

Quarterly Activities Report December 2023

londrive Limited (ASX: ION) (londrive or the Company) is pleased to present its quarterly report for the period ended 31 December 2023 (the Quarter).

Highlights

Corporate

- **The Company rebranded to londrive from Southern Gold, in line with its strategic goals for both the battery technology business and the exploration business**
- **Dr Ebbe Dommissie was appointed as the Interim CEO of IDT's subsidiary, londrive Technologies, to lead the Prefeasibility Study of the Company's DES battery recycling technology**
- **Dr Jack Hamilton and Mr Adam Slater appointed as Non-Executive Directors**

londrive Technologies

- **londrive has engaged highly respected battery supply chain consulting firm RhoMotion, based in the UK, to assist with completion of its Prefeasibility Study on its DES battery recycling technology**
- **Concurrently, the Lycopodium are undertaking a rigorous technical gap analysis to optimise the DES process**
- **The University of Adelaide, with londrive as the key industry partner, was awarded a \$5 million grant from the Australian Government related to battery recycling**

Exploration

- **londrive advanced its strategic focus on minerals critical to the clean energy transition through an Earn-in and Joint Venture Agreement with KoBold**
- **Under the terms of the Agreement, KoBold can earn a 75% interest in londrive's greenfields Lithium Projects in South Korea through a two-stage earn-in of \$7 million over 5 years**
- **KoBold will utilise londrive's expertise and resources in country, with an agreement to reimburse londrive for the cost of such services on a monthly basis**

Iondrive Technologies

Lithium Battery Recycling

During the quarter, Iondrive has made considerable progress on its Prefeasibility Study (PFS), which is critical to determining the commercial pathway to leverage its exclusively licensed Deep Eutectic Solvent (DES) battery recycling technology, which has the potential to redefine the battery recycling industry. The study is designed to establish a method that could potentially improve upon current industry standards by focusing on the selective recovery of valuable metals from Lithium-ion batteries.

To assist with the completion of its PFS for its DES battery recycling technology, Iondrive announced the engagement of Rho Motion, a highly respected UK-based battery supply chain consulting firm. The collaboration aims to refine the PFS, guiding Iondrive on the most effective commercial pathway. Specifically, the RhoMotion study will explore both the supply of raw materials (black mass) and offtakes with potential customers to de-risk the business model.

Concurrently, Lycopodium Limited is undertaking a rigorous gap analysis to optimise the DES process. This includes a detailed assessment of the feed material sourced from a prominent Australian supplier and an evaluation of the potential for pre-treatment methods to enhance purity levels. The review extends to scrutinising the downstream waste treatment processes, reinforcing Iondrive's commitment to an environmentally sustainable footprint.

Iondrive is on track to complete the PFS by the first quarter of 2024, a significant step towards its goal of advancing this innovative battery recycling technology.

In parallel with the PFS, Iondrive is engaging with a number of participants in the recycling industry, and the wider green energy transition, across the EU, US, Asia and Australia. This is an important process with a view to identifying collaboration opportunities not only for the commercialisation of the DES battery recycling technology, but also the Company's exclusively licensed Aqueous Sodium-Ion Battery and NCM 811 cathode material technologies.

New Battery Recycling Centre partnered by Iondrive Technologies

In October 2023, Iondrive became the key partner of The University of Adelaide (UoA) in a newly awarded Australian Research Council (ARC) Industrial Transformation Training Centre for Battery Recycling in Adelaide, SA. UoA will receive \$5 million in funding from the ARC for this initiative.

Over the next 5 years, IDT will contribute \$200,000 cash per year and in-kind contributions of \$100,000 per year. As an industry partner to UoA, Iondrive is now firmly positioned to access opportunities to accelerate the commercialisation its proprietary DES battery recycling technology, as well as exposure to new battery recycling technologies with other universities.

Sodium Aqueous Batteries

The UoA research has shown that performance of the Company's exclusively licensed sodium aqueous battery technology exceeded initial targets, achieving best in class performance values for Sodium-ion batteries, with Energy density of 120Wh/kg over 13,000 cycles.

High Performance Safe Lithium Metal Batteries

UoA research has shown that the Company's exclusively licensed cathode enhancing technology significantly improves the trade-off between higher Nickel content (higher energy density) and the problem of rapid capacity decay. Performance figures for the NCM811 cathode doping technology shows 87% capacity retention after 500 cycles compared to 36% for conventional NCM811 cathodes, indicating the technology is ready for commercialisation.

Ongoing work is being performed on Electrolytes to reduce flammability, while Lithium metal Anode development to enhance Anode performance and safety is progressing according to plan.

Exploration

In November 2023, Iondrive secured an Earn-In and Joint Venture Agreement (JV or the Agreement) with a subsidiary of KoBold Metals Company (KoBold) on its Samgwen, Seobyek, Danyang, Seosan, and Cheongpyeong Lithium Projects in South Korea.

In terms of the agreement KoBold can earn a 75% interest in Iondrive's Samgwen, Seobyek, Danyang, Seosan and Cheongpyeong Lithium Projects through a two stage earn-in arrangement of \$7 million over 5 years:

- Stage 1: exploration and evaluation of Samgwen, Seobyek, Danyang, Seosan and Cheongpyeong Li Projects, \$2 million sole funded by November 2026 for a 51% interest, with a minimum spend of \$500,000 by May 2025;
- Stage 2: the option to sole fund exploration an additional \$5 million by November 2028 to increase KoBold's interest to 75%;
- Iondrive may maintain its 25% interest by funding its pro-rata commitment after Stage 2; and
- If Iondrive's interest falls below 10%, this interest is replaced with a 1% net smelter royalty, subject to a US\$9,540,000 cap.

Iondrive's wholly owned subsidiary, Korea Metals Resources (KRM), has been engaged as Field Operator by KoBold during the earn-in period, for a minimum of 18 months. Under the Agreement, costs incurred by KMR in providing services as the Field Operator are reimbursed by KoBold on a monthly basis, including the full time cost of three South Korean field staff, any other staff utilised and direct support costs, assisting the Company reduce its cost base in South Korea.

Exploration under the Agreement commenced in late November. Fieldwork was undertaken at three of the JV projects, Seobyek, Samgwen and Danyang. This work was primarily focused on confirming the location and size of pegmatite dikes previously mapped by KIGAM, geological mapping and sampling 169 rock chip samples, with assay results expected in late February.

Bench sampling at the Company's Rare Earth Element (REE) project, Jangnam, was completed during the quarter with recently received assay results currently being reviewed and compiled. IonDrive has now suspended exploration activities on its REE and precious metals projects to focus exclusively on Lithium exploration, and is actively progressing discussions with potential joint venture partners for its REE and precious metals projects.

Corporate

Change of Company Name & ASX Code

The Company announced a change in its name from Southern Gold Limited to Iondrive Limited. The change of name, together with the change of ASX code from SAU to ION, was effective for ASX purposes from 15 November 2023. The Company also changed its website address to: iondrive.com.au. The change of the Company's name to Iondrive Limited followed overwhelming shareholder approval for the change at the Company's Annual General Meeting held on 9 November 2023.

Appointment of Interim CEO of the battery technology business

In October 2023, Dr Ebbe Dommisse was appointed Interim CEO of Iondrive's battery technology business, Iondrive Technologies. Dr Dommisse will initially focus on the Prefeasibility Study for the DES battery recycling technology. Dr Dommisse brings a wealth of experience and expertise in the field, making him an ideal candidate to lead battery technology business during this critical phase.

Changes in Board Composition

Iondrive made several changes to the composition Board, all effective at the conclusion of the Annual General Meeting held on 9 November 2023.

Firstly, Dr Jack Hamilton was appointed as a Non-Executive Director. Dr Hamilton brings a wealth of experience as a highly accomplished senior executive and board director, with a deep knowledge spanning technology commercialisation, operations, manufacturing, project management, business development, and commercial ventures. He has held significant leadership roles both locally and internationally within the energy sector, including a distinguished tenure as the Director of North West Shelf Ventures for Woodside Energy Ltd, overseeing Australia's largest resource project. Jack has also contributed his expertise to numerous non-executive director positions within ASX-listed companies over the past 12 years. Currently, he serves as a non-executive director at Hazer Group Ltd, where he is actively involved in the development of low emission hydrogen and graphite processes. Furthermore, his recent non-executive roles with Calix Ltd and AnteoTech Ltd have highlighted his involvement in advancing technologies for battery applications.

Secondly, Mr Adam Slater was initially engaged as an advisor to the Board, and then appointed a Non-Executive Director on 4 December 2023 following receipt of his ASIC director identification number. Mr Slater brings nearly three decades of invaluable experience in the commodities industry. His impressive journey includes leading the development of the commodity division at CWT Limited, a company listed on the SGX, from 2007 to 2018. This division encompassed financial services, brokerage of commodities, commodity trading, and comprehensive supply chain management for commodities. Notably, Adam also served on the boards of each subsidiary company within CWT Limited's commodity-related businesses and chaired the board of MRI Trading. Mr Slater was pivotal to the growth in the CWT commodities division, which accounted for over 80% of the Group's revenue of S\$14 billion. The HNA Group acquired CWT Logistics for \$1.04 billion in December 2017. In 2019, Mr Slater transitioned his primary focus towards venture capital, contributing his expertise to multiple company boards and advisory committees.

As part of their engagement, Messrs Hamilton and Slater were each granted 3,000,000 unlisted options, with an exercise price of \$0.025 and a term of four years. The options vest upon their re-election as a Director by shareholders at the 2024 AGM.

As the Company transitions to a new phase, the Board also bids a sincere farewell to two retiring Directors that have played key roles in the Company's journey. Mr Peter Bamford, a seasoned

mining engineer and corporate executive, has been an integral part of Southern Gold's Board since 2018. Likewise, Mr Doug Kirwin, a respected Australian geologist with an impressive 45 years of international experience, served as a Non-Executive Director since February 2020.

Quarterly Cashflows

For the Quarter, the Company reported total net cash outflows of just \$6,000, aided by inflows of:

- \$584,000 from its F23 Research & Development Tax Incentive; and
- \$532,000 from the sale of 25M shares in LSE listed Bluebird Merchant Ventures Limited (BMV).

Cash outflows for the Quarter included \$346,000 directly related to Research & Development activities of Iondrive Technologies, with the majority of this expenditure expected to be claimable under the Research & Development Tax Incentive. Outflows related to exploration activities were \$304,000, with this expected to reduce further as KoBold commences the reimbursement of costs of services provided by the Company as Field Operator.

As at 31 December 2023, Iondrive has available cash of \$2.5 million, unchanged from the prior quarter. In addition, the Company has received \$0.2 million in January from the sale of a further 25 million shares in Bluebird Merchant Ventures Limited (LSE: BMV) and is due to receive payment in February of at least this amount again, for its final 25 million BMV shares. The Company also expects to lodge its F24 Research and Development Tax Incentive claim early in the quarter ended 30 September 2024, with the potential to bring forward part of this receipt through a financing arrangement.

Cash flows for the Quarter include related party payments of \$127,000, comprising Non-Executive Directors fees and remuneration for the Managing Director.

Future Activities

Iondrive Technologies

The Company remains focussed on its Prefeasibility Study for its high priority DES battery recycling technology which is expected to be completed in the next three months. As part of this, large-scale bench trials commence in February at the University of Adelaide to validate process scalability and generate more accurate process data as an input for the design of a pilot plant. In parallel, a Perth based metallurgy and metallurgical services company, Independent Metallurgical Operations (IMO), has been engaged to conduct similar large-scale bench trials to independently verify results and to perform process optimisation trials indicative of a large-scale operations.

The Company is also undertaking a high-level internal study to explore the technical and commercial aspects of its exclusively licensed Sodium Aqueous Battery and High-Performance Safe Lithium Metal Battery technologies.

Exploration

KMR is working with KoBold to finalise a detailed field program for the next quarter and the broader scope of work for the Lithium Projects in the coming 12 months. Near term exploration activities will include reviewing of assay results currently pending from the exploration conducted this Quarter and regional stream sediment sampling, at Seobyek and Samgwen projects, expected to commence in late February – early March.

Discussions to progress potential Joint Ventures on ION's REE and precious metals projects will continue.

Exploration Tenure

Consistent with the Company's focus on managing the cost of its exploration activities, during the Quarter it has reduced its exploration licences under application to 195, covering an area of 532.7km² (prior quarter: 302 applications, covering an area 827.69km²).

The following tenements were 100% owned by the Company as at 31 December 2023:

Project Name	Tenement Info			Register Info		
	Korean	English	Block ID	No.	Type	Date of Granting
Hampyeong	나주	Naju	136	200970	Exploration	1/11/2018
Aphae	무안	Muan	99	201136	Exploration	26/03/2019
Deokon	전주	Jeonju	70	201041	Exploration	31/07/2018
	전주	Jeonju	80	201040	Exploration	31/07/2018
	전주	Jeonju	60	201218	Exploration	17/12/2019
Dokcheon	영암	Yeongam	116	201143	Exploration	4/12/2019
Janghwal	해남	Haenam	139	201302	Exploration	20/08/2021
Goseong	충무	Chungmu	131	201439	Exploration	18/5/2023
	충무	Chungmu	136	201414	Exploration	22/11/2022
	충무	Chungmu	142	201440	Exploration	19/5/2023
	삼천포	Samcheonpo	2	201422	Exploration	1/02/2030
	삼천포	Samcheonpo	3	201423	Exploration	1/02/2030
	삼천포	Samcheonpo	12	201424	Exploration	1/03/2023
	삼천포	Samcheonpo	13	201425	Exploration	1/03/2023

Table 1: Granted SAU tenements

Authorised for release by the Board of Iondrive Limited.

Further Information

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Iondrive Limited: Company Profile

Iondrive is an emerging critical minerals exploration and battery technology commercialisation group listed on the Australian Securities Exchange (under ASX ticker "ION").

The mineral exploration business includes 100% interest in a substantial portfolio of REE, Li and precious metals exploration projects in South Korea. Backed by a first-class technical team, Iondrive's aim is to find world-class deposits in a jurisdiction that has seen very little modern exploration.

The commercialisation business holds three exclusive world-wide licences from the University of Adelaide comprising next generation battery technologies 1) an enhanced performance non-flammable lithium-ion based battery, 2) a low-cost, environmentally sustainable method for recycling lithium batteries, and 3) a low-cost, high cycle life water-based battery.

Appendix 5B

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

Name of entity

IONDRIVE LIMITED

ABN

30 107 424 519

Quarter ended ("current quarter")

31 DECEMBER 2023

Consolidated 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		
1.2 Payments for		
(a) exploration & evaluation	(270)	(650)
(b) research & development (battery technologies)	(346)	(1,050)
(c) production		
(d) staff costs	(214)	(650)
(e) administration and corporate costs	(244)	(466)
1.3 Dividends received (see note 3)		
1.4 Interest received	6	14
1.5 Interest and other costs of finance paid	(1)	(1)
1.6 Income taxes paid		
1.7 Research and development refunds	584	584
1.8 Other (short term lease payments)	(7)	(13)
1.9 Net cash from / (used in) operating activities	(492)	(2,232)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities		
(b) tenements		
(c) property, plant and equipment	(3)	(7)
(d) exploration & evaluation	(34)	(181)
(e) investments		
(f) cash held by acquired entity	-	17

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 (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities (JV sale transaction costs)		
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments – sale of BMV shares	532	1,081
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (loans to 50% owned JV's)		
2.6	Net cash from / (used in) investing activities	495	910

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	-	(177)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings	-	(171)
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (repayment of lease liability)	(6)	(12)
3.10	Net cash from / (used in) financing activities	(6)	(360)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,536	4,213
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(492)	(2,232)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	495	910
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(6)	(360)

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 (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(3)	(1)
4.6	Cash and cash equivalents at end of period	2,530	2,530

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	1,779	290
5.2	Call deposits	751	2,246
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)	2,530	2,536

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	
<i>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.</i>		

The above amount at item 6.1 relates to Directors fees, including the executive salary of the Company's Managing Director.

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

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. 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.	

8. Estimated cash available for future operating activities	\$A'000	
8.1	Net cash from / (used in) operating activities (item 1.9)	(492)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(34)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(526)
8.4	Cash and cash equivalents at quarter end (item 4.6)	2,530
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	2,530
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	4.8 *
<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>		
* If the receipt of the \$584,000 RDTI were excluded from Net cash from / (used in) operating activities for the quarter, then the number of estimated quarters of funding available, reported at 8.7, would be 2.3. Note additional funding is receivable in the next quarter from the sale of the remaining shares held in Bluebird Merchant Ventures Ltd (LSE: BMV) and the Company may finance its F24 RDTI to bring forward a partial receipt into Quarter 4 of F24.		
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:	

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

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:

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.

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 January 2024.....

Authorised by:The Board of Directors.....
(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.