Redflow

FY2021 Results

27 August 2021

Tim Harris, CEO

Trudy Walsh, CFO

Rialto Anergia site, California.

* Highlighted image is not an actual image but artist's impression of Redflow batteries on completion

redflow
sustainable energy storage

Disclaimer

This presentation has been prepared by Redflow Limited (**"Redflow"**). It contains general information about Redflow as at the date of this presentation. The information in this presentation should not be considered to be comprehensive or to comprise all of the material which a shareholder or potential investor in Redflow may require in order to determine whether to deal in shares. The information in this presentation is of a general nature only and does not purport to be complete.

This presentation does not take into account the financial situation, investment objectives, tax situation or particular needs of any person and nothing contained in this presentation constitutes investment, legal, tax or other advice, nor does it contain all the information which would be required in a disclosure document or prospectus prepared in accordance with the requirements of the *Corporations Act 2001* (Cth).

Readers or recipients of this presentation should, before making any decisions in relation to their investment or potential investment in Redflow, consider the appropriateness of the information having regard to their own objectives and financial situation and seek their own professional legal and taxation advice appropriate to their particular circumstances.

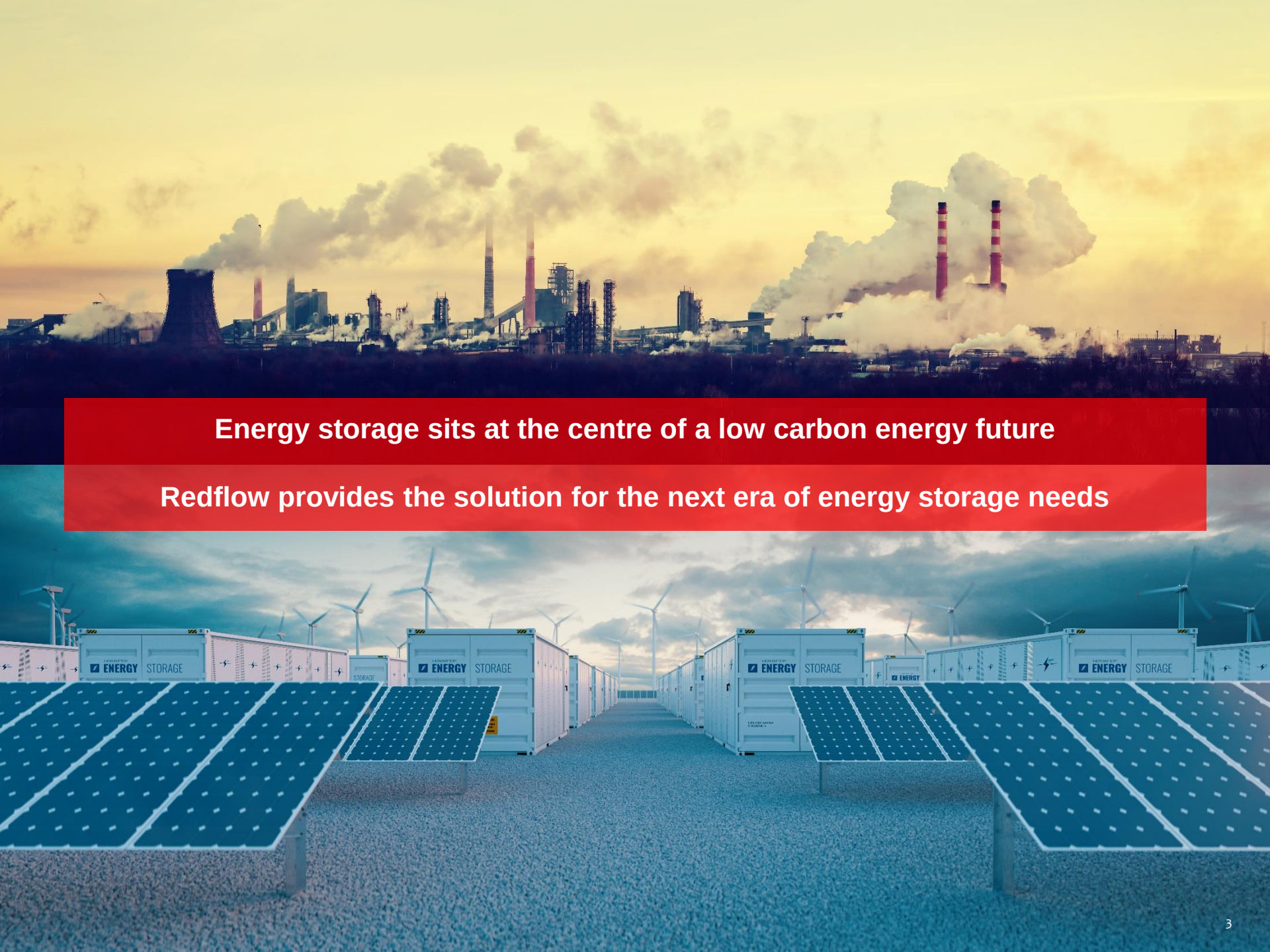
This presentation is for information purposes only and does not constitute or form part of any offer, invitation, solicitation or recommendation to acquire, purchase, subscribe for, sell or otherwise dispose of, or issue, any shares. Further, this presentation does not constitute investment advice, nor shall it or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any contract or investment decision.

Certain statements in this presentation are forward-looking statements. You can identify these statements by the fact that they use words such as "anticipate", "estimate", "expect", "project", "intend", "plan", "believe", "target", "may", "assume" and words of similar import. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements.

Forward-looking statements, opinions and estimates provided in this presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions.
Forward-looking statements, including projections, guidance on future earnings and estimates, are provided in this presentation as a general guide only and should not be relied on as an indication or guarantee of future performance. Forward-looking statements are based on current expectations and beliefs and, by their nature, are subject to a number of known and unknown risks and uncertainties that could cause the actual results, performances and achievements to differ materially from any expected future results, performances or achievements expressed or implied by such forward-looking statements. No representation, warranty or assurance (express or implied) is given or made by Redflow that the forward-looking statements contained in this presentation are accurate, complete, reliable or adequate or that they will be achieved or prove to be correct.

Subject to any continuing obligation under applicable law or relevant listing rules of the ASX, Redflow disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements in this presentation to reflect any change in expectations in relation to any forward-looking statements or any change in events, conditions or circumstances on which any such statements are based. Nothing in this presentation shall under any circumstances create an implication that there has been no change in the affairs of Redflow since the date of the presentation.
Except for any statutory liability which cannot be excluded, Redflow and its respective officers, employees and advisers expressly disclaim all liability (including negligence) for any direct or indirect loss or damage which may be suffered by any person in relation to, and take no responsibility for, any information in this presentation or any error or omission therefrom, and make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of this presentation.

By attending an investor presentation or briefing, or by accepting, accessing or reviewing this presentation, you acknowledge and agree to the terms set out in this disclaimer.


Energy storage sits at the centre of a low carbon energy future
Redflow provides the solution for the next era of energy storage needs
ENERGY STORAGE

FY21 Key Highlights

Substantial Commercial Progress Despite COVID Headwinds

- ✓ Delivered $2.2m revenue, despite impact of COVID-19. 1
- ✓ Established presence in California, signing Redflow's largest single sale to Anaergia for 2MWh system
- ✓ Received largest single Australian battery order to date from Semini Custom Feeds in WA for a 600 kWh Large Scale Battery
- ✓ 176 battery orders for expected FY22 delivery as of 30th June 2021
- ✓ Strong and growing pipeline including growing interest in MWh scale systems in Australia and the US

Growing Set of Reference Deployments

- ✓ 140 total systems now operational, one of largest deployments of any flow battery company globally
- ✓ Redflow batteries deployed by partner Seven20 Electrical in mid-sized solar and battery installations under NSW State Government's Department of Primary Industry grant scheme
- ✓ Partnership with Optus to deploy Redflow batteries as part of the Australian Government's Mobile Network Hardening Program
- ✓ Anaergia project on track for October installation and commissioning

FY21 Key Highlights

Acceleration of Gen3 and New Innovations

- ✓ Progressed Gen3 battery customer trials, providing valuable data into performance of the new Gen3 stack design, tank and new Mk12 electronics. Target launch FY22
- ✓ New innovations launched including Industrial Battery House enclosure & new capability to allow Redflow batteries to work seamlessly alongside lead acid batteries in a single system.
- ✓ Unique reuse and recycling capabilities of Redflow battery validated
- ✓ Progressed core chemistry research and testing focused on pH optimisation

Tight Cost Control and Capital Raise

- ✓ Secured available government COVID-19 support measures
- ✓ Tightly managed costs during COVID-19 period while investing in key R&D initiatives and Gen3 progression
- ✓ Cash balance of $9.8m as at 30 June 2021, including $5.0m from June 2021 placement, with additional $10.8m raised post period end from Entitlement Offer. $0.5m subject to Shareholder Approval

Key Investment Highlights

Market leading flow battery energy storage provider with deep technical competence

Growing diversified blue chip client base with clean needs and addressable spend

One of largest total deployments across all flow battery companies / 140+ active systems [1]

Total addressable market for flow batteries potential to be up to ~70 GWh by 2030[2]

Established and experienced Board, management and technical team

$120m invested over 15 years in proprietary technology and commercialisation

Redflow owned manufacturing facility in Thailand capable of being scaled with moderate capex[3]

New Gen 3 battery capable of scaling from small to multi MWh systems enabling volume/cost down benefits

1 Based on Company analysis and industry reporting including Research and Markets, *World Major Flow Battery Projects Map 2020*
2 US DoE report *Energy Storage Grand Challenge: Energy Storage Market Report*, Dec 2020
3 Estimated additional capital of AUD~$3m required to scale facility

Proven field experience

140
Active global deployments

1.3GWh
Total energy delivered

New Features
Telco anti theft
Hibernation mode
Lead acid compatibility

Example Deployments

Knox City Council, Australia
2 x 180 kWh systems 2019

Bosco, South Africa
120 kWh system, 2015

Vodafone, New Zealand
80 kWh system, 2016

Optus, Australia
Bushfire resiliency, 2021

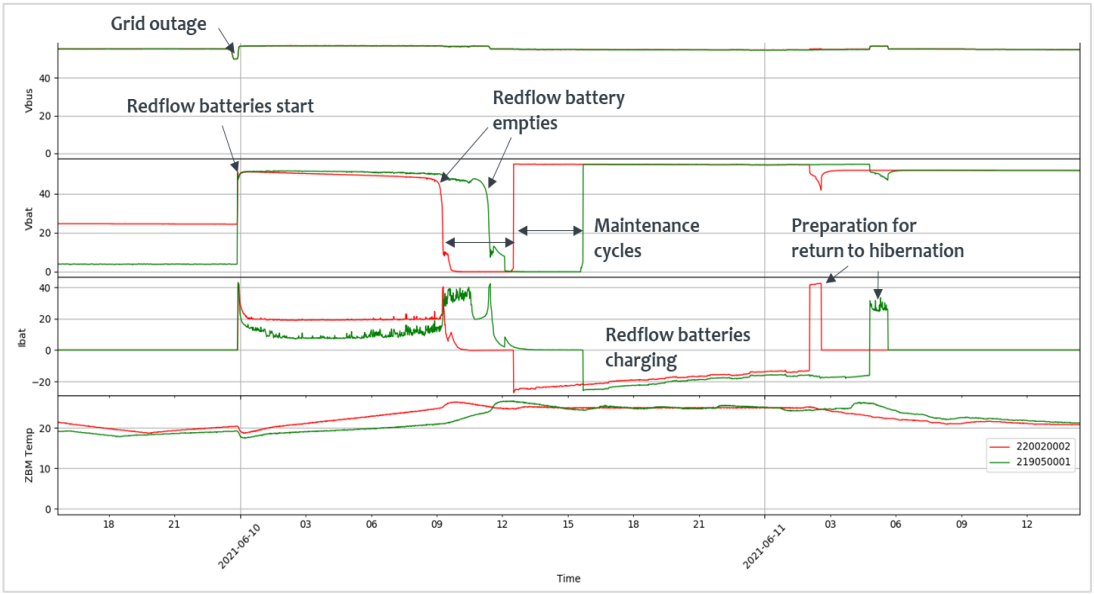
Base 64, SA, Australia
450 kWh system, 2017

Anaergia, California, US
2 MWh system, target installation date Oct 2021

Proven Field Performance to Support Critical Infrastructure

Summary

- Grid outage due to serious Storm in Victoria, Australia, on 10th June 2021 – Bush Fire Resiliency Optus Site at Lexton
- Existing lead acid system support load for first 15 minutes
- Redflow ZBMs wake from hibernation and support the entire load
- Grid is restored, ZBMs charge and return to hibernation.



Redflow batteries supported the Optus site for nearly 12 hours. We are now engaged with a number of US telcos who are interested in our solution

Anaergia Project on Track

Summary	
	▪ All Energy PodZs and batteries now shipped enroute to California ▪ Testing of Energy PodZ and Dynapower inverters successfully completed ▪ Local Project delivery resources supporting local coordination ▪ Redflow team targeted to travel to US to support installation ▪ **On track for installation and commissioning early October 2021**

Thailand built Energy PodZ's
Now shipped

Australia built Energy PodZ's –
Now shipped

Thailand COVID Update and Impacts

After successfully navigating 2020 and early 2021, Thailand has been heavily impacted by a deteriorating COVID-19 situation in recent months. Thailand hit a daily record of more than 20,000 COVID-19 cases earlier in August. No national vaccination program yet in place

Redflow Thailand

- Chon Buri area materially affected
- A small number of our staff have contracted the virus over past few weeks*
- Some delays in local materials supply and required machinery servicing
- Appropriate isolation, quarantine and facility deep cleaning measures in place

Current Business Impact

- Facility has remained open
- Some short term impacts on production
- Increased freight costs & some shipping delays
- Successful delivered Anaergia project
- Ongoing restrictions on travel for Redflow engineering team due to Australian controls
- Impact on Gen3 introduction – FY22

Outlook

- We remain confident that Thailand presents the optimal manufacturing location for current need and immediate growth plans
- Additional investment in line capability in Australia to enable Gen3 launch & optimisation
- We continue to monitor the situation carefully

* Affected staff now fully recovered and back to work

FY21 Financials

TIEC Kalyakool Farm,
Muckenburra, WA

Profit & Loss

Revenue up 14% to $2.23m:

- COVID-19 impacted sales conversion opportunities and delivery of orders
- Other Income up 3% including R&D Tax claim, JobKeeper support
- Raw materials and consumables used decreased to $5,128.3k due to moderation of production volume during H1
- Loss after tax down 5% to $9.5m
- Order Backlog of 176 batteries at 30 June 2021 all for delivery during FY2022

A$'000	FY21	FY20
Revenue	**2,230.1**	**1,948.4**
Other Income	2,685.7	2,595.1
Expenses		
Raw Materials and Consumables Used	5,128.3	5,534.8
Other Expenses	9,306.1	8,975.5
Profit/ (Loss) before Income Tax	**(9,518.7)**	**(9,966.8)**
Income Tax Expense	26.4	50.9
Profit/ (Loss) after Income Tax	**(9,545.1)**	**(10,017.7)**
Other Comprehensive Income	(49.8)	(4.5)
Total Comprehensive Loss	**(9,594.9)**	**(10,022.2)**

Sum of individual items may not equal total due to rounding effects

Balance Sheet

Strong Net cash position of $9.8m, with further $10.3m raised in July and August from Entitlement Offer

Current Assets:

Trade and other receivables up 598%, reflecting scale up of battery deliveries in H2

Inventories down 40% from pcp

- Raw materials of $2,665k down from 30 June 2020
- Finished Goods down to $681k, due to sales and batteries use for R&D purposes

Current Liabilities:

- Trade and other Payables increased due to increase demand and increasing manufacturing and the equity issue obligation under the share placement agreement
- Other current liabilities and Provisions increased due to various employee entitlement provisions and onerous contract provision

A$'000	FY21	FY20
Cash and cash equivalents	9,808.3	3,390.2
Trade and other receivables	944.8	135.3
Inventories	3,346.5	5,603.8
Other current assets	236.9	377.4
Total current assets	**14,336.5**	**9,506.7**
Property plant and equipment	617.8	766.9
Intangible assets	415.7	630.4
Right of use assets	75.1	76.0
Total non-current assets	**1,108.6**	**1,473.3**
Total Assets	**15,445.2**	**10,980.0**
Trade and other payables	6,178.9	492.1
Other current liabilities	953.5	493.9
Provisions	1724.8	1,456.4
Total current liabilities	**8,857.1**	**2,442.4**
Total non-current liabilities	**112.2**	**65.0**
Total liabilities	**8,969.3**	**2,507.4**
NET ASSETS	**6,475.8**	**8,472.6**

Sum of individual items may not equal total due to rounding effects

Cash Flow

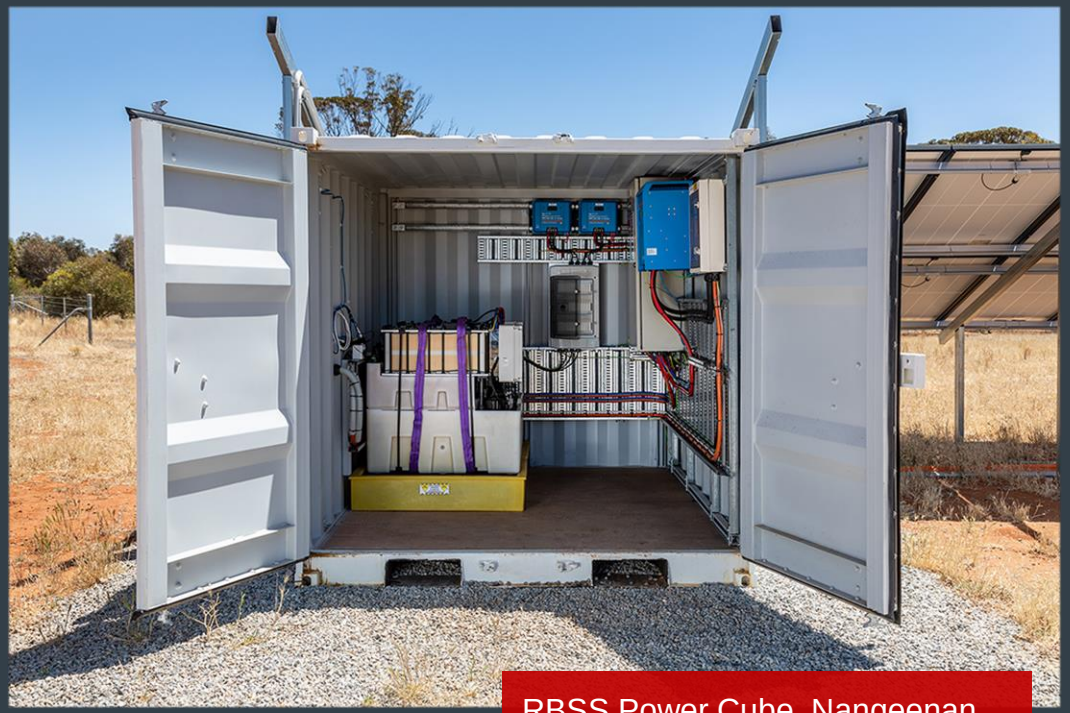
Net cash (outflows) from operations down 30% on PCP to negative $4.8m:

- Decrease in Receipts from customers, impacted by timing of Anaergia project payments
- Payments to suppliers and employees down 17% to $9.2m, due to moderation of production and prudent cost management measures
- Grant and other income received includes R&D tax incentive, EMDG grant and JobKeeper
- Capital raising activities:
  - $6.9m raised from July 2020 Entitlement Offer and two Shortfall Placements
  - $5.0m raised from placement to New Technology Capital Group in June 2021

A$'000	FY21	FY20
Cashflows from operating activities		
Receipts from customers	1,556.2	1,881.0
Payments to suppliers and employees	(9,222.4)	(11,128.5)
Grants R&D tax incentive received	2,859.6	2,313.8
Other	(32.2)	(3.2)
Net cash (outflows) from operating activities	**(4,839.8)**	**(6,936.9)**
Cashflows from investing activities		
Payment for property plant and equipment	(120.6)	(146.6)
Payments for intangible assets	(105.4)	(198.6)
Proceeds from sales of PP&E	29.2	
Net cash (outflows) from investing activities	**(196.7)**	**(345.2)**
Cashflows from financing activities		
Proceeds from capital raising activities	11,919.0	-
Transaction costs related to equity issues	(280.0)	(66.2)
Principal elements of lease payments	(177.4)	(186.4)
Net cash (outflows) from financing activities	**11,461.6**	**(252.5)**
Net increase/(decrease) in cash and cash equivalents	**6,425.0**	**(7,534.6)**

Sum of individual items may not equal total due to rounding effects

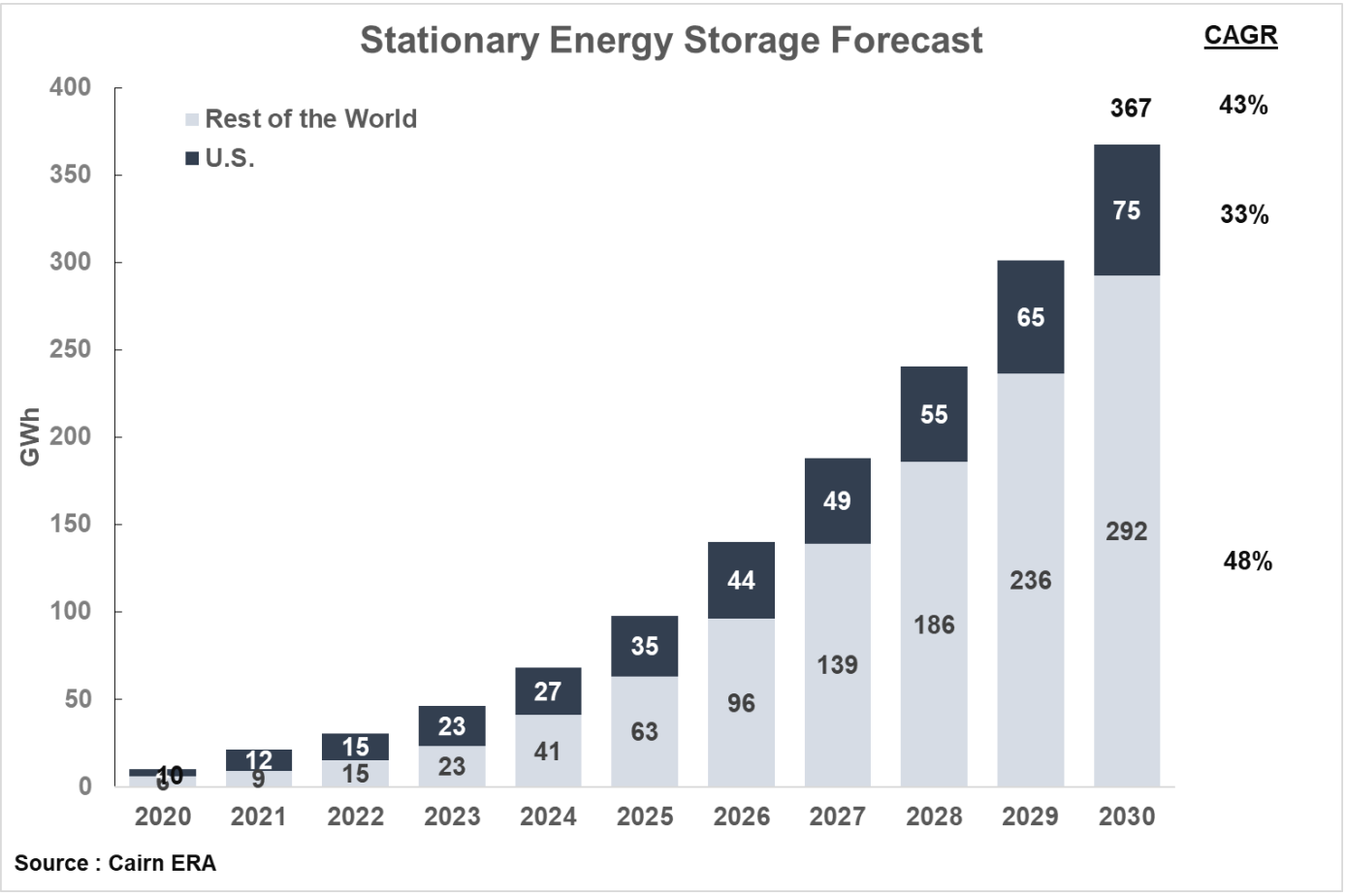
Market Strategy



RBSS Power Cube, Nangeenan, Western Australia

Accelerating Demand for Energy Storage

Global Energy Storage Market expected to be **36X larger in 2030** than 2020



Source : Cairn ERA

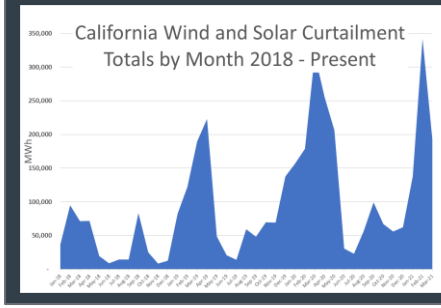
- **Global energy storage market expected to add cumulative 1,500 GWh capacity by 2030**
- **US market currently accounts for approximately 50% of current global energy storage market**
- **US Department of Energy reports indicate addressable market for flow batteries up to 69 GWh by 2030[1]**

1. See US DoE report *Energy Storage Grand Challenge: Energy Storage Market Report*, citing analysis that market for flow batteries size potential up to 69 MWh by 2030, *Dec 2020*

Key factors are accelerating the shift to longer duration

RE100
CLIMATE GROUP

Members now **use more electricity than Australia** – all are going 100% renewable with their electricity use [1]



Curtailment challenges from increasing renewables in markets such as South Australia and California [2]

ENERGY STORAGE GRAND CHALLENGE
U.S. DEPARTMENT OF ENERGY

Government renewed **support for medium duration energy storage** technology solutions [3]

1 See https://www.there100.org/
2 Analysis shows total curtailment of wind and solar by month from January 2018 to March 2021 Source http://www.caiso.com/
3 See Australian Government. https://consult.industry.gov.au/climate-change/technology-investment-roadmap/ and US DOE Energy Storage Grand Challenge – see https://www.energy.gov/

Ongoing Safety Concerns over Lithium

Tesla 'big battery' fire fuels concerns over lithium risks

Latest incident comes as utilities around the world increasingly rely on lithium-ion to store renewable energy

Fire investigators are looking into the cause of a blaze at a Townsville Tesla battery power storage site. It happened yesterday afternoon in...

FIRE

Morris fire: Lithium batteries a concern as blaze burns for 2nd day; evacuation order extended

Evacuation order for 1,000 homes continues until 9 p.m. Thursday

By Diane Pathieu, John Garcia, Liz Nagy and ABC7 Chicago Digital Team

Thursday, July 1, 2021

2 firefighters die in battling Beijing's power station fire

Source: Xinhua | 2021-04-17 09:09:07 | Editor: huaxia

The Growing Recognition of Flow Batteries

"Flow batteries are potentially going to be a big contributor in stationary energy storage, like the grid-level stationary energy storage"

Australia Chief Scientist Alan Finkel[1]

Flow batteries keep the energy flowin' more reliably …that's why they're good for grid storage and that's why we're investing $$ in them! Cleaner, more efficient energy for all…

Jennifer M. Granholm Secretary of Energy [2]

Flow battery technology can help us utilise the full potential of these clean-energy resources, and investing in this important new technology now is vital to our overall effort to combat the climate crisis

US Congresswoman Diana DeGette [2]

1 Australian Financial Review, *Finkel backs unheralded Aussie battery tech companies to go global*, 31 June 2019
2 US Department of Energy, *DOE Announces $24.5 Million for Manufacturing Innovation to Build a Clean, Resilient Electric Grid*, 17th March 2021 and US Secretary of Energy Twitter Feed, announcing initiative, 17th March 2021

Major Target Markets

COMMERCIAL & INDUSTRIAL	UTILITY	TELCO	REMOTE /COMMUNITY SYSTEMS
			
Energy Focused Applications	Frequent cycling e.g. solar shifting, peak shaving	Medium to longer term duration requirements	Conditions that rapidly degrade other chemistries

Key Demand Drivers and Redflow Value Proposition

Medium to longer duration	▪ Up to 12 hours [1] (and potential to extend in hibernation mode) ▪ <1 second response time
Cost & Performance	▪ Deep daily discharge and sustained energy output ▪ Long life, multi cycle design ▪ Ability to value stack – frequency control and energy shifting
Flexibility	▪ 10 kWh modular design – scalable to multi MWh system ▪ Core design allows for redundancy. Expand as needs increase ▪ Hibernation mode allows for extended duration – weeks/months
Safety & Durability	▪ No risk of thermal runaway - Non flammable materials ▪ Excellent tolerance for high ambient temperatures w/out external cooling ▪ Remote monitoring and diagnostics plus self-protection features
Sustainability	▪ Abundant low cost materials ▪ Proven recyclable and reusable components

1 Redflow 10 kWh battery rated at 3kW constant, 5 kW peak. Longer durations may impact total energy capacity. See redflow.com for further information

Attractive Core Drivers in US Market

Accelerating renewable energy commitments

Climate change risks / catastrophic weather events

Grid Reliability & Stability

Increasing demand for longer duration storage

Active support for new storage technologies – incl. flow

Energy Security – sourcing and manufacturing

Battery storage is now leapfrogging in much of the same way that solar did for a period of time. So you've got utility-scale battery capacity today, which is enlarging the ability of power providers to have greater security in the provision of that power. It deals with the baseload challenge.

John Kerry, Special Presidential Envoy for Climate, Washington, DC, April 2021[1]

1 US Department of State. Special Presidential Envoy for Climate John Kerry Delivers Closing Remarks on Day One of the Virtual Leaders Summit on Climate, 22nd April 22, 2021

Redflow Current Activities in the United States

Commenced Bankability study with DNV GL

Strategic market advisory & local delivery support

Consultation and testing of US suppliers for key battery materials

Engagement with EPC partners

Discussions with various State and Federal institutions to assist ramp up

Current Customer Engagements

- ✓ Telco for wildfire resilience
- ✓ RFI for NYSE corporate large scale deployment - partnering with FUND4SE to assist
- ✓ Large scale deployment for Company operations centres
- ✓ Micro grid solutions in California

Key Priorities for FY22

Execute on current contracts
Including Anaergia 2MWh system, Optus STAND rollout, Semini Custom Feeds 600 kWh system, and others

Launch Gen3 & Energy PodZ for Large Scale Deployments
Introduce Gen3 into Production in FY2022. Implement Energy PodZ for large scale system deployments

Expand Sales Activity
Hire new sales and business development resources and activity – focus on Australian and US markets

Accelerate US Presence
Build team and market profile. Expand partner system. Commence US UL (Underwriter Laboratory) certification, bankability, US based independent testing.

Accelerate Manufacturing Capacity
Finalise and execute on automation strategy. Explore opportunities for US localisation (demand dependent)

Extend Technology Leadership
Focus on driving increased operational performance and cost. Focus on electrolyte, separator and supplier performance and cost advances

Maintain prudent cost management
Pursue additional savings measures where appropriate

Progress strategic investment and partnership discussions

Questions

60kWh deployment for Pines Farm as part of NSW DPI Project