

renew.

Leading in sustainability

Small business leading the way

Industry leaders, particularly small builders are demonstrating that building to higher standards is possible and cost-effective now. Raising energy performance standards to reflect industry best practice would give them the policy certainty they need to continue to innovate and invest in new technology, training and jobs.

Mark Thomas, GoodHouse, South Australia

Mark Thomas is onto his 42nd energy-efficient project. "Once the builders [we work with] have actually built one, they say it's not that tricky," he says.



Over time [we've] whittled the costs down to below \$2000 a square metre for homes rated well above the minimum for thermal performance – a cost that is well below that of even the most basic custom house projects.



Brendan Condon, The Cape, Gippsland Victoria

Brendan believes that alongside regulatory change and consumer demand, it's the big players in the market who have the power to shift the conversation beyond the sticker price to what a truly valuable home can be.



There is no reason why volume builders can't be doing more work in their design phase to deliver high quality passive solar homes. They could be doing exactly the same as us and achieve much better prices per square metre and savings than we have.



Tony O'Connell, TS Constructions, Gippsland Victoria

TS Constructions builds 25 to 30 houses a year and routinely delivers 8+ Star homes to clients. The premium used to be about \$14,000 to get from 6 to 7.5 Stars with one of the basic designs we started with, and we've brought that back to just over \$6,000 to get from 6 to 8.2 Stars.



In 6 or 7 years we've increased the star rating and cut the cost in half.



Tony emphasises that most of the gains have been through investments in good building design and training. "Good design is key, and with that sorted, we don't really need to sacrifice anything to get good ratings."

"There are a lot of things we used to price in as a bit of an unknown that we don't anymore. For example, it takes very little time to run a bead of silicone around under the frame as you put it down on the slab to stop any air shift. We used to price that in as a bit of a premium, but now we've built so many of these projects, we've developed better and quicker methods and just see this stuff as part of good building practice."



Image taken at The Cape by photographer Dave Martin

Jenny Edwards, Light House Architecture and Science, ACT

Light House Architecture has designed more than 100 energy efficient homes, and has also found that 8-Star thermal performance is “the absolute sweet spot”. Her past clients report power bills as low as \$500 per annum and indoor temperatures that rarely range outside of 18 to 25 degrees.

We work with a range of builders in Canberra, and they're all a bit terrified when they first work with us because they know we've got these standards. But the good news is, even with standard construction, they're passing with flying colours.



It's not rocket science, just attention to detail.



“If you talk to a project home builder about a 7-Star house or double-glazing or increasing insulation, the extra they want to charge is way out of proportion for what those items actually cost. What they're charging the client for is wanting to do something different. They

have a massive stock of the same elements and it is inconvenient for them, so it wrongly gives the impression to the clients that it costs a lot more than it really does.”



The biggest hurdle is to get people to realise that a standard 6-Star project home costs as much upfront as mine does, but twice as much to run from then on.



Case studies and quotes taken from *Sanctuary 45*. Read the full “Price is right” article on the Renew website: <https://renew.org.au/sanctuary-magazine/in-focus/price-is-right-is-the-market-finally-ready-for-energy-efficient-design/>

What real-world experience of building to higher energy performance standards is telling us

Renew has conducted several case studies of Class 1A (detached) homes in Victoria built up to 2.2 Stars above the mandatory minimum of 6 Stars. We have found these homes typically:

- Have a 'cost premium' of only \$10K to \$15K.
- Have ongoing energy bills that hover between zero and \$500 per year (typical saving in the order of \$2.5K per year), without relying on high feed-in tariffs or energy (battery) storage; and
- Achieve high comfort levels as reported by occupants.

As very few Australians pay cash for a home, a minor shift in upfront price is unnoticeable over the average 25-year mortgage. It is the ongoing costs in terms of energy bills and their impact on mortgage repayments that has a much bigger impact on overall affordability.