



SOR Strategic Elements December Quarter Update

Perth, Australia – 31 January 2023 Strategic Elements Ltd (ASX: SOR) provides the following Company update to accompany the attached Appendix 4C lodged for the quarter ending 31 December 2022.

Strategic Elements Ltd ended the December quarter with \$3.47M in cash. Across the group, net expenditure was \$337k; this included all corporate costs, research and development expenditure, internal costs incurred in operating the ASX listed entity and direct costs in providing management assistance to investee companies, principally Australian Advanced Materials (Energy Ink technology) Stealth Technologies (robotics and artificial intelligence) and Maria Resources (technology metals frontier exploration). An R&D rebate of \$451k was received by the Company during the December quarter which represents part of the R&D conducted across the group in FY22. A further two R&D rebates are expected to be received in Q1 2023.

Australian Advanced Materials (AAM)

During the period, Strategic Elements Ltd reported¹ multiple successful developments in the Energy Ink™, a revolutionary new power source that generates electrical energy from moisture in the air. This included a successful demonstration comparing the power output of an Energy Ink battery, powered solely by moisture, to the baseline power consumed by a leading glucose-monitoring skin patch. The extremely thin, flexible, environmentally friendly Energy Ink battery generated over 200% more power than required.

Further activities included the successful design and fabrication of programmable load simulators proved to increase the data available to the engineering team, speed up testing, and drive optimisation of the technology. Millions of data points have now been collected for use in engineering, and to form a future databank for discussions with OEM manufacturers.

Utilising data from programmable load simulators and other sources, a simple power management system was combined with Energy Ink technology for the first time. Initial testing revealed an over 500% increase in power density or power per square centimetre. A smaller device (with power management) with one-quarter of the area was able to generate over five times the power output of the larger device (without power management) for the exact same load. Power management systems were proven to have the potential to increase the performance of an Energy Ink power solution dramatically. Due to the value being unlocked through load simulators and power management, the team is expanding on this work with the goal of further significant increases in the performance of the Energy Ink.

The team is progressing well with developmental milestones, and results are expected in Q1, 2023. The Company also announced that it is designing a program of work with the objective of opening an R&D pathway for larger-scale Energy Ink systems through Energy Ink packs with multiple large cells connected or larger Energy Ink cell sizes. Further information on the program is expected in Q1, 2023.

100% owned Australian Advanced Materials and The University of New South Wales also signed an agreement² for a \$1,600,000 federal government funded Project to develop a potential next-generation power source that can directly generate electricity from moisture in the air for wearable electronics.

To further enhance the development of the Energy Ink technology, AAM and Dr Dewei Chu also applied for an Australian Research Council Fellowship grant during Q4 2022. This additional funding will expand the research and development team to explore opportunities in different battery/power applications. This project will involve further fundamental work to investigate the upper limits of the Energy Ink technology, in areas such as maximum power output, duration and energy density. The Company expects to know the outcome during Q2 2023.

The Energy Ink™ technology is still in early development, and the fundamental upper limit of aspects such as maximum power output, duration and energy density remains unknown. Significantly, the team continues to identify multiple avenues that increase performance. It is accepted that the imperative for more innovative, renewable energy creation and power sources will continue to grow. Printed graphene-oxide-based cells that generate energy from airborne water molecules could potentially directly power a device, complement a battery by extending device life or providing energy for battery storage.

Stealth Technologies (Stealth)

During the previous quarter, automation and robotics Company Stealth signed an agreement with global software-industrial company Honeywell to progress the commercialisation of Autonomous Security Vehicles (ASVs) for perimeter security. Under the agreement, Honeywell is responsible for identifying, engaging, and maintaining customer relationships, procuring access to customer facilities, processing fees and entering into and maintaining agreements with customers to facilitate ASV Pilot Deployments.

Stealth has also been developing new products for the security sector and is currently testing the market demand for these in conjunction with a customer. Stealth engineers have also been supporting battery technology development at Australian Advanced Materials Pty Ltd by establishing a testing laboratory in Perth and developing customised test equipment and cloud-enabled test data storage and analysis.

Stealth also continued to build momentum in the mining sector, with activities during the quarter including testing Stealth technology in a live underground mining environment in conjunction with a major mining company and targeting applications directed towards increasing mine throughput and productivity. The Company considers the mining sector to be a major potential opportunity and is investing significant time and resources to develop solutions that can make a significant impact on profitability.

Stealth also continued to progress its late-stage broadacre weed detection technology and completed live trials in connection with the Australian Herbicide Resistance Initiative in the quarter. Live field trials were conducted during the quarter at Pingelly in the wheat belt of Western Australia and the data is currently being processed and analysed and is expected to be available in Q2 2023.

Maria Resources (Maria)

Maria focuses on technology metals (e.g. REE, Ni, Cu, Au, PGE (platinum group elements) related to batteries and advanced technology and applying innovative geological models to unexplored terrains. The highly underexplored Madura Province on the Nullarbor is experiencing increased activity with exploration tenements held by companies including Rio Tinto, BHP Nickel West, Chalice Gold Mines (under JV with Sensore) and more recently by Northern Mineral Resources (NMR) and WA1 Resources (WA1).

During the December period, the Company finalised the terms of a \$220,000 EIS drilling grant from the Western Australian government for the Leviathan carbonatite (rare earths, rare metals) target. To be awarded the EIS funding the company's EIS application was reviewed and assessed against other applications by independent external exploration specialists from both within DMIRS and industry.

The Leviathan project was originally lodged over a large gravity anomaly surrounded by a field of up to 100 inferred volcanic pipes, as reported from previous diamond exploration. Previous Companies working in the area for diamonds were not aware of the gravity anomaly and thus, it has never been previously explored. The Leviathan gravity anomaly is postulated by the Company to be the top of an alkaline intrusion and potentially associated carbonatite surrounded by the field of volcanic pipes.³ Volcanic pipes are associated with carbonatites and other types of intrusions that are highly prospective for rare metals and rare earths. The Mt Weld carbonatite in Western Australia is one of the world's richest sources of rare earths.

Since 2020, significant modelling of a ground-based gravity survey previously completed at the Leviathan Project has been conducted. Possible intrusive/alteration systems compatible with gravity and magnetics data at the Leviathan Project include carbonatites and other alkaline intrusives. This offers a range of possible mineralization styles, including REE, phosphate, copper ± gold and uranium. Some IOCG systems also have similarities to the unusual mineralogy in carbonatite-alkaline intrusive and alteration styles.

In 2003, DeBeers targeted circular pipe-like magnetic anomalies within the Leviathan Project, inferred to be diamondiferous kimberlites proximal to the Mundrabilla Shear Zone. Three holes were drilled around the Leviathan gravity anomaly (which was not visible in the gravity data available at that time). Drill hole WSH004

(5.5km to the southwest) reported sections of carbonate-rich matrix and massive carbonate veining. Hole WSH003 (5km to the southeast) reported carbonate alteration and disseminated sulphides. Hole WSH011 (5km to the northeast) reported carbonate-rich groundmass, carbonate veining and disseminated sulphides.

Petrography is the description and systematic classification of rocks, mainly by the microscopic examination of thin sections. A petrographic examination of the DeBeers 2003 drill cores by Dr Pirajno has revealed carbonatite breccia in WSH011 and WSH004. This supports the potential for the Leviathan gravity anomaly to be related to an alkaline intrusion and associated carbonatite.

The wider Leviathan Project includes tenements 3726, 3829, 3830, 4050 and application 4120, which target an area of alkaline rocks and the Mundrabilla Shear Zone. Further projects targeting potential activity related to the Mundrabilla Shear Zone include 'Line Manager' (tenements 3833 and 3832) and 'Red Rock' (application 4129).

Strategic Elements

The Company received \$451k in rebates under the R&D Tax Incentive program and a further \$15k in contract revenue. A further two R&D rebates are expected to be received in Q1 2023.

Strategic Elements incurred expenditure of \$400k which included payments of \$247k to related parties and their associates at item 6.1 of the accompanying Appendix 4C. These payments comprise director's fees for Directors and salaries for Executive Directors. AAM incurred expenditure of \$86k after grant funding which related to R&D development undertaken at UNSW, consultants and other costs incurred in developing and managing AAM's IP portfolio. Stealth incurred \$225k in direct expenses related to staff, consultants and R&D development costs across projects with Honeywell, Mining Industry, Defence Science and Technology Group and the Australian Herbicide Resistance Initiative/University of Western Australia. Cognition Engines incurred expenditure of \$53k related to early technology evaluation costs. Maria incurred \$40k in costs associated with the evaluation of exploration projects. Strategic Materials incurred \$1k in permit and consulting fees related to holding the Golden Blocks permit in New Zealand.

Net cash used across the group over the December quarter was \$337k.

The Australian Federal Government has registered Strategic Elements as a Pooled Development Fund with a mandate to back Australian innovation. The Company supports leading Australian scientists and innovators in high-risk-high reward ventures. SOR majority funds the initial development of each Venture whilst seeking a major strategic investor/partner able to assist commercialisation. The Company is backing projects across robotics, artificial intelligence, printable technologies (battery, storage) and strategic technology metals.

More Information:

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Competent Person

The information in this announcement that relates to Exploration Results is based on information compiled from public reports by Dr Franco Pirajno who is a Member of the Australian Institute of Geoscientists. Dr Pirajno is a Consultant to the Company. Dr Pirajno has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking 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'. Dr Pirajno consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Dr Pirajno is not a shareholder in the Company.

Footnotes

¹ ASX Announcement 29/12/2022 | ² ASX Announcement 13/12/2022 | ³ ASX Announcement 27/11/2019

Appendix 4C

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

Name of entity

Strategic Elements Limited

ABN

47 122 437 503

Quarter ended ("current quarter")

31 December 2022

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	15	15
1.2 Payments for		
(a) research and development	(242)	(645)
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	(17)	(38)
(d) leased assets	-	-
(e) staff costs	(476)	(847)
(f) administration and corporate costs	(75)	(292)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	7	11
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	451	451
1.8 Other	-	-
1.9 Net cash used in operating activities	(337)	(1,345)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	-	-
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	-	-

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
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 used in investing activities	-	-

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2 Proceeds from issue of convertible debt securities	-	-
3.3 Proceeds from exercise of options	-	-
3.4 Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5 Proceeds from borrowings	-	-
3.6 Repayment of borrowings	-	-
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 financing activities	-	-

4. Net increase/(decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	3,816	4,824
4.2 Net cash used in operating activities (item 1.9 above)	(337)	(1,345)
4.3 Net cash used in investing activities (item 2.6 above)	-	-
4.4 Net cash from financing activities (item 3.10 above)	-	-

Appendix 4C
Quarterly cash flow report for entities subject to Listing Rule 4.7B

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	(1)	(1)
4.6	Cash and cash equivalents at end of period	3,478	3,478

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	1,950	3,712
5.2	Term deposits	1,540	116
5.3	Bank overdrafts	-	-
5.4	Other (credit card)	(12)	(12)
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,478	3,816

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	-

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.

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.	

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash used in operating activities (item 1.9)	(337)
8.2 Cash and cash equivalents at quarter end (item 4.6)	3,478
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	3,478
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	10.32
<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: 30-01-2023.....

Authorised by: Matthew Howard.....
(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.