

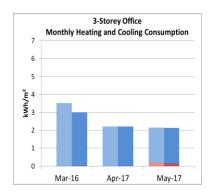
Exemplary Advances

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

Exemplary Weather and Energy (EWE) Indexⁱ - May 2017

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

2017 May	Canberra		Perth		Sydney	
	Heat	Cool	Heat	Cool	Heat	Cool
10-Storey	N/A	N/A	-27%	0.1%	-5%	-2%
3-Storey	N/A	N/A	-34%	3%	5%	-1%
Supermarket	N/A	N/A	-42%	92%	-59%	-64%
Solar PV	N/A		10.3%		6.1%	



Canberra – No data available.

Perth had warmer and sunnier than average weather. The PV array had an energy yield higher than average by 8.7%. The mean maximum, minimum and average temperatures were higher by 1.2°C, 1.9°C and 0.9°C respectively. The 10-storey office South-facing zone had cooling consumption 7.1% more than the average due to warmer air temperature. North and East-facing zones had higher cooling consumption than average, by over 9.0% due to warmer and sunnier weather.

Sydney was cooler than the average during the 1st half of May, then warmer for the rest of the month. Overall it was slightly warmer: the mean minimum and average were higher by 0.1°C and 0.3°C respectively, only the maximum was lower by 0.5°C. It was sunnier as well. The solar PV energy yield was 6.1% higher. The North-facing zones of the 10-storey office had both heating and cooling consumptions higher than the average, around 40% and 10% respectively. In contrast, the South-facing zone had both heating and cooling loads 0.4% and 1.5% less.

Mandatory Home Energy Rating in the ACT for 218 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. <u>Contact us</u> for your free trial.

ⁱ 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_{peak} 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.