

Highlights

- **U.S. MXene manufacturing platform targeting defence markets** – exclusive Rice University Flash Joule Heating (FJH) licence for MXene production through the proposed Xenica acquisition (subject to conditions precedent), combined with access to Metallium Ltd's commissioned FJH reactor infrastructure at Gator Point, Texas, and a defence-use MXene sublicense.
- **First MXene produced on ECT's U.S. platform (post quarter)** – initial FJH runs on Metallium's reactor platform produced MXene, with independent XRD analysis consistent with the formation of chlorine-terminated MXene. The programme is now focused on repeatable production.
- **Defence commercialisation pathway** – Xenica Inc. holds a sublicense from MXene Inc. to produce, use and sell MXenes for military and defence-related end uses. Initial target applications are electromagnetic interference (EMI) shielding, radar absorption, signature management and advanced coatings. The sublicense provides market access and is not a customer contract.
- **PFAS destruction commercialisation** – concept design completed for ECT's first pilot unit to destroy PFAS captured on granular activated carbon (GAC), with first flash trials targeted for early 2027 to support a licensing and OEM model.
- **Strong financial position** – cash of ~A\$10.2 million at 30 September 2026 following completion of an A\$10.6 million (before costs) Tranche 1 placement, directed to clearly defined technical and commercial milestones.
- **Near-term execution priorities** – Xenica completion, repeatable MXene production, functional performance validation and customer qualification, alongside delivery of the PFAS GAC pilot unit.

Environmental Clean Technologies Limited (**ASX: ECT**) ("**ECT**" or "**Company**") is pleased to present its Quarterly Activity Report and Appendix 4C for the quarter ended 30 September 2026. During the quarter, ECT moved beyond holding technology rights to assembling a practical U.S.-based MXene manufacturing and commercialisation platform, bringing together exclusive rights to MXene synthesis technology (Rice University, through the proposed Xenica acquisition), commissioned reactor infrastructure (Metallium Ltd), defence-friendly precursor supply and a defence-market channel (MXene Inc.). In parallel, ECT is progressing a separate PFAS destruction commercialisation pathway, with its own technology, milestones and licensing model.

Commenting on the quarter, ECT Chairman Faldi Ismail said: "This quarter marked ECT's transition from a PFAS technology developer to a company pursuing two commercialisation pathways on one Flash Joule Heating platform. A licence is only the starting point; we have now assembled the means to use it, with exclusive rights to the Rice technology, an operating reactor in Texas and a defined route into defence markets. Producing our first MXene shortly after quarter end was an important technical milestone. Our focus now is on producing material consistently, demonstrating its performance in defence applications and

taking it through customer qualification. With approximately A\$10.2 million in cash, we have the capital to pursue these milestones while advancing our PFAS pilot towards trials in early 2027."

Activity Update

MXene Technology Acquisition – Xenica Materials

ECT entered into a binding Share Purchase Agreement to acquire 100% of Xenica Materials Pty Ltd (Xenica), whose wholly owned subsidiary Xenica Inc. holds an exclusive licence from William Marsh Rice University (Rice) to commercialise Flash Joule Heating (FJH) technology for the production of MXenes and two-dimensional amorphous carbon.

The acquisition takes ECT's FJH platform beyond PFAS remediation into advanced materials manufacturing, with defence as the initial target market and potential applications across aerospace, electronics, energy storage, advanced coatings and water treatment. Shareholders approved the issue of the 60 million consideration shares at the Extraordinary General Meeting held on 22 October 2026 (post quarter). Completion remains subject to satisfaction of the remaining conditions precedent.

Metallium R&D and Engineering Agreement

ECT entered into a 12-month R&D and Engineering Support Services Agreement with Metallium Ltd (ASX: MTM) and its wholly owned subsidiary Flash Metals USA Inc., giving ECT access to Metallium's commissioned FJH reactor platform and engineering capability at the Gator Point Technology Campus in Chambers County, Texas. This provides an operating U.S. production platform while avoiding the time and capital required to build equivalent infrastructure, and reduces execution risk. ECT retains ownership of MXene produced under the agreement, while improvements to Metallium's reactor technology remain with Metallium.

The agreement provides for an upfront payment of US\$500,000, a quarterly service and facility access fee of US\$225,000 and ECT options, which were approved by shareholders post quarter. The parties will also negotiate in good faith on a potential longer-term collaboration and licence arrangement.

MXene Production

On 19 August 2026, ECT secured an initial 4kg supply of defence-friendly MAX Phase precursor, the feedstock for MXene production, allowing scale-up testing to begin. In September, work moved from commissioning at Metallium's Knighthawk reactor to the MTM/ECT reactor platform at Gator Point, with each run refining operating conditions for the next.

Production material is characterised internally and by independent laboratories, including Rice University's Shared Equipment Authority and Benchmark Labs for XRD analysis. ECT produced its first MXene shortly after quarter end (see Subsequent Events). The programme is now focused on repeatability and functional performance: consistent production to defence-relevant specifications, improved conversion of MAX Phase to MXene and application testing, which are the steps required before samples can be supplied to customers.

Defence Commercialisation Pathway – MXenes

On 14 September 2026, ECT announced that Xenica Inc. had secured a sublicense from MXene Inc. to produce, use or sell MXenes for military applications and defence-related end uses, subject to the terms of MXene Inc.'s underlying licence. This gives ECT a defined route into its initial target market.

MXenes combine high electrical conductivity, low weight and the ability to be processed into thin coatings and composites. Initial target applications are EMI shielding, radar absorption and signature management,

and advanced coatings and composites, with potential applications in aerospace and unmanned systems. Defence adoption depends on a consistent, secure supply of material made to specification; ECT aims to provide that supply from U.S.-based FJH production, an alternative to conventional chemical etching.

The sublicense is not a customer contract. Commercial adoption depends on ECT producing material consistently and demonstrating application-specific functional performance, such as shielding effectiveness, through independent testing. Any future revenue remains subject to completion of the Xenica acquisition, repeatable production, independent characterisation, customer sample delivery and customer or programme qualification.

PFAS Destruction – FJH / REM Platform

ECT's Rapid Electrothermal Mineralisation (REM) process is designed to destroy PFAS in contaminated soil and in PFAS-laden adsorbents such as granular activated carbon (GAC), and represents a second commercial opportunity for ECT, separate from MXenes. The licence extension to adsorbents opens a pathway into water treatment, where GAC is widely used to capture PFAS and, once spent, is currently incinerated or landfilled.

The commercial logic is destruction at the point of capture. GAC captures PFAS but does not destroy it, while incineration of PFAS wastes faces increasing regulatory scrutiny, including temporary limits under recent U.S. National Defense Authorization Acts. Destroying PFAS on the carbon, with the fluorine accounted for, could offer water utilities, treatment operators and GAC service providers a verifiable destruction step.

Laboratory testing and peer-reviewed studies summarised in ECT's ASX announcement of 29 June 2026 reported greater than 99.9% PFAS removal on GAC and ion-exchange resins, including GAC laden with aqueous film-forming foam supplied by the U.S. Army Corps of Engineers, with 96–99.9% of fluorine accounted for as inorganic fluoride and no detectable volatile organic fluorides. These results were achieved at laboratory scale and are yet to be demonstrated on the GAC pilot unit.

During the quarter, ECT completed the concept design of its first GAC pilot unit, which is designed to destroy the PFAS and convert the fluorine to inert calcium fluoride. Requests for quotation were prepared for an independent process safety assessment (HAZOP) and for the mechanical design and fabrication of the unit. The unit will generate the performance data needed to design larger-scale units and support licensing and OEM partnership discussions.

Next steps are to complete the safety assessment, fabrication and integration of the unit, with first flash trials on PFAS-laden GAC targeted for early 2027, while advancing licensing and OEM partnership discussions.

U.S. Market Presence – OTCQB

On 10 September 2026, ECT commenced trading on the OTCQB Venture Market under the ticker "ECTHF", giving U.S. investors direct access to ECT shares in U.S. dollars and supporting engagement with U.S. regulators, partners and customers across its PFAS and MXene platforms.

Capital Management

ECT completed Tranche 1 of its placement, raising approximately A\$10.6 million before costs through the issue of 88,709,808 fully paid ordinary shares at A\$0.12 per share. Proceeds are funding MXene production scale-up, PFAS commercialisation and general working capital. Tranche 2, comprising approximately 11.3 million shares to raise a further A\$1.4 million before costs, was approved by shareholders on 22 October 2026 (post quarter).

ECT also engaged Breakout Media Pty Ltd under a 12-month agreement for issuer-sponsored research and investor distribution services, issuing 1,000,000 shares on 18 August 2026 as partial consideration (subject to voluntary escrow).

Non-Core Assets – Yallourn Property and COLDry

Yallourn Property: On 19 August 2026, the purchaser of ECT's Yallourn Property terminated the sale agreement following extensions to the due diligence period. ECT retains the property and will consider other sale opportunities.

COLDry: Following completion of an independent commercial and financial review by RSM Corporate Australia Pty Ltd, ECT is assessing potential pathways to realise value from its proprietary COLDry low-temperature lignite processing technology and associated assets, including a potential sale or licensing of the intellectual property, strategic partnerships and alternative commercial applications, while limiting further capital requirements. Any proposal will be assessed against its commercial merits, execution risks and expected value to shareholders. No outcome is assured, and the Company will update shareholders on any material developments.

Commentary to Appendix 4C

The September quarter represented a significant period of capital deployment and strategic transition for ECT, with the Company moving from PFAS technology development towards execution of a broader FJH commercialisation strategy spanning advanced materials manufacturing and PFAS destruction.

Operating activities for the quarter resulted in net cash outflows of \$1,470,000 (June 2026 quarter: \$883,000). The increase reflects the deliberate acceleration of the Company's technical and commercial programmes following the capital raising, including MXene production optimisation, independent testing and characterisation, preparation for customer qualification and PFAS pilot development, together with costs relating to the Xenica acquisition and the Metallium agreement. Expenditure comprised:

- Research, development and scale-up engineering: expenditure associated with the MXene production programme, reactor access, engineering support, precursor procurement, characterisation and validation.
- PFAS technology development: continued technical work, commercial assessment, regulatory engagement and design of ECT's first GAC pilot unit.
- Corporate and capital markets: costs associated with the August capital raising, OTCQB listing, U.S. market engagement, investor relations and standard corporate administration.
- Strategic transactions: costs associated with the proposed Xenica acquisition and related legal, corporate and technical due diligence.

Financing activities provided net cash of \$9,937,000, comprising gross proceeds of \$10,645,000 from Tranche 1 of the placement, less capital raising costs of \$708,000.

Cash payments to related parties totalled \$115,000, comprising payments for Directors' fees for the quarter of \$82,000 and \$33,000 paid for company secretarial and accounting services provided by JM Corporate Services Pty Ltd, a related party of Mr Mouchacca, consistent with the disclosure requirements of Appendix 4C.

Cash and cash equivalents as at 30 September 2026: \$10,158,000.

Cash is directed to the Outlook milestones below: MXene production optimisation at Gator Point (including Metallium fees of US\$225,000 per quarter), independent validation, customer qualification and the PFAS GAC pilot unit. Further capital may be required for commercial-scale deployment.

Outlook

Having produced its first MXene, ECT's focus for the December quarter is turning that result into a repeatable, validated product that customers can qualify, while advancing its PFAS pilot. Key milestones are:

- **Xenica completion** – satisfy the remaining conditions precedent and complete the acquisition, following shareholder approval of the consideration shares on 22 October 2026.
- **Repeatable MXene production** – demonstrate consistent output across multiple runs at Gator Point, improving MXene conversion and yield towards the Company's stated target of approximately 1kg per day once optimised.
- **Functional performance validation** – independently characterise production material and test application-specific performance, including EMI shielding, against defence-relevant specifications.
- **Customer qualification** – deliver initial samples to prospective defence customers and commence qualification.
- **PFAS pilot** – complete the HAZOP, fabrication and integration of the GAC pilot unit ahead of first flash trials in early 2027.

ECT will continue its capital-light approach, using partner reactor and engineering infrastructure rather than building its own, while it proves the platform.

Subsequent Events

On 9 October 2026, following the end of the quarter, ECT announced that Xenica Inc. had successfully produced MXene in the initial runs of its scale-up optimisation programme on Metallium's FJH reactor platform. Two separate flashes were completed under the R&D and Engineering Support Services Agreement with Metallium, in line with the timetable previously announced by the Company.

Reaction products were characterised internally using X-ray fluorescence (XRF) and scanning electron microscopy (SEM), while independent X-ray diffraction (XRD) analysis showed changes in interlayer spacing consistent with the formation of chlorine-terminated MXene. The results are preliminary, and further optimisation and testing are required to demonstrate process repeatability and meet commercial specifications.

On 6 October 2026, following the end of the quarter, ECT announced the appointment of Lewis Utting and Jon Gourlay as Non-Executive Directors, effective 6 October 2026, and the resignation of Justin Mouchacca as a Non-Executive Director.

Mr Utting brings extensive chemical, PFAS, mineral processing and commercialisation experience, while Mr Gourlay brings Chartered Accounting, financial management, governance, operational and investor relations experience. The appointments are intended to strengthen the Company's commercial, technical, financial, governance and capital markets capabilities as ECT progresses its MXene and PFAS platforms.

On 22 October 2026, following the end of the quarter, shareholders approved the issue of the Xenica consideration shares, Tranche 2 of the placement and the options to be issued to Metallium at the Company's Extraordinary General Meeting.

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This announcement is approved for release by the Board of ECT.

For further information, please contact:

INVESTORS

For investor queries contact:

ir@aeadvisors.com.au

Forward-looking Statement

This announcement may contain forward-looking statements regarding future events or performance, including but not limited to projections of financial results, anticipated growth, and business strategies. These forward-looking statements are based on current expectations, assumptions, and projections that involve inherent risks and uncertainties. Actual results may differ materially from those anticipated due to various factors, including market conditions, regulatory changes, technological advancements, and economic conditions.

Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this announcement. The Company undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by applicable securities laws.

Investors should carefully consider the risks and uncertainties disclosed in the Company's periodic reports filed with the Australian Securities Exchange (ASX) and other regulatory authorities. Forward-looking statements are provided as of the date of this announcement, and the Company disclaims any obligation to update them except as required by law.

Appendix 4C

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

Name of entity

Environmental Clean Technologies Limited

ABN

28 009 120 405

Quarter ended ("current quarter")

30 September 2026

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) research and development	(959)	(959)
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	-	-
(d) leased assets	-	-
(e) staff costs	(60)	(60)
(f) administration and corporate costs	(469)	(469)
1.3 Dividends received (see note 3)		
1.4 Interest received	18	18
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(1,470)	(1,470)

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	-	-
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 from / (used in) investing activities	-	-

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	10,645	10,645
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	(708)	(708)
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 / (used in) financing activities	9,937	9,937

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,691	1,691
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,470)	(1,470)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	9,937	9,937
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	10,158	10,158

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	10,158	1,691
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)	10,158	1,691

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	115
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 (1)	-	-
7.2	Credit standby arrangements		
7.3	Other (R & D lending facility) (2)	-	-
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)	(1,470)
8.2	Cash and cash equivalents at quarter end (item 4.6)	10,158
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	8,688
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1) <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>	6.91
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 October 2026

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.