

THE AUSTRALIAN ROOFTOP VALUATION REPORT

Generate your Sunlight Salary

MARCH 2026

FROM DISTRIBUTED INFRASTRUCTURE TO NATIONAL SAVINGS

***Discover the value of your rooftop and
see how sunlight can turn into real household income.***



 **GreenSketch**



Contents

Executive Summary	04
Introduction	
Our World-Leading Strategic Infrastructure Asset	07
Bringing to Light	
The Opportunity on Australian Rooftops	10
Australia's Rooftop Value Map	
Where the Highest Returns are Found	14
Generate your Sunlight Salary	
A Quick Guide for Homeowners	19
Conclusion	22
References	23
Acknowledgments	24
About Us	25



Executive Summary



The roofs above our heads represent more than just shelter. For millions of Australians, it is a strategic, financial and infrastructure asset sitting in plain sight—one that can generate meaningful, measurable income every year that compounds over time, with the right solar and battery system installed. We call it a **Sunlight Salary**, quantifying the financial returns that homeowners can generate through harnessing the abundant sunlight falling on Australian rooftops.

Australia is already a world leader in residential rooftop solar adoption, with 4.3 million households or one in three households having installed rooftop solar systems as of 2025. But majority of the nation’s rooftops remain bare.



This white paper sets out to answer:
what is the value of the Australian rooftop?

Australia's Sunlight Salary

Using Emily, GreenSketch's AI agent, we assessed over 8.4 million Australian rooftops across 49 significant urban areas, and ran analyses assuming they each have an optimised rooftop solar and battery system installed. We found an estimated:

\$26 billion

total annual value of Australian rooftops in electricity savings

\$3,104

average annual savings for an Australian home

\$17,600

average returns after 10 years

\$46,888

average returns after 20 years

4.05 years

average payback period

24%

average Internal Rate of Return

Mapping the Nation's Sunlight Salary

Sunlight is free, but not equal. The potential earning power of a roof depends on a number of factors—the **availability of sunlight, roof conditions, prices of electricity, and government incentives**.

Darwin is the standout performer, with an estimated average annual savings or Sunlight Salary of \$4,005, a payback period of 3.14 years, and 20-year returns of \$64,447, significantly ahead of every other capital city in our projections. However, when comparing second and last place across the capitals, the differences in returns are much closer—meaning that a meaningful Sunlight Salary is within reach for the majority of Australian homeowners.

Maximising your Returns

Transforming the potential of your roof into your Sunlight Salary is as simple as a tap on your screen. Emily, GreenSketch's AI agent, delivers near-instant rooftop solar and financial assessments in real time. A free online assessment will help you discover your home's solar potential, providing a personalised value report tailored to your address. From here, you can choose from three proposal options that best suit your energy consumption patterns and needs, see your estimated returns on investment, and work with suggested installers to develop your final rooftop solar and battery system.

Installing rooftop solar is just the first step, and adding a home battery system and electric vehicle can multiply your returns. Without storage, most of the electricity generated during the day gets exported to the grid. With current feed-in tariffs being near negligible, raising your self-consumption rate through a battery will be boon, both financially and for your energy security. Every kilowatt hour you draw from yourself represents savings, and provides resilience against volatile energy prices, grid outages and climate disruptions.

Seeing the Light

Viewed individually, a Sunlight Salary offers households a way to offset rising costs of living. Collectively, the 8.4 million rooftops analysed in this report represent a distributed national asset that is worth an estimated \$26 billion in the world.

Empowered by data on the potential value of their roof and supported by intelligent, market-sensitive platforms, almost every home across the nation could come with a solar system installed by default, and Australia may become home to one of the most powerful, distributed clean energy systems in the world.

This paper makes it clear: it is a future already within our grasp.

INTRODUCTION

Our World-Leading Strategic Infrastructure Asset



Australia has one of the highest rates of residential rooftop solar adoption in the world, with approximately 4.3 million or one in three households having installed rooftop solar systems as of 2025¹ and technical analyses suggesting that the total potential of residential rooftops could reach 60.9 GW.² This is a powerful signal—one that exemplifies the role homeowners play within Australia’s energy transition, especially as the nation looks to secure 82% of its electricity from renewable sources by 2030.³



But there is more to our solar story than just watts, systems and batteries. If we start to see rooftops as strategic infrastructure assets, we may begin to ask:

1

How much financial value lies in the abundant sunlight falling on the roofs of Australian homes every single day?

2

What are the measurable returns of solar generation (paired with a battery) for each household?

3

What about the two-thirds who have not installed rooftop solar and a battery—and what might that financial potential look like if all suitable Australian homes adopted solar and storage?

The returns generated from rooftop solar and battery systems are already helping millions of Australians offset rising costs of living. Between 2023 and 2024, the median household with rooftop solar paid approximately [18% less for their annual residential electricity bill](#),⁴ a pattern consistent with broader findings that rooftop solar has become a key tool for easing energy cost pressures. What was once an aspiration decades ago is fast becoming a practical, accessible reality for many Australians.

This report serves as a practical guide to uncover the real economic potential lying on your rooftop: how much savings and returns it can generate. We also show where the highest returns can be found across Australia, and how to maximise your benefits with minimal effort using increasingly mainstream technologies such as home batteries and electric vehicles—turning your roof into a valuable income-generating energy asset.



Key Takeaways

1. Rooftop returns are widely achievable.

Our data modelling—combining industry-leading AI models, Geographical Information Systems (GIS), a series of core computational logics and economic calculations—indicates that the majority of Australian homes have the potential to generate meaningful income from solar energy. As a nation, the rooftops we analysed are collectively worth around **\$26 billion** per year in potential electricity savings, assuming optimal solar and battery systems with current incentives. Households could save an estimated average of **\$3,104** a year and, depending on location and energy consumption patterns, up to an estimated average of **\$4,005** annually.

2. The value of a rooftop solar and battery system compounds over time.

Installing rooftop solar and a home battery is just the first step towards a secure energy and financial future. Over 10- to 20-year periods, the returns for everyday Australians with a home rooftop solar and battery system could more than double, with an estimated average of **\$17,600** and **\$46,888** in returns respectively after accounting for upfront investment costs. As Australia transitions further into an era of renewable energy, the value of your rooftop solar system—especially when paired with storage—is likely to keep growing.

BRINGING TO LIGHT

The Opportunity on Australian Rooftops

The roofs above our heads represent more than just shelter or a line item on a property valuation report. They are an underutilised, shared national asset with enormous potential to reduce household energy costs and reduce carbon emissions. Collectively, the millions of residential rooftops across the nation constitute one of the largest distributed clean energy networks globally. As the Clean Energy Council's Chief Executive Jackie Trad said in February 2026, "Our biggest power station now resides on the rooftops of more than 4.3 million households, which is helping to drive downward pressure on power bills for consumers and businesses, with less reliance on expensive gas or unreliable coal to power our grid."⁵

With roughly only [one in three households fitted with rooftop solar](#),⁶ it is clear that a large share of viable rooftop space remains unutilised. We thus set out to establish:

1

What if this potential was fully realised? What would the total annual value of Australian rooftops be if an optimal system was installed on all suitable homes?

2

What financial returns do Australians stand to gain under current subsidies and policies, if their homes were fitted with an optimised rooftop solar and battery system?

Our Methodology

Over 2025, GreenSketch, Australia's first rooftop solar and battery valuation platform, has been developing **Emily**, an AI agent designed to deliver near-instant rooftop solar and financial assessments, enabling solar and battery system design as well as rooftop valuation to be automated in real time.

Emily generates solar and energy storage configurations at each eligible address, using AI-based roof recognition, GIS services, and a series of core computational logics. To gather our findings, we aggregated and generated data from over **8.4 million rooftops individually across 49 significant urban areas in Australia.**

Instead of using sampling or simulated data, what makes Emily's modelling and process distinct is that it **calculates the solar potential of the majority of Australian rooftops individually**. We leverage leading-edge models to increase the accuracy of 3D building reconstruction, which in turn leads to more precise data. Our calculations include not just the actual electricity consumption of each state, but also the relevant national and regional subsidies.

The findings in this report are anchored to what can actually be installed on a real rooftop under current technical and regulatory constraints.



A more detailed explanation of the process and core modules applied is as follows:

1. Basic data acquisition and potential assessment

This step involved identifying the physical limits of each roof using GIS and 3D modelling, obtaining information on the roof's slope orientation (angle and direction the roof faces) and number of installable panels. We employed industry-leading AI models to perform visual reconstruction from satellite imagery. Our model maintains an overall accuracy rate of 87%, recreating most building roofs in 3D with high-fidelity and ensures that the data models their true-to-life physical forms.

2. Electricity demand derivation

We applied existing preset data on electricity consumption in each state, calculating each home's average daily, daytime, evening peak, and overnight electricity consumption. This allowed us to align system sizing with rooftop potential and realistic household demand patterns.

3. System capacity and hardware selection

Emily calculates the number of PV panels and inverter specifications, and matches standard battery capacities by combining surplus PV energy with overnight electricity demand. The calculations also follow Australia's DC/AC ratio and single-phase grid limitations, and support two different types of calculations—for new systems or for storage expansion (battery-only).

Emily then provides three different proposals, based on different solar system set-ups and financial considerations:



Rebate Maximiser

Designed to secure the largest possible government rebate, by incorporating a larger battery.



High Performer

Balances high-performance with actual state-level electricity usage and available subsidies.



Smart Starter

Provides an essential, entry-level system at the lowest possible price.

4. Generation and energy flow simulation

To determine the average self-consumption rate, we utilised PV-GIS data to calculate hourly power generation, simulated energy flows for self-consumption, charging/discharging and grid feed-in.

5. Financial and return analysis

To arrive at the final value for each address, we calculated the average total system cost (including hardware, balance of system components, additional fees, taxes) and deducted the estimated government Small-scale Technology Certificate (STC) incentives. On this basis, we projected the 10- and 20-year returns, Internal Rate of Return (IRR), payback period, and annual bill savings.

Our Findings

We generated data on **8.4 million homes** across **49 significant urban areas** in Australia. Based on this and assuming that all of them have an **optimised rooftop solar and battery system installed**, we found:

Total value of Australian rooftops

The total value of Australian rooftops across the 8.4 million homes analysed is estimated to be **\$26 billion** in annual electricity bill savings. Across Australia, this represents a potential **\$3,104** in annual savings on electricity for the average rooftop solar system.

Financial returns

The total financial returns in Australia for rooftop solar over 10 years is estimated to be **\$148.25 billion**. Over 20 years, the returns grow by more than twofold and come up to around **\$394.94 billion**. For the average Australian home, this translates to financial returns of an estimated **\$17,600** after 10 years, and **\$46,888** after 20 years.

Payback period

The average Australian home can expect to see payback on their solar investment after **4.05 years**.

Investment return

The average estimated Internal Rate of Return (IRR) is **24%**.

Value of Australian rooftops (annual savings)			
Total	\$26 billion	Average	\$3,104
Total returns from rooftop solar across Australia			
10 years	\$148.25 billion	20 years	\$394.94 billion
Average Australian home's returns from rooftop solar			
10 years	\$17,600	20 years	\$46,888
Average payback period	4.05 years	Average IRR	24%

Table 1: Summary of rooftop value in Australia.

AUSTRALIA'S SUNLIGHT SALARY MAP

Where the Highest Returns are Found

Sunlight is free and universal, but not always equal. As with any other investment, its success depends on the right combination of conditions. For homeowners, the earning potential of rooftops varies across regions and is mainly influenced by the **availability of sunlight, roof conditions, prices of electricity, and government incentives.**

We break down how this translates into the highest returns across Australia's capitals using seven key metrics:

- (i) Annual bill savings
- (ii) Subsidies
- (iii) Upfront investment
- (iv) Payback period
- (v) Internal Rate of Return
- (vi) 10-year returns
- (vii) 20-year returns

All metrics in Tables 2, 3 and 4 present averages and decimals have been rounded up.

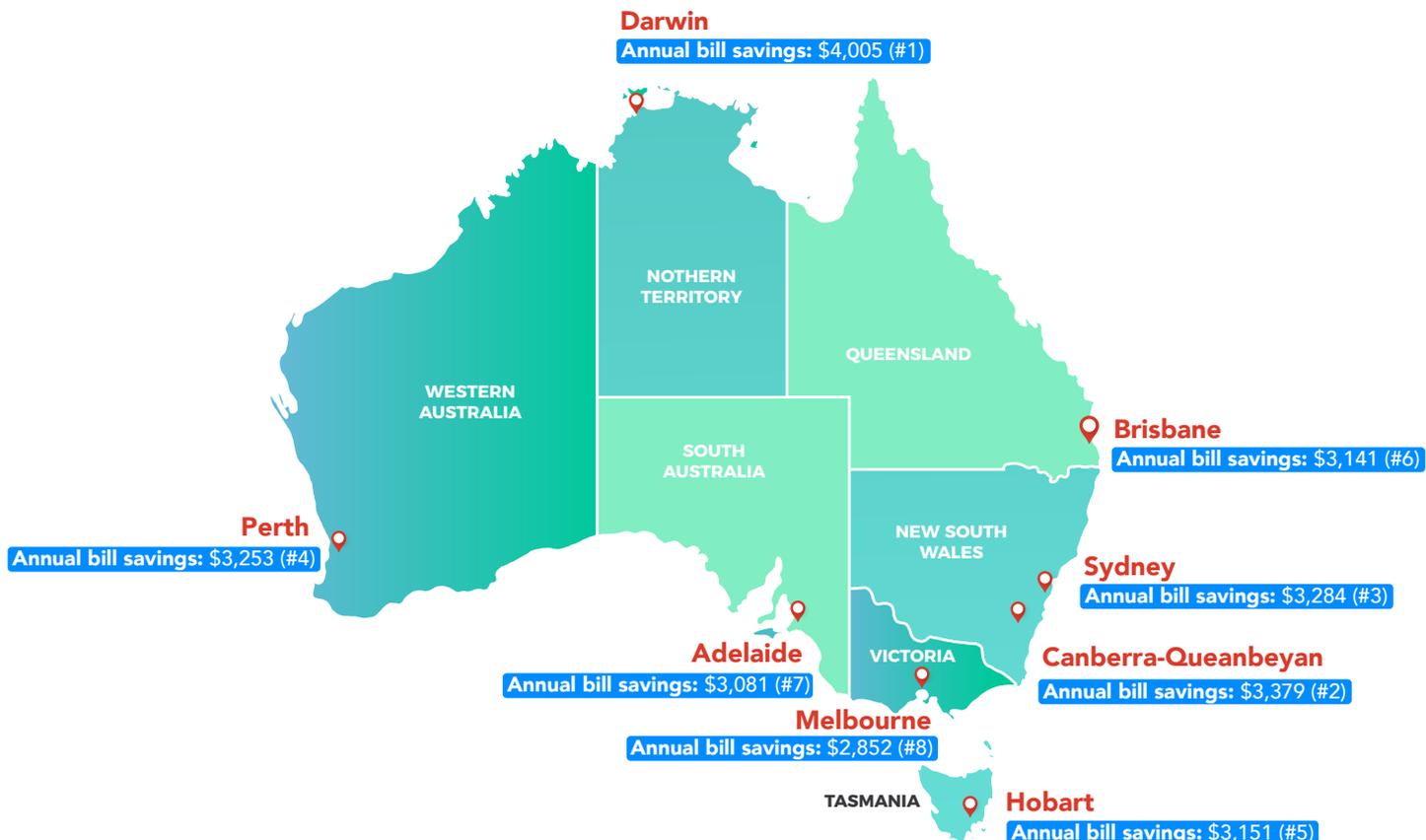
Australia's Rooftop Value (Capitals)

Legend: Best performing Lowest performing

City	Annual bill savings	Subsidies	Upfront investment	Payback period (years)	IRR	10-year returns	20-year returns
Adelaide	\$3,081	\$11,108	\$13,032	4.09	23.7%	\$17,230	\$46,303
Brisbane	\$3,141	\$10,948	\$12,918	3.98	24.4%	\$17,933	\$47,572
Canberra-Queanbeyan	\$3,379	\$10,612	\$12,567	3.61	27%	\$20,624	\$52,512
Darwin	\$4,005	\$11,871	\$12,688	3.14	31.7%	\$26,653	\$64,447
Hobart	\$3,151	\$8,086	\$11,078	3.75	27.5%	\$19,871	\$49,604
Melbourne	\$2,852	\$9,899	\$12,807	4.34	22.1%	\$15,206	\$42,119
Perth	\$3,253	\$11,608	\$13,422	4.04	24.2%	\$18,532	\$49,232
Sydney	\$3,280	\$11,083	\$13,081	3.88	24.9%	\$19,131	\$50,078

Table 2: Australia's rooftop value across capitals.

Australia's Sunlight Salary Map (Capitals)



#	Annual bill savings	Subsidies	Upfront investment	Payback period (years)	IRR	10-year returns	20-year returns
1	Darwin (\$4,005)	Darwin (\$11,871)	Hobart (\$11,078)	Darwin (3.14)	Darwin (31.7%)	Darwin (\$26,653)	Darwin (\$64,447)
2	Canberra-Queanbeyan (\$3,379)	Perth (\$11,608)	Canberra-Queanbeyan (\$12,567)	Canberra-Queanbeyan (3.61)	Hobart (27.5%)	Canberra-Queanbeyan (\$20,624)	Canberra-Queanbeyan (\$52,512)
3	Sydney (\$3,284)	Adelaide (\$11,108)	Darwin (\$12,688)	Hobart (3.75)	Canberra-Queanbeyan (27%)	Hobart (\$19,871)	Sydney (\$50,078)
4	Perth (\$3,253)	Sydney (\$11,083)	Melbourne (\$12,807)	Sydney (3.88)	Sydney (24.9%)	Sydney (\$19,131)	Hobart (\$49,604)
5	Hobart (\$3,151)	Brisbane (\$10,948)	Brisbane (\$12,918)	Brisbane (3.98)	Brisbane (24.4%)	Perth (\$18,532)	Perth (\$49,232)
6	Brisbane (\$3,141)	Canberra-Queanbeyan (\$10,612)	Adelaide (\$13,032)	Perth (4.04)	Perth (24.2%)	Brisbane (\$17,933)	Brisbane (\$47,572)
7	Adelaide (\$3,081)	Melbourne (\$9,899)	Sydney (\$13,081)	Adelaide (4.09)	Adelaide (23.7%)	Adelaide (\$17,230)	Adelaide (\$46,303)
8	Melbourne (\$2,852)	Hobart (\$8,086)	Perth (\$13,422)	Melbourne (4.34)	Melbourne (22.1%)	Melbourne (\$15,206)	Melbourne (\$42,119)

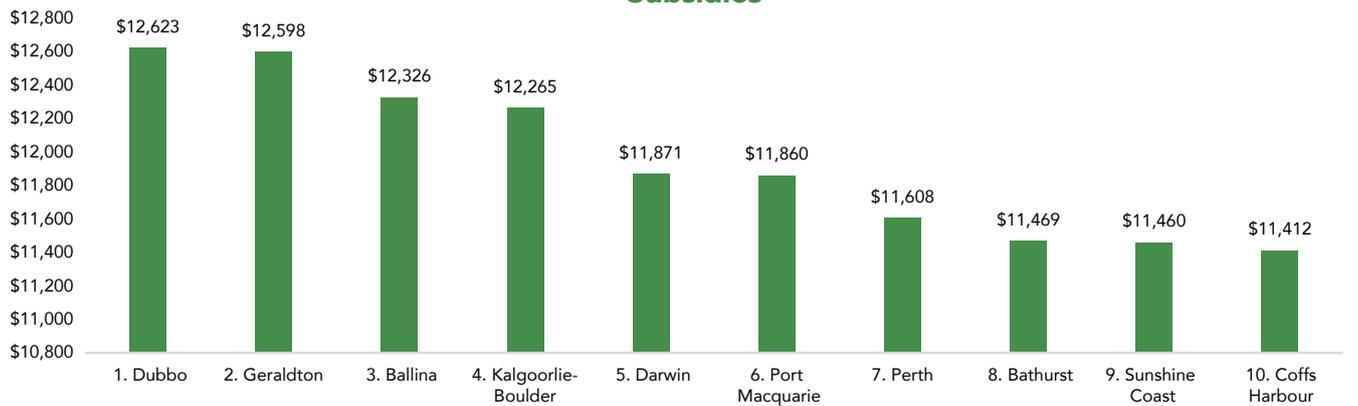
Table 3: Australia's rooftop value ranked by capitals.

Top 10 Significant Urban Areas in Australia

Annual bill savings



Subsidies



Upfront investment

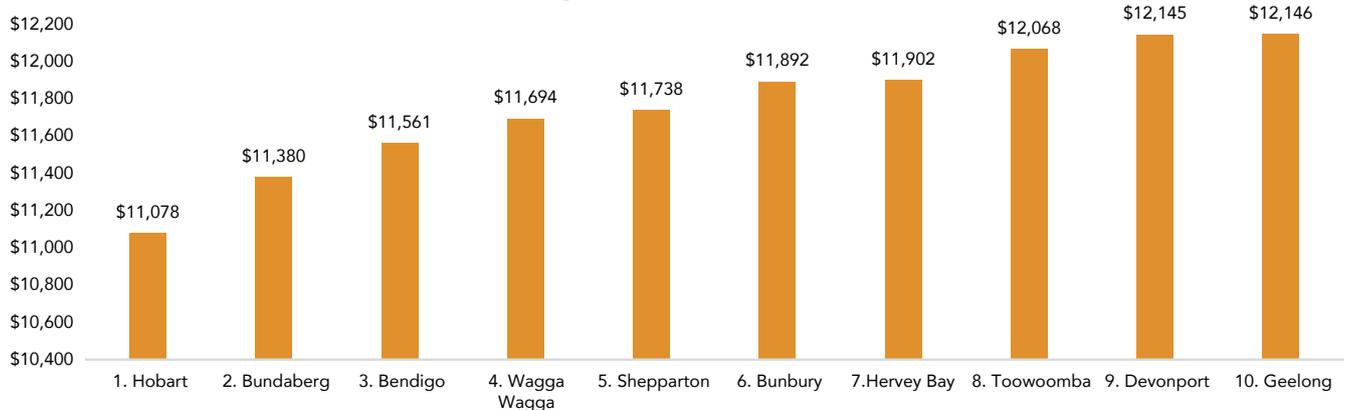
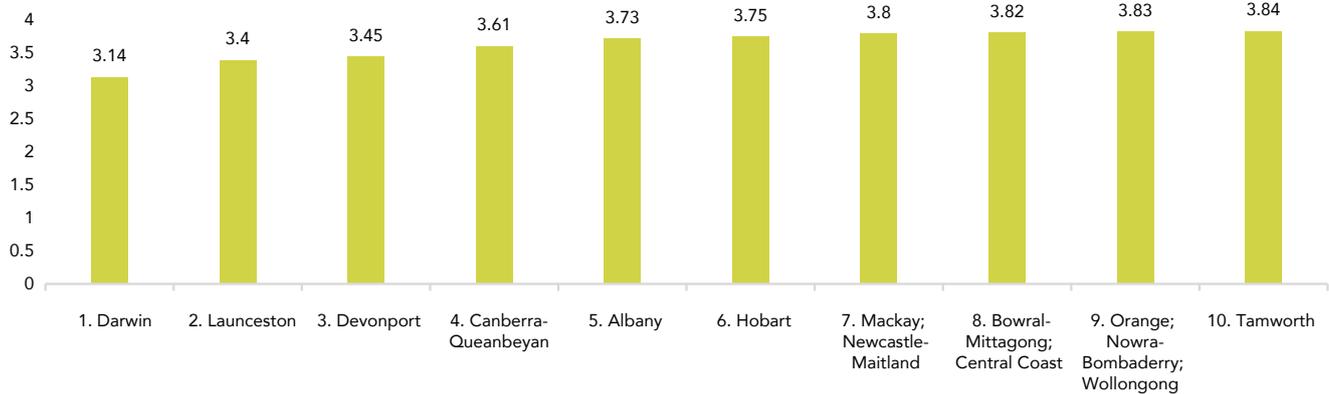


Table 4: Australia's rooftop value ranked across the 49 significant urban areas analysed.

Top 10 Significant Urban Areas in Australia

Payback period (years)



10-year returns



20-year returns



Table 4: Australia's rooftop value ranked across the 49 significant urban areas analysed.

Top 10 Significant Urban Areas in Australia

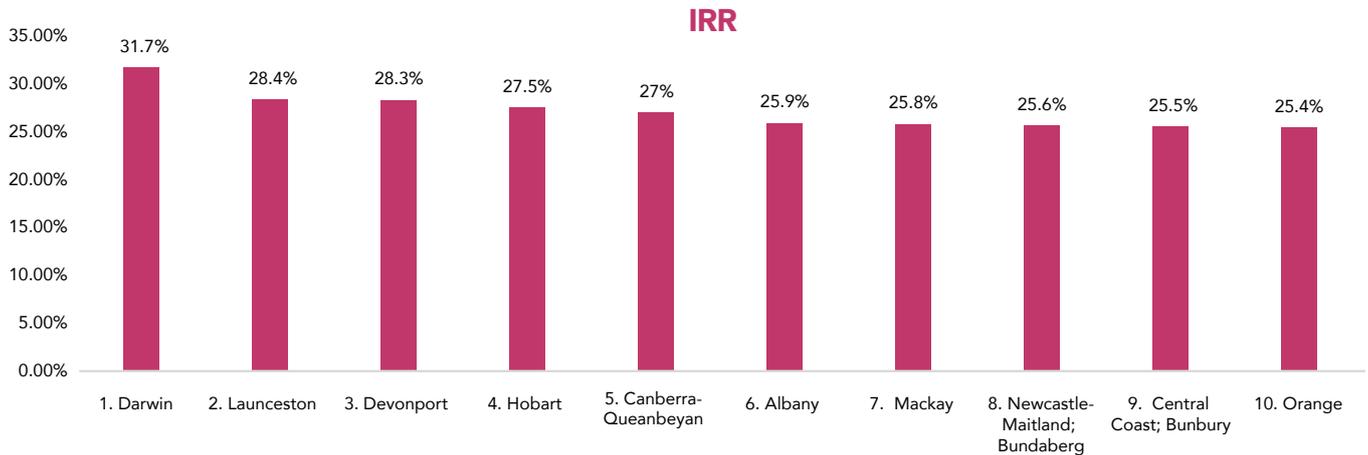


Table 4: Australia's rooftop value ranked across the 49 significant urban areas analysed.

Our Observations:

01

Darwin is the consistent top performer across most metrics. Across all 49 significant urban areas analysed, they were also the top performer across average annual savings, payback period, IRR, and 10- and 20-year returns.

While the difference between the top performer and second-best performer is significant across all metrics (except for subsidies and upfront investment), the differences down the rest of the rankings are less so. For instance, in annual bill savings, the difference between Darwin (\$4,005) and second-place Launceston (\$3,636) is \$369, while the difference between Launceston and 10th place Coffs Harbour (\$3,351) is \$285. Darwin thus outperforms all other Significant Urban Areas by a significant margin, while the rest perform relatively close to each other. This finding is consistent across [other similar national-level studies](#).⁷

02

Conversely, Melbourne performs the lowest across the most metrics (five out of seven) for the capitals.

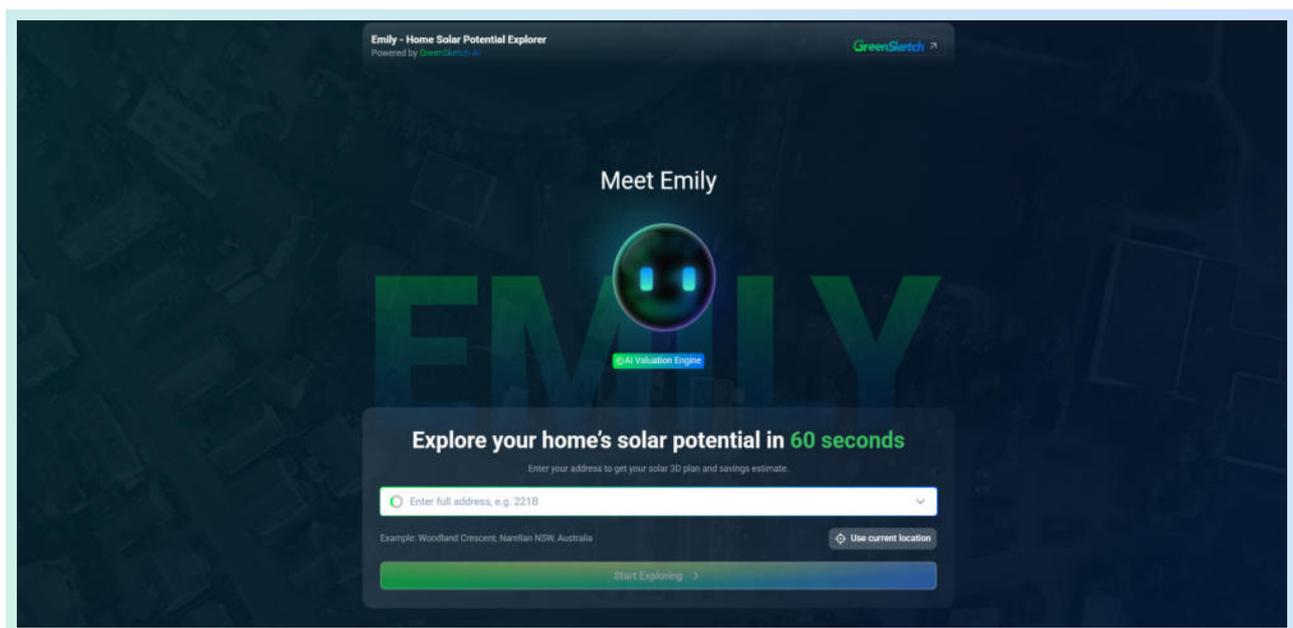
03

Across all 49 significant urban areas analysed, while Hobart receives the lowest subsidies, it also has the lowest upfront investment costs.

GENERATE YOUR SUNLIGHT SALARY

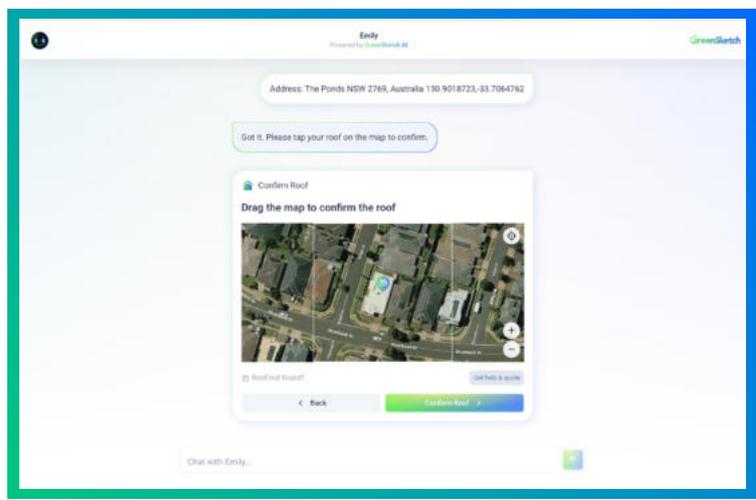
A Quick Guide for Homeowners

Transforming the potential of your roof into your Sunlight Salary is as simple as a tap on your screen using Emily, GreenSketch's AI agent, designed to deliver near-instant rooftop solar and financial assessments in real time.



Step 1: Free Assessment

Use our free online assessment tool to discover your home's solar potential. In just one minute, you will receive a personalised rooftop value report tailored to your address. The report estimates your solar generation potential, expected battery benefits and payback period.



Step 2: Tailored Design

Emily then provides three different proposals, based on different solar system and battery configurations and financial considerations: Rebate Maximiser, High Performer or Smart Starter.



Rebate Maximiser

Designed to secure the largest possible government rebate, by incorporating a larger battery.



High Performer

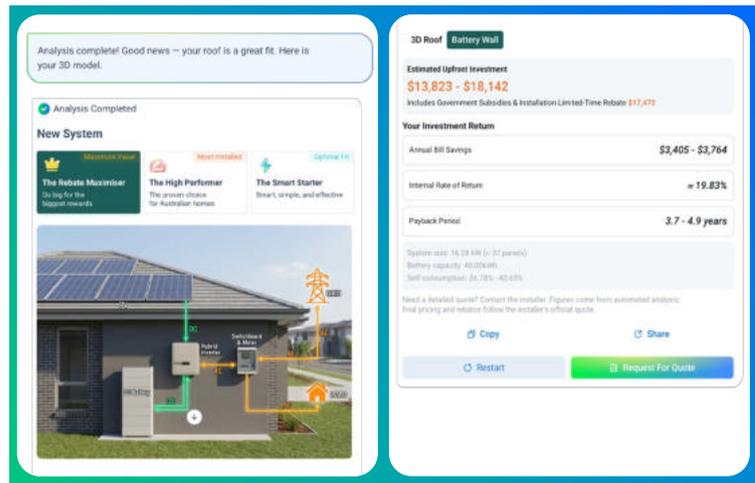
Balances high-performance with actual state-level electricity usage and available subsidies.



Smart Starter

Provides an essential, entry-level system at the lowest possible price.

This allows you to pick the option that best suits your energy consumption patterns and needs, and immediately see your estimated returns-on-investment on your rooftop solar and battery.



Step 3: Installation

The last step is making your chosen proposal a reality. Based on your location, Emily will suggest a list of installers near you, and your chosen installer will work together with you to develop on your system's final design. Once installed, you can start to enjoy the benefits of your solar and battery system.

The screenshot shows a form titled "Secure your subsidy eligibility now". The form includes the following fields and text:

- Header: "Secure your subsidy eligibility now"
- Section: "Get the final price including subsidies"
- Text: "Based on your plan, rebates are estimated at about \$19,798. Enter your details to see the final price after rebates."
- Text: "Just a couple more details, provide your name, and enter a phone number to email."
- Fields: Full name, Email, Phone, Postcode (8 digits)
- Note: "Note (optional): roof type, battery interest, preferred contact time"
- Text: "© 2020"
- Text: "I agree to the [privacy policy](#) and to be contacted for a final quote."
- Buttons: "Submit to Receive Full Report"

Energy Alignment to Maximise your Returns

Installing rooftop solar is the first step toward energy independence, but adding a home battery system and an electric vehicle will enable households to unlock the full potential of their investment.

Generating your own power does exactly just that. But without effective usage and storage, most of the generated electricity during the daytime ends up being sold back to the grid. With [feed-in tariffs currently being near-negligible](#),⁸ the financial boost homeowners once gained from exporting to the grid becomes insignificant. Every kilowatt hour you draw from yourself instead of the grid represents savings.

Self-consumption is thus key in this new chapter of renewable, independent energy.

A home battery can add value through both financial advantages and energy security:

1. Financial Savings

Without a battery installed, most homes' energy self-consumption rates range from 25% – 40%. With a battery installed, this could [rise to 60% – 90%](#).⁹ Using almost all the energy you generate will reduce your household's reliance on the grid.

2. Energy Security and Resilience

Australia faces increasing climate related risks, from storms, floods to fires that can disrupt grid infrastructure and cause widespread outages. The Australian Climate Service's National Climate Risk Assessment estimates that climate-driven impacts could cause [losses to Australian property values by up to \\$611 billion by 2050](#).¹⁰ In this context, a battery provides backup capabilities and a degree of energy independence, ensuring households are resilient against both electrical outages and future volatility in energy prices.

A simplified 24-hour renewable energy loop for a solar and battery home might look like this:

- Daytime solar generation meets household loads directly.
- Surplus generation charges an electric vehicle, lowering or almost eliminating the cost of commuting.
- Remaining excess energy is stored in a wall-mounted battery, which then discharges in the evening and overnight to cover remaining demand.

In this configuration, homeowners are not just saving on electricity bills; they are making the most of their energy asset while maintaining ownership of their household's long-term energy future.

CONCLUSION

Australia's solar industry is a historic inflexion point. While policies and subsidies have significantly accelerated the energy transition, we cannot simply hope that current trends on rooftop solar and battery installation will maintain their trajectory. This is especially true as the initial phase of adoption passes and the industry matures. Invisible frictions will remain and new ones may emerge.

For homeowners, the journey to clean energy is often filled with uncertainty, information asymmetry, long wait times, and lack of clarity around technicalities. For installers, the surge in the market also means maintaining competitiveness without increasing costs—from customer acquisition to efficiencies—is more critical than ever.

What is clear is that there is one simple way for Australia to maintain its world-leading position in solar adoption, and this potential lies in the hands—or above the heads—of everyday homeowners.

Viewed individually, a Sunlight Salary offers households a way to offset rising costs of living. Collectively, the 8.4 million rooftops analysed in this report represent a distributed national asset that is worth an estimated \$26 billion.

Empowered by data on the potential value of their roof and supported by intelligent, market-sensitive platforms, almost every home across the nation could come with a solar system installed by default, and Australia could become home to one of the most powerful, distributed clean energy systems in the world.

We do not have to imagine this future; it is a straightforward, financial opportunity, and it is already within our grasp.

REFERENCES



- ¹ PV Magazine (2026) Australia's rooftop solar hits 28.3 GW as home battery uptake surges.
- ² Australian PV Institute (2024) Rooftop solar potential of Australian housing stock by tenure and dwelling type.
- ³ Australian Government Department of Climate Change, Energy, the Environment and Water (2026) Renewable Energy.
- ⁴ Australian Competition & Consumer Commission (2025) Electricity industry on notice as more households invest in subsidised batteries and solar.
- ⁵ Clean Energy Council (2026) Record home battery surge charges up Australia's biggest power station on rooftops, new research finds.
- ⁶ Sydney Morning Herald (2026) As rooftop solar overtakes coal, more batteries are powering the night shift.
- ⁷ Cotality (2025) Watt's it Worth? Quantifying the value of solar and energy efficiency ratings in real estate.
- ⁸ Energy Matters (2025) Costs vs Climate: Solar ROI Without Feed-In Tariffs.
- ⁹ SolarTech (2025) Solar Self-Consumption Guide 2025.
- ¹⁰ Australian Climate Service (2025) Australia's National Climate Risk Assessment Report.

ACKNOWLEDGMENTS



Disclaimer

This report has been prepared by GreenSketch for informational and educational purposes only. The content presented in this report does not constitute financial, investment, legal, or professional advice and should not be relied upon as the basis for making investment or business decisions.

The analysis, projections, and insights contained in this report are derived from a combination of market data, proprietary datasets, publicly available information, and algorithmic models, including artificial intelligence and machine learning techniques. While reasonable care has been taken in compiling the information, GreenSketch makes no representation or warranty, express or implied, as to the accuracy, completeness, reliability, or timeliness of the data or analysis presented.

Certain results, forecasts, or estimates in this report are based on assumptions regarding market conditions, technology performance, rooftop conditions, energy pricing, policy frameworks, and other external variables. These assumptions may change over time and may not reflect actual outcomes.

GreenSketch's rooftop value models and AI-based analytical methods are continuously evolving. Model outputs may be updated as new datasets become available, methodologies improve, or market conditions change. As such, findings presented in this report should be interpreted as indicative insights rather than definitive valuations.

This report is not intended to predict the value of any specific asset, property, or rooftop installation. Individual project outcomes may vary significantly depending on location, regulatory environment, system design, financing structure, and other factors beyond the scope of this analysis. Readers are encouraged to seek independent professional advice before making investment, financial, or operational decisions.

ABOUT US



GreenSketch

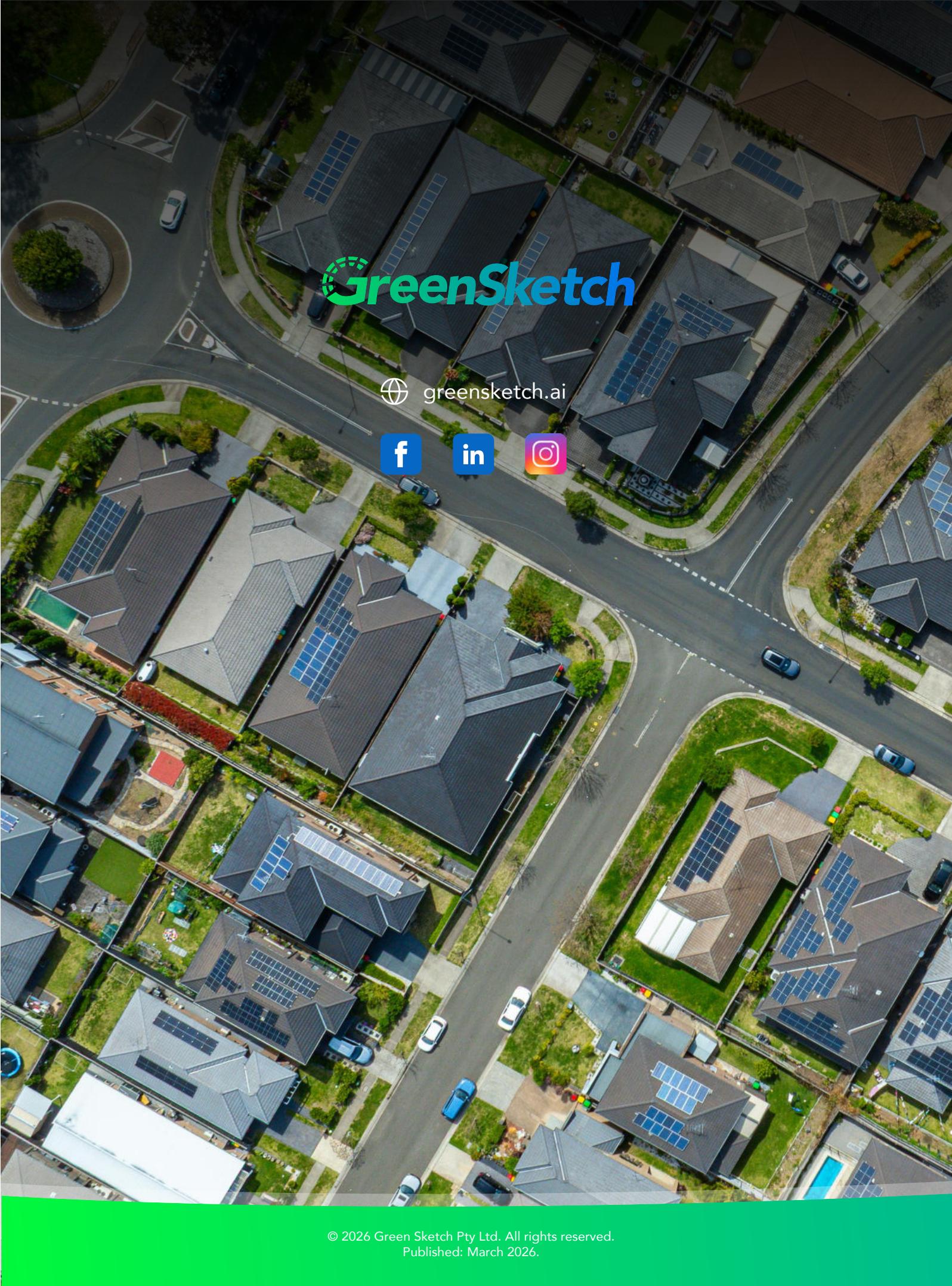
GreenSketch is a full-stack, AI-driven solar industry ecosystem platform. Developed by OSW Group, it is the world's first free, end-to-end solar and battery design platform created for solar professionals, connecting the industry with homeowners, installers, and leading solar brands with unprecedented speed, intelligence and transparency. From rooftop mapping, battery system layouts, to instant quotes, GreenSketch supports lead generation to enhance efficiency across the clean energy industry.

 greensketch.ai

Leveraging over a decade of experience and digital expertise, OSW has built a fully integrated one-stop platform for distributed solar smart energy solutions under its One Simple Way philosophy. The OSW ecosystem offers services spanning system design, product sales, carbon trading, and commercial Virtual Power Plant (VPP) software, streamlining operations and increasing efficiency for the entire industry.

 osw.energy





GreenSketch

 greensketch.ai

