



Exemplary Advances

2017 September “Exemplary Advances” is the newsletter for Exemplary Energy Partners, Canberra. Feel free to forward it to friends and colleagues. Click here to [subscribe](#) or [unsubscribe](#). Feedback is most welcome. Past editions of “Exemplary Advances” are available on our [website](#).

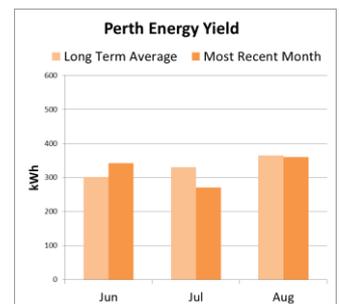
Exemplary Weather and Energy (EWE) Indexⁱ - August 2017

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

2017 August	Canberra		Perth		Sydney	
	Heat	Cool	Heat	Cool	Heat	Cool
10-Storey	N/A	N/A	16%	-10%	-35%	4%
3-Storey	N/A	N/A	12%	-9%	-29%	4%
Supermarket	N/A	N/A	47%	0%	-50%	-42%
Solar PV	N/A		-1.5%		-2.2%	

Canberra – data not available.

Perth had cooler than average weather in August overall. The mean maximum and average were slightly higher by 0.4°C and 0.6°C respectively, however, the mean minimum temperature was lower than the average by 1.4°C. It was cloudier as well. The solar PV array had an energy yield 1.5% less than the average. The 10-storey office North-facing zone had 40% higher heating consumption than the average due to the cooler and cloudier weather. The South-facing zone had heating consumption 13% higher than average due to the cooler air temperatures.



Sydney had warmer than the average weather in August. Although the mean maximum temperature was lower than the average by 0.6°C, the mean minimum and average temperature were higher by 1.8°C and 0.6°C respectively. Both of our office building models had lower heating and higher cooling loads than the average. The North and West-facing zones of the 10-storey office had 20% and 32% less heating respectively. However, the East-facing zone had higher heating consumption due to cooler air temperature during the early morning. It was cloudier as well. The solar PV energy yield was 2.2% lower than the average.



Welcome Zihay Wu

Our weather and climate data analyst and building and energy system simulation engineer, Chun Yin Wu, and his wife Pei welcomed the arrival of their first child, a daughter, Zihay, just minutes past midnight on a cold August night at the Royal Women's Hospital in Melbourne. Chun Yin is very pleased and said that she is a happy little girl who loves to be around people. Mum and bub are doing well. Chun Yin's parents from Hong Kong and Pei's parents from Malaysia will be supporting the couple in turn over these formative few months.

ⁱ Exemplary publishes the [EWE](#) for three archetypical buildings and a residential solar PV system each month; applying the RTYs to [EnergyPlus](#) models developed using [DesignBuilder](#) for a 10-storey office, a 3-storey office and a single level supermarket as well as an [SAM](#) model of a typical 3 kW_{peak} solar PV system designed by [GSES](#). 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.