zeotech

Annual General Meeting Presentation

23 November 2023

ASX: ZEO
www.zeotech.com.au

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The information in this presentation relating to exploration results for the Toondoon Project is extracted from the announcement entitled 'ZEO Acquires High Grade Kaolin Project within Approved ML' released to the ASX on 23 August 2021 which is available on the Company's website www.zeotech.com.au.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement, and that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed.

The Company confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original market announcement

Type A Zeolite

Our vision is to contribute to a **sustainable future** by empowering our people to **collaborate and innovate**, utilising proprietary technology and advanced materials.

Corporate snapshot

$68M
Market capitalisation

1,705M
Shares on issue

$3.18M
Cash at bank
(30 Sept 2023)

$0
Debt

$0.040
Current share price

Board & Management

- Sylvia Tulloch - Non-Executive Chair
- Peter Zardo - Managing Director
- Rob Downey - Non-Executive Director
- Scott Burkhart - Chief Executive Officer
- Dr. John Vogrin - Head of Projects, R&D

Technical partners

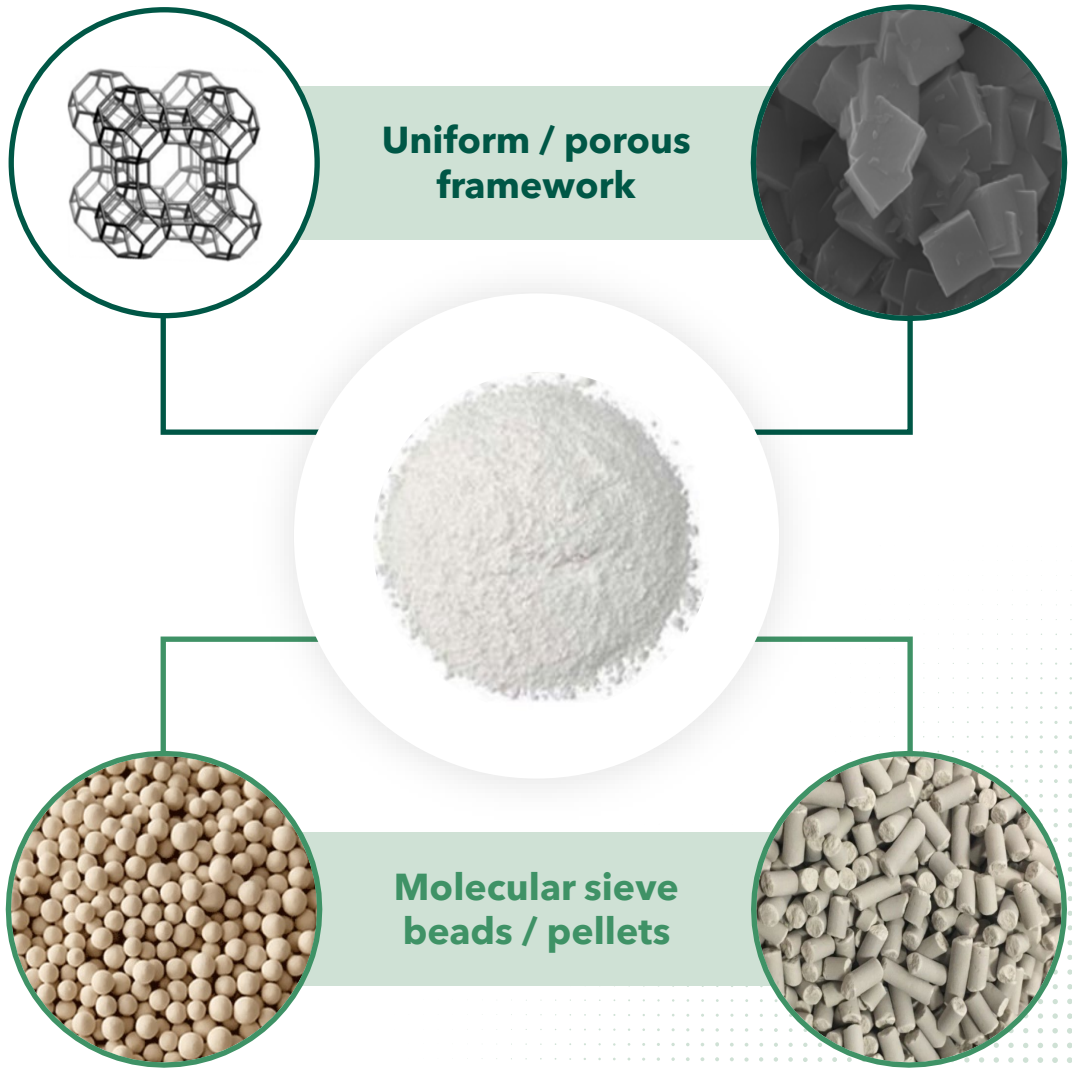
- Griffith University
- The University of Queensland
- Central Queensland University

Share price and volume

Manufactured Zeolites

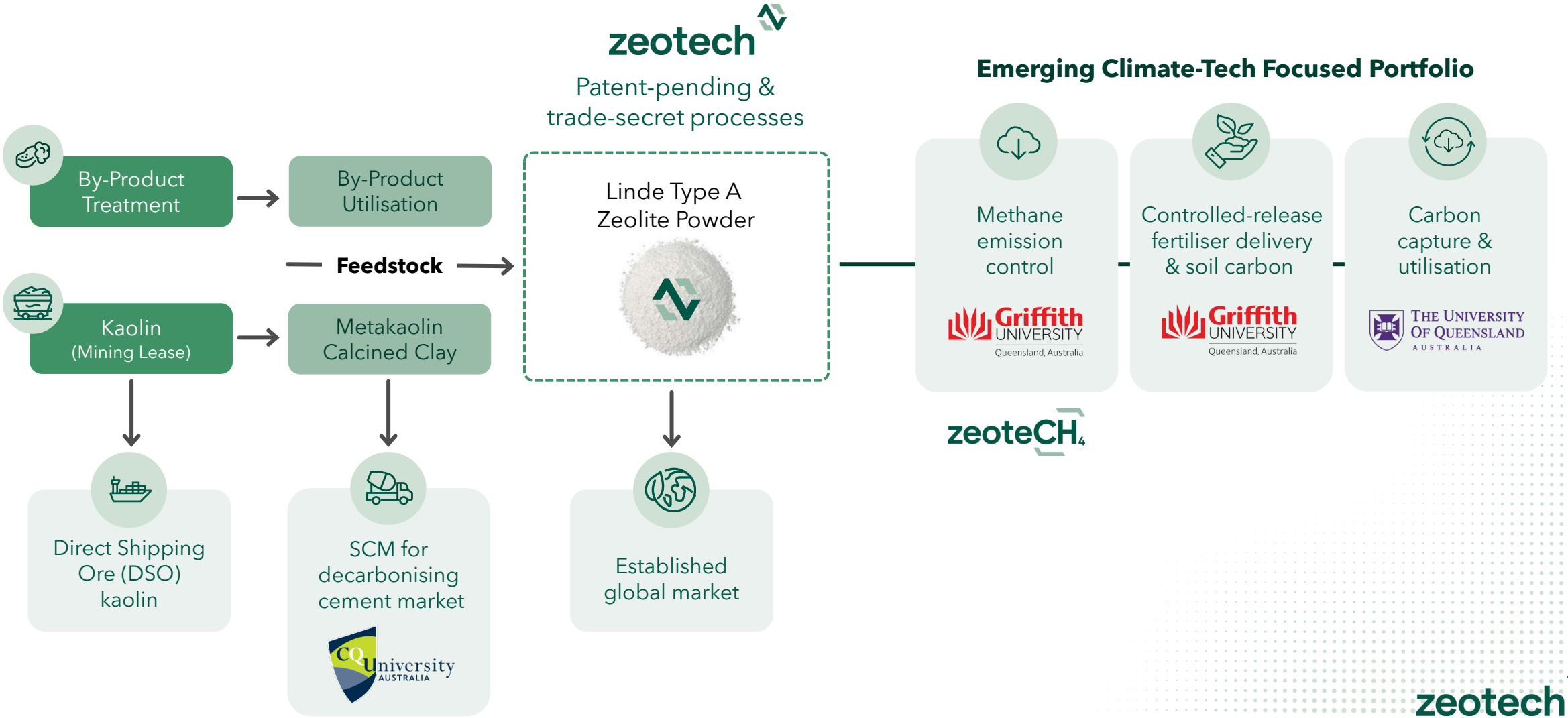
Zeolites are superior adsorbents and catalysts with broad applicability

- Manufactured zeolites are aluminosilicate minerals with a sponge-like structure (framework)
- Zeolites are made up of tiny pores that make them useful as adsorbents, catalysts and ultrafine filters
- Type A zeolites are commonly known as molecular sieves
- Can be designed to selectively adsorb molecules or ions dependent on their unique construction and can be regenerated repeatedly for re-use
- Manufactured zeolites act like a magnet that can hold cations, including heavy metals, ammonia, low level radioactive elements, toxins, petrochemicals, many different types of gases and a multitude of various solutions, offering diverse applications

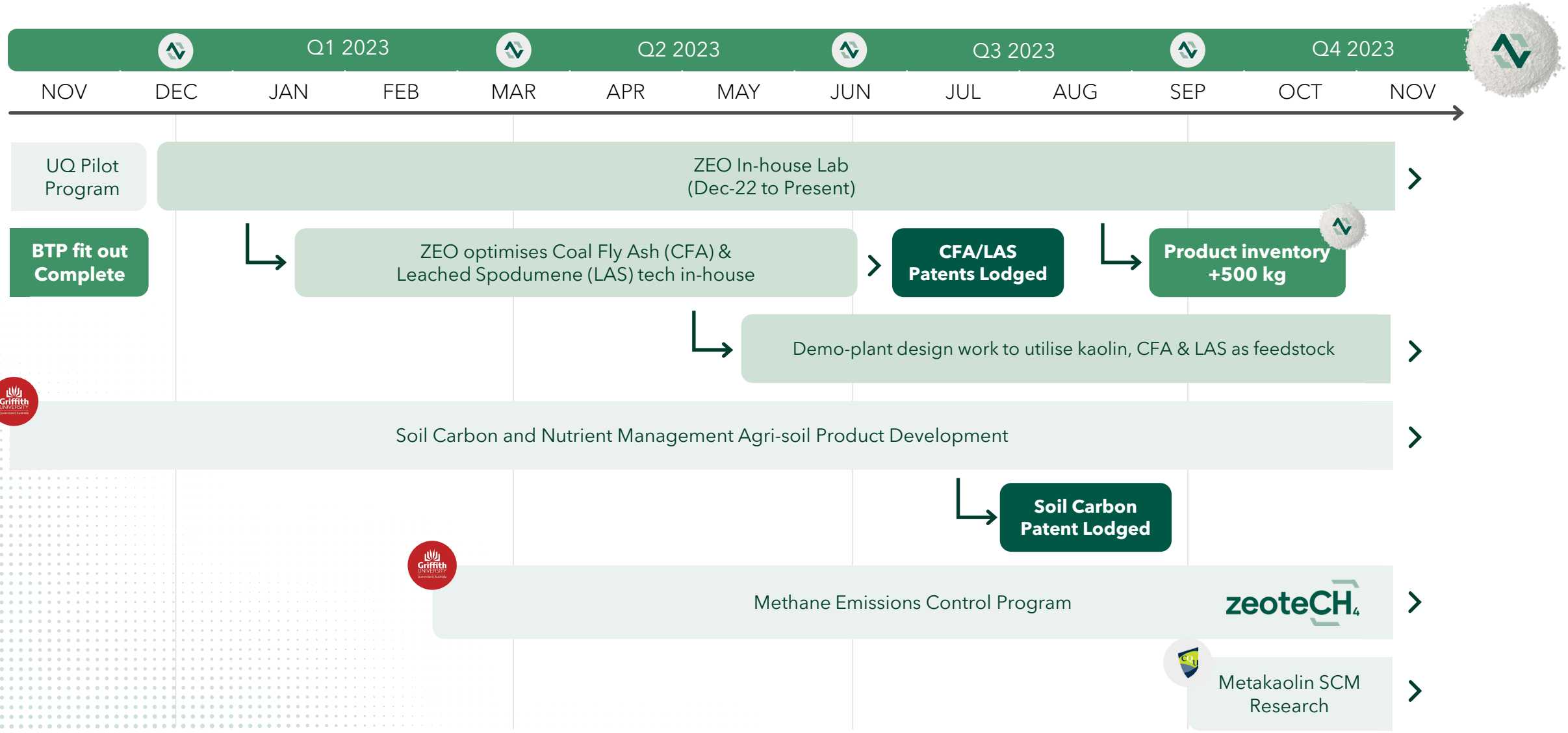


Integrated mineral processing technology company

Proprietary IP, leading research and established industry relationships underpin commercialisation opportunities



Technology advancement accelerates in-house



Project Streams

zeotech

Landfill methane control

Developing fugitive methane control solution, capable of contributing to climate change mitigation

Achievements 2023

- Commenced multi-stage targeted research program to develop & validate the application of **zeote**CH_4 products for controlling/eliminating landfill methane emissions.
- Landfill soil samples collected from Cleanaway's New Chum landfill facility (within 25kms of Griffith University project team).
- Program extended to expanded test work on biological methane oxidation.
- Stage B interim trial results deliver promising methane oxidation/elimination of up to 70-80%, achieved by a combination of chemical and biological oxidation.

Outlook 2024

- Decision regarding progressing the program to stages C & D, for in-field trials at Cleanaway landfill site.
- Explore patentability of novel and inventive aspects of the technology.
- Commence methane abatement carbon credit methodology development.

Cleanaway landfill facility

Developing Agri-soil Products

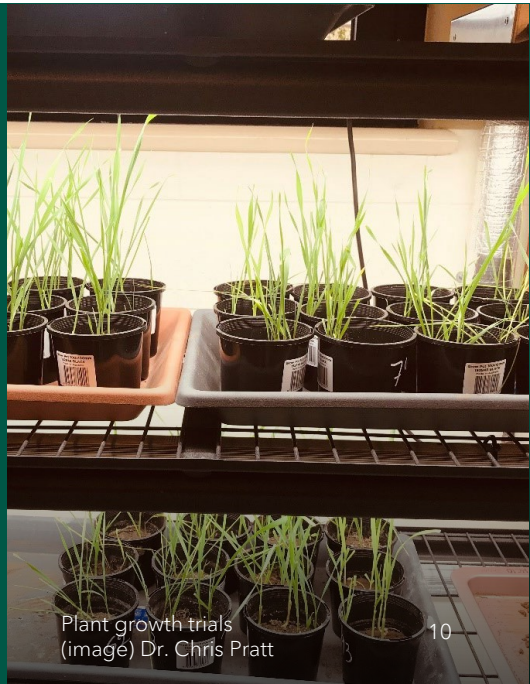
Improve fertiliser economics and enhance soil carbon sequestration

Achievements 2023

- Comprehensive datasets show that the application of Zeotech products to the soil can protect approx. 30% of added carbon.
- Zeotech products demonstrate potential to bolster soil organic carbon, which could result in additional carbon sequestration of approximately 110 tonnes per hectare over a five-year period.
- Zeotech products exhibit superior phosphate, nitrate and ammonia retention capacities when compared to natural zeolite and biochar products.
- Patent application associated with zeolites and soil carbon sequestration in soils lodged in August 2023.

Outlook 2024

- Complete final dual-stream agri-soil program results/data-set(s) assessment.
- Prioritise fertiliser industry attraction strategy aimed at securing an in-field trials partner to continue agri-soil product development at larger-scale.



Plant growth trials
(image) Dr. Chris Pratt

By-product circularity

Proprietary IP developed to convert a range of process by-products into advanced materials

Achievements 2023

- Patent application lodged for '**methods of preparing a zeolite**' associated with lithium process by-product (leached spodumene) and coal fly ash by-product.
- Patent application for '**treating a material**' associated with lithium process by-product enters the national phase.
- Critical minerals Trailblazer project reset under development.
- Design work for a commercial demonstration plant incorporates process by-product utilisation.

Outlook 2024

- Engage with Coal Fly Ash provider(s) to develop commercial synergies.
- Decision on progressing with new Trailblazer project.
- Advance demonstration plant planning, inclusive of by-product feedstock utilisation.

Coal fly ash by-product (image) Zeotech

Metakaolin Calcined Clay

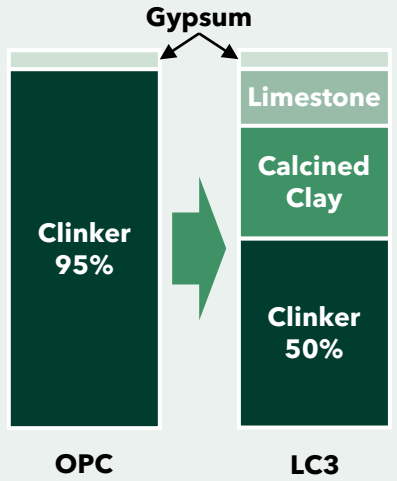
Supplementary cementitious material to help decarbonise the cement industry

Achievements 2023

- Study initiated with Central Queensland University (CQU) to investigate the suitability of Zeotech's natural kaolin clays as Supplementary Cementitious Materials (SCM).
- Provision of product samples to major Queensland cement producers for analysis and testing.
- Investigating calcining technology options that fosters lower carbon emissions and reduces the carbon footprint of a prospective metakaolin product.

Outlook 2024

- Results from the SCM study with CQU, which will investigate a range of samples across the Company's Toondoon and Abercorn tenements.
- Advancing discussions with potential off-takers for the Company's kaolin or metakaolin product for SCM.
- Investigating opportunities to further industry collaboration through APozA and other industry bodies.



LC3 saves up to 40% of CO_2 compared to Ordinary Portland Cement (OPC).

Source: *Limestone Calcined Clay Cement (LC3)*

Carbon Capture & Utilisation

Advancing zeolite-based technology for capturing & utilising greenhouse gas emissions

Achievements 2023

- Successful UQ School of Chemical Engineering Advanced Queensland Industry Research Fellowship 'Tailor-made nanocomposite membranes for greenhouse gas capture' secures $240,000 QLD government funding over 3-years.
- Global Hydrogen Economy ARC ($GLOBH_2E$) project recruits dedicated Postdoctoral Research Fellow to progress development of metal-based zeolite catalysts for hydrogenation of CO_2 to value added chemicals.
- Successful Industry partner in The ARC Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide ($GETCO_2$) aims to efficiently convert carbon dioxide into valuable products.

Outlook 2024

- Nanocomposite membrane modelling to progress and include Zeotech zeolite products.
- $GETCO_2$ funding to be applied to enhance membrane development project.
- $GLOBH_2E$ hydrogenation work to incorporate Zeotech zeolite products in developing metal-doped catalysts.

Carbon Emissions (image) Getty images

Toondoon Kaolin Project

Optimal zeolite feedstock with near-term cashflow potential

Achievements 2023

- Traffic impact report completed for notifiable road use, which will support further engagement with NBRC and DTMR.
- The waste rock assessment report associated with the Estimated Rehabilitation Cost ("ERC") calculations has been completed.
- Location identified for bulk sampling and potential mining pits for future DSO campaign.
- Engaged Conrad Partners, a Hong Kong based commodity marketing agency, to promote Toondoon high-quality DSO kaolin product, with a focus on large Asian markets

Outlook 2024

- Bulk sample campaign to be completed in early 2024 to meet kaolin demand for zeolite production, DSO samples and metakaolin SCM industry interest.
- Accelerate marketing of high-grade DSO kaolin product through Conrad Partners channel.
- Complete mine plan, contractor engagement and final cultural heritage approvals.

Toondoon kaolin

Investment Proposition

ESG positive company
An emerging mineral processing technology company, with a portfolio of maturing projects targeting circularity and sustainability, all utilising innovative and environmentally friendly advanced materials.

Sustainable mineral & by-product processing
Maximising green & sustainable processes for the production of manufactured zeolites = zero tailings stream, a closed-loop process.

Proprietary technology
IP portfolio of technology safeguarded through patent protection and trade-secret protocols. Identifying & advancing IP associated with climate-tech applications.

Agri-product development
Developing enhanced efficiency fertiliser delivery co-product to improve nutrient effectiveness, reduce nutrient pollution and protect/enhance soil carbon.

Climate change technology centric
Portfolio of projects targeting the mitigation of greenhouse gas emissions, including carbon sequestration, methane oxidation and carbon capture & utilisation.

Integration and near-term cashflow
Approved ML provides high-grade raw kaolin underpinning low-cost zeolite production, accelerated DSO revenue opportunity and SCM potential to help decarbonise the cement industry.

THANK YOU

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