



ASX ANNOUNCEMENT

FOR IMMEDIATE RELEASE TO THE MARKET

Li-S Energy Limited – ASX Code: LIS

Friday 29 April 2022

Quarterly Activities and Cashflow Reports

Li-S Energy Limited (ASX: LIS) (“LIS” or “the Company”) is pleased to provide its March 2022 Quarterly Activities and Cashflow Reports.

This announcement has been authorised by the Board.

For further information contact:

Dr. Lee Finniear
Chief Executive Officer
On 07 3054 4555

LI-S ENERGY LIMITED

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ASX Announcement

Friday 29 April 2022

Li-S Energy Limited (ASX: LIS) (“Li-S Energy” or “the Company”) is pleased to report on its activities for the quarter ended 31 March 2022.

Highlights and material developments

- Achieved scale up in cell testing from single layer to multi-layer pouch cells, utilising a lean electrolyte loading equivalent to that of commercial cells.
- Comparative testing of 4-layer pouch cells with and without Li-S Energy’s unique BNNT and Li-nanomesh protection showed that the BNNT protected cells had a specific capacity 24% higher and capacity retention above 95%, being 21% higher than the unprotected cells.
- Commenced manufacture of first batch of 10-layer lithium sulphur pouch cells to scale up BNNT and Li-nanomesh comparative performance testing in larger capacity cells.
- Commenced Li-nanomesh testing on zinc and aluminum electrodes to investigate the wider potential of Li-nanomesh as a dendrite inhibitor across a broad range of battery chemistries.
- Expanded our scientific team to include Professor Maria Forsyth, Professor Patrick Howlett and the Deakin BatTRI Hub facility, awarding contracts to the group focused on scaling Li-metal batteries using Li-nanomesh, plus polymer and solid-state electrolytes.
- Filed two international PCT patents for BNNT protection of sulphur cathodes and Li-nanomesh protection on metal anodes, plus took our PCT patent on flexible lithium sulphur batteries to national phase.
- Ordered two automated roll-to-roll coating machines, pouch cutters, Z stackers, and other machinery critical to increase the speed of lithium sulphur pouch cell production.
- The Company remains well funded with \$45.1m in cash at 31st March 2022.

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Operations and R&D results update

The March quarter was a busy period for the Company, continuing its strong operational momentum, including:

- Achieved strong, positive results from the first batch of 4-layer pouch cells protected with BNNT and Li-nanomesh. We performed comparative testing against control cells (identical cells but without BNNT/Li-nanomesh protection). The tests were designed to rapidly identify differences in performance between BNNT protected cells and the control cells. The results showed specific capacity 24% higher in the protected cells, and capacity retention at above 95% in the BNNT protected cells, versus 74% in the control cells. Furthermore, the coulombic efficiency in the protected cells was 18% higher than in the control cells.
- On the basis of the strong 4-layer results we commenced production and testing of 10-layer lithium sulphur pouch cells, utilizing “lean” electrolyte loading, consistent with the electrolyte typically used in commercial cells.
- Li-nanomesh testing on zinc and aluminum electrodes is now underway to investigate the wider potential of Li-nanomesh as a dendrite inhibitor across a broader range of battery chemistries where zinc or aluminium electrodes are utilised.
- The fit-out of the new laboratories, test facilities and a small-scale cell production capability at Deakin University in Geelong is progressing well. Orders were placed during the quarter for additional equipment needed. These facilities will increase the number and capacity of cells the Company can produce, including initial test cells for collaboration partners. Due to international supply chain issues we now expect the coaters and related equipment to arrive in early May, and the facility to be operational by the end of June 2022.
- The Company has expanded its scientific expertise and cell production capability by engaging two world renowned experts in battery chemistry, Professor Maria Forsyth and Professor Patrick Howlett. Maria, Patrick and their team at Deakin University’s BatTRIhub, have been engaged by the Company to develop and deliver Li-metal batteries using Li-nanomesh, and to develop advanced polymer and solid-state electrolytes.
- The Company’s Chief Technology Officer, Dr Steven Rowlands, permanently relocated to Australia during the quarter, strengthening our on-site team.
- The Company successfully recruited a marketing manager during the quarter, with recruitment process ongoing for additional senior roles in operations and technology.
- During March, Dr Lee Finniear and Dr Steven Rowlands were in Europe to meet and develop ongoing relationships with leading European Battery Research Institutions, equipment manufacturers and potential OEM customers.

CEO Dr Lee Finniear commented:

"I am pleased to report that we have continued our strong technical progress throughout the quarter.

On lithium sulphur cell development, we took the critical step to scale up from single layer to multi-layer pouch cells. It was very pleasing to note that our 4-layer cells performed extremely well compared to unprotected control cells, enabling us to fast-track development to the construction of our first 10-layer lithium sulphur cells.

We also took rapid action to capitalise on the outstanding potential of our Li-nanomesh to improve the safety and cycle life of lithium-metal batteries by mitigating dendrites. Rather than dilute the focus of our existing team, we engaged an additional team with extensive prior experience in lithium metal electrochemistry. Professor Maria Forsyth and her staff at BatTRIhub are already constructing our first multi-layer lithium-metal cells with Li-nanomesh for testing and evaluation.

During the quarter, we also continued testing Li-nanomesh to assess its ability to mitigate dendrites on zinc and aluminium electrodes, with a view to further expanding the market reach of this remarkable nano-composite. We expect initial results from this testing in the June quarter.

In addition to technical progress, we have been extending our commercial reach into Europe and the UK. During March we met with leading European Battery Research Institutes, manufacturers and potential OEM customers. What was clear from our conversations that the demand for a lighter, long lasting, more energy dense battery is stronger than ever. Li-S Energy is well positioned with both its lithium sulphur and lithium metal developments to play a key role in meeting that demand."

Financial update

Please refer to Appendix 4C below for the detailed quarterly cash flow report, including a summary of the Company's expenditure on the above activities.

Net cash outflows used in operating activities during the quarter were \$499,671. This was primarily driven by outflows related to staff costs of \$188,144, payments to a subsidiary of PPK Group Limited of \$150,000 for management services provided, and other administration and corporate costs of \$378,378. This was partly offset by a GST refund received of \$147,539 and an adjustment for development cost payments made in a previous quarter now capitalised as intellectual property during this quarter.

The net cash outflows used in investing activities during the quarter were \$1,169,500 consisting primarily of \$736,176 in payments to Deakin University for research and development activities completed under the Research Framework Agreement entered into on 8 July 2021, and \$367,452 for plant and equipment as part of the fit out of the new laboratory and test areas.

The net cash outflows from financing activities for the quarter of \$34,558, consisted of repayments to its lease liability, (accounted for in accordance with AASB 16 *Leases*).

Pursuant to Listing Rule 4.7C.2, the Company provides in Table 1 below, a comparison of its actual expenditure on the individual items in the “use of funds” statement since the date of admission to the official list against the estimated expenditure on those items in the “use of funds” statement in the IPO prospectus and an explanation of any material variances.

\$	Use of funds estimate (per Prospectus)	% of Funds	Cash payments to 31 March 2022	% of actual funds expended against Cash Payments to 31 March 2022
Project Expenditure	29,112,623	85.63%	1,981,809	36.56%
Costs of the Offer	3,581,968	10.54%	2,235,563	41.24%
Other Working Capital	1,305,409	3.84%	1,203,047	22.20%
TOTAL	34,000,000	100.00%	5,420,419	100.00%

Table 1 – Comparison of “use of funds” statement per prospectus to cash payments since the date of admission to the official list of the ASX to 31 March 2022

The material variances above are as a result of the Company listing at the end of the September quarter 2021, giving less than 7 months of comparative cash payments versus a 2 year use of funds period estimate. Expenditure also does not occur in a linear manner. The actual cash costs of the offer since the date of admission total \$2,235,563. This is below the estimate in the IPO prospectus, as the Company incurred cash expenses before the date of admission to the official list, that have not been included in the above “use of funds” statement comparison. Li-S Energy is still on track to meet the business objectives that sit behind the “use of funds” statement as described in the prospectus.

In accordance with Listing Rule 4.7C.3, the Company advises that it paid \$914,619 to related parties of the Company during the quarter. The Company paid Deakin University \$736,176, relating to project activities undertaken in relation to the Research Framework Agreement, and \$28,443 in rental payments for two production bays at Deakin’s ManuFutures advanced manufacturing hub in Waurin Ponds, Victoria. The Company also paid a subsidiary of PPK Group Limited \$150,000 for management services provided, in accordance with the relevant Agreement, and as disclosed in section 12.6 of the Prospectus.

ENDS

This announcement has been authorised for release by the Board.

For more information:

Investors

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<https://www.lis.energy/site/about/About-Li-S-Energy>

Media

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About Li-S Energy

Li-S Energy was created as the result of a joint venture between Li-S Energy's founding Shareholders, PPK Group Limited, BNNTTL and Deakin University. Li-S Energy is developing a battery technology based on more advanced lithium-sulphur chemistry, whereby BNNTs and other nanomaterials are incorporated into battery components. The aim of this combination is to improve battery energy capacity and cycle stability when compared to current lithium-ion batteries and lithium-sulphur batteries, respectively.

Appendix 4C

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

Name of entity

Li-S Energy Limited

ABN

12 634 839 857

Quarter ended ("current quarter")

31 March 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	14	42
1.2 Payments for		
(a) research and development	56	(26)
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	-	-
(d) leased assets	-	-
(e) staff costs	(188)	(465)
(f) administration and corporate costs	(528)	(5,081)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	(2)	(7)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other – GST refunds	148	506
1.9 Net cash from / (used in) operating activities	(500)	(5,031)

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 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	(367)	(669)
(d) investments	-	-
(e) intellectual property	(802)	(1,494)
(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	(1,169)	(2,163)

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	-	34,000
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	-	(170)
3.5 Proceeds from borrowings	-	-
3.6 Repayment of borrowings	(35)	(100)
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	(35)	33,730

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
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4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	46,847	18,607
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(500)	(5,031)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,169)	(2,163)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(35)	33,730
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	45,143	45,143

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	45,143	46,847
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)	45,143	46,847

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	178
6.2	Aggregate amount of payments to related parties and their associates included in item 2	736

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

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

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 Total financing facilities	-	-
7.5 Unused financing facilities available at quarter end		-
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.		
N/A		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(500)
8.2 Cash and cash equivalents at quarter end (item 4.6)	45,143
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	45,143
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	90.3
<i>Note: if the entity has reported positive net operating cash flows 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 flows 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 operations 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 of 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 gives a true and fair view of the matters disclosed.

Date: 29 April 2022

Authorised by:The Board.....
(Name of body or officer authorising release – see note 4)

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.