Australian Flow Batteries

AFB

A New Era for Energy Solutions

Exciting Investment Opportunity

Australian Flow Batteries Pty Ltd (AFB) is commercializing a suite of technologies to support the deployment of VRFB's as the building block for stand-alone and grid-based electrical storage systems to support the transition to renewable energy.

AFB energy storage and distribution systems cover domestic and commercial applications and integrate smart technologies to improve their efficiency and accessibility and significantly reduce fossil fuel consumption and the generation of carbon dioxide.

This is an opportunity to get in on the early stage to capitalize on years of cutting-edge technologies that enable a massive reduction on the fossil fuel inputs required to power our homes and workplaces.

This is one of those **rare opportunities** to own a piece of a company with massive growth projections, as well as offering real solutions to reducing the carbon footprint.

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The Problem

Our world today is predominantly reliant on the burning of fossil fuels for energy. Within Australia our cities are reliant on coal and off-grid relies on diesel.

The transition to renewable energy generation is delivering electricity from a wide variety of distributed sources. The intermittent nature of renewable energy forms energy peaks that are often out of synchronization with demand due to bidirectional transmission in the networks.

Emerging issues include:

- The need to maintain conventional fossil-fueled generation units to meet peak demand.
- Destabilized distribution networks.
- Damage to equipment.
- Unreliable delivery at the margins of the distribution networks.
- Rapidly increasing costs to consumers.

The Solution – VRFB Storage

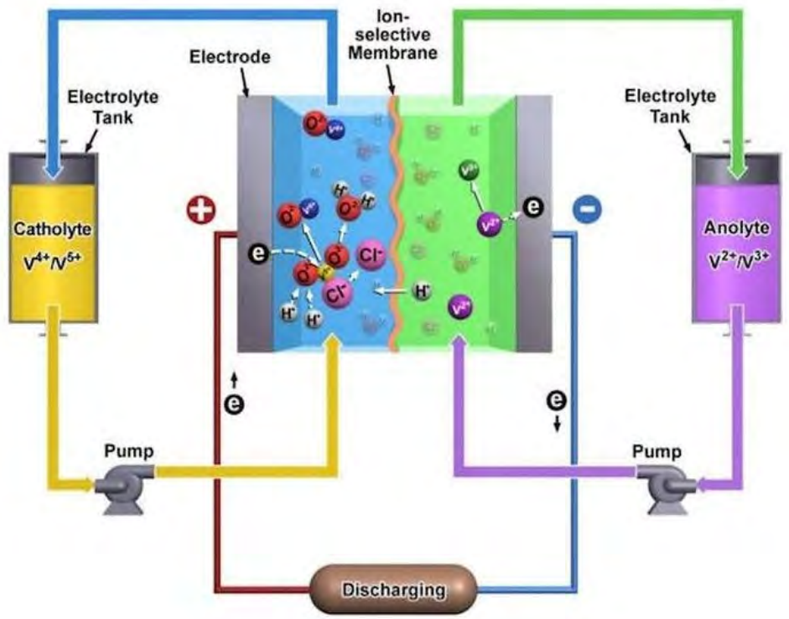
Vanadium Redox Flow Batteries (VRFB) offer solutions for the transition to renewable energy.

- Reduce the requirement for fossil-fueled generation to meet peak demand.
- Stabilize the distribution network.
- Provide clean stable power to end-users.
- Increase the stability at the network margins.
- Provide independence and fixed pricing for the delivery of electricity from the battery over its life.

AFB is at the forefront of R&D and commercialisation of residential and commercial scale VFRB in Australia.

VRFB History and Benefits

VRFB Chemistry



https://www.youtube.com/watch?v=0Uk0GQNgtqg

- Invented in NSW circa 1990 and now well proven.
- Safe and no fire risk from thermal run-away.
- Simple design and electrochemistry using vanadium valence states.
- Minimum 25 years life.
- No degradation of battery storage over system life.
- Scalable technology from 20kWh to 800MWh storage systems currently.
- 100% recyclable and sustainable (electrolyte is reusable indefinitely).
- Ideal for renewable energy distributed grid network stabilization.
- Ideal for stationary storage and uninterrupted power supplies (UPS).

The AFB Board

Mark Reynolds
Chairman

Mark provides extensive experience in the funding and administration of global businesses. He has been a significant investor, manager, and Company Director in the energy and battery industry for over 20 years.

Shane Meotti
Managing Director

As a founding Director of the Company, Shane has led the VRFB-related research and development and is a driving force in the commercialisation of the business operations.

Simon Kemp
Director (Technical)

Simon has worked on the development, delivery and commissioning of high voltage and electrical grid systems in Australia, Africa, Asia, and the Middle East. He is an expert at innovative network alternatives and solutions.

John Thomson
Non-Executive Director

With over 20 years' experience in taxation, and business services, John is renowned for his depth of knowledge and expertise.

John is a specialist adviser offering commercial advice as well as corporate and personal finance and is known for his ability to formulate the best possible outcome for individuals and companies.

Our Strategy

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- Create economic opportunities by establishing local and sustainable businesses for the production, installation and maintenance of solar battery storage systems.
- Use battery storage to improve electrical distribution and consumption efficiency and reduce the consumption of fossil fuels for electricity generation.
- Improve the social and financial outcomes of households and communities by delivering them control over the management of the energy storage and supply.
- Support Australia with its journey towards renewable energy and Net Zero.

Commercialisation

The AFB team has significant long-term experience in the development of VRFB technology, stand-alone and grid-based electrical systems and management focusing on:

- Commitment to the development of 100% Australian production.
- A program of continuous innovation with a focus on developing world first products and efficiencies.
- Using the scalability of VRFB to develop both commercial and residential products and provide diversification of revenue streams.
- Commercialisation of global collaborations and the development of an Australian hub for world leading technology.
- Supporting Governments, Utilities and Clients with the viable transition to renewable energy.

The Market - Commercial

- Large solar and wind farms require storage due to irregular and intermittent patterns of power generation globally.
- Electrical storage is required at the source and at the margins of the distribution networks.
- Companies need to convert to renewables to meet their ESG responsibilities. Storage will be essential to support 24-hour operations using renewable energy.
- In remote areas diesel generation is becoming increasingly expensive and storage is required to transition to solar and wind.
- Solar-powered electrolysers for the hydrogen industry require storage for 24-hour operations.
- Large-scale stationary lithium storage systems need air-conditioning and degrade within 7-10 years.

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Products - Commercial VRFB

- Hybrid battery systems that are customized to client needs.
- Modular systems based on the 200kWh VRFB that can be combined as required to create multi-MWh systems.
- Fitted in standard shipping containers for easy deployment, commissioning and redeployment.
- Plug and play compatibility with the SolarWing mobile solar system.
- Useful life in excess of 20 years.
- Does not require air-conditioning under Australian operating conditions.

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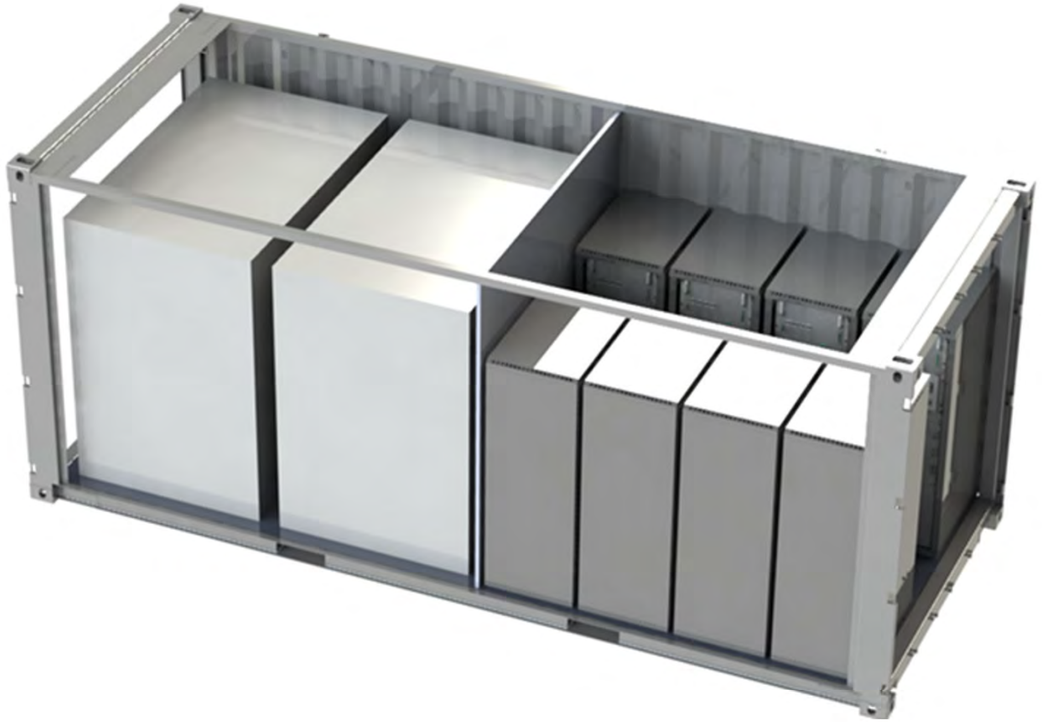
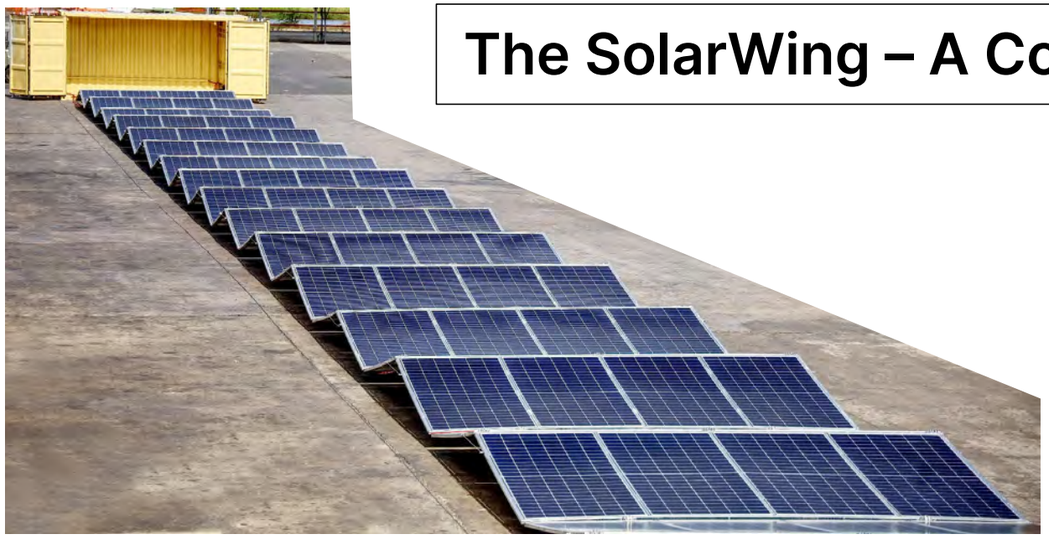


Products – Mobile Solar Power

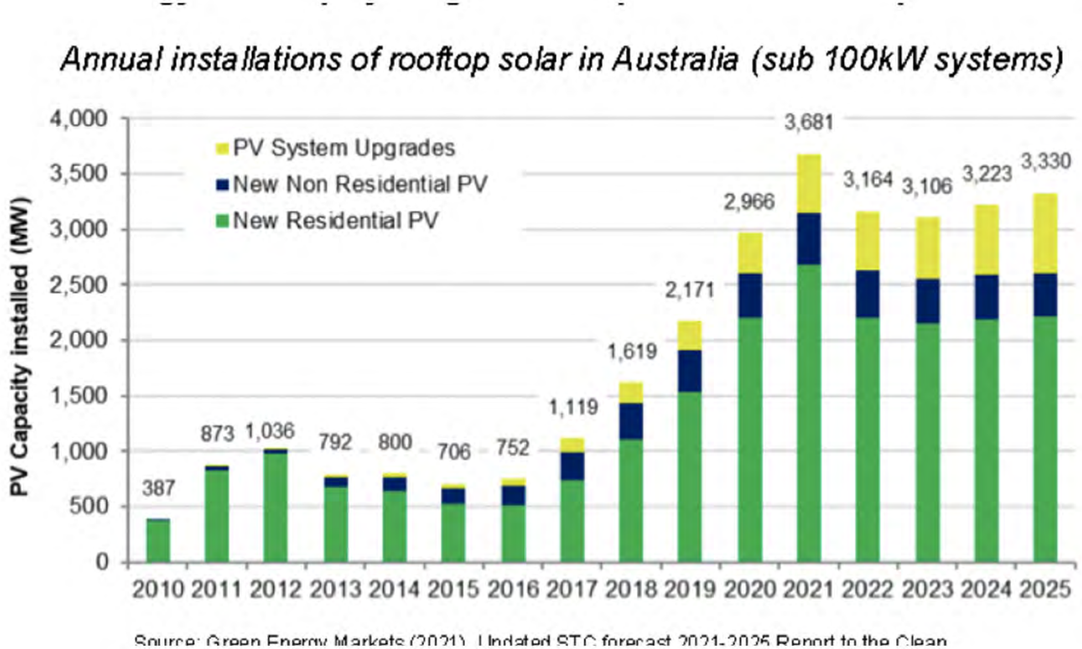


The SolarWing – A Complete Plug and Play Solution

- 20’ containerized fold out/fold in functionality.
- Fast deployment and retraction.
- Ideal for locations prone to adverse weather events such as cyclone or hail.
- Can be removed quickly with no negative legacy left on the environment.
- 100 kWP solar PV capacity with 3-Phase AC coupled output.
- Typical ROI within 1-3 years.
- Plug and play compatibility with the commercial VRFB system and diesel generators.

The Market - Domestic

- 3.2 million houses in Australia have rooftop solar systems with the installed capacity continuing to increase.
- Annual residential roof-top solar uptake is about 3 GW.
- Distribution grids are saturated at peak PV generation times and green energy is being wasted.
- The domestic market price of electricity is rising steeply.



- An average Australian house consumes 20 kWh of electricity daily and can be supplied by a 6.6 kW solar system with battery storage.
- Todays domestic-scale batteries are lithium which present a fire risk and will degradate within 7-10 years.
- By installing a VRFB residential system the consumer can safely lock in their power price for 25+ years.

Products – Residential 20 kWh VRFB

- AFB has developed a 20kWh VRFB that is ideally suited for residential storage in Australia.
- 20kWh of VRFB storage attached to a 6.6 kW solar array is sufficient to independently power an average household and includes capacity to charge an electric vehicle.
- Units have at least double the usable life of a Lithium counterpart, cannot catch fire and are 100% recyclable.
- Units will be assembled in WA and AFB will steadily increase production and manufacturing in Australia.
- Residential Solar providers have indicated strong support to add this product to their offerings.

AFB Share Issue Offer Summary

Issuer	Australian Flow Batteries Pty Ltd
Offer Type	Ordinary Shares
Amount offered	$5 000 000 AUD
Existing Shares	87,352,123
Share Price	0.20 per share
Shares on offer for this raise	25,000,000
Total shares post this raise (not including options)	112,353,123
Offer close	29 September 2023

Note: Management and Employee ownership after capital raise – 52.8%

Request the IM

Contact - Tony Hume CEO

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Important Note:

This presentation is intended as introductory information only. Interested Parties looking to invest in AFB should get their own independent professional advice and contact AFB to obtain a copy of the Information Memorandum (IM) to assist with their decision.

Tony Hume
Chief Executive Officer

Tony is an experienced CEO and strategic problem-solving specialist with experience in building community transformational projects. He has held previous leadership roles in the Indigenous, communities, higher education and health sectors.