# VOLT POWER GROUP LIMITED

ABN: 62 009 423 189

ASX CODE: VPR

#### **BOARD**

Adam Boyd
Executive Chairman

Paul Everingham
Non-Executive Director

Peter Torre
Non-Executive Director

Simon Higgins Non-Executive Director

#### **ISSUED CAPITAL**

9,345M Ordinary Shares 660M Unlisted Options

#### PRINCIPAL OFFICE

6 Bradford Street Kewdale WA 6105

#### **REGISTERED OFFICE**

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#### CONTACT

Mr Adam Boyd
Executive Chairman

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#### ASX ANNOUNCEMENT

1 August 2022

**Volt Power – Q2 FY22 Operational Activity Update** 

#### **Q2 FY22 HIGHLIGHTS**

The Volt Group achieved record Q2 & YTD Ordinary Revenues received of \$1.16 million and \$1.98 million respectively

This Ordinary Revenue growth equated to a 72% increase Vs Q2 FY21 (\$0.67 million) & 131% increase Vs YTD FY21 (\$0.86 million)

Wescone & EcoQuip sales revenue and EBITDA continues to track in accordance with FY22 budget

Wescone delivered another strong sales and revenue result during Q2 & received above average new procurement enquiry

EcoQuip secured a 6-month demonstration trial agreement with BHP Iron Ore Pty Ltd (BHP) for deployment of 3x Mobile Solar Light Towers (MSLT). The initial MSLT has been deployed with the remainder scheduled in August 2022

EcoQuip also commenced a MSLT trial with Albemarle at their Kemerton lithium refining operations in Western Australia

The trial of EcoQuip's new Autonomous Communications Sentry security solution by the Commonwealth of Australia was successful – supply/procurement discussions are ongoing

Wescone & EcoQuip advanced a supply chain security enhancement strategy. Significant progress to expand EcoQuip's supply chain alternatives are advancing

EcoQuip continued to assemble 30x MSLTs in its WA located workshop facility. Minor procurement delays have occurred however final completion remains on track for early September 2022

Volt continued a focused business development campaign pursuing opportunities for its zero emission ATEN / HYTEN Waste Heat to Power / Hydrogen technologies

The HYTEN Preliminary Study (Waste Heat to zero emission hydrogen) was delayed to complete a detailed review of the exciting results. The Preliminary Study results will complete in September 2022

EcoQuip (70% owned) – More MSLT Demo Trials with Miners & Equipment Hire Businesses

EcoQuip is the developer and owner of a new "next generation" Mobile Solar



Light & Communications Tower solution (MSLT / MSCT). The MSLT / MSCT solution sets a new benchmark in Solar / BESS reliability and safety, charge efficiency, remote control, data analytics and system redundancy.

- The EcoQuip MSLT incorporates a proprietary, zero emission, high efficiency solar / BESS power management system capable of up to ~40% enhanced efficiency compared to similar industry standard Solar LED / BESS systems.
- The new EcoQuip MSLT / MSCT Generation 4 was first released in late 2020 and has since been successfully enhanced & deployed under 1 5-year hire contracts at oil & gas and hard rock mining operations across Australia owned / managed by Chevron, AGC and Thiess Contracting. EcoQuip is engaged in discussions to expand the EcoQuip MSLT / MSCT fleet deployments with these foundation customers and potential national distribution partners.
- In May 2022, the EcoQuip business signed a 6-month MSLT demonstration trial agreement with BHP Iron Ore Pty Ltd (BHP) to trial an MSLT with certain design modifications to satisfy BHPs long-term internal standards requirements. These modifications included upgraded autonomous / automated capabilities. These arrangements followed a 15-month BHP MSLT trial in 2020/21.
- EcoQuip advanced MSLT demonstration trial arrangements with Thiess Contracting and Albemarle Corporation. The Albemarle trial commenced in July 2022. EcoQuip anticipates that the Thiess Contracting trial which will involve multiple MSLT units will commence in September 2022.
- The Commonwealth of Australia and EcoQuip completed a successful 1-month trial of a new EcoQuip live situational awareness security and communications solution with satellite uplink capability (Autonomous Communications Sentry or ACS). EcoQuip and the Commonwealth are currently working through procurement pathway and process considerations.
- The 25x MSLT Chevron (Barrow Island) deployment continues to operate with outstanding performance reliability and discussions for a significant increase in the size of the MSLT fleet deployed at Barrow Island remain active, however Chevron delayed the relevant project for which they are required by 6-months during Q2. The Company looks forward to updating shareholders on this opportunity in the coming months.
- EcoQuip's 65x Mobile Solar Light Tower (MSLT) and Mobile Solar Comms Tower (MSCT) fleet has maintained fleet utilization at ~65 75% during the Quarter. The EcoQuip business continues to generate surplus operating cashflow.
- EcoQuip completed a \$0.57 million first drawdown of its \$2.0 million Westpac Equipment Finance Facility. These funds have been applied to the purchase of components and the assembly of 30x MSLTs currently underway at the Volt Group workshop and office facility.

#### ATEN Waste Heat to Zero Emission Power (100% owned) - ESG Competitive Advantage clarity

- The ATEN Waste Heat to Power technology is a combined heat recovery and organic rankine cycle turbine system that can recover and utilise low grade, industrial waste heat otherwise vented to atmosphere to generate zero emission, baseload electricity.
- As previously reported, the Company (together with its EPC Contract and OEM supply partners) completed a comprehensive formal Price Enquiry response for the installation of two zero emission, baseload ATEN Waste Heat to Power systems with ~35MW of combined electricity generation capacity at two existing Australian domiciled baseload, open cycle gas fired power stations (Volt Price Enquiry Response) in Q4 2021. To date, no formal feedback has been provided to the Company.
- Also as previously reported, the salient results of the Volt Price Enquiry Response compared to an equivalent annual power generation Solar / BESS system are detailed in the Table below:



Description	Units	Combined ATEN 1 & 2	Solar / BESS Equivalent	Variance Vs Solar
Capacity (gross / net)	MW (AC)	35.5 / 32.4	106.7	+71.2
Gross Annual Generation (MWh)	MWh	265,375	265,375	-
Capital Cost	\$'M	137.0	255.4	+118.4
Utilisation	%	93.4	28.4	Baseload Vs Intermittency
Annual Scope 1 CO2 Abatement	CO <sub>2</sub> t	159,530	159,530	-
ACCU eligibility	CO <sub>2</sub> t	159,530	-	+159,530
<b>Tot. Scope1 Net Emission Reduction</b>	CO <sub>2</sub> t	319,060*	159,530	+159,530
Levelised Cost of Energy (LCOE) <sup>1</sup>	A\$/MWh	47.5	85.7	+38.2

<sup>\*</sup> Equivalent to CO2 emission reduction of a ~213MW (2x 106.5MW) solar array

- The Table above highlights that a 107MW (AC) solar array is required to generate the <u>equivalent annual electricity</u> as the combined 32.4MW (AC) ATEN installations the subject of the Volt Price Enquiry Response. Importantly, where installed at remote generation infrastructure, the Volt Waste Heat to Power solution is <u>also eligible for Australian Carbon Credit Units (ACCUs)</u> for an 8-year pear period post operational commencement.
- The zero-emission electricity generated together with the ACCUs created deliver double the reported net emissions reduction outcome which (in the case of the above Volt Price Enquiry Response) is CO2 abatement equivalent to a ~213MW solar array for the initial 8-years of operation. The estimated CAPEX of a ~213MW (AC) Solar /BESS system is ~A\$500 million compared to ~A\$137 million for the equivalent electricity generation ~32.4MW Waste Heat to Power system.
- Importantly, the ATEN Waste Heat to Power is compatible and complimentary to the installation of Solar / Wind intermittent power generation technologies. ATEN's zero-emission, baseload power supply capability reduces the carbon intensity of OCGT thermal generation required to a supply grid firming generation capacity to electricity grids connected to intermittent Solar/Hybrid and Wind generation.
- The Company remains highly optimistic about the commercialization potential of the Volt ATEN Waste Heat to Power solution and continues to prosecute a committed business development activity effort to resource, power generation and gas pipeline operators.

#### HYTEN - Waste Heat to Hydrogen (100% owned) - Exciting HYTEN Study Results Pending

- As previously reported, the Company continued to advance the flowsheet development of a combined ATEN Waste Heat to Power system with a proven, high efficiency alkaline water electrolyser for production of zero emission hydrogen. The combined ATEN / electrolyser system is called, HYTEN. A HYTEN patent application has been submitted and related initial patent search due diligence completed.
- The initial HYTEN preliminary feasibility / concept study activities were completed in Q4 FY21 and the results are highly encouraging. The preliminary engineering activities have confirmed that HYTEN has numerous cost and technical competitive advantages relative to an equivalent annual electricity supply Solar to Hydrogen system. These include:
  - > A ~50% lower LCOE\* for zero emission electricity supply to the electrolyser;
  - > ~300% greater electrolyser utilization performance (baseload Vs intermittent power supply);
  - At least 50%+ lower electrolyser CAPEX; and
  - All delivering a significantly lower Levelised Cost of Hydrogen (LCOH1).
- During the Quarter, the Company expanded the scope of the HYTEN Preliminary Study to include downstream hydrogen compression to 102bar and related storage (Compression & Storage). The preliminary engineering, OEM pricing & specification clarification and price estimation activities are close to completion. The HYTEN Preliminary Study report was due for completion in June 2022, however



management has initiated a review process to verify the promising results (HYTEN LCOH <US\$3/kg Vs Solar/H2 LCOH ~US\$8-9/kg). This review and HYTEN Preliminary Study report is scheduled for completion in early September 2022.

 The Board is excited about the potential of the HYTEN technology to facilitate existing LNG facilities, natural gas pipeline compression stations and some power station assets to become significant low-cost hydrogen producers by exploiting the waste heat generated by existing energy infrastructure to create zero emission hydrogen

#### Wescone (100% owned) – Delivering Reliable On-budget Performance

- Wescone is the Original Equipment Manufacturer (OEM) of the proprietary W300 sample crusher extensively deployed in the global iron ore and assay laboratory industries. The Wescone OEM offering comprises three sample crushing equipment solutions with alternative dimensional feed acceptance capabilities – the W300 Series 3, W300 Series 4 and W300 Lab crushers.
- During the Quarter, Wescone performed well with results marginally above budget for the period. The business continues to respond to numerous new tender and enquiry opportunities and facilitate the expansion of its partner business in South Africa.
- The FY22 Wescone budget forecasts have been revised by management and now forecast annual Ordinary Revenues of ~\$3.0 million.

#### Corporate and Appendix 4C – Salient December Quarter Financial & Other Information

- The Company generated positive Operating Cashflow during the period of approximately \$0.36 million for the Quarter.
- The Company held a cash balance of ~\$2.6 million at 30 June 2022. Ordinary revenue receipts totaled ~\$1.16 million for the Quarter which is 72% higher than for the same period in FY21. The Company's Wescone business traditionally generates higher revenues in Q4 in line with planned shutdown execution schedules of the iron ore sector.
- Cash payments for the March Quarter totaled ~\$1.03 million comprising:
  - Research & Development and Intellectual Property \$0.19 million
  - Staff Costs \$0.22 million
  - Manufacturing Costs \$0.30 million
  - Admin & Other Costs (net) \$0.32 million
- Related Party payments for Non-Executive Director and Executive Chairman services for the period totaled \$28,402 and \$99,000 representing ~3 months of non-executive director fees and Executive Chairman fees respectively.

#### End

Issued by: Volt Power Group Limited (ACN 009 423 189)
Authorised by: The Board of Volt Power Group Limited

#### **About Volt**

**Volt Power Group Limited (ASX: VPR)** is a power generation and infrastructure asset / equipment developer and owner. The Company's businesses commercialise innovative proprietary equipment delivering "step change" client productivity and cost benefits achieving annuity earnings for the Company.



#### **Business Activity Summary**

These activities of our businesses include:

- ATEN (100%) ATEN is a zero-emission waste heat to electricity generation equipment solution. The ATEN is at an advanced stage of initial commercialisation. ATEN enjoys Australian Innovation Patent certification. Refer below:
- Wescone (100%) the proprietary owner of the globally unique Wescone W300 sample crusher
  predominantly deployed throughout the global iron ore sector. Wescone has a successful 25+ year
  operating track record and recently developed a new crusher with larger dimensional acceptance,
  reduction ratio and durability specifications;
- **EcoQuip** (~70%) developer and owner of a 'best in class' Mobile Solar Lighting & Communications Tower equipment solution incorporating robust design attributes including US military spec design & build quality, solar / lithium (LFP) battery and storage solution and advanced power management, data telemetry & control system capable of LED lighting, LTE Wi-Fi mesh repeater, point to point microwave, environmental monitoring and CCTV technology retro-fit; and
- **Acquisition / Development Strategy** The Company actively pursues opportunities to expand its broader renewable / low emission power generation and contract services, infrastructure asset & innovative equipment footprint.

**About the ATEN Technology:** The ATEN comprises a modular, power generation equipment package capable of harvesting 'low' grade industrial waste heat to generate zero emission baseload electricity.

ATEN generated electricity is expected to significantly reduce 'energy intensive' industry operating costs via the displacement of grid sourced electricity or fossil fuel usage associated with electricity generation. The global industrial complex vents a significant quantity of 'low' grade waste heat to atmosphere. This quantity of unexploited waste heat presents an outstanding opportunity for the commercial roll-out of ATEN.

The ATEN's simple, high efficiency design and modular configuration - developed to maximise its integration capability - provides a low capex, uniquely compatible and scalable solution for the exploitation of 'low grade' industrial waste heat from existing multiple sources. Volt's priority target markets for the commercialization of the ATEN Technology include the resources and industrial processing sectors.

The salient ATEN Waste Heat to Power technology benefits that resonate with power station owners include:

- Baseload, zero emission incremental power generation (Scope 1 Emission reduction) compatible with Solar Hybrid systems with high penetration;
- Levelised Cost of Electricity (LCOE)\* up to ~50% lower than gas and ~80% lower than diesel generation;
- LCOE\* ~50% lower than an equivalent annual generation Solar/Battery Energy Storage System (BESS);
- CAPEX ~60% lower than Solar / BESS based on identical annual generation and zero emission performance;
- Hydrogen co-firing capability;
- Carbon Credits (CFI) Act 2011 Offset Project / ACCU eligibility; and
- Zero water & operational personnel requirements

<sup>\*</sup> Levelised Cost of Energy (LCOE) is based on new ATEN zero emission capacity and operating costs and variable costs of fueled generation (where relevant) in the WA Pilbara region and the ARENA LCOE calculation methodology @ 8% discount rate and 20-year



project life including ACCUs (\$30/ACCU) and Solar RECs (\$35/REC) as applicable.

<sup>1</sup>Leveised Cost of Hydrogen (LCOH) is based on the LCOE methodology above inclusive of OEM supplier & EPC installation estimates of the capital and operating costs of hydrogen production via alkaline water electrolysis in the WA Pilbara region.

## **Appendix 4C**

# Quarterly cash flow report for entities subject to Listing Rule 4.7B

#### Name of entity

Volt Power Group Limited

ABN

Quarter ended ("current quarter")

62 009 423 189

30 June 2022

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	1,156	1,983
1.2	Payments for		
	(a) research and development	(134)	(216)
	(b) product manufacturing and operating costs	(135)	(192)
	(c) advertising and marketing	(18)	(18)
	(d) leased assets	(118)	(118)
	(e) staff costs	(218)	(379)
	(f) administration and corporate costs	(161)	(408)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	(10)	(11)
1.6	Income taxes refunded/(paid)	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	362	641

ASX Listing Rules Appendix 4C (17/07/20)

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	(165)	(435)
	(d) investments	-	-
	(e) intellectual property	(58)	(73)
	(f) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(223)	(508)
3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue 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	-	-
3.5	Proceeds from borrowings	565	565
3.6	Repayment of borrowings	(12)	(18)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	553	547

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,871	1,883
4.2	Net cash from / (used in) operating activities (item 1.9 above)	362	641
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(223)	(508)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	553	547
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	2,563	2,563

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	2,563	1,871
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	2,563	1,871

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	127
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includ nation for, such payments.	le a description of, and an

Payments totalling \$13,750 (incl. GST) were paid to Isapia Pty Ltd, a company related to Mr Simon Higgins, for non-executive directors' fees.

Payments totalling \$14,652 (incl. GST) were paid to Torre Corporate, a trust related to Mr Peter Torre, for non-executive directors' fees.

Payments totalling \$99,000 (incl. GST) were paid to Renewable Initiative Pty Ltd, a company related to Mr Adam Boyd, for executive directors' fees.

The above payments represent three (3) months directors' fees.

7.	Financing facilities  Note: the term "facility" includes 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.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	3,029	584
7.4	Total financing facilities	3,029	584
7.5	Unused financing facilities available at qu	arter end	2,445

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

During the quarter, the Group secured a total of \$3M in new financing facilities with Westpac Banking Corporation within its subsidiary, EcoQuip Australia Pty Ltd. These financing facilities consist of a \$2M Revolving Equipment Finace Facility and a \$1M Trade Finance Facility. These facilities are secured against EcoQuip's equipment fleet under a general security agreement and were drawn to \$565k at 30 June 2022.

Other financing facilities also includes a hire purchase facility secured against an EcoQuip motor vehicle from Toyota Finance.

The current interest rates that apply to the above facilities range from 6.36% to 7.15%.

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	362
8.2	Cash and cash equivalents at quarter end (item 4.6)	2,563
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	2,563
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	N/A
	Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A".	

8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:

figure for the estimated quarters of funding available must be included in item 8.5.

8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Not applicable

8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: Not applicable

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: Not applicable

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

#### **Compliance statement**

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

Date: 29 July 2022

Authorised by: By the Board

(Name of body or officer authorising release – see note 4)

#### **Notes**

- 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.
- 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.