



Redflow Strategy Update

April 2024

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Redflow profile



Financial overview

Ticker	RFX.ASX
Share price¹	\$0.15
Shares on issue¹	237.1m
Market cap¹	\$35.57m
Cash and cash equivalents²	\$4.9m
Debt²	Zero

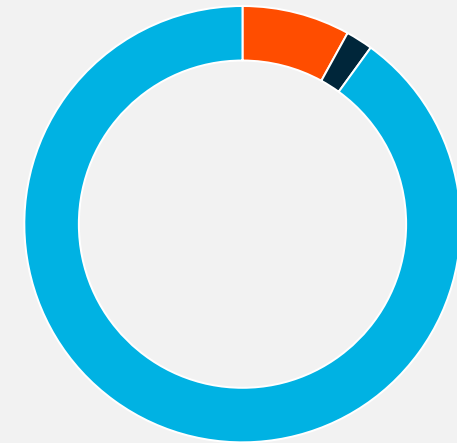


Operational overview¹

Headquarters	Brisbane
Employees (Aus, US, Thailand)	110
Manufacturing	Thailand
Active deployments	~ 250
Storage capacity delivered	> 3.2 GWh
Cumulative operating hours	> 24 million



Shareholder structure³



- Institutional
- Employees & Directors
- Retail



Board

Brett Johnson

Independent
Non-Executive
Chairman

Adele Fraser

Independent
Non-Executive
Director

John Lindsay

Independent
Non-Executive
Director

David Brant

Independent
Non-Executive
Director

Tim Harris

CEO &
Managing Director

1. As at 12 April 2024
2. As at 31 March 2024
3. As at 12 February 2024

Board members and Senior Executives listed in Appendix

Executive summary



Vision

To be a global leader in clean energy storage, paving the way to a sustainable future.



Product

Redflow manufactures zinc-bromine flow batteries, a technology that plays a key role in the clean energy transition due to its ability to store energy for extended durations, and because it is amongst the most fire-safe and sustainable batteries on the market.



Addressable market

Global decarbonisation efforts and the growing penetration of renewables is accelerating the need for energy storage. Our opportunity set is extensive with over 85 TWh of LDES demand required by 2040¹. Queensland alone requires over 48 GWh of LDES capacity by 2035².

Quality customers



Drivers of success

1. Commercialised technology with millions of hours of operational experience, with quality customers.
2. Strong pipeline of demand from large utility and government counterparties.
3. Market intelligence and insight into commercial, product and scale requirements of energy storage users, from deep customer engagement on projects.
4. Our plan positions us to succeed for customers and shareholders.

Catalysts

Commercial – convert near-term pipeline.

Manufacturing – maximise Thailand factory output and complete feasibility study for new advanced manufacturing facility in Queensland.

Product evolution – design, specifications and tooling for the new X10 battery designed for ease of deployment and low costs in utility-scale installations – the natural product evolution from our current system.

Finance – progress discussions with Government grant and finance agencies.

Clear and consistent strategy

Will continue to deliver growth in FY24 and beyond



ENERGY FOCUSED APPLICATIONS

- + Solar/wind + storage, renewables integration.
- + Medium to long duration focus – 8+ hours.
- + Industries and applications where safety paramount (e.g. mining).
- + Leverage hibernation and duration attributes.



COMMERCIAL AND INDUSTRIAL (C&I) CUSTOMERS

- + Small C&I deployments 1+ MWh.
- + Medium to larger C&I deployments – behind the meter focus 2 – 50 MWh.
- + Promote unique fire safety vs lithium.
- + Basis to move into grid-scale opportunities – 50 MWh+.

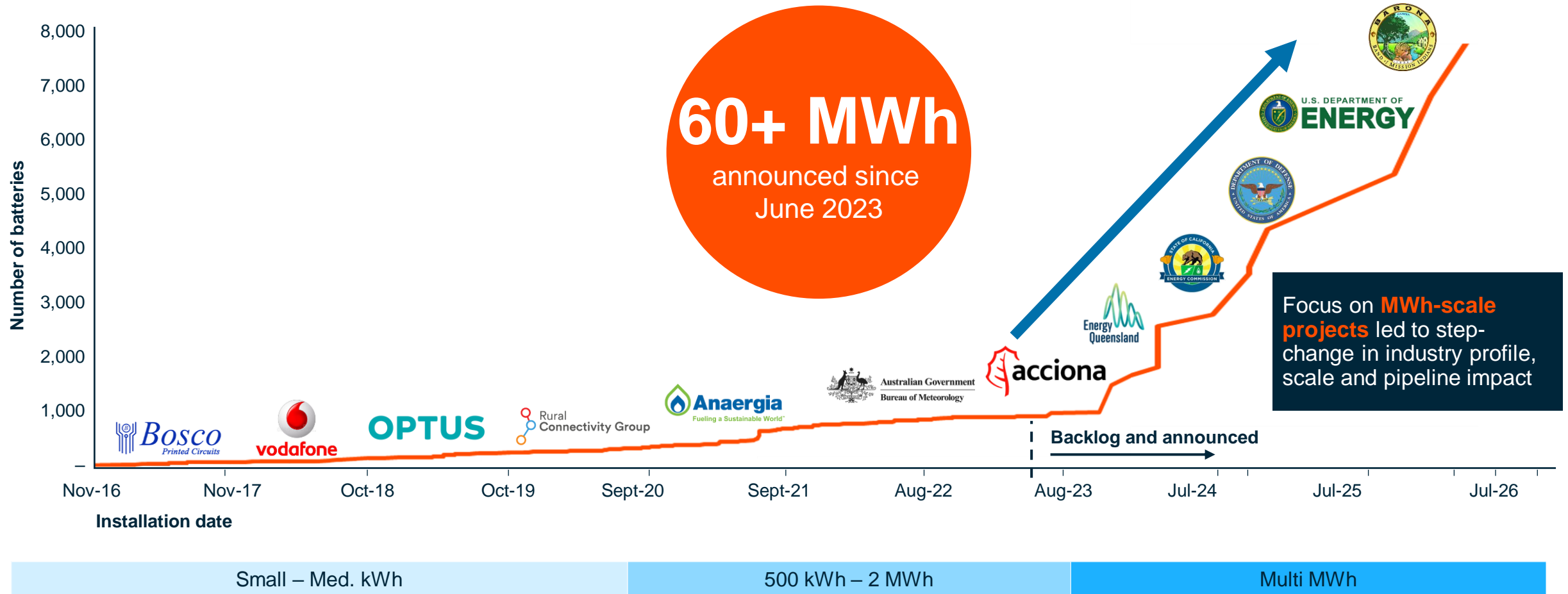


US AND AUSTRALIA AS CORE MARKETS

- + US – California and other markets with large LDES energy storage needs and drive for diversification.
- + Queensland Government energy storage strategy supporting acceleration of ambition.
- + Continued growth of opportunities in the broader Australian market.
- + Pursue deals in other markets where opportunity is compelling.

Our strategy has enabled our transition to a credible multi-MWh technology in some of the most exciting global LDES markets

Redflow Battery Installations, 2016–2026, current view¹



Sources: Company information.



1. Note that installations are based on deployed systems to 30th August 2023 and the current expected deployment schedule of announced projects. The specific delivery timetable of announced projects is subject to final contracting, implementation, production, logistics timetables and other factors outside our control and therefore may be subject to change

Key projects on track for delivery and revenue

Financial impact¹



Paskenta Microgrid project 15 MWh

Phase One adjusted based on final budget allocation. Final notice to proceed received Feb 24. Kick off deployment meeting April 2024

~\$12.5m in FY25²



Energy Queensland project 4 MWh

Engineering and design continuing with signing of the MSA expected April 2024. Target installation remains on track to be in H1 FY25.

~\$2.5m in FY25³



Acciona project 200 kWh

BESS has been delivered to Acciona site in Spain. Commissioning underway and expected to be complete in April 2024

~\$150k in FY24²



US DOD Microgrid project 1.2 - 1.4 MWh

Engineering and design on track to meet the US DOD milestones. System delivery and commissioning expected in Q3 2024.

~\$1.7m in FY25²



US DOE Valley Children's Hospital project ~34 MWh

Negotiations across all parties continuing. Expect final contracting to be finalised in H1 FY25. Engineering and design is progressing, with the delivery timetable expected over FY26/7.

~\$25m in FY26/7³



Barona LDES project 6.6 MWh

Project team contract negotiation is continuing with CEC. Final contracting anticipated in H1 FY25. Expected delivery timetable FY26.

~\$5m in FY26³



¹ Estimates only. Specific revenue and timing of recognising revenue to be confirmed at time of final contracting, and other factors such as production/delivery milestones.

² Expected revenue.

³ Revenue opportunity.

The energy transition in Queensland is a powerful example of Redflow's opportunity



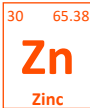
Responsible for ~30% of national emissions, **Queensland's energy transition will be critical** to Australia meeting Paris Agreement obligations
 In particular, Queensland holds a **strong foundation for our battery industry to grow**;



Largest national rooftop solar penetration



Existing mining and refining capabilities of critical battery minerals



Established local zinc ecosystem, e.g., multiple zinc mining and refining sites



National leader in large-scale firmed renewables and infrastructure



Queensland's **energy transition and battery industry growth** is expected to be accelerated by Queensland Government's **\$62bn Energy and Jobs Plan** and **\$570M Battery Industry Strategy**, which earmarked over 25GW of new and existing renewable energy by 2035

This will be enabled by:



~10 GW of energy storage planned by 2035



Retirement of entire coal fleet by FY35



~1500km of new high voltage backbone transmission



Smarter grid to support ~11GW of solar, ~6GW of batteries in homes / businesses



*The Queensland Battery Industry Strategy establishes Queensland as a **global leader in the flow batteries** needed to store renewable energy and advanced battery technologies.*



Queensland Premier, Steven Miles



Source: Queensland Battery Industry Strategy; Queensland Energy and Jobs Plan; Climate Energy Finance - Queensland's Energy Transformation: From Coal Colossus to Renewable Energy Superpower

New LDES project with Australia utility, Horizon Power

Second Australian utility project for delivery in late 2024

- + Redflow to supply and install an initial **400 kWh Battery Energy Storage System (BESS)** – 2 x Pod 200 units to **support remote community grid network**.
- + BESS will be located at Nullagine in the **Pilbara region of Western Australia**.
- + Initial deployment will review how Redflow's zinc-bromine flow battery operates on Horizon Power's network with a **focus on the temperature resilience**.
- + Funding for the project has been awarded to Horizon Power by **ARENA**, under the **Regional Australia Microgrids Pilot Program**, and the **Western Australian State Government**.
- + Redflow will partner with a WA EPC service provider for build and commissioning
- + **Deployment is expected late in 2024** subject to concluding customary procurement agreements and final technical approvals.



ARENA



1. See Redflow ASX Release, *Redflow awarded first remote grid project by Horizon Power*, 25 March 2024, <https://wcsecure.weblink.com.au/pdf/RFX/02788370.pdf>



We are really excited about these ground-breaking trials which will support the Australian and State Government's carbon emissions reduction targets, while making renewables more accessible for our regional and remote customers.



Stephanie Unwin
Horizon Power CEO¹

High utilisation of our current battery and factory is our platform for continued success in the short term



Thailand factory is established, ISO 9001 accredited and has been manufacturing since 2019 with capacity to produce up to 40 MWh pa.

ZBM3 is the current core battery unit based on product evolution and commercial adoption over the past decade.

Pod200 is the commercial sales product, housing 20 ZBM3 batteries, iterated for scale to match each project sizing.



These established and current assets will continue to be the basis for our pipeline conversions in 2025-2026

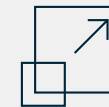


The manufacturing and operation of these assets is established and ready to scale



Production is on-track with scale-up plans proceeding for 20 MWh pa and 40 MWh pa thresholds

Asset utilisation is a key objective to maximise efficiencies as we increase production



Scope to further increase beyond 40 MWh based on customer demand

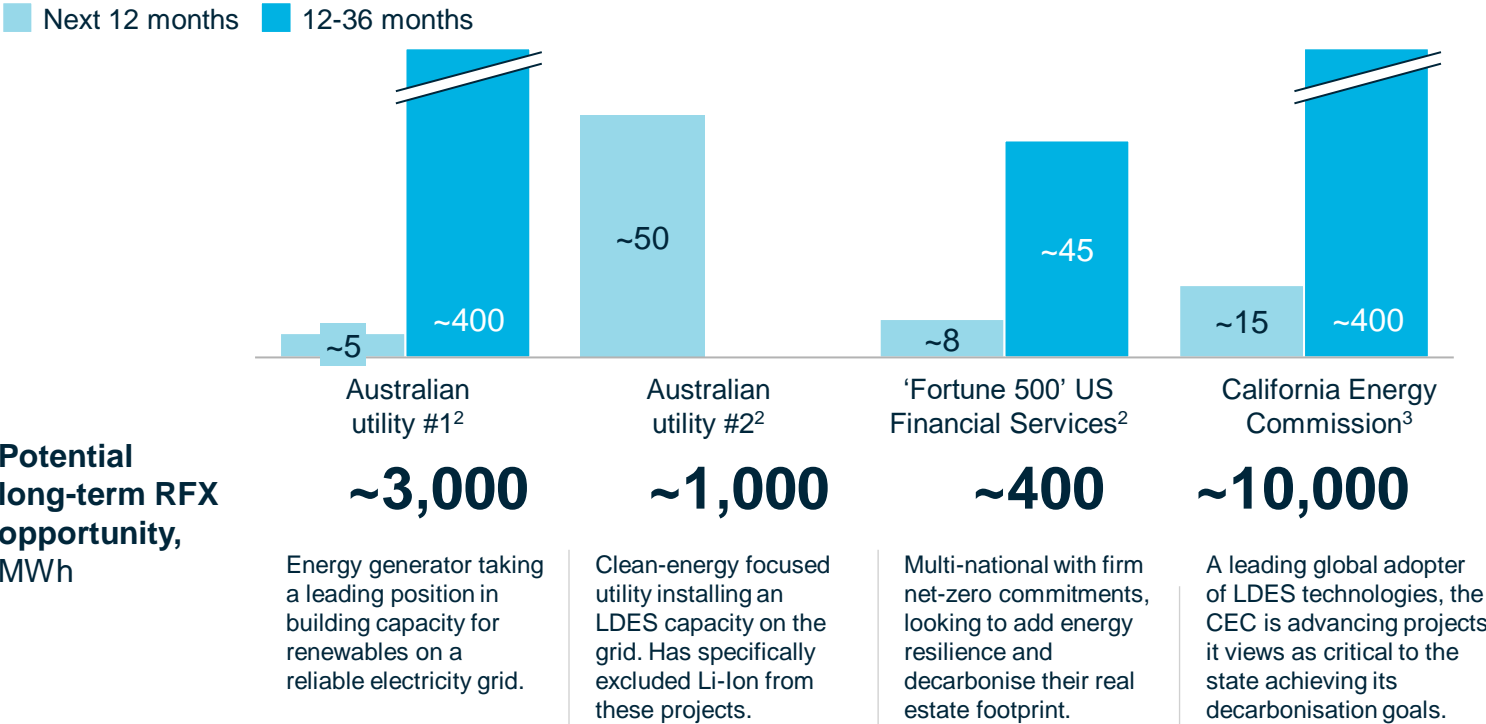


Utilise Thailand to test new X10 production techniques and product iterations

Near term opportunities support short term momentum and underpin large-scale demand

Large customers with significant storage needs looking to undertake initial projects

Key opportunities in discussion with key selected customers within indicative timeframes, MWh



Potential long-term RFX opportunity, MWh

Energy generator taking a leading position in building capacity for renewables on a reliable electricity grid.

Clean-energy focused utility installing an LDES capacity on the grid. Has specifically excluded Li-Ion from these projects.

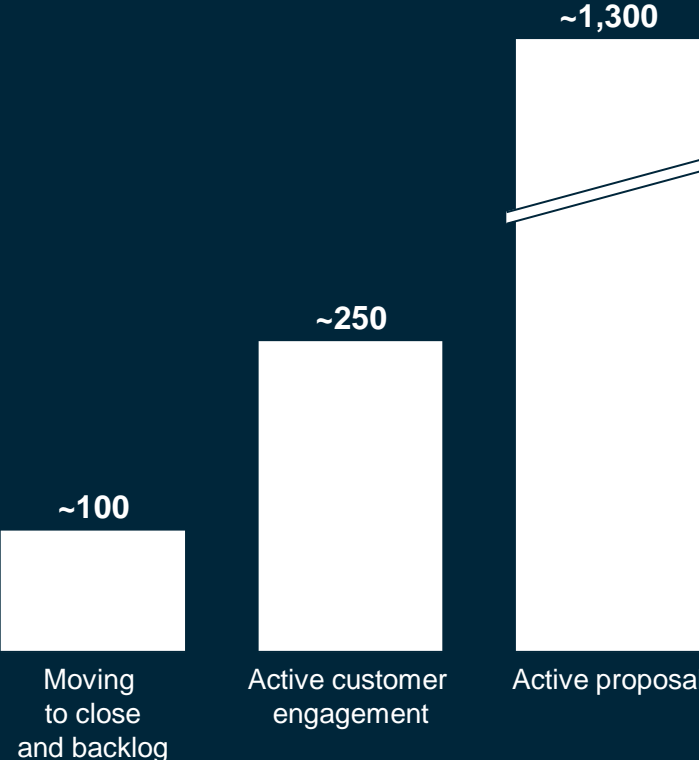
Multi-national with firm net-zero commitments, looking to add energy resilience and decarbonise their real estate footprint.

A leading global adopter of LDES technologies, the CEC is advancing projects it views as critical to the state achieving its decarbonisation goals.

1. Later stage pipeline is unweighted
 2. Pipeline opportunities and direct customer engagements
 3. Pipeline opportunities and "RFI for LDES Demonstration Solicitation", CEC, February 16, 2024. Note: next 12 months figures includes announced projects



Full project pipeline by development stage¹, excluding prospects, MWh



Our understanding of customer needs is core to our product evolution

Purchase considerations

Customers are telling us what they want...

... is aligned with Redflow's product evolution

Cost (CAPEX and LCOS)

Cost is at the **forefront** of decision-making

Market Competitive product CAPEX
Competitive LCOS

Energy capacity

Scalability is key

Modular solution

Duration

8+ hours is the **minimum**

8+ hours and hibernation mode

Footprint/
Form factor

Constraint is the **infrastructure or logistics** needed

Energy-dense solution; form factor efficiency for optimal install cost

Technological risk

Technology needs to be **operationally proven**

Successful and extensive operational track record

Safety

Safety is a **must**

Compliance to baseline safety requirements; enhanced fire safety



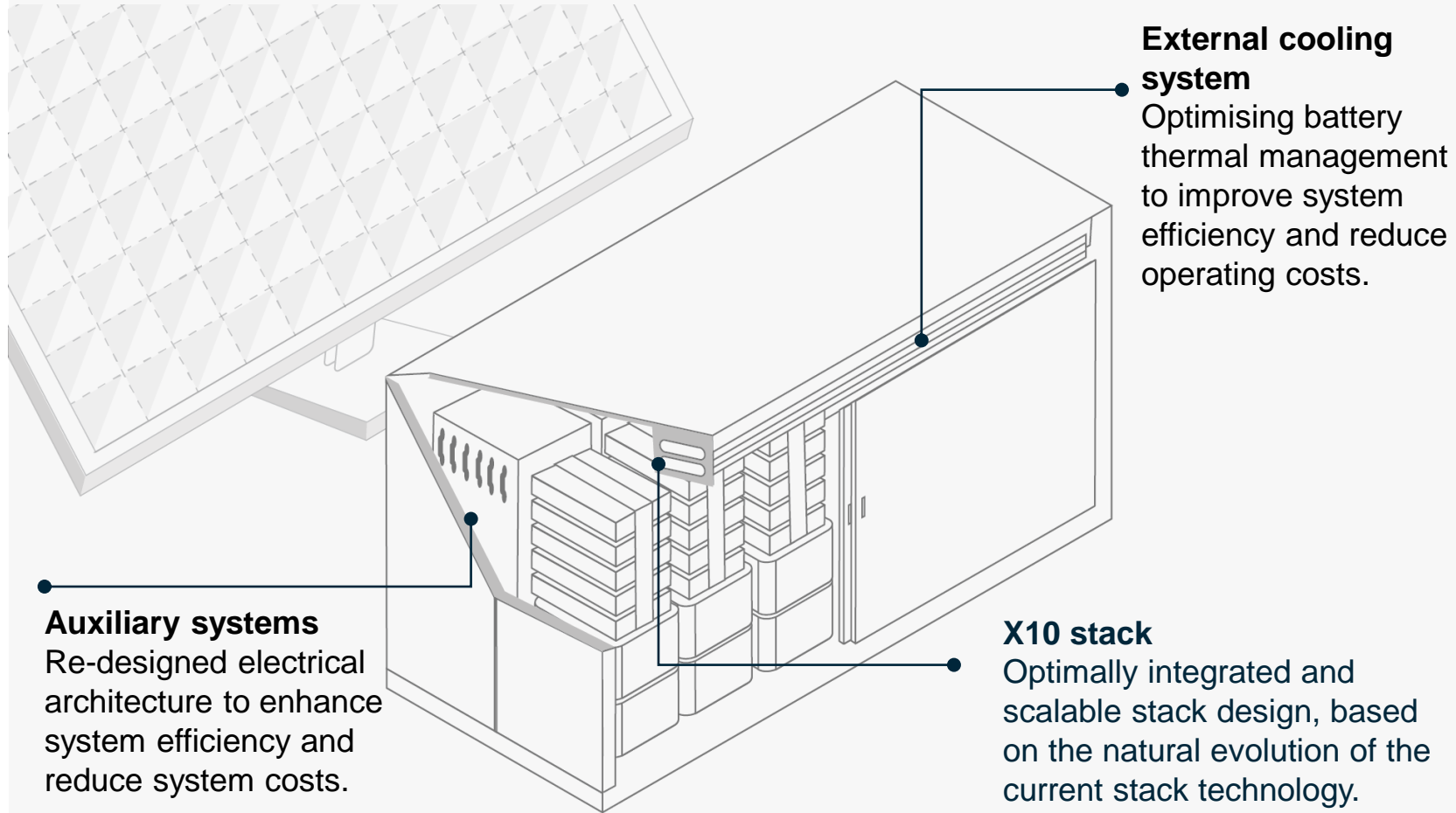
Redflow provides a sophisticated and understood product that scales to the application..... Redflow is helping us pursue 24/7 Carbon Free Energy across our global portfolio



'Fortune 500'
US Financial Services Company

X10 is the natural evolution of our current systems and designed for larger scale projects

ILLUSTRATIVE DESIGN



External cooling system

Optimising battery thermal management to improve system efficiency and reduce operating costs.

Auxiliary systems

Re-designed electrical architecture to enhance system efficiency and reduce system costs.

X10 stack

Optimally integrated and scalable stack design, based on the natural evolution of the current stack technology.

Key customer requirements to be met by the new X10 design

Natural product evolution of Pod200/ZBM3, e.g., chemistry and stack technology, which have extensive operational track record

Market Competitive product CAPEX

8h+ duration

MWh+ scale

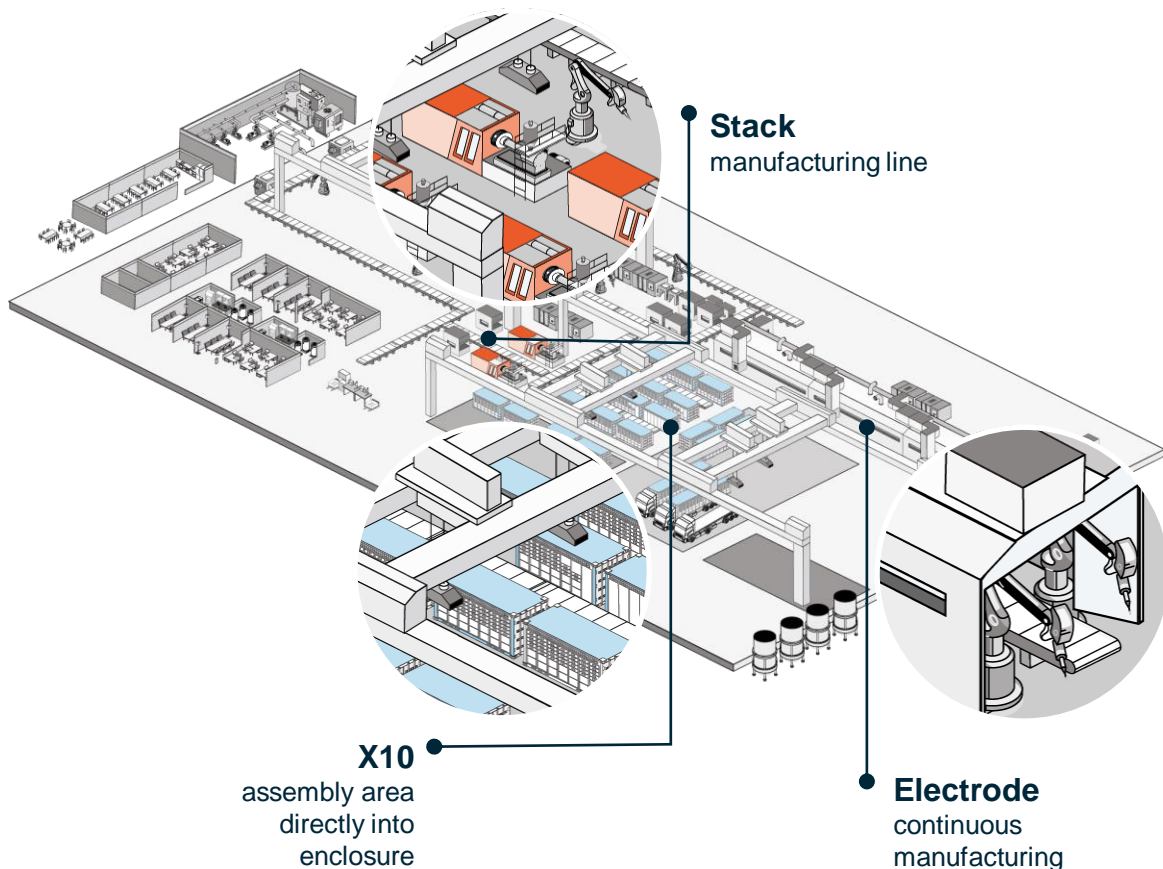
Modular design for rapid scalability

Designed and manufactured for ease of maintainability in the field for O&M efficiency

Turnkey solution for ease of transportation, field deployment and low installation costs – key customer requirement

Planning commenced for new advanced manufacturing facility

Preliminary QLD factory design



Redflow has advanced scoping plans to commission a **new manufacturing facility in 2026**. Commencing a jointly-funded feasibility study for a **Queensland-based facility** with the state government.

This facility will produce **Redflow's new X10 product**, adopting **highly automated manufacturing processes** to enable a **reduced cost and improved product life**

Queensland can serve as a **global hub for Redflow**, centralising stack manufacturing for deployment to global assembly centres



500MWh+

annual production target



>10x

increase in Redflow's annual production capacity



100+

Direct jobs generated in QLD

Redflow has a clear and focused plan to scale-up



Delivered

- Filled production capacity out to early 2025 with customer orders.
- Detailed scale-up plan for Thailand factory to increase production capacity to 40 MWh/year.
- Design optimisation for cost of ZBM3.
- Preliminary design of new X10 product.
- Multi-MWh projects with option to further expand in project size.



Next steps



Manufacturing

- Implement Thailand factory scale-up.
- Detailed design / planning of QLD factory (capital equipment, plant design, site selection, etc.).
- Ongoing supplier diversification and partnerships.



Design

- Implement design / process improvements in Thailand facility.
- Finalise new X10 design.



Finance

- Progress discussions with government debt and export finance agencies.
- Working capital financing solutions.
- Drive progressive gains in product margin.



Commercial

- Lock in ZMB3 customer pipeline orders.
- Engage on X10 scaled future commitments.

Investment Risks



Investment Risks

There is no assurance that the Company will achieve its stated objectives or its business plan either in whole or in part.

This section describes certain, but not all, specific risks associated with an investment in the Company. Each of the risks set out below could, if it eventuates, have a materially adverse impact on the Company's ability to achieve its stated objectives or business strategies, its prospects, operating and financial performance, financial position, liquidity and the value of its securities.

Availability of funding

The Company currently operates on a negative cash operating basis in that its operating expenses exceed its revenue.

Accordingly, the Company requires immediate funding to support its short term operational needs comprising scale up of the Thailand factory to manufacture the current Pod200/ ZBM3 product, initial development work and prototyping of the X-10 battery and for ordinary operational expenses and working capital. The Company believes that it has a strategy which if successfully executed will form the basis of a financially sustainable business. Until then, the Company will need to raise additional funds for its ordinary operations.

Separately and in addition to its ordinary funding needs, the Company's strategy relies on the successful establishment of an advanced manufacturing facility in conjunction with the development of the X-10 product by 2026 to enable it to manufacture X-10 batteries at scale and at a competitive cost to meet the needs of the utility scale LDES market.

The execution of this manufacturing strategy will require significant additional funding in the near future. The Company is targeting non-dilutive government funding as the principal source of funding, with additional funding support from capital markets.

There is no assurance that adequate or sufficient funds can be raised at any time to meet the Company's funding needs of its ordinary operations or its manufacturing strategy or to achieve a breakeven point, either at all or in a timely manner when the funds are required or on terms and conditions which are commercially acceptable to the Company or at a price which is not lower than the current share price.

If the Company is unable to obtain additional capital, it may be required to reduce the scope of its anticipated activities which could adversely affect its ability to execute its strategies and business plan, its business prospects, and improve its financial condition and operating results

Change in government policy

A change in government policy at State or Federal level may have a materially adverse impact on the Company's ability to raise non-dilutive funding to execute its manufacturing strategy and also on the demand for the Company's products.

Project delivery

If existing projects and customer contracts are not delivered in accordance with contractual terms or within expected timeframes or budget, there may be a material adverse effect on the Company including its cashflow, project profitability and reputation.

Investment Risk - continued

Conversion of commercial opportunities

The Company relies on its ability to convert its pipeline of commercial opportunities into sales, deliveries and then revenue. There is no guarantee that the Company will be successful in converting these opportunities into revenue either at all or on acceptable terms or within commercial timeframes. If these opportunities are not converted into revenue, this may have an adverse effect on the cashflow and financial performance and position of the Company.

Manufacturing cost reduction strategy

The Company's business prospects are dependent on the development of its new X10 battery and its ability to manufacture the X10 battery at scale to significantly reduce the production costs of its batteries. If the Company is unable to reduce its cost of production sufficiently, the Company may not achieve profitability.

There is no guarantee that it will be operationally, technically or economically feasible to establish an advanced manufacturing facility in Queensland or to commission that facility by 2026. If this is not feasible, the Company will need to investigate the feasibility of establishing the new facility in another jurisdiction. This may delay the production of the X10 product and negatively affect the Company's operations and cashflow and capital requirements.

Even if the facility is commissioned, there is no assurance that the target cost reductions will be successfully implemented or will be achieved or that the reductions will be sufficient to enable the Company to competitively price its batteries. Factors outside of the Company's control may mean that competitors also experience a reduction of their manufacturing costs.

Commercialisation risk

If the Company's battery technology is not adopted by its customers, or if its battery technology does not meet industry requirements for long duration energy storage capacity in an efficient and safe design, the Company's battery will not gain market acceptance.

Product and performance risk

There is an inherent risk of defective workmanship or materials in the manufacture of the Company's products and for exposure to product liability for damages suffered by third parties attributable to the use of the product. Defective products may have a materially adverse impact on the Company's reputation, its ability to achieve sales and commercialise its products and on its financial performance due to warranty obligations. It may also give rise to product liability claims.

Technology obsolescence risk

Rapid and ongoing changes in technology and product standards could quickly render the Company's products less competitive, or even obsolete if it fails to continue to improve the performance of its battery, its chemistry and battery management systems.

Investment Risk - continued

Reliance on system integrators as strategic partners

The Company relies on key system integrators as strategic partners providing channels to market. There may be a materially adverse effect on the Company if the market reputation of a system integrator suffers, if one or more of these strategic system integrator relationships is lost and not replaced or if a dispute arises between the Company and a systems integrator. There are also risks associated with being one step removed from the ultimate customer and end user, such as issues arising from installation of Redflow energy storage systems by an integrator.

Manufacturing risks

There are risks which are inherent in manufacturing operations including production, securing raw materials, parts and components, pricing of inputs, quality control, outsourcing and human resourcing, many of which are outside the control of the Company. Any adverse impact on production could have a materially adverse impact on the Company's ability to meet customer needs and the risk of customer claims and the Company's ability to achieve its expansion plans or its financial performance.

Sovereign Risk

The Company's manufacturing operations in Thailand and a number of overseas battery deployment projects are subject to the risks associated in operating in foreign countries.

Dividends

There is no guarantee as to future earnings of the Company or that the Company will be profitable at any time in the future, and there is no guarantee that the Company will be in a financial position to pay dividends at any time in the future.

Personnel risk

The Company relies heavily on its senior executives and engineering team. There can be no assurance that the Company will be able to retain its key personnel or recruit suitable technical staff as replacements. The loss of key personnel could have a materially adverse impact on the Company.

Ukraine and Gaza conflict

The war between Ukraine and Russia (**Ukraine Conflict**) and Israel and Palestine (**Gaza Conflict**) is impacting global economic markets. The nature and extent of the effect of the Ukraine Conflict and Gaza Conflict on the performance of the Company remains unknown. These conflicts may impact on capital markets, the Company's ability to raise funds and the ability of the Company to source an important input from a key supplier based in Israel.

Appendices

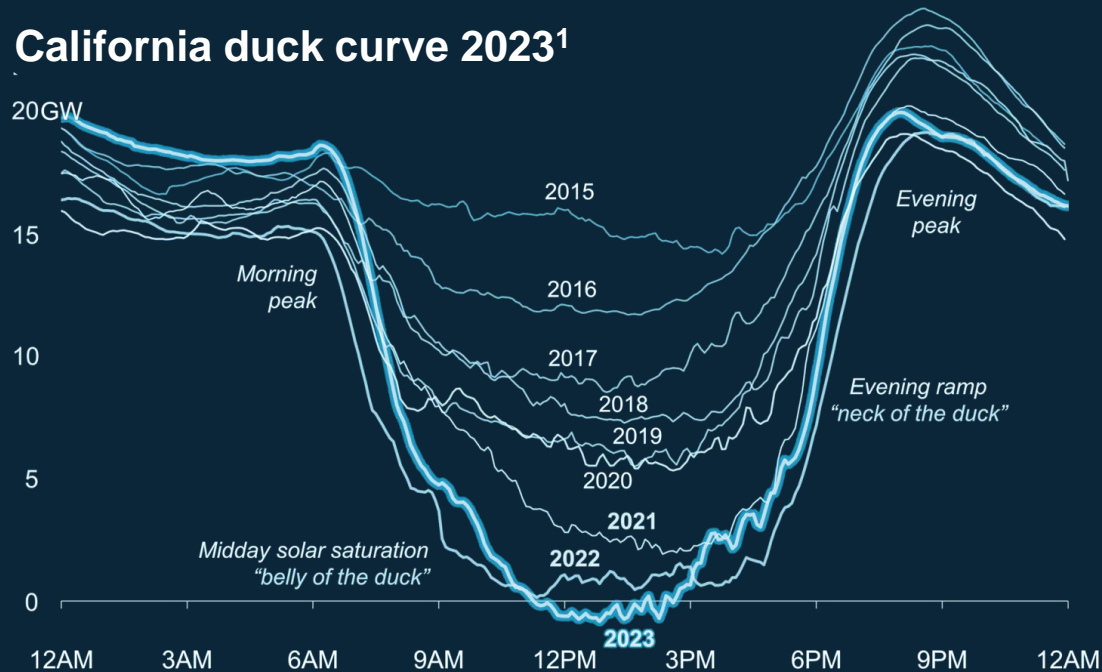


Bureau of Meteorology weather radar emissions reduction and reliability project
NSW, Australia

LDES increasingly seen as crucial to the energy transition

Renewables acceleration generates new challenges that LDES is best equipped to solve

California duck curve 2023¹



Source: CAISO | @BPBartholomew

Note: Net load shown is demand minus utility-scale wind and solar



“Long-duration energy storage is not a luxury, but a necessity. This is not an economic paradigm, it’s a reliability paradigm.”³



1. CAISO
2. Source: PTK analysis. Illustrative only
3. PNNL.gov, *Long-Duration Energy Storage: The Time Is Now*, May 2023, Citing PNNL study in *Journal of Energy Storage*, *Defining long duration energy storage*, April 2023

Key LDES applications



Bulk energy shifting



Renewables integration



Energy arbitrage



Back up source

Redflow aligned to core LDES requirements



Use 100% energy



Flexible duration



Frequent cycling & long life



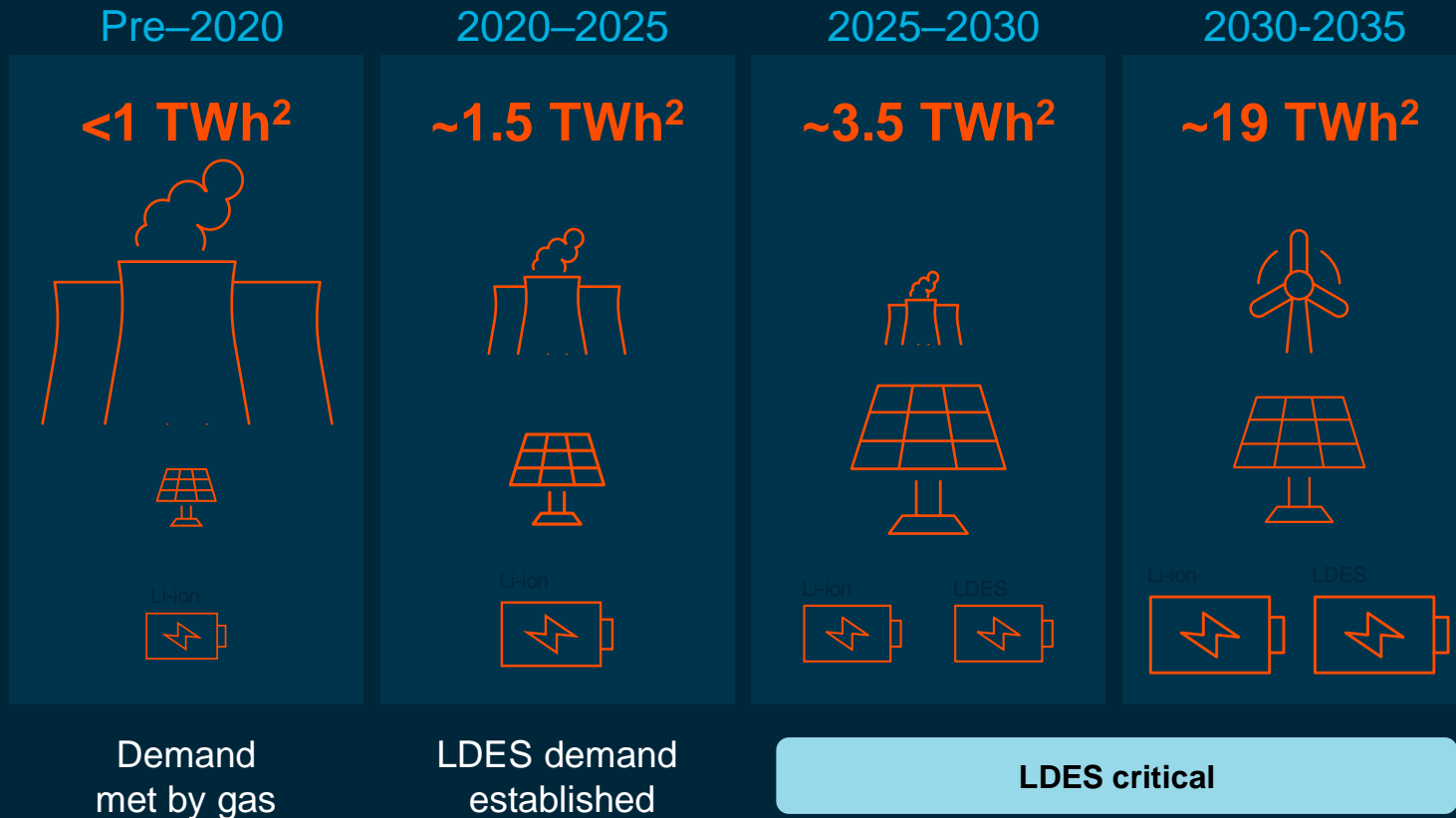
High temperature tolerance



Fully recyclable and no fire risk

Renewables penetration drives LDES adoption

Global need of 8–24-hour duration LDES: 38TWh+ by 2040¹



LDES penetration has been low in the past

- + High proportion of baseload from coal and gas.
- + Renewables supplemented the core grid.

Fossil fuels declining as source of baseload

- + Grids increasingly powered by renewables.
- + Coal and gas generation prevent climate goals.
- + Phasing out of coal and gas peakers.
- + Lithium for short term energy storage needs.

Renewables powered grids need LDES


- + Renewables require LDES to shift power to match demand (intra-day, multi-day).
- + Growing demand for 24/7 renewable PPAs.
- + Total electricity demand increasing 2x³.

Market looking beyond lithium


- + Requirements for 8+ hour discharge capability.
- + Lithium supply constraints and EV demand.
- + Customer concerns about lithium fire safety.
- + LDES already viable for long-duration applications.

Strong value proposition built on core advantages of Redflow's technology


Core chemistry, operational experience, low-cost deployment and unique features



Density
Highest across commercial flow batteries¹



Core chemistry
ZnBr one of the lowest \$/kWh chemistries²




Modularity
Flexible from 200 kWh to 100s MWh



Hibernation mode
Indefinite standby capability



Supply chain
Mature and abundant zinc supply chain



Deployment
Low cost, rapid drop-in deployment model

“
*If you look past lithium ion, probably **zinc is the next metal that's the most popular for energy storage**, and it does appear to be able to provide performance equal to or better than lithium if given a chance*
”

Mike Gravely,
Californian Energy Commission³

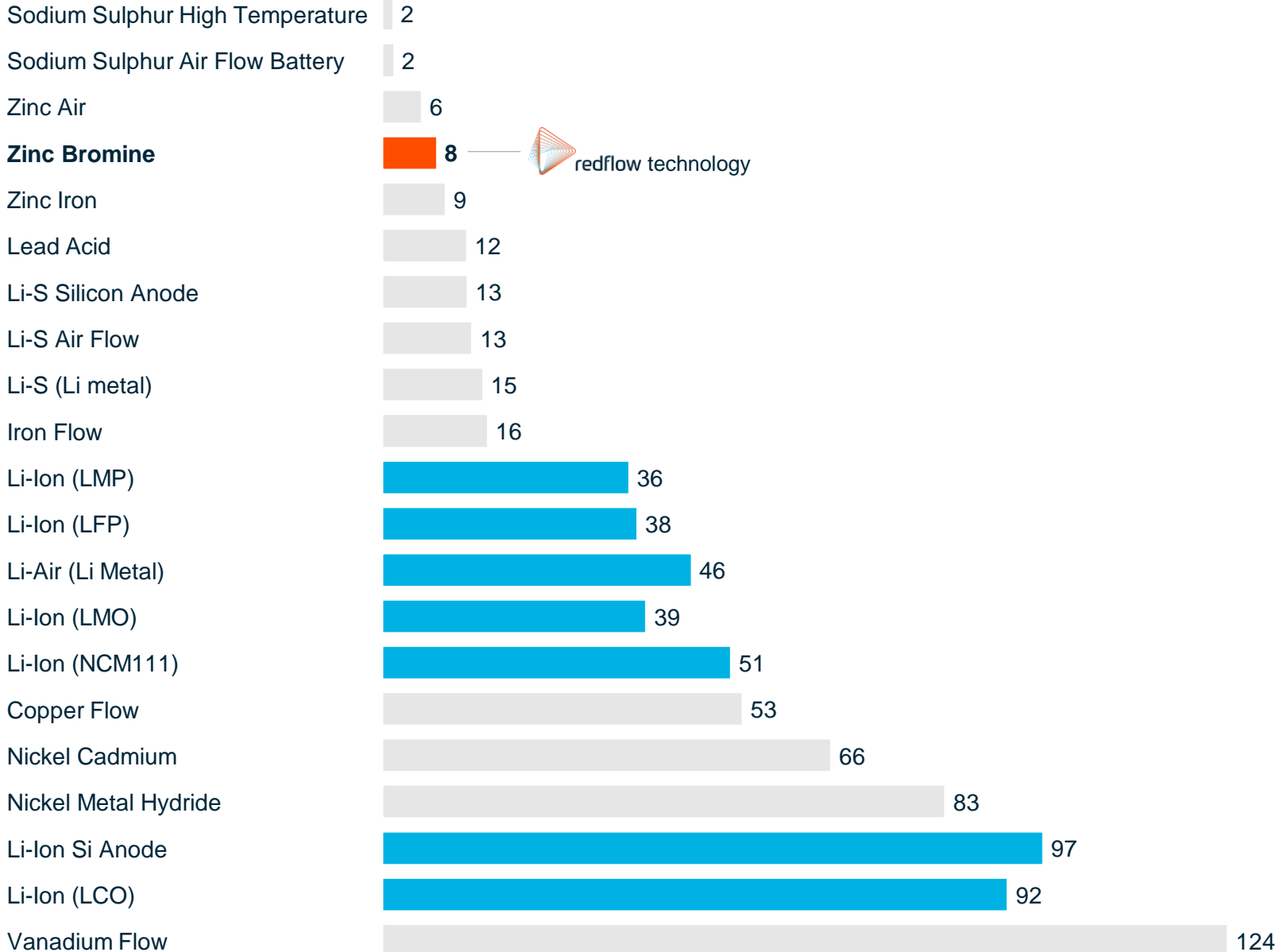


1. Redflow analysis based on publicly available information and industry literature as of 30th August 2023
2. The Future of Energy Storage, MIT, 2022
3. Forbes, California Sees Zinc As Likely Successor To Lithium-Ion In Energy Storage, October 2022. Bold added for emphasis

Zinc-bromine chemistry has fundamental a cost advantage vs. other chemistries

Estimated cost of raw material for different battery chemistries USD/kWh

- Li-Ion battery technology
- Other battery technologies



Note: This data indicates the estimated relative chemical cost of storage for Zinc Bromide chemistries. This is not a statement of Redflow's chemical cost of storage, which may differ from this data.

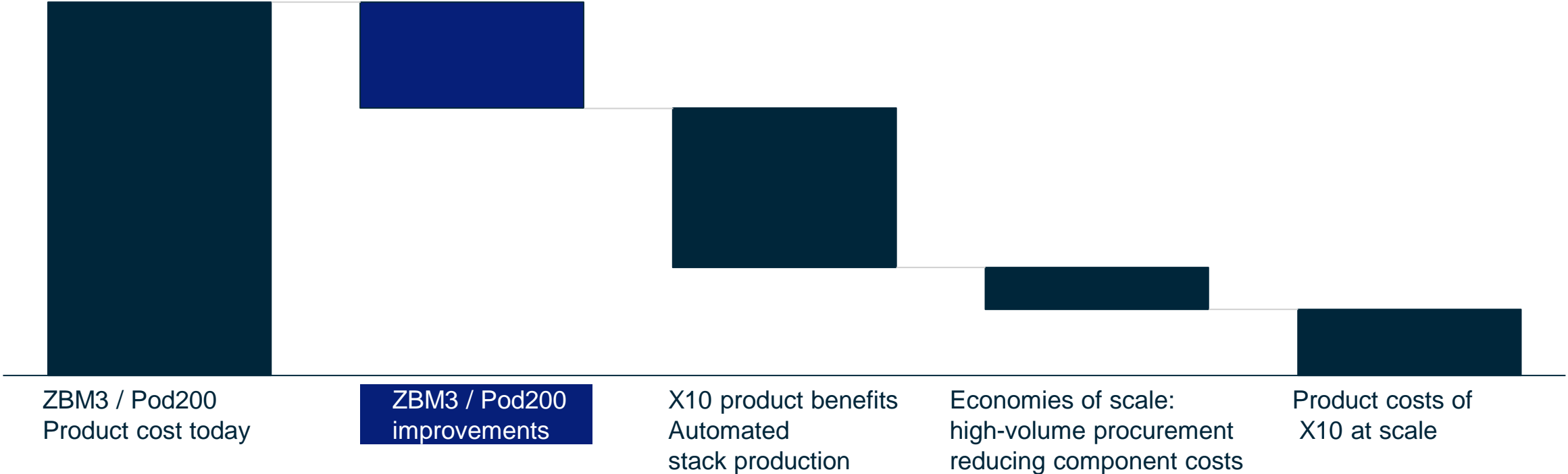
Source: MIT Future of Energy Storage study 2022



Our X10 and manufacturing scale up plan will allow us to target a step change in product costs and competitiveness^{1,2}

Redflow's product cost down goals^{2,3,4}

USD/kWh, illustrative



1 Subject to key investment risks – see slides 17 – 19

2. Product costs are the direct material and labour costs of manufacturing and installing at the customer's site an 8+ hour system. It excludes the cost of delivery from Redflow's factory to site and indirect costs.

3. Product costs including target cost reductions based on expected bill of materials, internal management estimates and external analysis.

4. Product cost reduction assumptions and actions required to achieve reductions described overleaf. Outcomes are not guaranteed and are subject to usual commercial risks including changes of a range of technical, operational and commercial factors.

Target product cost reduction initiatives

NON-EXHAUSTIVE

Cost down levers

ZBM3 / Pod200 improvements

Key initiatives

- + Optimise electrolyte formulation, e.g., reducing 10% of electrolyte and assuring rated performance.
- + Improve procurement of key components, e.g., DC-DC converters.

X10 product benefits

Technical improvements specifically designed for efficient manufacture at scale and installation including:

- + Improve stack battery controller allowing the control of multiple stacks with one control unit.
- + Increase stack busbar voltage to reduce copper costs and increase electrical efficiency.
- + Design containerised enclosure to scale efficiencies in the installation process.
- + Fit batteries directly into containerised enclosure with integrated cooling/heating systems allowing the elimination of redundancies within the current thermal management system.
- + Iterate tank and pump assembly to improve operational efficiency of tank and pump system
- + Increase stack surface area and higher system energy density
- + Eliminate stack cooling fans to reduce costs and enhance energy efficiency.

Automated stack production

Shift from manual stack manufacturing process to (semi-) automated assembly line resulting in:

- + Reduced materials quantity due to shift towards high precision manufacturing process vs manual process.
- + Higher production quality increasing factory yield and reducing scrap costs.
- + Increased plant utilisation through stack continuous production.











Economies of scale: high-volume procurement reducing component costs

- + Procure large volume of the externally sourced components to achieve lowest unit cost.



Redflow considers that the target product cost reductions are reasonably achievable based on available information, internal management estimates and external third-party analysis. However, outcomes are not guaranteed and are subject to usual commercial risks including the risk that a range of technical, operational and commercial parameters may change.

We see strong catalysts that the global LDES market & opportunity for Redflow will accelerate in the next 12 months

Catalyst	Key examples	Redflow Impact & Action
 <p>Government / regulatory policies</p>	<p>Policies are being enacted or contemplated globally to foster LDES market growth</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="529 445 947 768">  <p>The Supercharging Battery Storage Initiative, led by the EC, Australia, US, and Canada, aims to reduce energy storage costs and establish a sustainable, transparent, diversified, and responsible supply chain¹</p> </div> <div data-bbox="973 439 1330 768">  <p>The US Department of Energy's Long Duration Storage Shot aims to decrease the cost of grid-scale energy storage by 90% for 10+ hours of duration within ten years¹</p> </div> <div data-bbox="1355 445 1778 768">  <p>The Battery Energy Storage System consortium aims at securing 5GW of battery storage deployments in low-middle income countries¹</p> </div> </div>	<p>Redflow Impact & Action</p> <p>Only Australian LDES battery on US Department of Energy project portfolio</p> <p>Initial 4MWh project with Energy Queensland</p> <p>34 MWh project with California Energy Commission</p> <p>QLD Government jointly funded feasibility study</p>
 <p>Investments</p>	<p>>US\$58b² in investments made by governments, funds and corporates in LDES projects around the world since 2019</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="529 825 1268 959"></div> <div data-bbox="1294 825 1778 959">  <p>~US\$10b venture capital funding³ made in energy storage start-ups in 2023</p> </div> </div>	<p>Redflow is actively engaged with a number of grant funding and export financing agencies in Australia with multiple NDAs signed</p>
 <p>Demand for scale is growing</p>	<p>Customer demand has been driving large scale LDES deployments across the world</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="529 988 1039 1125"></div> <div data-bbox="1065 988 1778 1125">  <p>480MWh⁴ Mornington Battery Energy Storage System recently announced in Victoria, Australia</p> </div> </div>	<p>Thailand production capacity is full for 2024 and early 2025.</p> <p>New manufacturing facility to be designed for scaled production.</p>
 <p>Technological advancements</p>	<p>~25-50% decrease in LDES costs driven by technological advancements through 2040 will boost LDES adoption⁵</p> 	<p>X10 battery has been evolved for larger scale deployments and significantly lower storage costs</p>



1. Respective agency website and press releases
 2. Wood Mackenzie 'Long-duration energy storage report 2022'
 3. Mercom Capital Funding and M&A Report for storage and grid 2023
 4. Mornington BESS website
 5. 2022 LDES Council Technology Benchmarking Results (N=26), page 25

We have a long-term plan for global manufacturing¹

Further global scale-up



Engagement of **global manufacturing partners**, low-capex expansion.

GWh+/year production.

Highly automated end-to-end manufacturing, bulk procurement of materials, **optimised supply chain**.

Hyper-localised supply to take advantage of **subsidies** (e.g. IRA).

Localised assembly



Assembly of complete battery systems (with Australian produced stacks) in **localised advanced facilities** across key markets / manufacturing hubs (**Australia, USA and Thailand**).

Aim for supporting production of **500-1,000 MWh/year**.

Highly efficient assembly processes.

Potential localised supply/assembly in delivery markets (e.g. USA) to **take advantages of subsidies** (e.g. IRA).

Australia: advanced stack manufacturing







Preliminary scoping plans for a **Queensland facility to be commissioned in 2026**

Aim for production capacity of **500-1,000 MWh/year** by 2030

Highly automated stack production, improvements to manufacturing efficiency and quality.



Government support for energy transition provides Redflow with multiple funding options

	Entity focus	Latest update
Australian Federal Government Entity #1	 Support AUS scale up manufacturing / operations	<ul style="list-style-type: none">+ NDA signed+ Initial discussions
Australian Federal Government Entity #2 (renewables focus)	 Support for initial prototype projects / facility	<ul style="list-style-type: none">+ NDA signed+ Multiple discussions
State government (misc.)	 Scale up support and product development	<ul style="list-style-type: none">+ NDA signed+ Detailed discussions and initial due diligence scoping
Australian Federal Government Entity #3	 Support AUS scale up manufacturing / operations	<ul style="list-style-type: none">+ NDA signed+ Initial discussions



Redflow is part of our growing local ecosystem of battery technology companies and we are proud to support them to fast-track the development of their tech and potentially manufacturing their products right here in Queensland.



Deputy Premier, Treasurer and Minister for Trade and Investment, Cameron Dick¹



Feasibility study for QLD will allow us to rapidly advance our X10 and scale manufacturing

- + The Queensland's Government's Queensland Critical Minerals and Battery Technology Fund (QCMBTF) has allocated **\$1.12m in grant funding to Redflow**. The grant will **reimburse Redflow** for part of the total \$3.2m project cost.
- + The funding is for the development and construction of a large-scale zinc-bromide flow battery prototype and a feasibility study for the establishment of a fully automated large-scale battery manufacturing facility in Queensland.
- + The \$100m QCMBTF fund provides for **initial feasibility funding and scale up financing (debt or equity) of up to \$30m**.
- + Anticipated to be **completed by the end of CY2024**.



Anchor demand



Endowment effects



Location based factors



Government stimulus & support

1. See Redflow ASX Announcement Redflow allocated Queensland government grant funding for battery prototype and manufacturing feasibility study, 29 February 2024 <https://wcsecure.weblink.com.au/pdf/RFX/02779404.pdf>

Redflow has a world-class team



Tim Harris
Chief Executive Officer
& Managing Director



Mark Higgins
President, North America &
Chief Commercial Officer



Steve Hickey
Chief Technology
Officer



Tim MacTaggart
Chief Operating
Officer



Brett Johnson
Independent
Non-Executive Chairman



Adele Fraser
Non-Executive
Director



Eric Chainet
General Manager,
Thailand



Michael Hipwood
Chief Financial Officer



Juergen Reitz
Chief Engineer



John Lindsay
Non-Executive
Director



David Brant
Non-Executive
Director



Profit & Loss

- + H1 FY24 revenue was affected by low production in the Thailand factory. This issue has been discussed in previous presentations and is now resolved.
- + Other income is primarily R&D tax rebate.
- + Raw materials and consumables used includes the increase in warranty provision \$3.4m.

A\$'000	H1 FY24	H1 FY23
Revenue	62.8	645.6
Other Income	1,153.5	2,344.3
Expenses		
Raw Materials and Consumables Used	(7,128.3)	(2,555.2)
Other Expenses	(6,967.3)	(6,647.4)
Profit/ (Loss) before Income Tax	(12,879.2)	(6,212.6)
Income Tax Expense	(8.1)	(12.1)
Profit/ (Loss) after Income Tax	(12,887.2)	(6,224.7)
Other Comprehensive Income	73.4	88.2
Total Comprehensive Loss	(12,813.8)	(6,136.5)

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

Balance Sheet

Net cash position of \$9.7m as of end Dec 23

Current assets

- + The \$11.6m raise contributed to the increase in cash.
- + Received R&D tax rebate hence the decrease in trade and other receivables.

Current liabilities

- + The warranty provision was revised conservatively following management's assessment of the number of batteries sold under warranty, battery performance, potential contract exposure and the cost of meeting warranty obligations, based on historical experience and current knowledge.

A\$'000	31 Dec 23	30 June 23
Cash and cash equivalents	9,697.2	5,512.9
Trade and other receivables	1,144.3	2,563.9
Inventories	3,294.3	2,737.5
Other current assets	690.0	706.1
Total current assets	14,825.7	11,520.3
Property plant and equipment	1,333.0	1,633.3
Intangible assets	539.0	501.2
Right of use assets	173.4	249.5
Total non-current assets	2,045.3	2,384.0
Total assets	16,871.0	13,904.3
Trade and other payables	2,450.3	1,701.5
Other current liabilities	1,193.7	572.8
Provisions	5,621.5	2,190.3
Total current liabilities	9,265.5	4,464.7
Total non-current liabilities	200.0	324.2
Total liabilities	9,465.5	4,788.9
NET ASSETS	7,405.5	9,115.4

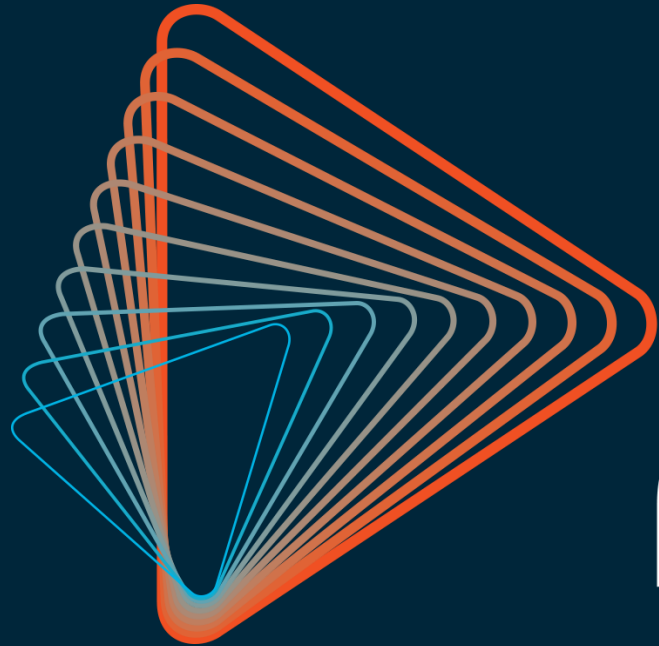
Sum of individual items may not equal total due to rounding effects

Cash Flow

- + As mentioned above, supplier quality issues impacted production of orders.
- + Payments to suppliers and employees increased in preparation of ramp up.
- + As discussed previously R&D tax grants received earlier than historical trends.
- + Capital raising activities:
 - \$11.6m raised from successful entitlement offer and placement.

A\$'000	H1 FY24	H1 FY23
Cashflows from operating activities		
Receipts from customers	243.7	779.6
Payments to suppliers and employees	(9,132.7)	(8,081.0)
Grants R&D tax incentive received	2,456.8	36.6
Other	147.7	37.5
Net cash (outflows) from operating activities	(6,284.5)	(7,227.4)
Cashflows from investing activities		
Payment for property plant and equipment	(273.6)	(300.6)
Payments for intangible assets	(56.9)	(99.6)
Proceeds from sales of PP&E	-	9.2
Net cash (outflows) from investing activities	(330.5)	(391.0)
Cashflows from financing activities		
Proceeds from capital raising activities	11,642.7	10,621.6
Transaction costs related to equity issues	(752.8)	(540.3)
Principal elements of lease payments	(84.9)	(84.0)
Net cash (outflows) from financing activities	10,805.0	9,997.3
Net increase/(decrease) in cash and cash equivalents	4,190.0	2,379.0

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



redflow