

## **Exemplary Advances**

2017 July "Exemplary Advances" is the newsletter for Exemplary Energy Partners, Canberra. Feel free to forward it to friends and colleagues. Click here to <a href="mailto:subscribe">subscribe</a> or <a href="mailto:unsubscribe">unsubscribe</a>. Feedback is most welcome. Past editions of "Exemplary Advances" are available on our website.

## Exemplary Weather and Energy (EWE) Indexi - June 2017

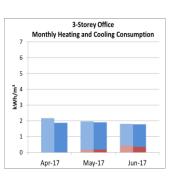
Monthly tabulation and commentary relative to the climatic norm - the Reference Meteorological Years

2017 June	Canberra		Perth		Sydney	
	Heat	Cool	Heat	Cool	Heat	Cool
10-Storey	N/A	N/A	-31%	18%	-25%	3%
3-Storey	N/A	N/A	-29%	25%	-19%	3%
Supermarket	N/A	N/A	-58%	68%	-50%	0%
Solar PV	N/A		13.4%		-3.6%	

Canberra – data not available.

**Perth** had warmer and sunnier than average weather in June. Although the mean maximum temperature was lower than the average by 2.1°C, the mean average and minimum were higher by 1.6°C and 1.4°C respectively. The 10-storey office South-facing zone had cooling consumption 27.4% less than the average due to the warmer air temperature. The North and West-facing zones also had more cooling consumption than the average, by over 19.0% and 27% respectively due to the warmer and sunnier weather. The solar PV array had an energy yield higher than the average by 13.4%.

**Sydney** also had a warmer than the average weather in June. The mean maximum, minimum and average temperatures were higher by 0.1°C, 1.8°C and 0.7°C respectively. Both our office building models had lower heating and higher cooling loads than the average. The East-facing zones of the 10-storey office had 18.8% less heating and 16.4% higher cooling consumptions. On average, there was less sun in the later afternoon. The 10-storey office West-facing zone had both heating and cooling loads less than the average by 21% in this weather. Solar PV energy yield was 3.6% lower than the average.



## Mandatory Home Energy Rating in the ACT for 219 Months

Mandatory <u>rating</u> and disclosure of the energy efficiency of existing homes at the time of sale has been <u>law</u> in the ACT since April 1999 and we have tracked the \$/star value correlation since then.

Recently, we have disaggregated the data by housing type and will be publishing those results soon.

## Home Energy Rating OptiMizer - HERO - available for free trial

The service is now available for AccuRate and BERS Pro files with a version to handle FirstRate5 files under advanced development. Contact us for your free trial.

Exemplary publishes the <u>EWE</u> for three archetypical buildings and a residential solar PV system each month; applying the RTYs to <u>EnergyPlus</u> models developed using <u>DesignBuilder</u> for a 10-storey office, a 3-storey office and a single level supermarket as well as an <u>SAM</u> model of a typical 3 kW<sub>peak</sub> solar PV system designed by <u>GSES</u>. All values are % increase/decrease of energy demand/output relative to climatically typical weather. Especially during the mild seasons, large % changes can occur from small absolute differences.

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