

ASX Announcement ([ASX: AXE](#))

14 July 2025

Q4 FY25 Activities Report and Appendix 4C

For the quarter ended 30 June 2025.

Key Highlights

- Advanced the ¹²CQ quantum project 1HCY26 goal: development and demonstration of a qubit by extending contract work with Queen Mary University of London (QMUL).
- Began contract work with Paragraf to improve the Biochip gFETs ability to accurately test blood samples.
- Fabricated a silicon chip that integrates the Biochip gFET with electrical readout circuitry, moving the Biochip towards a hand-held device for blood testing.
- Experienced and well credentialed advisory committee established to help bolster technological advancements and commercialisation of core technologies.
- Strong cash position to fund activities with \$13.7 million and no debt to fund R&D and commercial activities.

Archer Materials Limited ("Archer", the "Company", "ASX: AXE"), a semiconductor company advancing the quantum computing and medical diagnostics industries, provides its Quarterly Activities Report and Appendix 4C for the quarter ended 30 June 2025 ("Quarter").

Commenting on Q4 FY25 activities, Greg English, Executive Chairman of Archer, said

"Both the quantum and Biochip teams advanced the Company's core technologies during the quarter.

"Archer's Biochip continues to move closer to having a lab demonstrator for accurate testing of blood for chronic kidney disease. The Company has created a silicon chip that integrates the gFET into circuitry that can be inserted into a cartridge. Also during the quarter, Archer, alongside its partner, Paragraf, began a program of work to improve the Biochip's gFET ability to test blood by in order to achieve sensor accuracy, stability and robustness, while looking to move it from lab to production.

"The quantum team is making developments in the key ¹²CQ project milestones of a qubit demonstration next year via the Sydney team and with its QMUL collaboration.

"Archer has also created a new advisory board that will help with the technological development of the Company's core technologies and advise on bringing them to the commercialisation phase."

Technology development and commercialisation activities

Quantum Technologies

¹²CQ Project

During the quarter, the ¹²CQ Quantum project bolstered the development of its carbon-based qubit by extending its work with QMUL for a further six months. The new program of work aims to showcase significant technical advancements in qubit development and build on demonstrated single electron isolation via the Coulomb blockade. The work will complement ongoing activities in Sydney.

The project with QMUL will provide the first building blocks for both readout and control of the electron spins in a qubit by combining Archer's demonstration of coupling of spins to superconducting resonator micro-devices. The first stage will involve developing single electron transistor devices to identify electron spin states in the electrical data from the devices, with the later stage looking at how the spin state can be readout from the qubit.

The intellectual property (IP) resulting from the work will remain with Archer.

The TMR sensor program continued the work to identify a commercially attractive application where Archer's technology can deliver a differentiated solution to a high-value market need. In 2025, the program priority is identifying and validating these opportunities, with current efforts focused on building strategic partnerships and developing relationships with prospective customers. Archer anticipates this market-focused phase will require the greatest investment of time and resources and will continue through to the end of the calendar year.

Biochip

During the quarter, Archer advanced the testing of chronic kidney disease (CKD) for its Biochip by signing an agreement with UK graphene-based electronics company Paragraf Limited ("Paragraf") to undergo a contract of work on the Biochip to test blood potassium using a graphene field effect transistor (gFET). The work complements the activities ongoing in Archer's Sydney facilities.

Archer and Paragraf are looking to improve sensor accuracy, as well as data to improve foundry fabrication processes and device qualification procedures, with the resulting IP belonging to Archer. The team will also help move the chips from the lab to product representative chips, while working on sensor stability, lifetime and robustness.

The Biochip team also helped improve the at-home CKD testing capabilities by creating a silicon chip that combines the Company's gFET sensors with electrical readout circuitry. The integration of the Biochip with miniaturised electronics is a precursor to inserting the Biochip into a cartridge that tests blood samples, as part of a hand-held digital device. This will help feed into the work being done with Hylid Diagnostics.

Archer will verify the new integrated chips in Sydney, with the chips being packaged for testing at the Company's facilities in Sydney. The chips were fabricated at foundry partner VTT Technical Research Centre of Finland Ltd ("VTT") via a multi-project wafer run (MPW) on a 200mm wafer.

New Advisory Committee

Archer formed a new advisory committee to provide advice to the Archer board on strategy including research, development and the commercialisation of the company's projects.

The advisory committee comprises Dr Steven Duvall (Chair), Mark Davis (member) and Dr Anthony Brewer (member).

Dr Steven Duvall - Chair

Steven has been in the semiconductor industry for over 40 years since completing his PhD at Stanford University. He joined Intel in 1983 in the company's Technology Development Group. Steven spent 18 years with Intel in California, driving corporate initiatives in design for manufacturability, and six years with Intel in Australia, supporting Intel Capital globally with technical and commercial due diligence of entrepreneurial companies. At Intel, Dr. Duvall was appointed an Intel Fellow and was twice awarded Intel's highest individual recognition award.

Dr Duvall's last executive role was Chief Technology Officer and General Manager of Technology Development at Silanna Group, an Australian developer and manufacturer of advanced semiconductor components. At Silanna, Dr Duvall led the research, development and commercialisation of new semiconductor manufacturing technologies and products.

Mark Davis

Mark is a seasoned biotechnology entrepreneur and executive with over two decades of experience in diagnostics and life sciences. In 2003, he co-founded Mologic Ltd a leading innovator in rapid diagnostic technologies, developing affordable, point-of-care tests for diseases. In 2021, Mologic transitioned into a social enterprise under the umbrella of Global Access Health, backed by philanthropic investors including the Soros Economic Development Fund and the Bill & Melinda Gates Foundation. This transformation led to the formation of Global Access Diagnostics (GADx), where Mark continued to serve as CEO until stepping down in 2023, after 20 years of service.

Beyond Mologic, Mark has held leadership roles at several biotechnology companies, including Unipath and NextGen Sciences, where he contributed to the development and commercialisation of diagnostic platforms. His expertise spans research and development.

Dr Anthony Brewer

Anthony is a physicist, entrepreneur, and deep-tech innovator with over 15 years of experience translating advanced technologies into commercial products across medtech and semiconductors.

He is the Founder and Principal Consultant at BadFish, a specialist advisory firm focused on technology strategy, medtech, AI/ML, semiconductors, and intellectual property. As former Chief Technology Officer at WearOptimo, Anthony led the development of AI-enabled wearable biosensors, steering the company from proof-of-concept through clinical trials to pilot production, and designed and built a state-of-the-art advanced manufacturing facility.

Dr. Brewer holds a PhD in semiconductor quantum physics from the University of Cambridge, with academic experience at the École Normale Supérieure in Paris researching graphene and the University of Queensland researching organic semiconductors. He brings deep expertise in

regulated medical device development, digital health, and commercialisation of advanced technologies. He is passionate about driving innovation to improve patient outcomes and mentoring early-career scientists and engineers working at the intersection of deep tech and healthcare.

Financial and corporate update

The Company's cash balance at the end of the Quarter was \$13.7 million and has no debt. The Company holds 1,633,944 shares in Canadian Stock Exchange listed Volatus Capital Corp (CSE:VC) and 10,397,806 shares and 2,892,780 quoted options in ASX listed ChemX Materials Ltd (ASX:CMX).

Archer's accompanying Appendix 4C cashflow report for the Quarter includes an amount of \$172,000 at item 6.1, relating to executive and non-executive director fees paid as salaries and wages.

The Board of Archer authorised this announcement to be given to ASX.

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About Archer

Archer is a technology company that operates within the semiconductor industry. The Company is developing advanced semiconductor devices, including chips relevant to quantum computing and medical diagnostics. Archer utilises its global partnerships to develop these technologies for potential deployment and use across multiple industries.

www.archerx.com.au

Appendix 4C

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

Name of entity

Archer Materials Limited

ABN

64 123 993 233

Quarter ended ("current quarter")

30 June 2025

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	-	-
1.2 Payments for		
(a) research and development	(874)	(2,528)
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	(9)	(9)
(d) leased assets	(10)	(100)
(e) staff costs	(805)	(3,507)
(f) administration and corporate costs	(126)	(1,154)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	47	823
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	2,190
1.8 Other (provide details if material)		
1.9 Net cash from / (used in) operating activities	(1,777)	(4,285)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(5)	(12)
(d) investments	-	-
(e) intellectual property	(47)	(212)
(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	9
	(d) investments	-	39
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(52)	(176)

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)	(4)	(4)
3.10	Net cash from / (used in) financing activities	(4)	(4)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	15,578	18,210
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,777)	(4,285)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(52)	(176)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(4)	(4)
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	13,745	13,745

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	2,663	3,495
5.2	Call deposits	11,082	12,083
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)	13,745	15,578

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	172
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	N/A	
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)	(1,777)
8.2 Cash and cash equivalents at quarter end (item 4.6)	13,745
8.3 Unused finance facilities available at quarter end (item 7.5)	0
8.4 Total available funding (item 8.2 + item 8.3)	13,745
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	7.73
<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:14 July 2025.....

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

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.