



Macarthur**Energy**

Batteries for the community

2023

WE ARE A SMART ENERGY RETAILER

It is a pleasure to speak with our clients directly, so if you're reading this document I just want to say thank you for taking the time to learn more about our company. This is the beginning of what I hope is a very fruitful relationship.

MACARTHUR ENERGY EXISTS TO HELP OUR CUSTOMERS REACH 100% SUSTAINABILITY. WE DELIVER THIS THROUGH 3 MAIN AREAS.

1. PROVIDING OUR CUSTOMER WITH THE FREEDOM OF CHOICE

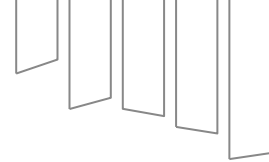
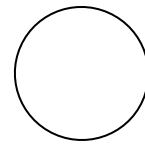
We do this by first taking an active interest in our customers. We take the time to learn about their entire energy situation, present deep analyses into their consumption patterns and work together on designing a solution: whether it's financial or environmental.

2. GROWING AND DEVELOPING THE BEST TEAM IN THE INDUSTRY

We seek to find high quality individuals who are determined to produce excellent work and continue to develop them to reach their potential. Our team underpins our ability to innovate and grow, so Macarthur Energy takes pride in finding enthusiastic people who bring creativity and sophistication to our operation.

3. INNOVATING AND GROWING A SUSTAINABLE BUSINESS

For our business to deliver on our promise to our customer and the individuals within our team, we need to look to the future and develop new solutions as well as grow new market segments with an open and humble perspective.



Founded in 2015 by Macarthur local, Mathew Cox, Macarthur Energy is focused on helping our community understand the true value and benefits of renewable energy.

As an Endeavour Energy trained Electrician, Mat spent over 12 years working on the electricity network in the Campbelltown, Camden, Picton and Wollondilly shires. During this time he developed a passion for sustainable and renewable sources of energy.

As the household demand for solar and renewable energy grew, so did Mat's desire to help friends, family and neighbours become more savvy with the way they consume power in their homes.

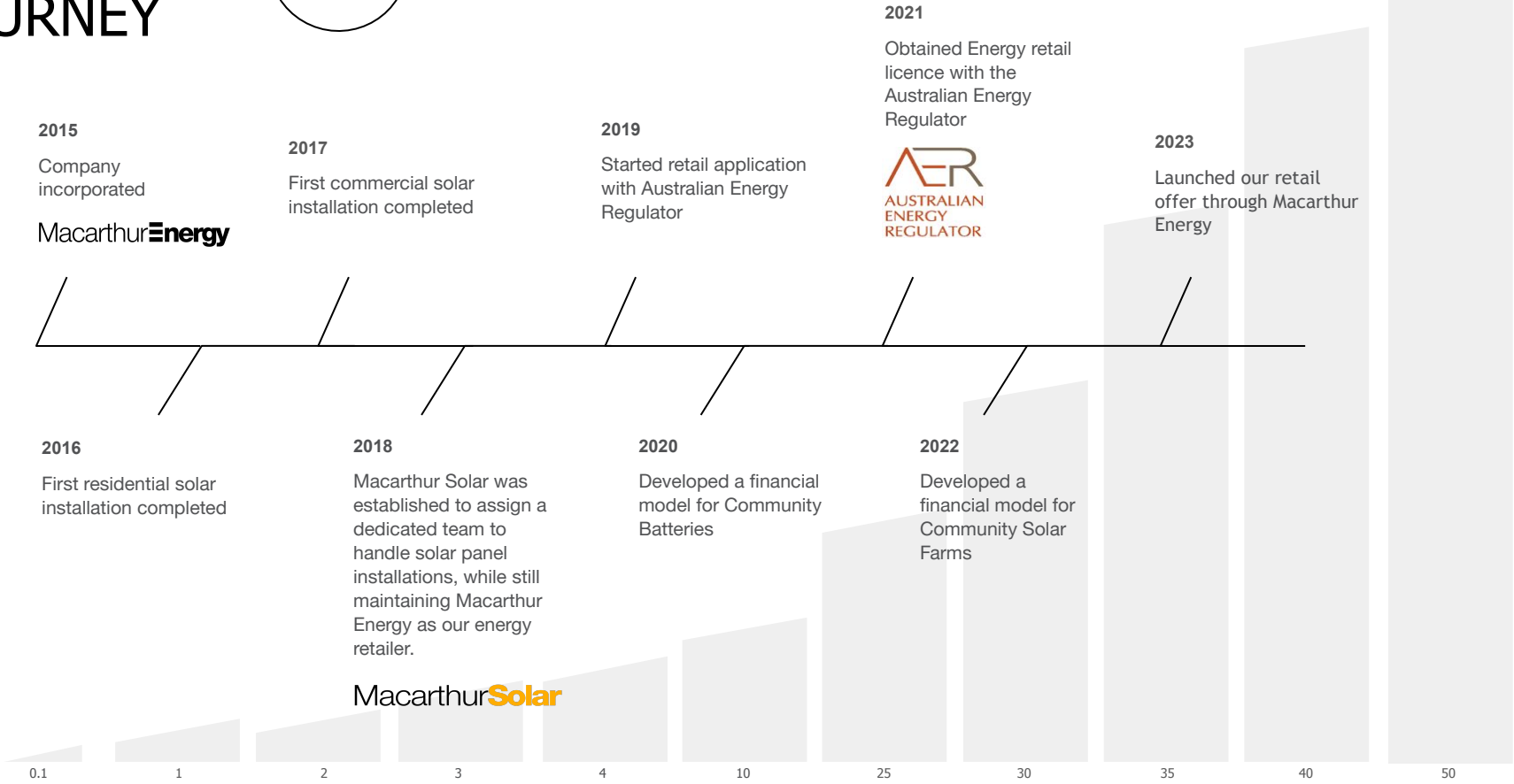
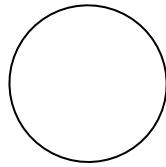
We believe choosing an energy provider is like finding a great GP.

Someone who is a dependable and trustworthy individual who understands your unique circumstances, values you as an individual rather than a statistic, and is always available when you require assistance, allowing you to concentrate on what truly matters.

It's a significant undertaking for any energy company, which is why Macarthur Energy focuses its services on just three council areas. This allows us the opportunity to dedicate ample time to assist our customers in discovering optimal energy solutions, conducting personalized installations, and providing friendly tips or advice.

Mathew Cox
Founder and Managing Director

OUR JOURNEY



2015

Company incorporated

Macarthur**Energy**

2017

First commercial solar installation completed

2019

Started retail application with Australian Energy Regulator

2021

Obtained Energy retail licence with the Australian Energy Regulator



2023

Launched our retail offer through Macarthur Energy

2016

First residential solar installation completed

2018

Macarthur Solar was established to assign a dedicated team to handle solar panel installations, while still maintaining Macarthur Energy as our energy retailer.

Macarthur**Solar**

2020

Developed a financial model for Community Batteries

2022

Developed a financial model for Community Solar Farms

0.1

1

2

3

4

10

25

30

35

40

50

KEY STATS

Camden, Campbelltown & Wollondilly Councils



SOLAR CAPACITY

180 GW

HOUSEHOLDS WITH SOLAR

36,000

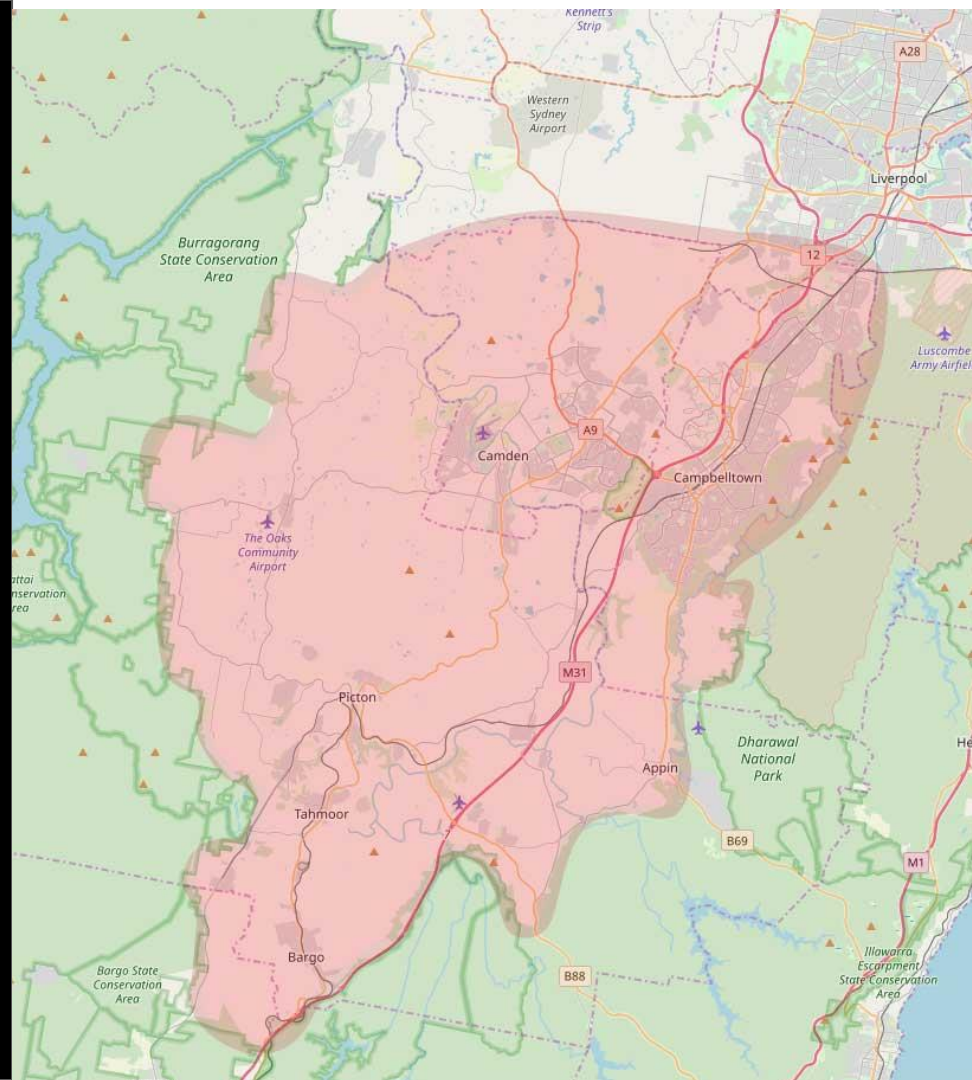
ENERGY GENERATED PER DAY

720 MWh

SOLAR PANELS

600,000

*The above numbers represent averages



ABOUT US

KEY STAFF



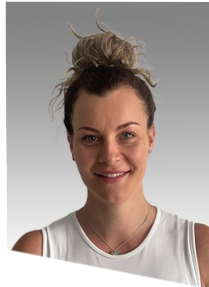
Mathew Cox
MANAGING DIRECTOR

Matthew is passionate about cultivating teams that fuel innovation. Through his visionary leadership, he effectively manages and executes challenging projects. Matthew is dedicated to fostering growth, both personally and for the company.



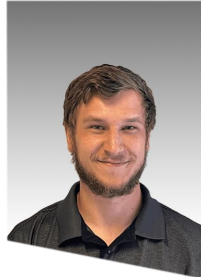
Ashlee Cox
Business Development
Manager

Ashlee is pivotal in the growth and change that Macarthur Energy is achieving. She makes sure we can grow and deliver on our promises sustainably.



Aleisha Ryan
Office Manager

With over 6 years experience in finance and accounting, Aleisha's expertise is driving a profitable business.



Tim Klaassen
Renewable Energy
Consultant

Tim's skills in customer relationships and solar design make him the driving force behind Macarthur Energy's sales and consulting.



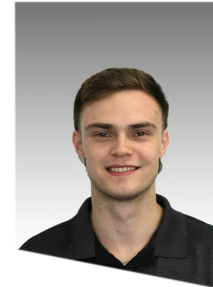
Jack Hammond
Renewable Energy Analyst

Through digital strategies, Jack thrives to analyse sustainable energy markets, he supports in the growth and delivery of Macarthur Solar's day to day operations.



Allan Fisher
Renewable Energy
Consultant

Allan is passionate about the renewable energy sector and has previously worked with a major multi-national solar provider.



Ayrat Bayanov
Renewable Energy Engineer
BEng (Hons)

Ayrat strives to uphold Macarthur Energy's reputation through quality monitoring, technical support, and service work for our clients.



AN ENERGY STORAGE SOLUTION

COMMUNITY BATTERIES

Community batteries are a groundbreaking innovation in the field of renewable energy distribution, and Macarthur Energy is at the forefront of implementing these systems across South West Sydney. These community batteries, also known as shared energy storage facilities, provide an efficient and sustainable solution to address the intermittent nature of renewable energy sources like solar and wind.

Macarthur Energy's strategic approach involves installing these batteries at key locations within the community, allowing residents and businesses to store excess energy generated from their rooftop solar panels or other renewable sources.

Community members can buy a portion of the battery which they own indefinitely. In doing so, they can not only reduce their electricity bills and the upfront cost of buying a standard household battery, but also contribute to grid stability and minimise reliance on fossil fuels. This collective approach to energy storage not only benefits the environment but also fosters a sense of community involvement in the transition towards a cleaner, more sustainable energy future.



COMMUNITY BATTERIES

POWER AND PERFORMANCE

Macarthur Energy employs the PowerShaper2 by Pixii, an IP55-rated modular energy storage system. This fully integrated solution is grid-ready, facilitating applications such as solar self-consumption, demand charge reduction, peak shaving, arbitrage, and various ancillary services.

Widely utilised for community energy storage in Australia and Scandinavia, the PowerShaper2 has consistently demonstrated reliability, safety, and efficient energy storage capabilities.

Each cabinet has the capacity for power conversion up to 48kW, accommodating LFP or NMC batteries to suit various applications and meet specific requirements.

The PowerShaper offers a range of energy-saving or grid-supporting services, which can operate autonomously or be directed by commands and settings from higher-level energy management systems utilizing various protocols. Power conversion within the PowerShaper is accomplished through the PixiiBox, a bidirectional 3.3kW AC/DC converter module. Each cabinet can accommodate up to 15 PixiiBoxes.



COMMUNITY VS. HOUSEHOLD

WHY WE MADE THE SWITCH

Macarthur Energy has been supplying standard household batteries to our customers for over five years. We have found a number of problems with this form of energy storage, which is why we recommend purchasing into a Community Battery.

This technology has been so successful in many parts of the world. The Australian Renewable Energy Agency has [released a report](#) about its benefits.

Some of the reasons we do not recommend using a standard household battery include:

Cost

The upfront cost of purchasing and installing household batteries can be significant. While prices have been decreasing, the initial investment can be a barrier for many homeowners.

Maintenance

Homeowners are typically responsible for the maintenance and monitoring of their household batteries. This can be a burden for those who may not have the technical expertise to handle potential issues.

Lifespan

Batteries have a finite lifespan, and over time, their capacity and performance can degrade. Homeowners need to consider the long-term costs associated with battery replacement.

Community batteries have proven to be exceptionally effective in revolutionizing the way communities harness and distribute renewable energy. Macarthur Energy's decision to roll out these shared energy storage facilities across South West Sydney is driven by the undeniable success of this technology.

Some advantages of community batteries include:



Return on Investment

Community batteries are a cost-effective energy storage solution, typically priced at half the cost of standard household batteries. With shared infrastructure and more efficient use of resources, homeowners can realize a return on investment in as little as half the time.



Hassle-free

With Macarthur Energy, community batteries are hassle-free. We handle maintenance and repairs at no cost to participants, ensuring seamless operation and peace of mind for the community, simplifying the renewable energy experience.



Scalable

Community batteries are scalable, which means they can adapt to growing energy demands. This flexibility ensures that as the community's energy needs increase, the shared infrastructure can efficiently expand to meet those requirements, offering a sustainable, future-proof solution.

COMMUNITY BATTERIES

PRICING

Due to the size and collaborative design of Community Batteries, we are delighted to inform you that their current cost is less than half that of acquiring a standard household battery. Residents can connect to a Community Battery for just \$500/kWh + GST in 5kWh increments. If your usage exceeds the storage you have purchased, additional usage can be purchased from the grid at \$0.28 per kWh.

Upon linking to our Community Battery, Macarthur Energy will serve as your energy provider. For instance, with a 10kWh allocation in our Community Battery, it will store excess production from your solar system during the day, enabling you to tap into it during the evening. We facilitate your transition to Macarthur Energy as your energy retailer and offer an above-average feed-in tariff for any surplus solar energy.

If you require more than your provision provides, you can either expand the provision, or simply purchase the remainder from the grid as you currently do - but at a better rate!

Starter

5kWh

AUD \$2,750

For smaller houses and apartments

- Modular and scalable
- For applications 5kW to 1MW
- Compact energy storage
- Four solution safety metering
- Fast response (charge to discharge)
- Integrated battery and inverter

Residential

10kWh

AUD \$5,500

For medium sized houses

- Modular and scalable
- For applications 5kW to 1MW
- Compact energy storage
- Four solution safety metering
- Fast response (charge to discharge)
- Integrated battery and inverter

Recommended

Residential +

15kWh

AUD \$8,250

For larger houses

- Modular and scalable
- For applications 5kW to 1MW
- Compact energy storage
- Four solution safety metering
- Fast response (charge to discharge)
- Integrated battery and inverter

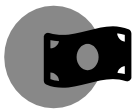
Business

20+kWh

Get in Touch

For commercial businesses

- Modular and scalable
- For applications 5kW to 1MW
- Compact energy storage
- Four solution safety metering
- Fast response (charge to discharge)
- Integrated battery and inverter



COMMUNITY BATTERIES

RETURN ON INVESTMENT

Investing in 10kWh storage will pay off in 3.6 years

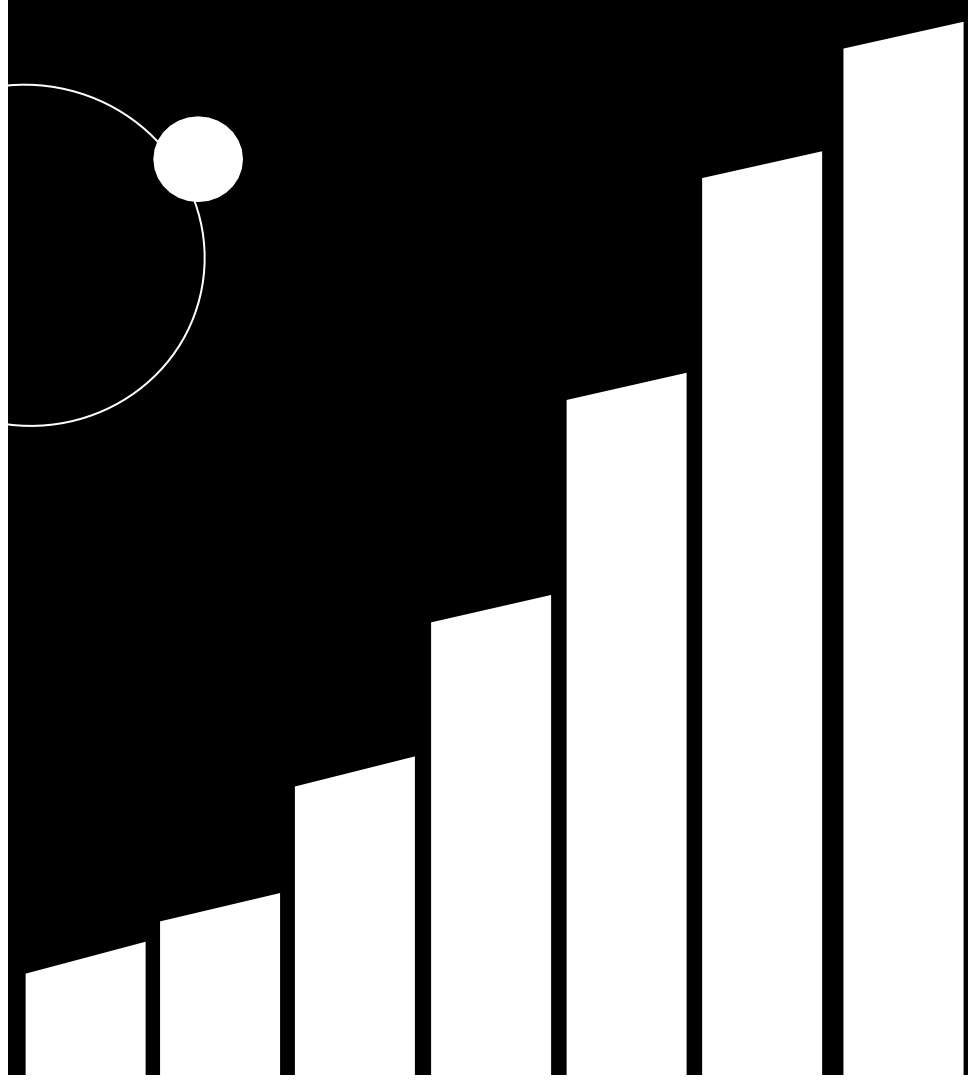
(10kWh Example)

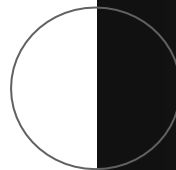
If you were storing and using 10kWh of energy in the battery each day, that would equate to \$3.80 (38c x 10kWh) saving each day from the battery.

If the cost of the battery was \$5,000 ex. GST, you would expect a return on investment (ROI) in 3.6 years.

Assuming the battery is warrantable for 20 years, this is equal to a \$27,740 saving over the lifetime of the battery. This gives a ROI of almost 550% on the initial investment.

Average savings equal \$1,387 each calendar year ($\$3.80 \times 365 = \$1,387 + \text{GST}$) not including any additional earnings from the feed-in to the grid above the 10kWh daily expectation.





**THANK YOU FOR YOUR
TIME AND ENERGY**

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