

# Redflow delivers further progress in execution of its growth strategy

31 January 2023

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## Implementation of key projects and pipeline progressing

*Quarterly activities report for December 2022*

**Redflow Limited (ASX: RFX)** (the 'Company' or 'Redflow') is pleased to provide its quarterly activities report, together with its Appendix 4C, for the three months ended 31 December 2022 (Q2 FY2023).

### Key highlights:

- Implementation of key reference projects in Australia:
  - Australian Government's Bureau of Meteorology emissions reduction and reliability project is now completed, with a third radar site operational in rural NSW and able to run without grid power for weeks at a time;
  - Recently completed a third project for Knox City Council at their Regional Netball Centre following on from successful deployments at two childcare centres in 2019. The 60 kWh project incorporated the recently approved Deye hybrid inverter which is a new market development for the Australian commercial and industrial market; and
  - The first shipment of ZBM3 batteries was delivered for the 560 kWh deployment at Southern Ocean Lodge on Kangaroo Island, South Australia. Final delivery of the remaining batteries will be in the coming months.
- Launch of new QuadPod 40 kWh solution and integration with new Deye hybrid inverter generating strong commercial interest in a standardised, repeatable and small energy storage solution for commercial and industrial deployments in Australia.
- One-year operational milestone achieved in the US at Redflow's flagship 2 MWh Anaergia project in January 2023 and is continuing to attract significant industry interest with regular site visits by customers, partners and 3rd party engineering companies.
- Further growth in 1 GWh+ sales pipeline:
  - Continue to advance in the US and Australia and other selected markets, with multiple potential multi-MWh sales materially progressing in recent months; and
  - Nearly 1.2 MWh of existing customer orders targeted for delivery in the coming months, as production of ZBM3 batteries at the Redflow Thailand facility recommences following resolution of temporary minor quality issues with a third-party supplier and one manufacturing process.
- Q2 FY2023 cash receipts of \$559k.
- Cash balance of \$11.4 million as at 31 December 2022 supports the Company's growth plan. A further estimated \$2 million is expected to be received in the coming months from an Australian Government's R&D tax rebate.

## **Commenting on the continued progress made over the second quarter, Redflow CEO and Managing Director Tim Harris said:**

“Key multi-MWh opportunities in our sales pipeline have continued to move forward, with a number of these targeted to close this financial year. These larger deals inevitably have an elongated sales cycle due to a longer project approval process and the need to validate Redflow’s technology against customer requirements, such as fire safety risk. We are confident these projects will provide a strong validation of our world leading solution at multi-MWh scale and will accelerate broader interest in key markets as we build Redflow into a global leader in alternative energy storage.

“We have continued to implement critical reference projects, deliver on our backlog, and convert new sales deals. Our production facility also remains on target to ramp up production to 80 MWh per annum by the end of 2023 as demand increases.

### **Implementation of key reference projects**

Installation of the last of the three Bureau of Meteorology radar sites in regional NSW was completed in January 2023. The original delivery schedule was heavily impacted by the extreme weather in NSW in recent months. Working with our core integration partner, Seven20 Electrical, the sites provide 260 kWh of energy storage for backup power and emissions reduction and reliability and enable the sites to run without grid power for weeks at a time. Redflow and Seven20 Electrical remain in discussion with the Bureau of Meteorology around the potential to extend the project rollout to other sites in 2023.

Installation has commenced of Southern Ocean Lodge’s 560 kWh battery energy storage system in South Australia. Delivery of the final installment of batteries should be shipped by the end of February 2023.

Installation of a third energy storage system for Knox City Council was completed at the end of 2022 for their Regional Netball Centre in partnership with integration partner Seven20 Electrical. This installation follows on from the successful deployment of two childcare centres for the Knox City Council, which were completed in 2019.

In January 2023, the Anaergia 2 MWh energy storage project in the US celebrated 12 months of operation. The system continues to support Anaergia’s critical infrastructure and has demonstrated its reliability by supporting peak load periods through the delivery of over one million hours of ZBM operation. Redflow has continued to host a number of interested parties from government, integrators, customers and engineering consultants at this site.

### **1 GWh+ sales pipeline continued to grow**

Redflow’s sales pipeline has continued to grow over 2Q FY2023. Several large potential projects have progressed in recent months in the US and Australia, as well as selected other specific opportunities in other markets.

We are also working on several new exciting opportunities that have the potential to be material to Redflow. A number of those projects are multi-MWh in size, with progress made against the specific examples highlighted in previous investor presentations and quarterly updates. This successfully follows our strategy of focusing on larger scale systems as well as executing on smaller energy storage solutions for commercial and industrial customers.

Redflow’s sales and industry visibility has also increased over the quarter, bolstered by the Company’s presence at critical events and trade shows, including RE+ in California in September, All Energy Australia in Melbourne in October, and as a guest speaker at the World Bank Energy Storage Partnership Secretariat and Forum in Seoul in December. All have generated significant customer interest in the Redflow solution.

Earlier this month, Redflow announced the successful integration with Deye's hybrid inverter, the first of its kind available for use with Redflow batteries. As a fully compliant CEC listed, grid connected inverter, the Deye hybrid inverter provides a range of new capabilities previously unavailable to the Australian market. The inverter offers the ability to have a direct connection of solar and batteries in a three-phase grid connected inverter and can also continue charging batteries from solar PV even in the event of a grid outage, as well as a backup generator input.

Redflow officially kicked off Phase 2 of our UL listing for the ZBM3 battery in the US earlier this month. This will be core to our future success in the US and is currently expected to be completed in Q3 of 2023.

Our focus in the coming months is to convert some of the key deals that are in advanced stages in our pipeline into battery orders and projects by the end of this financial year, for initial delivery in the second half of 2023.

### **Well placed to tap into market momentum in target markets**

The broader positive market dynamics for Redflow in key target markets has continued to accelerate. Concerns around the fire risk of lithium batteries have increased, the imbalance between lithium supply and demand is expected to last well into 2030, and there is an increasing focus on longer duration applications that have a requirement for more energy focused versus power orientated energy storage solutions.

The US' Inflation Reduction Act (IRA) was signed into law in August 2022 and provides large tax incentives for energy and climate change measures, including benefits for standalone energy storage deployments. The IRA includes incentives worth approximately US\$340 billion and has stimulated significant interest in non-lithium alternative energy storage technologies. Redflow has been working towards ensuring it can meet IRA requirements for the past 18 months including qualification of a number of US companies with the capability to support Redflow's bill of materials.

Earlier this month, the European Commission President Ursula von der Leyen used a speech at the World Economic Forum in Davos to promise investments from the EU very similar to the IRA. Energy storage again sits at the centre of this initiative. Given this, Redflow sees significant strategic opportunities to expand its focus into the core European market as traction is gained in the US and Australia this year.

Locally, the Queensland Government released its *Battery Industry Opportunities for Queensland* discussion paper in January 2023 as part of its Queensland Energy and Jobs Plan. The paper sets out the market opportunities for batteries in the State and Australia, including up to 14 GWh of stationary grid energy storage opportunities in Queensland and 27 GWh in Australia by 2030.

As a proud Queensland company that has invested significantly in the region since 2008, Redflow was delighted to be named in this initiative, and excited to be part of the solution that will deliver energy storage to Queensland and Australia. This plan and the Queensland Government's ongoing public commitment to support local Queensland renewable companies, will see Redflow creating more local jobs and investment as it supports Queensland moving towards its goal of achieving 70% renewable energy generation by 2032.

### **Financial update**

The Appendix 4C quarterly cashflow report for Q2 FY2023 is attached.

Cash receipts for Q2 FY 2023 were \$599k (Q2 FY2022: \$997k) and trade receivables were \$140k.

As at 31 December 2022, Redflow had a cash balance of \$11.4 million.

The following is a Summary of Receipts and Expenditures for the Q2 FY2023 business activities (refer also accompanying Appendix 4C):

<b>A\$'000</b>	<b>Dec Quarter</b>	<b>Year to date (6 months)</b>
Receipts from customers	\$599	\$780
Product manufacturing and operating costs	-1,007	-2,211
Research and development	-1,405	-2,479
SG&A (Corporate Overhead)	-1,721	-3,401
Investing activities	-184	-392
Financing activities	-24	10,082
Other	-9	-2

Notes:

<sup>1</sup> Numbers in the table are presented on a cash basis, consistent with the ASX Appendix 4C.

<sup>2</sup> Numbers exclude the effect of movement on exchange rates on cash held.

<sup>3</sup> Expenditures include allocation of staff costs, which are shown as a separate line in the ASX Appendix 4C.

Payments to related parties over Q2 FY23 were \$204k, relating to fees paid to directors over the quarter.

*This announcement was authorised for release by the Chairman of the Board of Redflow Limited.*

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## About Redflow

Redflow Limited, a publicly-listed Australian company (ASX: RFX), produces zinc-bromine flow batteries that tolerate daily hard work in harsh conditions. Redflow batteries are designed for high cycle-rate, long time-base stationary energy storage applications and are scalable from small systems through to grid-scale deployments. Redflow's smart, self-protecting batteries offer unique advantages including secure remote management, 100 per cent daily depth of discharge, tolerance of high ambient temperatures, a simple recycling path, no propensity for thermal runaway and sustained energy delivery throughout their operating life.

For further information, please visit: [www.redflow.com](http://www.redflow.com)



<b>Consolidated statement of cash flows</b>		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from disposal of:		
	(a) entities		
	(b) businesses		
	(c) property plant and equipment	8	8
	(d) investments		
	(e) intellectual property		
	(f) other non-current assets		
2.3	Cashflows from loans to other entities		
2.4	Dividends received (see Note 3)		
2.5	Other (provide details if material)		
2.6	<b>Net cash from/(used in) investing activities</b>	-184	-392
<b>3</b>	<b>Cash flows related to financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	200	10,622
3.2	Proceeds from issues of convertible debt securities		
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-224	-540
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)	0	0
3.10	<b>Net cash from/(used in) financing activities</b>	-24	10,082
<b>4</b>	<b>Net increase (decrease) in cash and cash equivalents for the period</b>	-3,782	2,379
4.1	Cash and cash equivalents at beginning of period	15,218	9,050
4.2	Net cash from/(used in) operating activities (Item 1.9 above)	-3,574	-7,311
4.3	Net cash from/(used in) investing activities (Item 2.6 above)	-184	-392

<b>Consolidated statement of cash flows</b>		Current quarter	Year to date (6 months)
		\$A'000	\$A'000
4.4	Net cash from/(used in) financing activities (Item 3.10 above)	-24	10,082
4.5	Effect of movement in exchange rate on cash held	-9	-2
4.6	<b>Cash and cash equivalents at end of the quarter</b>	<b>11,427</b>	<b>11,427</b>

<b>5 Reconciliation of cash and cash equivalents</b>		Current quarter	Previous quarter
at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts		\$A'000	\$A'000
5.1	Bank balances	11,427	15,218
5.2	Call deposits	0	0
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>11,427</b>	<b>15,218</b>

<b>6 Payments to related parties of the entity and their associates</b>		Current quarter
		\$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	204
6.2	Aggregate amount of payments to related parties and their associates included in item 2	
<i>Note: if any amounts are shown in 6.1 or 6.2 your quarterly report must a description and an explanation for, such payments</i>		
Payments of salary and fees to Executive and Non-executive Directors.		

<b>7</b>	<b>Financing facilities</b> <i>NOTE: The term "facility" included all forms of financing arrangements available to the entity Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end	Amount drawn at quarter end
		\$A'000	\$A'000
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	<b>Total financing facilities</b>		
7.5	<b>Unused financing facilities available at the quarter end</b>		
7.6	Include below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

<b>8</b>	<b>Estimated cash available for future operating activities</b>	\$A'000
8.1	Net cash from / (used in ) operating activities (Item 1.9)	-3,574
8.2	Cash and cash equivalents at quarter end (Item 4.6)	11,427
8.3	Unused finance facilities available at quarter end ( Item 7.5)	0
8.4	Total available funds (Item 8.2 + Item 8.3)	11,427
8.5	<b>Estimated quarters of funding available (Item 8.4 divided by Item 8.1)</b>	3.2
	<i>Note: if the entity has reported positive net operating cashflows in item 1.9 answer item 8.5 as "N/A. Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5</i>	
8.6	If Item 8.5 is less than 2 quarters, please provide answers to the following questions:	
	8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flow for the time being and if not why not ?	
	Answer: N/A	
	8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operation and , if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: N/A	
	8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and , if so , on what basis?	
	Answer: N/A	
	<i>Note: where item 8.5 is less than 2 quarters, all questions 8.6.1, 8.6.2 and 8.6.3 above must be answered</i>	

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement does give a true and fair view of the matters disclosed.

Date: 31-Jan-23

Authorised by: The Audit and Risk Committee

## Notes

- 1 This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2 If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report
- 3 Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4 If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5 If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.