

24 April 2023

QUARTERLY ACTIVITIES REPORT

Quarter Ended 31 March 2023

Emerging mineral processing technology company, Zeotech Limited (ASX: ZEO, "Zeotech" or "the Company") is pleased to provide the following update and commentary on activities undertaken during the three-month period ended 31 March 2023 (the "quarter").

HIGHLIGHTS

- Research program to develop and validate the application of Zeotech targeted products for controlling landfill methane emissions¹ commences at Griffith University ("Griffith").
- Dr. Taku Ide, Head of Carbon, and Mr Srikar Rapole, Remediation & Sustainability, from Cleanaway Waste Management Ltd ("Cleanaway") hosted at Zeotech's office and laboratory at Brisbane Technology Park.
- Zeotech supports the successful 'Tailor-made nanocomposite membranes for greenhouse gas capture' Advance Queensland Industry Research Fellowship.
- The Australian Research Council - Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide accepts Zeotech as an industry partner.
- Cash refund of \$1,040,353 received under the Australian Federal Governments R&D Tax Incentive Program.
- In-house research team commences developing new grades and varieties of zeolite targeted products for high volume applications, including synthesis processes to produce manufactured zeolite from Coal Fly Ash (CFA) feedstock.
- Mr Alister Morrison, a senior executive with 25-years of strategic international experience across energy, natural resources and early-stage technology commercialisation, commences as CEO.

Managing Director, Peter Zardo, commented:

"It has been another rewarding quarter with the commencement of our methane control program, led by Dr. Chris Pratt from Griffith University, and supported by our continued engagement with industry collaboration partner, Cleanaway."

The Company continues to expand its climate-tech portfolio by adding further exposure to carbon capture and utilisation technologies, by supporting Advance Queensland Industry Research Fellowship for membrane greenhouse gas capture and our successful entry as an industry partner in the Australian Research Council, Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide.

I would also like to welcome Alister to the team and look forward to his contribution in the year ahead."

¹ ASX Announcement 24/10/2022 "Zeotech to Develop Products for Methane Control"

MANUFACTURED ZEOLITE MINERAL PROCESSING TECHNOLOGY

OPERATIONAL UPDATE

Griffith University

Methane Control Program

The methane emissions control program commenced as scheduled in February 2023, following the successful recruitment of Niloofar Ordou to the role of Research Fellow.

Field work commenced to collect landfill capping soil samples which will undergo analysis and characterisation.

Cleanaway's candidate host site for the proposed research activities is highly suitable, offering appropriate scale and diversity in both soil type and age profile.



Early field work - Cleanaway landfill site (left) young capping cell (right) mature capping cell
Photos courtesy of Dr. Chris Prat - Griffith University

The location of the sample 'cells' have been cordoned off to ensure that they are not disturbed in preparation for future configuration development and field validation, pending satisfactory outcomes from initiatives.

Soil Carbon & Nutrient Management

Research activities for the dual-stream agri-research program at Griffith are progressing as scheduled.

Under the soil carbon stream, activities have focussed on carbon incubation and enhanced carbon sequestration trials. The trials aim to evaluate the soil organic carbon protection potential for zeolites as well as investigating the potential for soil inorganic protection.

Results and datasets emerging from the soil carbon program continue to be analysed and show promise that the application of Zeotech's targeted soil products can protect substantial portions of added carbon and have corroborated earlier preliminary trials.

The nutrient management stream has focussed on the evaluation of nutrient retention capacity of zeolites together with advancing product development and nutrient delivery compound formulation.

The latter activity is focused on designing a fertiliser delivery product with direct blends of Zeotech materials and commercial fertiliser.

The Company is anticipating an interim progress report on the soil carbon and nutrient management activities by Griffith during the current quarter and looks forward to providing further updates on the program in due course.

The University of Queensland ("UQ")

Carbon Capture & Utilisation

Zeolite-Based Nanocomposite Membrane

Zeotech supported the successful [Advance Queensland Industry Research Fellowship \(AQIRF\) program for tailor-made nanocomposite membranes for greenhouse gas capture](#).

The program is administered by the Queensland Department of Tourism, Innovation and Sport ("DTIS"), and will support Dr. Gloria Milena Monsalve Bravo from the UQ School of Chemical Engineering, research and develop next generation Greenhouse Gas ("GHG") capture technology.

Research in GHG capture compliments the Company's adjacent research at UQ for utilising captured CO₂ to produce value-add products such as syngas and hydrocarbon fuels in a hydrogenation or electrochemical conversion process, powered by renewable energy.

The early career fellowship will provide funding of A\$240,000 over 3-years. Zeotech will provide cash contributions of A\$165,000 over 3-years.

The Company will retain all new IP which is developed from the project², in line with the pre-existing royalty agreement between UniQuest (UQ's commercialisation company) and Zeotech.

Green Electrochemical Transformation of Carbon Dioxide

Zeotech has been accepted as an industry partner for [The Australian Research Council - Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide \("GETCO₂"\)](#).

In collaboration with research partner and administering organisation UQ, participation in GETCO₂ aims to advance carbon utilisation technology using the Company's manufactured zeolites as metal-based zeolite catalysts that can be applied in electrolyzers for converting captured CO₂ into hydrocarbon fuels such as methanol.

Among carbon utilisation technologies, electrochemical transformation of CO₂ has gained interest due to its potential for directly converting CO₂ to a variety of valuable hydrocarbon fuels, such as methanol, using renewable energy.

² ASX release 07/05/2020 "Synthetic Zeolite Research Agreement Signed"

Collaboration with GETCO₂ complements the Company's existing partnership with the Australian Research Council GlobH₂E, led by the University of New South Wales³, together with the potential for carbon capture technology advanced by the AQIRF tailor-made nanocomposite membrane research.

Zeotech will provide cash contributions of A\$60,000 over 3-years.

Global Hydrogen Economy

Alister Morrison (CEO), Dr. John Vogrin (Head of Projects, R&D) and Connie Zhao (BDM) attended UQ for the bi-monthly progress update for the Company's research collaboration with [ARC Industrial Transformation Training Centre for the Global Hydrogen Economy](#) ("GlobH₂E").

To date, the research has developed nine potential types of monometallic and bimetallic zeolite catalysts for hydrogenation of CO₂ to produce value-add products such as syngas and hydrocarbon fuels using renewable energy.

The research team is currently finalising the experimental plant and equipment for catalyst efficiency testing.

Operations

[Zeotech Hosts Representatives from Cleanaway](#)

Following commencement of the methane emissions control program in February 2023, Zeotech hosted Dr. Taku Ide, Head of Carbon, and Mr Srikar Rapole, Remediation & Sustainability, from Cleanaway at Zeotech's office and laboratory at Brisbane Technology Park. This follows a meeting with Dr. Ide in the previous quarter, hosted by Griffith.

[Brisbane Technology Park](#)

Activities during the quarter included commissioning of the Company's scaled-up in-house pilot and associated testing and safety equipment.

The pilot is now fully operational and has completed more than 100 batch tests and produced approximately 120 kilograms of new zeolite product utilising the Company's proprietary trade-secret synthesis process.

Product samples have supported requirements for Zeotech's large-scale research programs in soil carbon, agricultural nutrient management and the early activities for landfill methane emissions control.

Focus has been on developing new grades and varieties of zeolite targeted products for high volume applications such as soil carbon, agricultural nutrient management, and methane emissions control.

³ ASX Announcement 04/07/22 "ZEO to Fast-Track Carbon Utilisation Technology Development"

During the quarter, the research team put considerable emphasis on developing synthesis processes to produce manufactured zeolite from Coal Fly Ash (CFA) feedstock.

Metakaolin

Metakaolin is a semi-calcined kaolin, and a precursor material to the Company's proprietary kaolin-to-zeolite mineral processing technology.

Metakaolin can be used as a supplementary cementitious replacement material for clinker in cement-based products and can enable CO₂ emissions associated with producing concrete to be reduced significantly.

Opportunities for a potential future metakaolin product will now be investigated in-house by the Company's research and business development teams.

Further, Zeotech has been engaged in early discussions with a group regarding the Company's kaolin tenements in Queensland, Australia. Interest in the tenements is associated with beneficiating the kaolin into products for the Queensland cement market.

Kaolin samples have been provided to the group for testing and analysis and discussions are ongoing.

GreenX Talks Conference & Expo

Alister Morrison (CEO) represented Zeotech at the Cleantech Industries Sunshine Coast Inc. GreenX Talks Conference and Expo in Caloundra, Sunshine Coast. GreenX was attended by business leaders, sustainability experts, innovators and educators to discuss sustainability goals and solutions to climate change, in addition to providing useful sector-focused networking opportunities.

Product Marketing

Manufactured Zeolite

During the quarter, discussion continued with a North American counterparty, which utilises 4A zeolite as the main ingredient in producing animal feed supplements.

Toondoan Kaolin

Following recent developments in China and a reopening of its borders, the Company is developing an internal marketing strategy for its high-quality Direct Shipping Ore (DSO) kaolin product. The strategy will be led by Zeotech's Business Development Manager (BDM), Connie Zhao.

MINING TENEMENTS

Toondoon Kaolin Project

Planning & Approvals

The Company, together with tenement manager Ardent Group, completed a waste rock sample collection from a variety of drill-hole locations and depths. The samples will now undergo analysis to assist with environmental approvals and Estimated Rehabilitation Cost (ERC) calculations.



Waste rock sample collection - Toondoon Kaolin Project (March 2023)

No additional groundwork was undertaken during the quarter.

Abercorn Kaolin Project

The Abercorn Project is a large-scale kaolin prospect, located in central Queensland and has demonstrated it contains a resource of significant scale and consistent grade of kaolinite mineralisation.

No groundwork was undertaken during the quarter.

CORPORATE

Chief Executive Officer

Mr Alister Morrison (MSc, GAICD, ACEcD) commenced his role as CEO, on 13 March 2023. Mr Morrison is an accomplished senior executive with 25-years of strategic international experience across energy, natural resources and early-stage technology commercialisation sectors.

R&D Tax Refund

The Company received a cash refund of \$1,040,353 under the Australian Federal Government's R&D Tax Incentive Program on eligible research and development activities claimed for the financial year ending 30 June 2022.

Legal proceedings against Zeotech

During the quarter, representatives from Zeotech attended a court-ordered mediation with representatives from Goody Investments Pty Ltd (a related party of John Goody being an ex-director of the Company) and Gold Coast Tweed Pet Motels Pty Ltd (jointly "the Plaintiffs") in Perth, Western Australia in relation to both legal proceedings⁴.

Following a confidential mediation, discussions between the parties with respect to the terms of a proposed settlement of both proceedings remain ongoing. The Company will provide an update at the appropriate time.

APPENDIX 5B – QUARTERLY CASH FLOW REPORT

The cash position of the Company on 31 March 2023 was \$2.437m.

Details of mining exploration activities

Details of exploration activities during the quarter are set out above.

Exploration and evaluation expenditure for the quarter comprised Toondoon and Abercorn resource evaluation work \$1,000 and rents, rates, tenement management and miscellaneous expenses \$9,000.

Details of mining production and development activities

No production and development activities were undertaken during the quarter.

Research and Development Costs

R&D project costs were \$246,000.

Details of related party payments

The aggregate amount of payments to related parties and their associates included in the current quarter Cash flows from operating activities were \$135,000, comprising director salaries (inclusive of superannuation), directors fees and consulting fees.

This Announcement has been approved by the Board.

- End -

⁴ Details regarding legal proceedings refer to ASX releases dated 31/08/22 and 10/11/22

For further information please contact:

Peter Zardo - Managing Director

peter@zeotech.com.au

Tel: (+61) 7 3181 5523

Neville Bassett - Company Secretary

info@zeotech.com.au

Tel: (+61) 7 3181 5523

About Zeotech

Zeotech Limited (ASX: ZEO) is a team of dedicated people, working together to build a future focused company, leveraging proprietary technology for the low-cost production of advanced materials 'manufactured zeolites' to deliver solutions aimed at addressing sustainability challenges.

Zeotech Limited - Social Media Policy

Zeotech Limited is committed to communicating with the investment community through all available channels.

Whilst ASX remains the prime channel for market-sensitive news, investors and other interested parties are encouraged to follow Zeotech on Twitter ([@zeotech10](https://twitter.com/zeotech10)) and [LinkedIn](#).

Subscribe to ZEOTECH NEWS ALERTS - visit <https://zeotech.com.au/contact/>

No New Information

Except where explicitly stated, this announcement contains references to prior exploration results and Mineral Resource estimates, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the results and/or estimates in the relevant market announcement continue to apply and have not materially changed.

Forward-looking Statements

This release may contain certain forward-looking statements with respect to matters including but not limited to the financial condition, results of operations and business of Zeotech and certainty of the plans and objectives of Zeotech with respect to these items.

These forward-looking statements are not historical facts but rather are based on Zeotech current expectations, estimates and projections about the industry in which Zeotech operates, and its beliefs and assumptions.

Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates", "guidance" and similar expressions are intended to identify forward looking statements and should be considered an at-risk statement.

Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the process of developing technology and in the endeavour of building a business around such products and services.

These statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties, and other factors, some of which are beyond the control of Zeotech, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements.

Zeotech cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of Zeotech only as of the date of this release. The forward-looking statements made in this announcement relate only to events as of the date on which the statements are made. Zeotech will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this announcement except as required by law or by any appropriate regulatory authority.

Tenement Information as required by Listing Rule 5.3.3

The following is a table setting out the information as required by ASX Listing Rule 5.3.3, namely:

1. Mining tenements held at the end of the Quarter and their location;
2. Mining tenements disposed during the Quarter and location;
3. Beneficial percentage interests held in farm-in or farm-out agreements at end of Quarter; and
4. Beneficial percentage interests held in farm-in, or farm-out agreements acquired or disposed of during the Quarter.

Location	Tenement	Interest at beginning of quarter (%)	Interests relinquished, reduced or lapsed (%)	Interests acquired or increased (%)	Interest at end of quarter (%)
Australia	EPM 19081	100%	Nil	Nil	100%
Australia	EPM 26837	100%	Nil	Nil	100%
Australia	EPM 26903	100%	Nil	Nil	100%
Australia	EPM 27427	100%	Nil	Nil	100%
Australia	ML 80126	100%	Nil	Nil	100%
Australia	EPM 27395	100%	Nil	Nil	100%
Australia	EPMa 27866	100%	Nil	Nil	100%

Appendix 5B

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

Name of entity

ZEOTECH LIMITED

ABN

29 137 984 297

Quarter ended ("current quarter")

31 MARCH 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(10)	(68)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(325)	(817)
	(e) administration and corporate costs	(153)	(628)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	17	23
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	1,040	1,040
1.8	Other (Technology expenses)	(246)	(399)
1.9	Net cash from / (used in) operating activities	323	(849)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	(350)
	(c) property, plant and equipment	(25)	(1,395)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	(13)	(31)

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 (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) 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	(38)	(1,776)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	2,210
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	-	(55)
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	-	2,155

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,152	2,907
4.2	Net cash from / (used in) operating activities (item 1.9 above)	323	(849)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(38)	(1,776)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	2,155

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 (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	2,437	2,437

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	1,361	76
5.2	Call deposits	1,076	2,076
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)	2,437	2,152

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	135
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.

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.		
N/A		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	323
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	323
8.4 Cash and cash equivalents at quarter end (item 4.6)	2,437
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	2,437
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	N/A
<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>	
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: N/A	
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: N/A	

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: N/A

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: 24 April 2023

Authorised by: 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 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.