



Exemplary Advances

2018 March “*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.

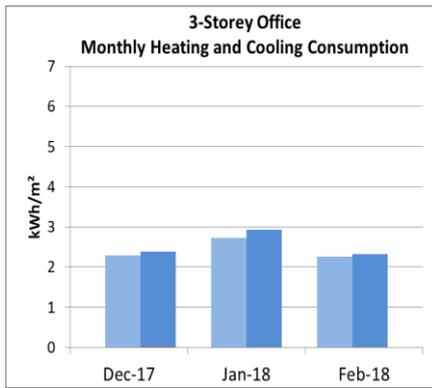
Past editions of “*Exemplary Advances*” are available on our [website](#).

Exemplary Weather and Energy (EWE) Indexⁱ - February 2018

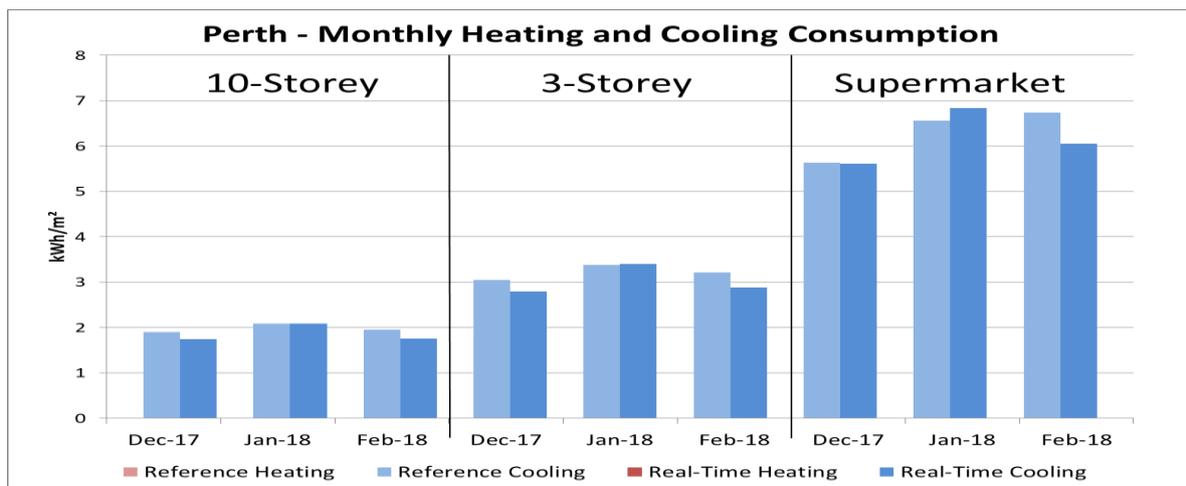
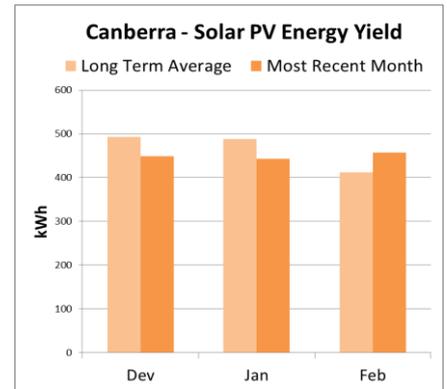
Monthly tabulation and commentary relative to the climatic norm – the Reference Meteorological Years

| 2018 February | Canberra | | Perth | | Sydney | |
|---------------|----------|------|-------|------|--------|------|
| | Heat | Cool | Heat | Cool | Heat | Cool |
| 10-Storey | N.A. | 3% | N.A. | -10% | N.A. | -23% |
| 3-Storey | N.A. | 3% | N.A. | -10% | N.A. | -26% |
| Supermarket | N.A. | 3% | N.A. | -10% | N.A. | -22% |
| Solar PV | 11.0% | | -1.7% | | 3.0% | |

Canberra had slightly warmer and substantially sunnier than average weather in February. The mean maximum, minimum and average temperatures were higher by 0.7°C, 4.0°C and 0.8°C respectively.

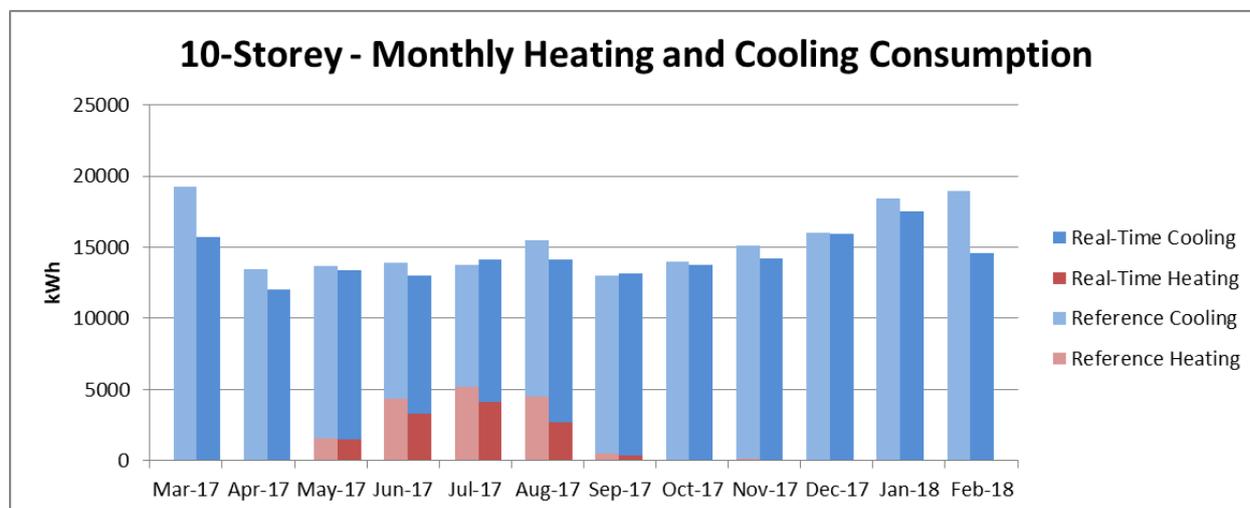


All the commercial building models had cooling consumptions higher than the averages by 3%. The 10-storey office South facing zone had 8.0% more cooling than the norm due to the higher air temperatures. East, North and West facing zone also had around 7.5 to 11% more cooling consumption as it was warmer and sunnier. The solar PV array energy yield was 11.0% higher in this weather.



Perth had substantially cooler than average weather in February. The mean maximum, minimum and average temperatures were lower by 5.4°C, 1.1°C and 2.2°C respectively. The 10-storey office South facing zone had a cooling consumption less than the average by 15.4% due to the lower air temperatures. North and West facing zones also had around 11% less cooling consumption. It was a little cloudier as well. The PV panel energy yield was lower by 1.7%.

Sydney had cooler than average weather in February. The mean maximum, minimum and average temperatures were lower by 2.9°C, 0.4°C and 2.6°C respectively. It was slightly sunnier as well; hence the solar PV energy yield was 3.0% higher. The cooling consumption of the 10-storey office South facing zone was over 34% less than the norm due primarily to the lower air temperatures. The other 3 zones also had cooling consumption around 26%-30% less. The solar PV array efficiency benefited from this cooler and sunnier weather and hence the energy yield was higher by 3.0%.



Mandatory Home Energy Rating in the ACT for 224 Months

Mandatory [rating](#) and disclosure of the energy efficiency of existing homes at the time of sale has been [law](#) 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.

Eco-Estate Residential Development in Malua Bay NSW completed

Exemplary Energy Partners has now completed its Eco-Estate Residential Development in Malua Bay NSW in which a Community Title of 15 lots was developed with shared facilities and private road access. An existing house recently upgraded was also offered for sale.

Called [Escape @ Malua](#), its neighbourhood management plan includes building approval conditions favouring care for the amenity of neighbours and for environmental construction including energy efficiency beyond the current minima set out in [BASIX](#) for homes within NSW - generally lower standards than the 6 Stars ([NatHERS](#)) required elsewhere in Australia. The last lot was sold in March 2018.



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.