PROPERTY REPORT · 06

Solar & Energy.

Roof-by-roof solar potential and annual generation estimate, powered by Google's Solar API.

1 Bearke Place, Bracken Ridge QLD 4017

SafeBuy

PROPERTY DUE DILIGENCE · SOLAR & ENERGY

SOLAR POTENTIAL

What this roof can do.

Numbers come from Google's Solar API — a satellite + LiDAR-derived analysis of the actual roof at this address.

Panel nameplate **410 W** | Electricity rate **23 c/kWh**

PEAK SUNSHINE
1,919
hours / year

ROOF AREA
310
m² total · 175 m² usable

MAX PANEL COUNT
89
at 410 W each ≈ 36.5 kW system

PEAK ANNUAL YIELD
57,142
kWh / year · all panels installed

CO_2 OFFSET
45.7
tonnes / year · grid: 799 kg/MWh

IMAGERY USED
2017
quality: MEDIUM

Heads up — Google's imagery for this property was captured 9 years ago. If the roof has been altered (extensions, skylights, new gables) since then, the panel count and yield estimates may be off. Field-verify before installing.

ROOF ANATOMY

10 detected roof planes.

In the Southern Hemisphere, north-facing planes (azimuth ≈ 0°) at 20-30° pitch are optimal. South-facing (azimuth ≈ 180°) is the worst direction.

#	DIRECTION	AZIMUTH	PITCH	AREA	VERDICT
1	S	202°	23.5°	57.7 m²	Suboptimal
2	S	196°	25.4°	55.8 m²	Suboptimal
3	N	6°	21.5°	52.7 m²	Optimal — fill first
4	W	272°	27.6°	47.9 m²	Mixed
5	SE	113°	24.6°	38.7 m²	Mixed
6	S	188°	23.0°	24.6 m²	Suboptimal
7	N	11°	17.6°	11.8 m²	Optimal — fill first
8	S	195°	34.0°	10.9 m²	Suboptimal
9	E	100°	20.6°	6.6 m²	Mixed
10	W	252°	29.5°	2.8 m²	Mixed

SIZE THE SYSTEM

Drag the slider.

Google has pre-solved the panel-placement problem for every system size from 1 panel up to the maximum that fits. Slide to see the trade-off — panels appear on the rooftop as you go.

1 panel

89 panels (max)

Imagery: state-published aerial (NSW Spatial Services / Qld DSDILGP) where available, ESRI World Imagery otherwise. Roof planes detected by Google Solar API · panels drawn from segment azimuth + Google's panel dimensions (1.88 m × 1.04 m). Layout is approximate — actual installer placement may differ to avoid obstacles (skylights, AC units) not visible in the imagery.

SYSTEM SIZE	ANNUAL YIELD	BILL OFFSET	CO_2 OFFSET
4.10	7,806	$1,795	6.24
kW DC (10 × 410 W)	kWh / year	/ year at 23 c/kWh	tonnes / year

PANELS SPLIT ACROSS

- **9×** on segment 6 · 6°/22°
- **1×** on segment 7 · 11°/18°

THINGS TO KNOW

What this estimate is — and isn't.

Aerial-imagery analysis, not a survey. Google's model detects roof planes from satellite + LiDAR. It can't see internal obstructions (joists, conduit runs) that affect real-world panel placement.

DC nameplate yield, not net export. The annual kWh is DC at the panel — real-world AC after inverter losses, wiring, soiling and degradation is typically 80-85% of this figure.

Bill offset depends on self-consumption. Exported energy earns a feed-in tariff (5-10 c/kWh in most AU regions); only kWh used on-site is offset at your retail rate. The "bill offset" here assumes 100% self-consumption — the upper bound.

Imagery date matters. If the roof has been modified after Google's most recent capture, the analysis is out of date until they refresh. Check the imagery year above.

Shading from new growth. Trees that weren't there at imagery time aren't in the shading model. Walk the lot.

Not a quote, not advice. Use this as a screening tool. Get at least two installer quotes that include site inspection before deciding.

Solar potential figures are sourced from Google Solar API (©Google) and reflect their satellite-imagery-derived model of the roof at this address. SafeBuy presents these figures as-is; we don't verify or warrant their accuracy. This report is a screening tool — not a quote, a financial recommendation or an electrical engineering assessment.