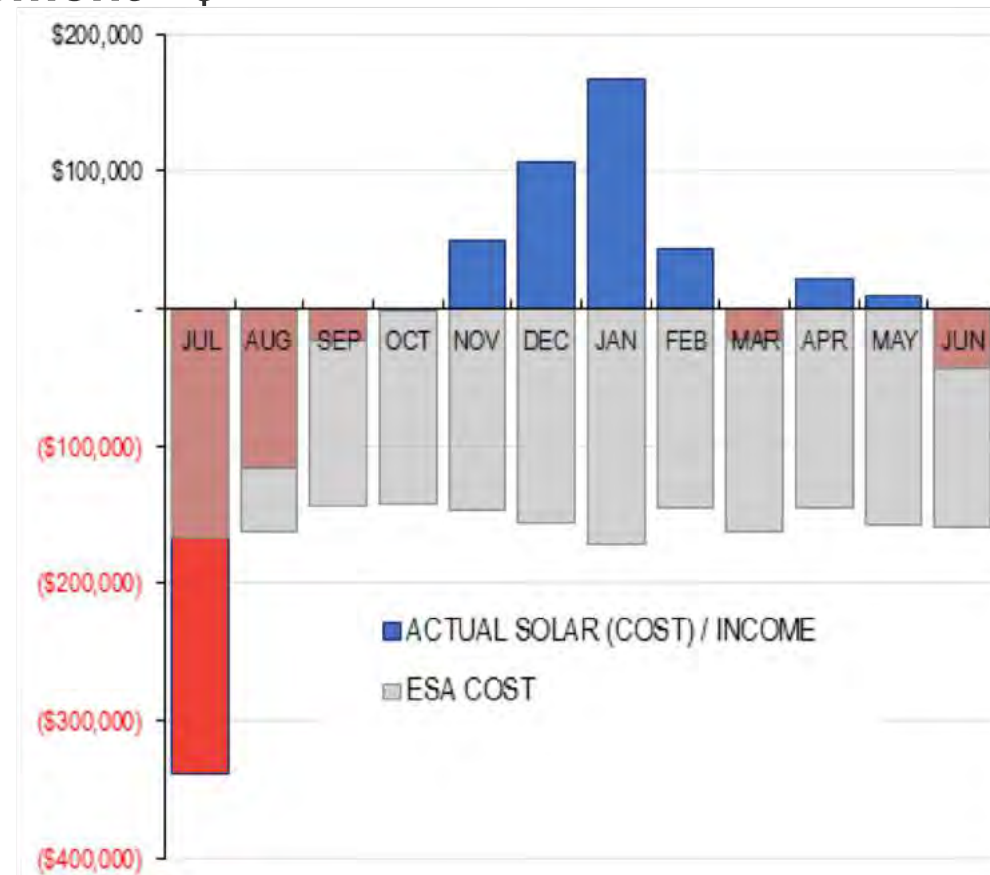


FY 2018 results

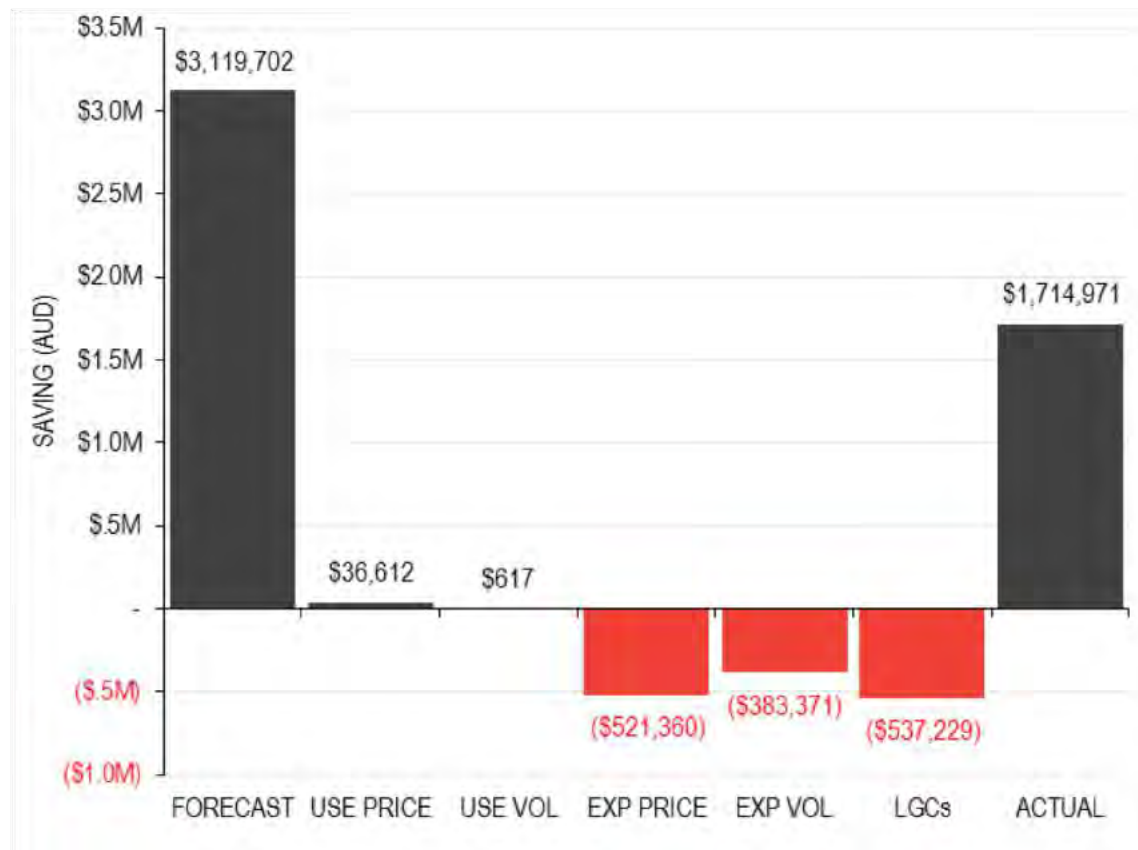
Measurement – monthly plant performance



Measurement - \$



Measurement – forecast v actual variances



Thank you