

Kelvin Trimper Scholarship 2025: Alexandra Fry

Case Study: Showcasing Energy Efficiency in SA

The following case study was written for the Scorecard team in the Victorian Government. It was published in the monthly assessor newsletter and website.

Joel and Laura have recently moved to Adelaide, into a new rental, a new job and just had their first baby! Another thing they dove head-first into was volunteering their home up for Adelaide-based Scorecard Assessor, Alex to showcase it for Sustainable House Day 2025 (SHD).

Alex received funding from the inaugural SA Power Networks Kelvin Trimper scholarship and sought expressions of interest from landlords and renters who wanted to improve their home in return for opening it up to the public to take a look. She undertook a Scorecard Assessment and has been working through the list of recommendations to upgrade this home and disconnect it from gas appliances and connection. In just two months, over March and April 2025, the following work was completed:

- Upgraded ceiling insulation from R1.5 to R5
- Replaced the instant gas hot water system with a hot water heat pump (disconnecting the house from gas)
- Relocated the reverse cycle outdoor unit (to make room for the heat pump)
- Installed weather stripping and door seals
- Installed Renshade, a temporary internal shade that has helped reduce the sun from entering the home in summer.

In addition to these interventions, Alex says the house already had some great features that she wanted to highlight, showing people visiting on SHD that many houses have their hidden benefits, if you know where to look:

- The house is small, measuring around 120m², which means it uses less energy to heat and cool.
- It has a small reverse cycle in the rear of the property, in a room which can be zoned for climate resilience. This means on really hot or cold days, doors and blinds can be closed and the small space heated or cooled efficiently.
- There is shading to the northern windows, both in the form of trees and external blinds. This stops the house heating up as much in summer.
- As a townhouse, it has the potential to have a high heat load in the top floor. The existing ducted evaporative air conditioner is a cooling appliance with a low cost to run and helps lower the temperature in summer.

Joel, an advocate for improving rental and housing standards also went one step further, leaning into the work being undertaken by buying a new heat pump dryer and working with the landlord to have solar installed on the roof. One thing that made this easier is that Joel's landlord is also a family member and was willing to have her home electrified – knowing it would open opportunities in the future, including electric vehicle charging, access to low-rate green loans, low ongoing running costs of the house for both future tenants and herself should she move back in one day.

The open home was called *Showcasing Energy Efficiency in SA*. Alex invited stakeholders to participate in the open day, and had the follow trades and groups attend on the day;

- CosyWrap

- Adelaide West Plumbing
- Brokerage and Co
- Mission Possible
- Venergy Solar

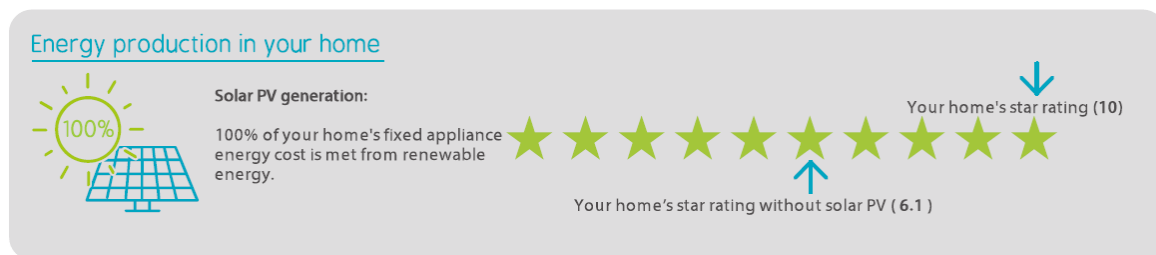
Unable to join on the day were YESS and Olson Cooling and Electrical, who were service and product suppliers in the project.

The community groups and businesses in attendance talked to the 30+ visitors about how they could take inspiration for their home too. The open day featured information on all the interventions or existing benefits of the home, links to more information or online resources, and talked about how SA residents can access rebates via the Retailer Energy Productivity Scheme.

Initial Scorecard rating: 6.6/10 stars

Finished Scorecard rating: 10/10 stars

The average home in Australia measures at 3 stars. This house started out well, over 6 stars, because of the efficient appliances already installed and its small size. The resulting star rating is a result of both the work completed and the installation of solar. The Scorecard star rating is a reflection of cost to run the energy appliances in the home – so the more stars the lower the running cost for the household. A rental property with a 10-star final rating is a great outcome.



The outcome of the work also saw the house's carbon emissions and energy costs greatly reduce. According to the data collected in the back end of the Scorecard system, the houses energy costs and CO2 emissions are projected to fall into the negatives – meaning the house has a net benefit outcome from the work completed.

Energy use: from 8426 MJ of energy annually down to -26125MJ

Carbon emissions: from 806kg CO2 emissions per year down to -3866kw CO2 emissions.

The open home in pictures: Sustainable House Day, 4 May 2025

We did not take pictures of attendees.



Figure 1: Mission Possible and Brokerage and Co set up tables at the side of the home to talk to visitors as they entered the cul de sac.

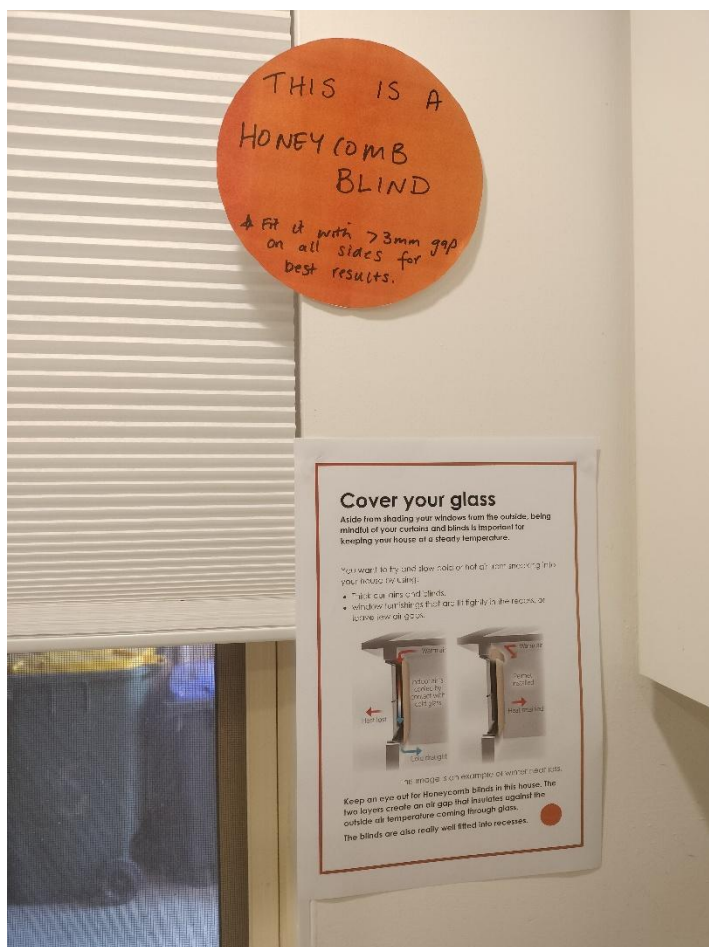


Figure 2: Information about window coverings and showcasing existing honeycomb blinds. I created 'orange circles' to highlight features about the house that the attendees should make note of. These are some examples.

Figure 3: information about solar hardware in the carport as well as education on the time of use tariff the household was moved too once installing solar.

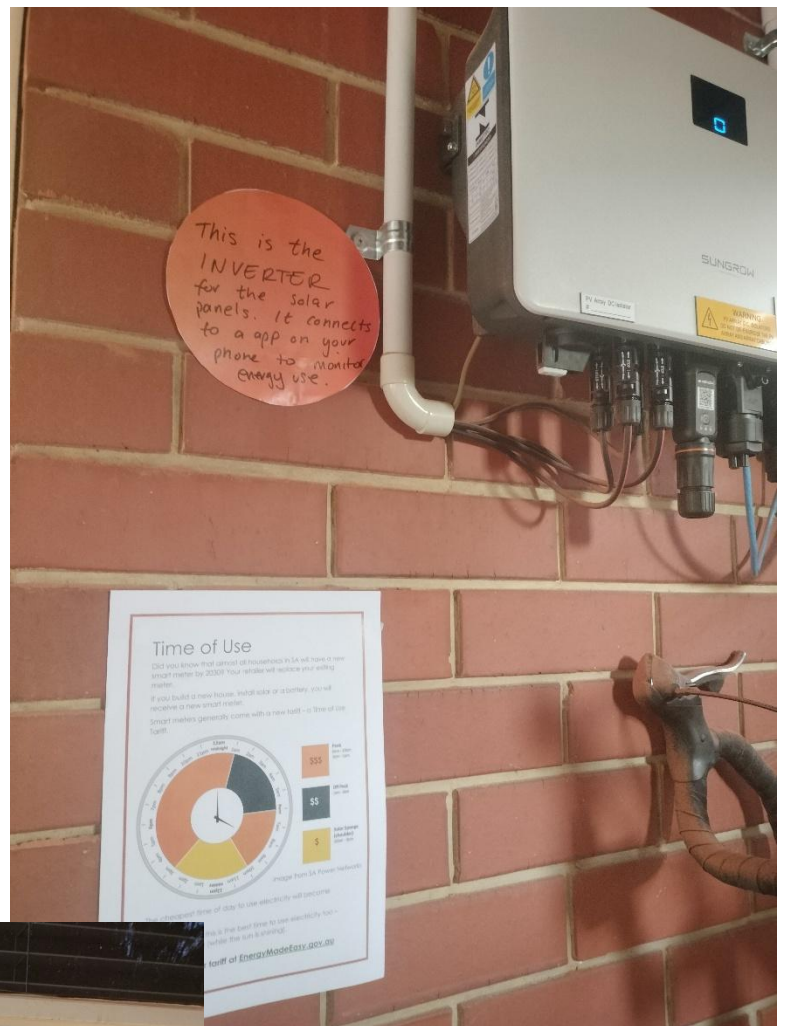


Figure 4: A display of Renshade - a perforated reflective film used to reflect direct sun light. It was downstairs as we didn't allow people upstairs. The front door also had EVM Slimline tape installed to block draughts.

Figure 5: A social media tile used to promote an EOI from renters and landlords in Adelaide.

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- Receive FREE advice and upgrades to make the home cheaper to run, and more comfortable to live in!

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Sustainable House Day
Presented by **renew.**

BE PART OF SUSTAINABLE HOUSE DAY 2025!

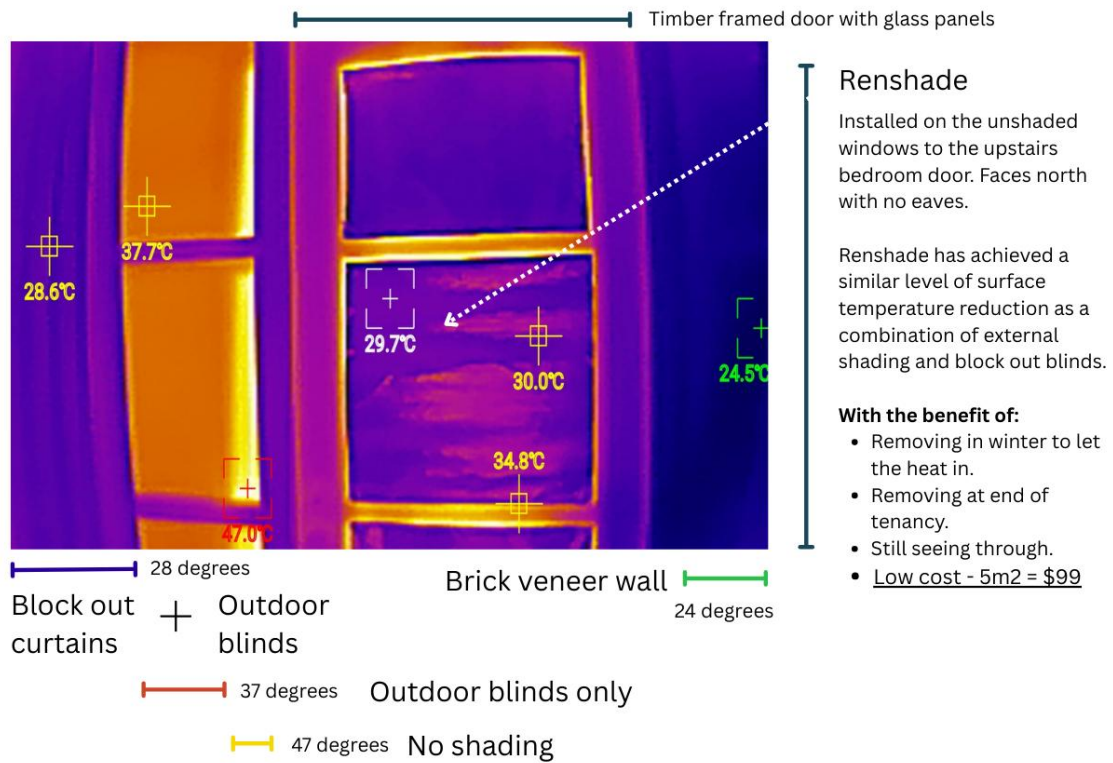


Figure 6: Information about hot water heat pump systems.



Figure 7: image of the insulation upgrade in the roof with R3 roof batts laid over existing material. CosyWrap also sealed any holes in the ductwork of the AC to make it run more efficiently. CosyWrap were in attendance to talk to all attendees about the insulation and draught sealing work they could do – and were inundated with conversations.

A Renshade Case Study



Can you see through the glass?

Only the door has Renshade on it.

Renshade on the toilet window in combination with a honeycomb blind.



Both images taken at the same time, on a day recording temperatures of low 30's.

Figure 8: a thermal camera was purchased for this project. It was used to look at the impact of window coverings - and this case study was written up and published for the event.