RATING METHOD

How we rate heat pump hot water

Independent ratings for Australian homes. No brand can pay for a score.

A heat pump water heater should save as much energy as possible, keep working on frosty mornings, last, and not disturb you or the neighbours. We start from the government's own savings figures for every model, then add the warranty, cold-weather limit, noise and refrigerant from the manufacturer's documents.

33 series on the Clean Energy Council approved list, covering **301** approved models. **30** home series have enough published data to rank.

What makes up the score

CRITERION	WEIGHT	WHY IT MATTERS	THE RULE
Energy savings (official) On the list: 28 to 34, typically 32	30%	STCs are calculated by the government from tested performance under the Australian Standard: the more energy a heat pump saves against an electric tank, the more it earns. It's the one efficiency figure every brand is measured the same way on.	STCs for a Zone 3 installation on the Clean Energy Regulator register, best model in the series: 26 scores 0, 34 scores 10.
Warranty On the list: 5 to 10, typically 6	25%	Tanks and heat pump units are covered for different terms. Both matter: a tank leak or a dead compressor is the expensive failure.	Average of the cylinder and the refrigeration-system parts warranty, in years: 3 scores 0, 10 or more scores 10.

CRITERION	WEIGHT	WHY IT MATTERS	THE RULE
Cold-weather operation On the list: -15 to -5, typically -7	15%	Below its limit, a heat pump hands over to the electric element and costs as much to run as an old tank.	Lowest outdoor temperature the heat pump runs at without the element: 0°C scores 0, -10°C or colder scores 10.
Quietness On the list: 37 to 54, typically 47	15%	Heat pumps often sit near bedrooms or a neighbour's window.	Sound pressure at 1 metre: 55 dB(A) scores 0, 37 dB(A) scores 10. Figures quoted at 2 metres have 6 dB added.
Refrigerant	15%	Natural refrigerants have almost no climate impact and are what new systems are moving to; older synthetic ones are being phased down.	Natural refrigerants R744 (CO2) and R290 score 10; R513a 5; R32 4; R134a 2.

How we read the documents

Energy savings (official)
Every heat pump on the Clean Energy Regulator register is modelled under the Australian Standard, and earns small-scale technology certificates (STCs) in proportion to the energy it saves against an electric tank. We use the Zone 3 figure for the best model in each series. Unlike manufacturers' COP figures, every brand is measured the same way.

Cold-weather operation
The lowest outdoor temperature at which the heat pump itself runs, as printed on the datasheet. Below it, the electric element takes over and running costs jump.

Noise
Sound pressure at 1 metre. Where a maker quotes 2 metres, we add 6 dB so every brand is compared at the same distance.

Warranty
The average of the cylinder and the refrigeration-system parts warranty. Labour cover and pro-rata years are shown but not scored.

Before anything is scored

- Currently on the Clean Energy Regulator register of air source heat pumps, so it earns STCs
- Manufacturer datasheet or brochure on file for the series

Not in the score

- Manufacturer COP figures, because brands test them at different conditions; we show them, but score the government-modelled savings instead
- Price and installation
- Recovery rate and tank size, which depend on your household rather than the product's quality

A worked example

Reclaim Energy CO2 Split (REHP-CO2-160GL / REHP-CO2-160GL-V2 / REHP-CO2-160SS-WIL ...), exactly as the site scores it. Points are score × weight.

CRITERION	PUBLISHED VALUE	SCORE	WEIGHT	POINTS
Energy savings (official)	32	7.5	30%	2.25
Warranty	10	10.0	25%	2.50
Cold-weather operation	-10	10.0	15%	1.50
Quietness	37	10.0	15%	1.50
Refrigerant	R744	10.0	15%	1.50
EnergyUpgrade Score				**9.3**

How brands are rated

A datasheet shows what a product promises, not how a brand behaves. Brand ratings add independent evidence, with the same rules for every brand.

PART	WEIGHT	THE RULE
Product scores	40%	Average datasheet score of the brand's two best home series in the category, the ones an installer would actually quote. Older ranges still on the approved list don't drag a brand down.
Owner reviews	20%	What owners say across the brand's products in this category: SolarQuotes owner reviews for panels, inverters and batteries, and ProductReview.com.au plus SolarQuotes for heat pumps. Reviews are averaged by count, and every brand is pulled towards 4.0 stars as if it had 30 more reviews at that level, so a handful of perfect reviews can't beat thousands of good ones. 3.0 stars or lower scores 0, 5.0 scores 10. Listings for a range the brand no longer sells are shown but not counted, and a listing about the company in general counts half.
Track record	15%	Panels: Kiwa PVEL Top Performer status, 2 points for each of the 2024, 2025 and 2026 scorecards plus up to 4 for total editions (10 or more scores 4). Inverters and batteries: up to 7 points for years selling in Australia (8 or more scores 7) and 3 for a stock-exchange listing. Heat pumps, which should last 10 to 15 years: up to 7 points for years trading in Australia (20 or more scores 7) and 3 for a listing. ACCC recalls of that kind of product take points off: 3 for one covering a range we list, 2 for another, doubled when the brand offers no remedy. A brand in liquidation scores 0.
Installer and market standing	15%	Average of two independent results, each using the better of this year's result and last year's (last year's counts 80%). The SolarQuotes Installers' Choice vote: 1st scores 10, 2nd 8, 3rd 7, 4th or 5th 6. SunWiz awards from Clean Energy Regulator installation data: No. 1 for homes scores 10, No. 1 in another segment or 2nd–3rd 8, top 5 or fastest growing 6. For panels, BloombergNEF Tier 1 status scores 6 when there's no SunWiz award. For heat pumps, which have no installation-data award, the second result is popularity from the number of owner reviews: 10 reviews scores 2, 100 scores 5, 1,000 scores 8.
Australian support	10%	Published Australian office 4 points, local support phone 3, local service email 2, more than one office 1.

Score bands

Excellent	8.5 and above
Very good	7.5 to 8.4
Good	6.5 to 7.4
Fair	Below 6.5

Data confidence

High
Australian datasheet, verified against the approved list, states at least 85% of what we weigh, and every scored value appears in the PDF.

Medium
A global edition of the datasheet, a small gap in the data, or a value we couldn't find printed in the sheet we hold.

Low
The datasheet doesn't clearly match every model in the series, or leaves out more than a third of what we weigh. Low-confidence series can't be a pick.

Questions

Why not use the manufacturer's COP?
Brands test COP at different air and water temperatures, so the numbers aren't comparable. The STC figure on the federal register is modelled the same way for every model.

Why does refrigerant matter?
Natural refrigerants such as R290 and CO2 have a tiny climate impact and usually perform better in the cold than older R134a units, which are being phased down.

Which brands are rated?
We rate 16 heat pump brands commonly quoted to Australian homes, using every model of theirs that is currently eligible for STCs and still sold. A brand in liquidation is listed for the record but not ranked.

