



redflow



# Redflow Q1 FY2024 Update Webinar

1 November 2023

# Redflow at a glance



**270+**  
active deployments



**3.2 GWh**  
total energy delivered to date



**Over 6 GWh**  
qualified sales pipeline



**A\$23+m revenue**  
for announced projects over next 12- 18 months<sup>1</sup>



**500+ MWh**  
ambition  
manufacturing scale with capital efficiency



**2,080**  
estimated tonnes of CO<sub>2</sub> offset



**34 MWh**  
largest project announced<sup>2</sup>



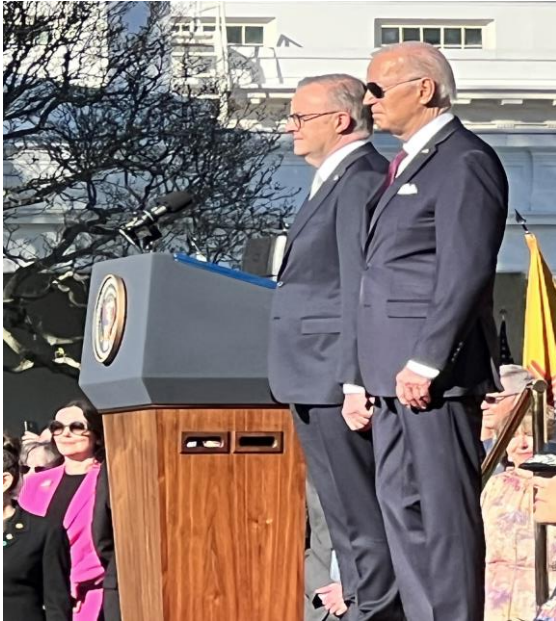
**3x density**  
energy density vs other commercial flow batteries<sup>2</sup>



**24 million**  
cumulative hours of field operations since 2018



# Building presence and visibility in critical US market



*The third pillar — the new pillar of our alliance — a plan for both our nations to seize the transformative economic opportunities of clean energy and a plan to help every nation meet the global challenge of climate change*

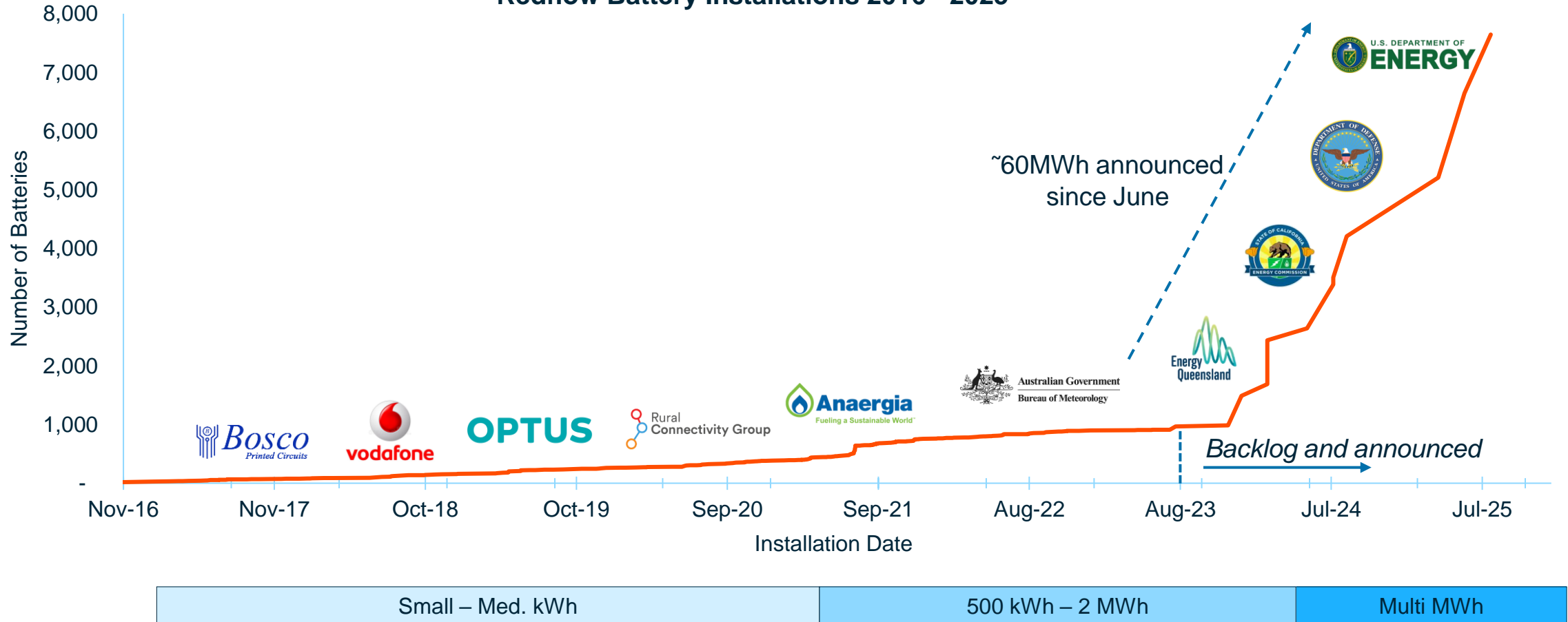
Remarks by Australian Prime Minister Anthony Albanese of Australia at Arrival Ceremony, 26 Oct 2023



# Redflow has reached a critical inflection point

Focus on MWh-scale projects led to step-change in industry profile, scale and pipeline impact

Redflow Battery Installations 2016 - 2025\*



Sources: Company information. \* Installations based on deployed systems to 30<sup>th</sup> August 2023 currently active and currently expected deployment schedule of recently announced CEC, EQ, DOD and DOE projects. Note the specific delivery timetable of the CEC and EQ projects is subject to final contracting and implementation timetable and therefore may be subject to change



# US – recent project wins

60 MWh<sup>1</sup> of projects announced since June

- + **June-2023: 20 MWh** solar & storage microgrid, funded by the CEC, providing power for the Paskenta Band of Nomlaki Indians.
- + **September-2023: 1.2 MWh** microgrid contract, providing storage at military installations for the Department of Defense through its LDES program
- + **September-2023: 34.4 MWh** resilient microgrid for children's hospital, backed by the Department of Energy and the California Energy Commission

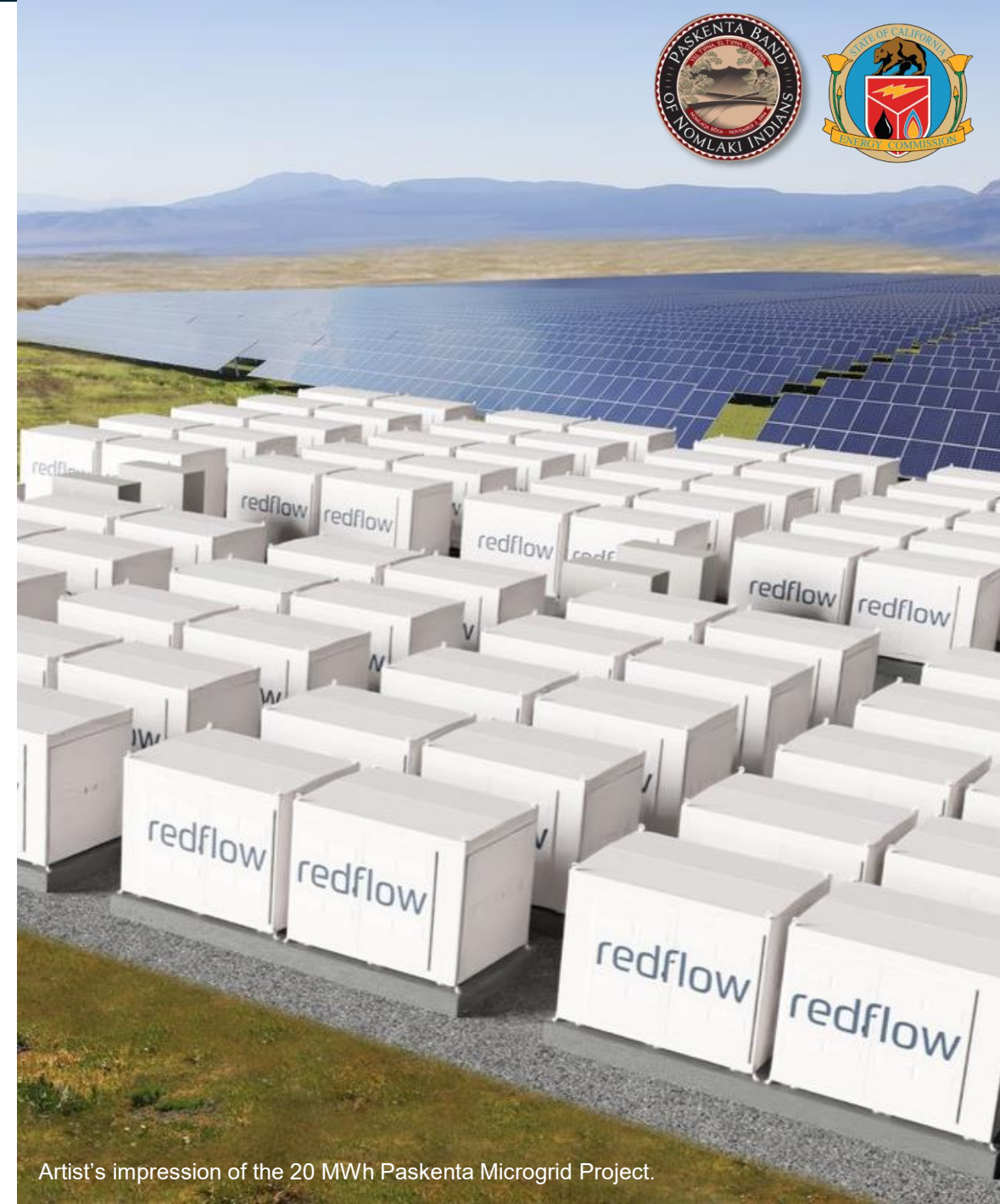


*"With emerging energy storage technologies such as those developed and deployed by Redflow ... we will be better positioned to expand and diversify California's energy storage portfolio."*<sup>2</sup>

**Jonah Steinbeck, Director of the Energy Research and Development Division at the California Energy Commission**



1. Company sources, not including other smaller projects 2. Bloomberg, *Redflow to supply transformative 20 MWh flow battery system for project in California*, 1 June 2023. Bold added for emphasis



Artist's impression of the 20 MWh Paskenta Microgrid Project.

# Australia provides core projects base & multi-GWh market

Positioned to play a key role in the Queensland and broader Australian energy transition



## Partnering with Queensland Government

- + 4 MWh project with Energy Queensland announced Aug 23
- + Final contract negotiations in progress
- + Supporting A\$62bn Energy & Jobs Plan, targeting 70% renewables by 2035
- + Identified Queensland requirement for 22 GWh potential energy storage demand by 2035<sup>2</sup>



# Thailand production update



- + Full production of ZBM3s resumed – August 2023. Current production levels circa 10 MWh p.a.
- + Key supplier quality issues having temporary daily production yield impact – 10% High Density Polyethylene (HDPE). Injection moulding part will address this – Dec 2023
- + Further refinements to ZBM3 design delivered over last quarter, incl. new tank, new separator
- + Additional capacity and 2nd shift commencing in Q1 2024 – circa 40 MWh p.a.
- + Ramp up EnergyPod manufacturing and assembly capabilities
- + Ramp up aligned with delivery schedule for key projects

# Clear strategy

Will continue to deliver growth in FY24 and beyond



## ENERGY FOCUSED APPLICATIONS

- + Solar shifting and energy arbitrage
- + Medium to long duration focus – 4+ hours
- + Industries and applications where safety paramount (e.g. mining)
- + Leverage hibernation attributes



## COMMERCIAL AND INDUSTRIAL (C&I) CUSTOMERS

- + Small C&I deployments <1 MWh
- + Medium to larger C&I deployments – Behind the Meter focus 2 – 20 MWh
- + Leverage energy density
- + Position for Grid scale opportunities – 20 MWh+



## US AND AUSTRALIA AS CORE MARKETS

- + US – California and other markets with large LDES energy storage needs & drive for diversification
- + Australian market also a core focus
- + Pursue deals in other markets where opportunity is compelling

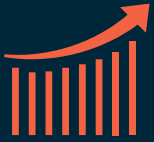


# Our priorities remain clear

## Priorities

## Target Impact

### Convert



**Finalise contracting for key deals announced. Progress new opportunities**

- + Finalise contract negotiations for key deals and secure notice to proceed
- + Continue to grow share in target markets as leading Lithium alternative for LDES in high momentum markets
- + Grow our pipeline, drive sales and increase revenue
- + Utilise industry partnerships and government relationships to accelerate sales momentum

### Execute



**Deliver on key projects in the US and Australia. Extend Thailand production capacity to ~80 MWh p.a. as order book increases. Secure required funding for growth.**

- + Execute on key projects – 20 MWh in California and 4 MWh with Energy Queensland
- + Demonstrate larger system capabilities with reference systems and data – including Levelised Cost of Storage (LCOS) impacts
- + Maximise Redflow Thailand for capital efficient scale for productivity & unit cost impacts
- + Incorporate new design improvements for productivity, cost, quality and supplier diversification – ZBM3 battery and EnergyPod
- + Fund capital expenditure and working capital for expansion

### Scale



**Focus on strategic scale – projects, manufacturing and execution**

- + Focus on ability to develop, win and execute against large utility scale projects and C+I customers
- + Meet market demands for local sourcing/manufacturing. Australia and US focus
- + Design, iterate and validate new target 500 MWh p.a. facility
- + Engage with potential local and national government support in target markets for scale up (US, Australia)

# Redflow summary

Growth strategy focused on multi-MWh projects is delivering results

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Production outlook full for 2023 and into 2024

24+ MWh projects generating \$23m+ revenue for delivery (excl. DOE project)

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MWh+ contracts reinforce Redflow's industry leading position — US CEC, DOD and DOE and AU with EQL. Support from AUS and US governments at state and federal level

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At the forefront of AU/US clean energy collaboration

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Thailand facility back into production and ready to scale

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6+ GWh pipeline of qualified sales opportunities

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Strengthened balance sheet to execute and grow

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