



30 July 2021

Lithium Australia quarterly activities report – June 2021

Lithium Australia NL (ASX: LIT, 'the Company') is pleased to provide the following update on the business activities of it and its subsidiaries for the quarter.

ACN: 126 129 413
ASX: LIT

Level 1
677 Murray St
West Perth WA 6005

PO Box 1088
West Perth WA 6872

Phone +61 (0) 8 6145 0288
Fax +61 (0) 8 9475 0847

info@lithium-au.com
lithium-au.com

HIGHLIGHTS

- **Corporate** – the funding position is strong (cash as of 30 June '21 of \$11.4 million with no debt) and the Company appointed Phil Thick as director, Stuart Tarrant as chief financial officer and Merrill Gray as executive director of VSPC.
- **Recycling (Envirostream Australia Pty Ltd, 90% Company-owned)**
 - National Battery Stewardship Scheme ('BSS'), scheduled for January 2022, will have a positive financial impact on revenue.
 - Sales of over \$1 million for the year, a 52% increase on FY2020.
 - Second fertiliser micronutrient field trial programme commenced.
- **Batteries (VSPC Ltd, 100% Company-owned)**
 - The lithium ferro phosphate ('LFP') battery market is forecast to expand more than fivefold by 2030.
 - VSPC Ltd ('VSPC') achieved patent protection for the manufacture of LFP cathode powder.
 - A pre-feasibility study ('PFS') for production of LFP cathode powder completed and definitive feasibility commenced.
- **Batteries (Soluna Australia Pty Ltd, 50% Company-owned)** – product distribution partnership with Legend Corporate Services Ltd ('Legend') secured and Soluna Australia 10K Pack HV approved by the Clean Energy Council ('CEC') for release into the market.
- **Lithium chemicals**
 - LieNA[®] pilot plant construction to test the hydrometallurgical conversion of spodumene and subsequent recovery of lithium chemicals commenced.
 - First LieNA[®] licence issued to Deutsche Rohstoff AG, providing potential revenue stream for the Company.
 - LieNA[®] IP bolstered with patent approvals.
- **Raw materials**
 - Exploration continues at the Greenbushes South Project – Company 20%, Galan Resources Ltd (ASX: GLN, 'Galan') 80% – fully funded by Galan.
 - Subsequent to quarter's end, Charger Metals NL ((ASX: CHR, 'Charger') successfully listed on the ASX. Pursuant to the sale and joint venture agreement, the Company retains a 30% free carry in most projects and a 19.6% interest in Charger.





Corporate overview

A leader in battery-material processing technologies, the Company aims to ensure an ethical and sustainable supply of energy metals to the battery industry (enhancing energy security in the process) to create a circular economy for battery materials. A seamless lithium-ion battery ('LIBs') production cycle can minimise the number of steps needed to progress from mining through to the production of cathode materials and batteries and, ultimately, the re-birthing of end-of-life ('EOL') LIBs.

The Company controls a suite of proprietary technologies designed for the following.

- Recycling of mixed EOL batteries, with a strong focus on energy-metal recovery from spent LIBs.
- Refining of lithium chemicals as feed for the production of advanced cathode powders.
- The manufacture of advanced cathode powders for LIBs.
- Recovery of lithium from ore and waste materials (including spent LIBs).

As of 30 June 2021, Company cash reserves were \$11.4 million (31 March 2021: \$13.3 million) and it has no debt.

During the quarter, a total of \$609,008 was raised by the issue of fully paid shares. Of this total, \$359,008 was raised by LITCF shareholders fully paying up their LITCF partly-paid shares and option holders converting options, with \$250,000 raised via the placement to Deutsche Rohstoff AG.

At the date of this report, the Company could source a further \$6.1 million in funding from in-the-money options and partly-paid shares. A total of 29 million LITO options expired unexercised on 4 July 2021.

Successful listing of Charger and farming out of most of the Company's exploration assets, has significantly reduced exposure to high-risk exploration whilst retaining upside in value creation across these assets.

Comment on the sector

The transition from nickel and cobalt cathode powders to LFP continues to gather momentum. Along with Tesla, VW and BYD, General Motors recently announced various electric vehicle ('EV') models will be LFP-powered utilising patented GM technology. The transition is driven by LFP's greater safety, longevity, lower production cost and reduced reliance on critical materials.

Board structure and management appointments

Mr Thick was appointed as a non-executive director during the quarter. The board now has three independent non-executive directors in addition to the managing director. Ms Gray has joined the board of VSPC, a wholly-owned subsidiary of the Company, as executive director and Mr Tarrant has been appointed chief financial officer.

Mr Thick has more than 30 years' senior executive experience in oil and gas, mining and chemical processing in large multinational companies, smaller ASX listed companies



and privately owned companies. In addition, he has extensive experience on many boards in non-executive director roles and has chaired many of those boards for extended periods. Mr Thick had a 20-year career with Shell in Australia and overseas and for the last three years was downstream director on the board of Shell Australia. This was followed by five years as a director and CEO of Coogee Chemicals and then four as chief executive officer of New Standard Energy. For the past four and a half years, he headed up Tianqi Lithium Australia, a subsidiary of Tianqi Lithium Corp out of China, one of the world's largest lithium companies. Tianqi, in joint venture with IGO, owns 51% of the Greenbushes mine in Western Australia, the world's best hard-rock lithium resource. Mr Thick was charged with building the world's largest lithium hydroxide plant in Kwinana, south of Perth, an investment of nearly A\$1 billion. He also chairs the boards of the Chamber of Arts and Culture WA and the Perth Symphony Orchestra.

Ms Gray brings with her 30 years of experience in the mining and energy sectors, including production, project development corporate management and capital raising. She has spent the past 15 years as CEO/MD of ASX-listed, public and private high-tech energy companies, in brown and green hydrogen, renewables (embedded bioenergy co-generation) and the circular-economy (waste-to-energy) and will now lead VSPC's definitive feasibility study and global expansion plans.

Mr Tarrant is a senior finance professional with more than 20 years' experience, most gained in rapidly growing or changing environments. He has worked in a range of industries, including mineral extraction, mineral exploration, financial institutions, and agribusiness. Mr Tarrant's most recent role was as chief financial officer at Danakali Limited (ASX: DNK), which is developing the world-class Colluli Potash Project in Eritrea, East Africa. During his time with Danakali, he worked through the study phases, providing the financial model that underpinned the economic outcomes, successfully secured US\$200 million of project senior debt and negotiated material operating contracts. Prior to Danakali, Mr Tarrant held roles with BHP, Leighton Contractors and Great Southern Limited, as well as consulting to both small and mid-sized enterprises. He brings with him specific expertise in fundraising, strategic analysis, governance and compliance, with a focus on value creation.

Recycling

Envirostream Australia Pty Ltd ('Envirostream')

As the national leader in mixed-battery recycling, 90% Company subsidiary Envirostream offers sustainable solutions for the disposal of EOL batteries and the re-birthing of energy metals recovered from spent LIBs. As Australia becomes more environmentally aware by diverting spent batteries from landfill (it is anticipated that the national BSS will greatly enhance this), Envirostream is preparing for increased volumes of such EOL batteries – and thus operational growth over the next 12 months – to cater for the anticipated influx. That includes the development of additional battery-recycling sites within Australia and the potential for expansion of operations offshore.



Envirostream's current plant in Melbourne is the only commercial facility in Australia capable of recycling all types of EOL batteries to produce a range of materials, among them mixed metal dust ('MMD'). Comprising the 'active' compounds recovered from EOL LIBs, including critical battery materials such as cobalt, nickel, lithium and manganese, MMD can provide a sustainable feed source for the manufacture of new batteries.

EOL battery volumes in Australia

Currently in Australia, battery recycling rates are extremely low. According to the Battery Stewardship Council's report *Australian Battery Market Analysis* (June 2020), EOL batteries available for recycling currently total around 22,000 tonnes per annum ('tpa'), with most still consigned to landfill. By 2035, says the report, the volume of EOL batteries is expected to exceed 106,000 tpa and by 2040 rise to 218,000 tpa.

On that basis, and environmental considerations aside, the value of the contained metal in spent LIBs in Australia alone could be as much as \$3 billion per annum by 2036 (King, S. *et al*, 2018: CSIRO report EP181926, *Lithium Battery Recycling in Australia*).

The BSS

In September 2020, the ACCC [authorised the Battery Stewardship Council](#) to establish and operate a national BSS for managing EOL batteries, the intent being to commoditise them by placing a levy on new batteries at the point of sale; this would supplement the cost of subsequent collection and recycling. For Envirostream, implementation of the BSS (expected from January 2022) should greatly increase the volume of EOL batteries available to recycle, as well as significantly increasing margins on its collection and recycling operations.

Preparations for increased volumes and growth

In the June '21 quarter, EOL batteries collected by Envirostream totalled 203 tonnes ('t') (Mar'21 qtr: 225 t & 2021 FY: 603t), given that battery collection was significantly hampered by the COVID-19 lockdowns in Melbourne. During the quarter, Envirostream continued to focus on readying its operations for the significant growth in the collection of EOL batteries expected over the next 12 months.

In the June '21 quarter, the volume of spent LIBs processed by Envirostream was 64 t (Mar 21 qtr: 35 t & 2021 FY 215t). Subject to appropriate permitting and approvals from various regulatory authorities, Envirostream has appreciable excess capacity and can ramp up its operations quickly as required.

Envirostream made one shipment of MMD during the quarter (Mar'21 qtr: one & 2021 FY: three) and finished the quarter with 29 t of MMD inventory, all of which was shipped subsequent to quarter's end.

Envirostream's copper, aluminium and plastic separation ('CAPS') circuit was re-commissioned, despite the supply difficulties and restriction of movement of service personnel consequent to COVID-19. Work continues on CAPS to ensure that value is added downstream for the mix of plastics.



Financial summary Q4 and FY 2021 – battery recycling

Total battery recycling revenue for the quarter increased 123% (compared to the previous quarter) to \$0.393 million (Mar'21 qtr: \$0.176 million) for annual sales of \$1.012 million, an increase of 52% on FY2020 (FY2020: \$0.666 million).

As noted, the national BSS is expected to increase the amount of EOL batteries made available for recycling. With the federal government investing \$1 million to aid implementation of this product stewardship scheme, and Energizer and Duracell committing funds, Envirostream will continue to invest in collection infrastructure and expanding on its proven processing success to grow ahead of the predicted expansion.

Safety, the environment and permitting

During September 2020, due to expected growth in both its EOL battery collection and recycling activities, Envirostream applied for a permit to operate a scheduled premise with the Environmental Protection Authority Victoria ('EPA Victoria') for one of its Melbourne premises, in order to operate above 500 tpa of specified electronic waste. Currently, Envirostream is working closely with EPA Victoria to demonstrate industry best practice in its recycling processes, since the granting of a permit to operate a scheduled premise in advance of that capacity is required. During this quarter, the EPA Victoria application moved through a number of key process steps. Envirostream's work with the local council on land-use applications is also ongoing. Meanwhile, Envirostream is operating at below the 500 tpa rate and minimising stock levels of dangerous goods at its premises.

In addition, Envirostream continues its implementation of multiple industry-wide improvements, to ensure that its multi-site, multi channel battery collection, storage and processing activities are conducted in a manner that mitigates any fire risks associated with such activities.

The main challenge for Envirostream (and for battery collectors and recyclers globally) is the risk of fire resulting from improper handling of different types of EOL batteries at its collection points. Given the wide range of battery types available, and the confusion that can arise during their sorting and separation, Envirostream is conducting ongoing research and development with regard to fire-resistant EOL battery containers for use throughout its collection network.

Envirostream will continue to work closely with all relevant regulatory bodies in ensuring that its management systems, as well as its safety and environmental procedures, surpass accepted industry standards, the aim being to mitigate any risk to local communities that may arise from its operations.

Fertiliser micronutrient trials expanded and collaboration with Summit Fertilizers

The Company is pleased to be collaborating with Summit Fertilizers ('Summit'). A leading fertilizer supplier established in 1989, Summit has over the years introduced a number of innovations to the West Australian ('WA') market. With a highly experienced area manager network and dedicated field research team, Summit aims to help its customers use nutrients that achieve the best outcomes.

Summit has provided access to three of its 2021 trial sites, two seeded with wheat and one with lupins, to assess Envirostream's products.

The 2021 fertiliser micronutrient trial programme

The programme has been expanded to four sites in WA (three Summit sites and one dedicated Envirostream site) and one dedicated Envirostream site in South Australia ('SA'), thereby permitting performance assessments of the recycled battery material across varying broadacre soil types. Envirostream's micronutrients will again be agglomerated with mono-ammonium phosphate ('MAP') fertiliser.

This year, the number of treatments at the two Envirostream trial sites has been expanded from five ([see ASX announcement 10 June 2020](#)) to nine. It is hoped that there will be a manganese uptake response similar to or better than that noted in the 2020 trial ([see ASX announcement 18 February 2021](#)).

Both Envirostream's trial sites will be seeded with wheat crops. Treatments being used in the 2021 programme at the Envirostream sites include the following.

- No fertiliser (control).
- Summit MAP at two target phosphate addition rates.
- Summit MAP and manganese (full compound), blended with Summit MAP, at two target phosphate addition rates.
- Envirostream agglomerated MAP product 1, at two target phosphate addition rates.
- Envirostream agglomerated MAP product 2, at two target phosphate addition rates.

The two Envirostream product options used are derived from its proprietary separation technology for single-use alkaline batteries. Any performance differences between these options will be assessed.

Seeding at WA sites

Summit has seeded several sites in May 2021, with the remaining Envirostream sites, located west of Kojonup, seeded in early June 2021, with successful germination in July 2021.

Seeding at SA site

The dedicated Envirostream SA site is located between Port Wakefield and Port Broughton, towards the top of the Yorke Peninsula. Seeding there with wheat was completed on 21 May 2021 and germination has occurred in July 2021, as pictured below.



Batteries

VSPC

VSPC specialises in research into, and the production of, high-purity, high-performance battery cathode materials and derivatives – including LFP and lithium ferro manganese phosphate ('LMFP') – at its R&D facility in Brisbane, Queensland. There, its pilot plant includes sophisticated laboratory and battery-testing capabilities designed to further develop and utilise its proprietary nanotechnology.

PFS – robust project economics

Due to the strong battery market outlook for LFP, VSPC has completed a PFS for LFP cathode production that compares a number of jurisdictions, including Vietnam, India and Australia.

The PFS is based on proprietary VSPC processes that provide competitive, if not superior, performance when compared with other processes for the manufacture of advanced LFP materials – notably, the more expensive sol-gel and hydrothermal processes widely used in China.

Subsequent to quarter's end, the PFS confirmed robust project economics for the manufacture of VSPC's LFP cathode powder, with production to ramp up to a capacity of 10,000 tpa over a three-year period, reaching nameplate capacity in 2026.

While the PFS has provided a detailed evaluation of the three possible jurisdictions, the case for locating the plant in India was revealed as the best financial outcome, with an (net present value) of US\$253 million and an IRR (internal rate of return) of 33%.

That said, further factors – such as strategic partnerships with upstream mining, refining and chemical producers – may provide further benefits for the commercialisation of VSPC cathode powders. Similarly, downstream partnerships (cathode and battery manufacturing) may provide additional financial benefits in other jurisdictions. To that end, specific opportunities in Australia, South Korea, Europe and the United States are also being evaluated.

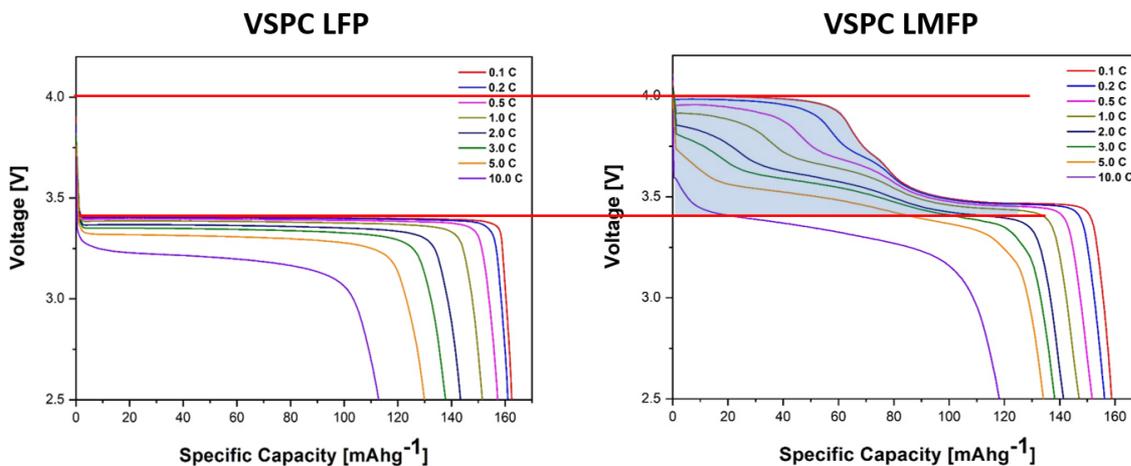
LFP – enhancing quality

LFP produced using high-purity iron oxalate derived from VSPC's new proprietary process shows an electrochemical performance equivalent to that of LFP produced using commercial, battery-grade iron oxalate. Stage 4 of VSPC's Advanced Manufacturing Growth Centre grant to investigate the use of lower-cost materials – including recycled battery products – in the manufacture of new LIBs has begun, with a focus on process refinements. Scale-up of feed material production is also ongoing.

LMFP – research and development

VSPC has also produced LMFP battery cells. While just as safe as standard LFP cells, LMFP cells, by virtue of their higher voltage, provide more energy. The discharge curves below are for cells manufactured from VSPC-produced LFP (left) and VSPC-produced LMFP (right).

The electrochemical properties of VSPC's LMFP product compared with its LFP are shown in profile in the figure below by C-rate (the charge-to-discharge rate over time), under industry standard/specific operating conditions.



The higher voltage delivery of the LMFP cells resulted in an increase in energy density of up to 25% when compared with the LFP cells, energy density being approximated by the area below the curves.

LFP and LMFP – safety and service life

LFP and LMFP are inherently stable. The exceptionally high bond strengths in the crystal lattice (olivine structure) result in the superior characteristics of both, which include lower manufacturing cost, greater thermal stability, longer service life and superior safety when compare with competing batteries based on nickel and cobalt chemistries.



LFP and LMFP – environmental and social governance

Using materials derived from industrial waste and from EOL LIBs processed at Envirostream, VSPC produced LFP which meets industry standards, while its work on LMFP continues. The Company is committed to enhanced sustainability and lowering supply chain risks with this approach to production.

Intellectual property ('IP') update

During the quarter, a patent application in relation to the LMFP process was lodged. Review of this application is pending.

Batteries

Soluna Australia Pty Ltd

Soluna Australia Pty Ltd ('Soluna Au') markets battery energy storage systems (BESS) for residential and industrial applications. Interest in its products continues in a highly competitive market and first sales and installation of its Power Bank systems for residential applications commenced in July 2020. The products comprise LIB storage, a hybrid inverter and an advanced battery management system (technical details can be found at <https://soluna.com.au/>).

During the June '21 quarter, Soluna Au installed 10 residential battery units (Mar'21 qtr: 3) and posted sales of \$71,000 (Mar'21 qtr: \$29,000).

During the quarter, Soluna Au's 10K Pack HV was added to the CEC's Battery Assurance Program. In addition, a national distributor agreement with Legend was completed. The Company continues to review this division in what is a very competitive market.

Lithium chemicals

The Company continues with research into and development of its proprietary extraction processes for the conversion of *all* lithium silicates (including mine waste), and of unused fines from conventional conversion of spodumene, to lithium chemicals. The Company's processes can recover lithium in several forms, including lithium hydroxide, lithium carbonate and lithium phosphate.

Two potentially disruptive lithium processing technologies developed by the Company are **SiLeach**[®], for the processing of lithium micas, and **LieNA**[®], for the recovery of lithium from fine and variable-grade spodumene.

Both processes can produce a range of lithium chemicals; however, lithium phosphate is the Company's preferred option. In combination with VSPC's patented nanotechnology, this option permits the production of battery cathode materials directly from lithium phosphate recovered from either silicate minerals or spent LIBs – without the need for an intermediate step to produce lithium hydroxide or carbonate.

There is thus the potential to reduce the process steps required to produce cathode material for new LIBs.



LieNA®

One of the great dilemmas of the lithium industry is the inability of conventional processing systems to deal with fine or low-grade spodumene generated by concentrators. The Company's patented LieNA® process, which provides a practical industrial solution to that problem.

The Company's LieNA® process is designed to provide a production pathway for lithium chemicals that is not constrained by the requirements of 'conventional' spodumene converters. At present, fine and/or low-grade spodumene is discharged to either waste or tailings by producers seeking to achieve the high-grade offtake demanded by the mineral concentrate market. LieNA®, however, *can* recover lithium from this type of material, which amounts to most of the lithium 'lost' during spodumene concentrate production and thus represents a significant opportunity to increase ore reserves and improve resource utilisation without increasing mining costs.

LieNA® – the pathway to commercialisation

The Company is currently exploring the commercialisation of LieNA® with a number of lithium concentrate producers. A commercialisation and licence agreement, the Company's first, was signed subsequent to the end of the quarter with German resources and investment company Deutsche Rohstoff AG.

The construction and operation of a LieNA® pilot plant is the next step on the pathway to commercialisation. In February 2020, the federal government awarded a CRC-P (Cooperative Research Centres Projects) grant to co-fund construction and operation of that pilot plant. While COVID has created some delays, the pilot plant is now under construction, with completion scheduled for later this year. A 60-litre batch autoclave is also under construction, with delivery expected in the December '21 quarter.

Beneficiation of a 650-kilogram concentrate parcel was completed from a composite sample. Prepared from drill cuttings (bulk field sample) obtained from a spodumene prospect in the Goldfields of WA, the concentrate will be feed material for the pilot-plant programme.

Spodumene-conversion optimisation testwork on concentrate produced during flotation testwork on the bulk field sample was further advanced by way of an assessment of varying reagent and operating conditions.

SiLeach® – recognition of IP

The Company has received a 'Notice of Allowance' from the United States Patent, Trademark Office for its first generation SiLeach® patent application, US 16/076,643 (filed August 2018), and notice of acceptance from IP Australia. This is a clear vindication of the value of the Company's research programmes and the intellectual property generated.

National phase entry for multiple international jurisdictions has commenced. A summary of the current status in the various jurisdictions is outlined below.



- Australia – patent granted (Patent number 2017218457).
- USA – patent granted (Patent number 10,883,157,B2).
- Chile – ongoing examination.
- Europe – claims allowed and intention to grant issued.
- Brazil – request for examination filed.
- Canada – Notice of Allowance has issued by the Canadian Intellectual Property Office.

Patent application PCT/AU2019/050541 details the econd-generation SiLeach[®] patent application, published under the Patent Cooperation Treaty by the World Intellectual Property Organisation with a priority date of 30 May 2018. The Company has received a written opinion from the International Searching Authority on the patentability of the application, confirming that the claims are novel and inventive. This application has been lodged in the following jurisdictions.

- Australia – national phase entry has commenced and awaiting examination.
- USA – under examination.
- Chile – accepted into examination.
- Europe – under examination.
- Brazil – national phase entry has commenced and awaiting examination.
- Canada – national phase entry has commenced and awaiting examination.

Other IP activities

The Company continues to progress its provisional patent applications for critical metal recovery from the processing of EOL batteries.

The Company has also received a 'Notice of Allowance' from the examining division of the European Patent Office for its first-generation LieNA[®] patent application number 17 836 093.9 (PCT/AU2017/050808), with a priority date of 02 August 2016.

National phase entry for multiple international jurisdictions for the second-generation LieNA[®] patent application has also commenced. A summary of the current status in the various jurisdictions is outlined below.

- Australia – national phase entry has commenced and awaiting examination.
- USA – under examination.
- China – national phase entry has commenced and awaiting examination.
- Europe – under examination.
- Brazil – national phase entry has commenced and awaiting examination.
- Canada – national phase entry has commenced and awaiting examination.

Raw materials

Charger initial public offering ('IPO')

The Company has reduced its exposure to high-risk exploration activities following the successful listing of Charger. The Company's shareholders were offered a priority allocation in the IPO.

The Company can confirm completion of its sale and joint-venture terms with Charger. Under the agreement, Charger exercised its option to acquire the following listed exploration projects from the Company for consideration of \$100,000 and 9.6 million escrowed shares valued currently (30/7/2021) at \$2.2 million.

- The Coates project, located in the highly prospective Western Yilgarn nickel/copper/platinum group elements belt, located approximately 20 kilometres ('km') from the Julimar discovery of Chalice Mining Limited (ASX: CHN, 'Chalice', formerly Chalice Gold Ltd) in WA, in a similar geological environment.
- The Lake Johnston project, near Southern Cross in WA, which is prospective for lithium, gold and nickel, has outcropping lithium (spodumene) pegmatites and is located approximately 70 km east of the world-class Earl Grey/Mt Holland lithium deposit now being developed by Wesfarmers Ltd and SQM.
- The Bynoe project, near Darwin in the Northern Territory, which is prospective for lithium and gold and is proximal to the Finnis lithium project of Core Lithium Limited (ASX: CXO); that project is at a very advanced stage of development, with a definitive feasibility study completed.

By structuring free carries at project level and holding 19.6% equity in Charger, the Company has retained upside in these assets. This is a strategic move which potentially preserves access to lithium deposits that may provide feed to future Company mineral processing and chemical production activities.

Greenbushes South project

Galan has acquired 80% of the Company's Greenbushes South lithium project. Located 200 km south of Perth, WA, the project has an area of 353 km². It commences around 3 km south of the current Greenbushes open-pit lithium mining operation and covers the southern strike projection of the geological structure that hosts that mine.

The Company's agreement includes an unincorporated joint venture formed between Galan (80%) and the Company (20%) via the issue of 1,221,000 fully paid ordinary shares in the capital of Galan, valued currently (30/7/2021) at \$1.2 million. Galan will fully fund all exploration expenditure share until completion of a PFS.

Authorised for release by the Board.

Adrian Griffin

Managing Director

Mobile +61 (0) 418 927 658

Adrian.Griffin@lithium-au.com

Barry Woodhouse

Company Secretary

Mobile +61 (0) 438 674 259

Barry.Woodhouse@lithium-au.com



Media contacts

Adrian Griffin, Lithium Australia NL

08 6145 0288 | +61 (0) 418 927 658

About Lithium Australia

Lithium Australia aims to ensure an ethical supply of energy metals to the battery industry by creating a circular battery economy that enhances both sustainability and resource security. Reprocessing spent LIBs to create new ones is intrinsic to this plan, with the Company operating Australia's only fully integrated mixed-battery recycling business.

Having rationalised its portfolio of lithium projects/alliances, Lithium Australia continues its research into, and the development of, proprietary extraction processes for the conversion of *all* lithium silicates (including mine waste), and of fines generally discarded during conventional spodumene conversion, to lithium chemicals, from which it will produce advanced cathode materials for the battery industry globally.

The Australian federal government has recognised the Company's progress through the awarding of substantial research grants designed to progress the nation's advanced battery capabilities.

By uniting resources and innovation, Lithium Australia seeks to vertically integrate lithium extraction, processing and recycling.

Forward-looking statements

This document contains forward-looking statements. Forward-looking statements are necessarily based on a number of estimates and assumptions that, while considered reasonable by the Company, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies, involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements, and may include, among other things, statements regarding targets, estimates and assumptions in respect of commodity prices, operating costs and results, capital expenditures, ore reserves and mineral resources and anticipated grades and recovery rates and are, or may be, based on assumptions and estimates related to future technical, economic, market, political, social and other conditions.

The Company disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words 'believe', 'expect', 'anticipate', 'indicate', 'contemplate', 'target', 'plan', 'intends', 'continue', 'budget', 'estimate', 'may', 'will', 'schedule' and other, similar expressions identify forward-looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and, accordingly, investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

Many known and unknown factors could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-



looking statements. Such factors include, but are not limited to: competition; mineral prices; ability to meet additional funding requirements; exploration, development, operating and sales risks; uninsurable risks; uncertainties inherent in ore reserve and resource estimates; dependence on third-party smelting facilities; factors associated with foreign operations and related regulatory risks; environmental regulation and liability; currency risks; effects of inflation on results of operations; factors relating to title to properties; native title and Aboriginal heritage issues; dependence on key personnel, and share-price volatility. They also include unanticipated and unusual events, many of which it is beyond the Company's ability to control or predict.

Competent person's statement – Australian exploration

The details in this report that relate to exploration strategy are based on information provided to and compiled by Mr David Crook BSc GAICD, a member of The Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists.

Mr Crook, who provides the service of 'Manager – raw materials' to Lithium Australia, has sufficient experience relevant to the style of mineralisation and exploration processes under consideration to qualify as a 'competent person', as defined in the 2012 edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves*.

Mr Crook consents to the inclusion in the report of the matters, based on the information made available to him, in the form and context in which they appear.



Appendix I – Mining and exploration tenement schedules

Details of mining tenements as at quarter ended 30 June 2021 (ASX Listing Rule 5.3.3)

Australian projects

Tenement	Location	Registered holder	Beneficial interest		Notes
			Start	End	
E27/562	Gindalbie, WA	Metal Hawk Limited	0%	0%	1, 2
E63/1772	Lake Johnston, WA	Lefroy Exploration Limited	0%	0%	1
E63/1773	Lake Johnston, WA	Lefroy Exploration Limited	0%	0%	1
E63/1777	Lake Johnston, WA	Lithium Australia NL	100%	100%	1,3
E63/1805	Lake Johnston, WA	Lithium Australia NL	100%	100%	4
E63/1806	Lake Johnston, WA	Lithium Australia NL	100%	100%	4
E63/1809	Lake Johnston, WA	Lithium Australia NL	100%	100%	4
E63/1866	Lake Johnston, WA	Lithium Australia NL	100%	100%	4
E63/1903	Lake Johnston, WA	Lithium Australia NL	100%	100%	1,4,7
E70/4690	Greenbushes, WA	Lithium Australia NL	100%	20%	5
E70/4790	Greenbushes, WA	Lithium Australia NL	100%	20%	5
E70/5315	Greenbushes, WA	Venus Metals Corporation Limited	100%	0%	6
E70/5316	Greenbushes, WA	Venus Metals Corporation Limited	100%	0%	6
E70/5198	Wundowie, WA	Lithium Australia NL	100%	100%	4
E74/0543	Ravensthorpe, WA	Lithium Australia NL	0%	0%	
P15/5574	Coolgardie, WA	Focus Minerals Limited	100%	100%	8
P15/5575	Coolgardie, WA	Focus Minerals Limited	100%	100%	8
P15/5739	Coolgardie, WA	Focus Minerals Limited	100%	100%	8
EL30897	Bynoe, NT	Lithium Australia NL	100%	100%	4
EL6212	Kangaroo Is, SA	Lithium Australia NL	100%	0%	99
EPM26252	Cape York, QLD	Lithium Australia NL	100%	0%	99
Notes					
1	Lithium Australia NL holds the lithium rights.				
2	Metal Hawk agreement completed 17 September 2020.				
3	Lefroy Exploration Limited gold and base metal rights sale agreement dated 10 March 2021				
4	Following the end of the quarter, Charger Metals NL exercised its option to acquire 70% interest under the Acquisition and Joint Venture Agreement (as amended). This does not include E63/1903 where CHR holds 100% of the tenement.				
5	JV agreement with GLN dated 13 January 2021 whereby LIT holds a 20% free-carried interest until completion of a PFS.				



6	Venus Metals Corporation Limited Sale agreement dated 5 August 2020 – LIT holds a 1% royalty on all minerals.
7	Okapi Resources Limited JV agreement dated 3 September 2020 – OKR may earn a 75% interest in gold and base metal rights subject to expenditure hurdles.
8	Focus Minerals Limited acquisition agreement dated 16 September 2020 – FML retains a 1% royalty on all minerals.
99	Tenement surrendered.

Appendix II – Payments to related parties of the entity and their associates

Payments made during the quarter and included in items 6.1 and 6.2 of Appendix 5b – Mining exploration entity quarterly cash flow report, comprise the following.

6.1 Aggregate amount of payments to related parties and their associates included in cash flows from operating activities – \$251,000.

This includes payments of directors’ remuneration for services to the economic entity – \$247,000, and payment to directors’ associates for services provided to the economic entity – \$4,000.



Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Lithium Australia NL

ABN

29126129413

Quarter ended ("current quarter")

30 June 2021

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	364	1,143
1.2 Payments for		
(a) exploration & evaluation	(26)	(376)
(b) development	(393)	(1,921)
(c) production	(249)	(2,087)
(d) staff costs	(1,116)	(2,913)
(e) administration and corporate costs	(437)	(1,529)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	15	47
1.5 Interest and other costs of finance paid	(3)	(10)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	478	2,219
1.8 Other (Jobkeeper and cashflow boost)	-	574
1.9 Net cash from / (used in) operating activities	(1,367)	(4,853)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	(400)	(891)
(d) exploration & evaluation	-	-
(e) investments	18	(162)
(f) other non-current assets	(532)	(833)

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	126
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (business combination)	(3)	186
2.6	Net cash from / (used in) investing activities	(917)	(1,574)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	414	16,788
3.2	Proceeds from issue of convertible debt securities (repayment of convertible debt)	-	(1,704)
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(414)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(100)	(355)
3.7	Transaction costs related to loans and borrowings	(6)	(215)
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	308	14,100

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	13,394	3,740
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,367)	(4,853)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(917)	(1,574)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	308	14,100

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(48)	(43)
4.6	Cash and cash equivalents at end of period	11,370	11,370

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	11,370	13,394
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)	11,370	13,394

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	247
6.2	Aggregate amount of payments to related parties and their associates included in item 2	4

The payments to directors or their associates in 6.1 and 6.2 include gross salaries, superannuation, director fees and consulting fees.

7.	Financing facilities <i>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.</i>	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	-	-
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.		

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(1,367)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(1,367)
8.4 Cash and cash equivalents at quarter end (item 4.6)	11,370
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	11,370
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	8.3
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 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:	
8.8.2 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:	
8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer:	
<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 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: 30 July 2021

Authorised by: "By the Company Secretary"
(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 6: Exploration for and Evaluation of Mineral Resources* and *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 standards apply 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.