

SOR Strategic Elements December Quarter Update

Strategic Elements Ltd (ASX: SOR) provides the following update to accompany the Appendix 4C lodged for the quarter ending 31 December 2023. Strategic Elements operates as a 'Venture Builder' by sourcing and combining teams of leading scientists or innovators. The Company majority funds the initial development of each Venture whilst seeking a major strategic investor/partner to assist commercialisation. The Australian Federal Government has registered Strategic Elements as a Pooled Development Fund (PDF) with a mandate to back higher risk early-stage Australian innovation. The PDF program provides the Company with a highly beneficial tax structure for the Company and its shareholders.

Australian Advanced Materials (100% owned) is working with a University of New South Wales team to convert moisture into electrical energy. Development of the Energy Ink™ technology was the priority focus during the quarter. The Company ended the quarter with a strong cash position of \$6.6M and no debt.

Australian Advanced Materials (100%)

During the quarter Australian Advanced Materials (100% owned) reported that the Energy Ink™ (renewable energy technology) achieved unprecedented power density from moisture in the air. Power density is a measure of how much power can be produced in a given area and is a crucial metric for comparing emerging technologies with established systems. These results greatly exceed published moisture-enabled power generation technologies.¹

Technologies like the Energy Ink™ that use moisture as a high-power energy source have significant technical issues in low power density, short duration and material degradation. Thus, there has been a preconception that moisture is only suitable for small devices. The Energy Ink™ was successfully re-engineered to achieve a significant 1000-fold increase in power density in under 12 months. This achievement challenges the conventional notion that moisture is limited to powering small devices.

Whilst these are promising early results, significant hurdles exist for the Energy Ink™ to reach technical feasibility in high-power cells, including a) efficiency: achieving high energy conversion efficiency to make the technology competitive; b) stability: ensuring consistent performance over time, without significant degradation and c) scalability: transitioning from small, laboratory-scale prototypes to a more extensive, integrated system.

Achieving the required power and duration of high-power cells, as well as upscaling fabrication of numerous cells and electrodes, are formidable challenges for the Energy Ink™. Notwithstanding this, Australian Advanced Materials has set an ambitious goal for the coming year to generate energy from moisture in an apartment building parking bay overnight, store a small charge into an electric vehicle. The Company is developing a forward plan for high-power Energy Ink™ development and will keep shareholders duly informed of any material developments.

The Energy Ink™ is still the first of its kind to demonstrate the potential to power small devices by powering a commercial skin patch and associated sensor/Bluetooth. During the quarter the Company reported that Professor Dewei Chu, lead innovator of the Energy Ink™ technology at UNSW, had been awarded an Australian Research Council Industry Fellowship for mid-career researchers. The fellowship provides funding for Professor Chu to apply his globally recognized expertise in generating electrical energy from moisture to the Australian Advanced Materials project on a full-time basis for four years.²

The Australian Research Council (ARC) Industry Fellowships program is highly competitive and enables leaders in Australian research to collaborate with specific industry partners. These fellowships aim to encourage and facilitate knowledge transfer between academia and industry.

The ARC Project includes AAM, Stealth Technologies and a team of interdisciplinary researchers in functional materials, computational materials science and solution-processed nanodevices. It aims to address the industry need for self-powered small devices and sensors. The team will have access to state-of-the-art facilities at UNSW, including nanoionics materials fabrication, electronic printing and characterisation technology. The ARC will provide approx. \$1,020,000 in cash funding whilst AAM will contribute \$800,000 in cash funding over the four years.

A formal agreement with UNSW was completed during the quarter, with the ARC Project commencing January 2024. This ARC Project is a significant step forward in the Company's collaborative research efforts, a strong endorsement of Professor Chu's expertise in this innovative field and provides cash funding without diluting shareholders interests.

Stealth Technologies (100%)

Stealth Technologies has been finalising its mining technology demonstrator and has commenced showcasing the technology, engaging with potential partners in the mining industry. The demonstrator was developed using live operational mine data. Engagement with potential partners is focused on highlighting the potential value that can be realised through improved operational gains in underground mines leading to increased throughput and revenues for mine operators.

During the quarter, Stealth also provided significant engineering support to the collaboration with AAM and UNSW. Engineers completed the next generation of testing systems for Energy Ink™ cells with enhanced dynamic range more suitable for higher power device testing. In addition, these testing systems will lead to higher testing throughput enabling the testing of multiple devices simultaneously. Stealth engineers are also preparing to work with the multi-disciplinary team as part of the ARC Project commencing in January.

Stealth successfully completed data collection for the late stage broadacre weed detection technology in collaboration with the Australian Herbicide Resistance Initiative, a world leader in herbicide resistance and cropping system management. Upgraded hardware and software was used for live data collection as during crop harvest. Data collected from the harvest will be processed and analysed when Stealth engineers have availability outside of the ARC Project.

Stealth has 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.

Maria Resources (100%)

Maria focuses on applying innovative, scientific geological models to unexplored terrains. It is currently focused on the underexplored Madura Province (Nullarbor, WA) seeking critical minerals (e.g. Rare Earths, Nickel, Copper, Gold, PGE) used in batteries and other advanced technologies.

Maria is collaborating with Dr Franco Pirajno who was nominated as a top 1% highly cited researcher globally in 2019. He has 246 published peer-reviewed publications, is a sole author of 4 geology books and has presented 69 unpublished industry papers. In industry, Dr Pirajno has worked in mining and exploration with Anglo-American Corp of South Africa for 19 years in Africa, Australia, SW Pacific and New Zealand and was an Exploration Manager for Anglo-American Corporation of South Africa Ltd in the South West Pacific.

During the period the critical minerals exploration sector experienced significant challenges and the Company is assessing its projects in line with this environment. Desktop analysis was progressed on the Cyclops Project to determine the most economical options of exploring the area under the recently granted EIS funding received from the Western Australian government.

Strategic Elements Ltd

The Company ended the quarter with a strong cash position of \$6.6M and no debt. Across the group, net expenditure was \$676k; 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).

Direct costs of \$309k were attributable to Strategic Elements, this included all corporate costs, internal costs incurred in operating the ASX-listed entity and direct costs in providing management assistance to investee companies. Payments of \$176k to related parties and their associates are reported 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 \$158k related to R&D development undertaken at UNSW, consultants and other costs incurred in research and managing AAM's IP portfolio. Stealth incurred \$170k in expenses related to staff, consultants and R&D development costs across projects. Cognition Engines incurred net expenditure of \$13k for consulting costs. Maria incurred \$13k in costs associated with its battery metal projects exploration projects. Strategic Materials incurred \$13k in permit and consulting fees for holding the Golden Blocks permit in New Zealand.

The Company is finalising processing of the FY23 research and development rebates for research and development conducted across the group during FY23. The Company expects approximately \$700,000 to be paid under the R&D Tax Incentive scheme during the March quarter.

More Information:

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This announcement was authorised for release by the Strategic Elements' Board of Directors.

¹ASX Announcement 14/11/2023

²ASX Announcement 21/12/2023

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 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	-	40
1.2 Payments for		
(a) research and development	(260)	(545)
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	(29)	(40)
(d) leased assets	-	-
(e) staff costs	(341)	(685)
(f) administration and corporate costs	(118)	(277)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	72	147
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other	-	-
1.9 Net cash used in operating activities	(676)	(1,360)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(7)	(7)
(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	(7)	(7)

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	7,302	7,989
4.2	Net cash used in operating activities (item 1.9 above)	(676)	(1,360)
4.3	Net cash used in investing activities (item 2.6 above)	(7)	(7)
4.4	Net cash from financing activities (item 3.10 above)	-	-

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)	(4)
4.6	Cash and cash equivalents at end of period	6,618	6,618

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	1,521	701
5.2	Term deposits	116	116
5.3	60 Day Notice	5,000	6,500
5.4	Other (credit card)	(19)	(15)
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	6,618	7,302

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	176
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>		

7. Financing facilities <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>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
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)	(676)
8.2 Cash and cash equivalents at quarter end (item 4.6)	6,618
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	6,618
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	9.79
<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: 31/01/2024

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.