

December 2022 Quarterly Activities Report

Allkem Limited (ASX|TSX: “AKE”, the “Company”) provides an update on its global lithium portfolio, business activities and financial position¹ as at 31 December 2022.

HIGHLIGHTS

OPERATIONS

- The Olaroz Lithium Facility² achieved record production of 4,253 tonnes of lithium carbonate which was up 17% on the previous corresponding period (“PCP”). Half year production was also a record at 7,542 tonnes some 13% higher than the prior record in 2019
- Lithium carbonate sales were 3,131 tonnes, generating record quarterly revenue of ~US\$151 million with a gross cash margin of 90%. Excluding shipments to Naraha, third party sales for the quarter averaged US\$53,013/tonne³ FOB, up 23% on the September quarter
- The weighted average price for third party sales of lithium carbonate products in Q3 FY23 is expected to be in line with Q2 FY23
- In the December quarter, Mt Cattlin produced 16,404 dmt of spodumene and shipped 15,702 dmt, generating revenue of ~US\$83 million⁴ with a gross cash margin of 72% based on an average sales price of US\$5,284/dmt CIF for SC 5.3%, which corresponds to approximately US\$6,000/dmt on a SC6 CIF basis, up 5% on the September quarter. Cost of production was US\$1,016/dmt FOB which was impacted by lower production volume
- An additional US\$32 million of revenue was generated from sales of 53,715 dmt of low grade spodumene concentrate from pre-existing stockpiles and processing of fine-grained ore
- EV sales growth is expected to remain robust in 2023 given strong order books and potential pent-up demand. Supportive government targets and policies announced globally (including subsidies or tax incentives) continue to ensure strong fundamentals for future growth

DEVELOPMENT PROJECTS

- Naraha successfully achieved first production of lithium hydroxide and product quality exceeded expectations. Progressive improvement to battery grade product is expected to occur over a 12-month period. Approximately 200 tonnes of lithium hydroxide produced during the quarter has been sold to third party customers
- Olaroz Stage 2 reached 96% completion, pre-commissioning and commissioning activities are underway, with full commissioning activities expected to commence later in Q1 CY23. First production is planned for Q2 CY23
- The first two strings of ponds at Sal de Vida (“SDV”) Stage 1 reached 82% completion and the EPC contract for the process plant has been awarded. Data received during the tender and award process, together with learnings from COVID and a Board review is being incorporated into the project schedule with first production currently estimated in mid-2024
- Material progress has been achieved in the permitting of James Bay with the recent approval by the Joint Assessment Committee (Federal government) of the ESIA. Comex approval (Quebec government and CREE Nation) of the ESIA, agreement of the IBA and procedural construction permitting remain in progress. Once permits are secured, construction will commence and the Company will update guidance for first production

¹ All figures are unaudited and contain non-IFRS metrics and exclude Borax as a discontinuing operation. Gross operating cash margin is calculated as revenue less cash cost of goods sold, freight and insurance (and excludes corporate and non-operating costs).

² All figures 100% Olaroz Project basis.

³ “FOB” (Free On Board) excludes insurance and freight charges included in “CIF” (Cost, Insurance, Freight) pricing. Therefore, the Company’s FOB reported prices are net of freight (shipping), insurance and sales commission.

⁴ Revenue excludes tantalum sales from Mt Cattlin.

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FINANCIALS AND CORPORATE

- Group revenue⁵ for the quarter was US\$265 million and group gross operating cash margin¹ was approximately US\$218 million (82%)
- At 31 December group net cash⁶ was US\$552 million up US\$105 million from 30 September 2022
- Progress continues on a proposed US\$200 million project finance facility for the Sal de Vida Project by the International Finance Corporation
- The transaction to acquire 100% of the strategic lithium tenement of María Victoria for Borax Argentina S.A (“**Borax**”) closed in December 2022
- The Allkem AGM was held on 15 November 2022 with all resolutions successfully passed and the subsequent appointment of Peter Coleman as Chair
- The government of Argentina has communicated its intention to remove the export benefits that currently apply to lithium chemical production. Whilst the timing of implementing such change and its full effect are not yet known, it is anticipated it would result in the loss of incentives in the range of 1.5% to 4% of revenue

SUSTAINABILITY

The Company’s sixth Sustainability Report was released in November and represents the first sustainability report since the merger of Orocobre Limited and Galaxy Resources to form Allkem Limited. This report demonstrates Allkem’s long-term commitment to environmental, social and governance performance and transparent reporting across our operations and growth projects.

Allkem has again been included among global sustainability leaders in the Dow Jones Sustainability Indices (DJSI) 2022 Annual Review announced in December. Allkem has been included in both the Australia and Asia Pacific Index based on strong performance in the S&P Global Corporate Sustainability Assessment. The Company also continues to participate in the annual CDP Climate Change and Water Security surveys with results released this month.

Safety performance

Allkem recorded a 12-month moving average Total Recordable Injury Frequency Rate of 1.9 (per million hours) at the end of the December quarter and a 12-month moving average Lost Time Injury Frequency Rate of 0.3 (per million hours).

Whilst no Lost Time Injuries were experienced, six Recordable Injuries occurred during the quarter: four at Mt Cattlin, one at Tincalayu (this Borax operation is now no longer an Allkem entity) and one at Olaroz. Investigations have been carried out and effective corrective actions have been implemented.

As part of Allkem’s strategic improvement program the Introduction of a Field Critical Control Check (“**FCCC**”) that will involve active worker participation in recognizing and controlling hazards is underway at Mt Cattlin. The impact of the Behavioural Based Safety program is planned to be rolled out at Olaroz and Sal de Vida.

Community and Shared Value Program

Allkem is committed to regularly engaging with community stakeholders across all operations and providing positive and lasting benefits to the communities it works with.

⁵ Revenues exclude Borax discontinued operations

⁶ Net cash includes Naraha cash balances and project loans at 75% interest, and Olaroz cash deposits to secure project borrowing. Related party loans are excluded.

The Shared Value team in Argentina provides long-term value to the local communities through initiatives based on five pillars; empowerment; transparency, education; health; local production/natural resources. Community engagement and consultation continues at each project including our participatory environmental baseline monitoring programs. During the quarter, engagement sessions were held with the Cienaga Redonda community with representatives of the Catamarca Ministry of Mining. Training sessions completed for this community during the reporting period include electronics and internet connectivity solutions. The Health and Wellbeing program continued with visits from medical professionals to support programs in the towns of Antofagasta de la Sierra.

An updated easement and participation agreement has been reached with the Olaroz Chico community incorporating production from Olaroz Stage 2, and final approvals for Sal de Vida Stage 1 were received during the quarter.

The James Bay project team continued to undertake regular engagement with community stakeholders as part of the Environmental and Social Impact Assessment (“ESIA”) and Impact and Benefit Agreement (“IBA”) process, with the ultimate objective to ensure long-term benefits to the communities.

OPERATIONS

OLAROS LITHIUM FACILITY

Lithium Carbonate

Jujuy Province, Argentina

Production

Production for the December quarter was a record 4,253 tonnes, up 17% on the previous corresponding period. Approximately 66% of production was technical grade with feedstock supply to Naraha prioritised during the quarter.

Product quality remains high reflecting excellent plant reliability, low downtime and improved energy efficiency from better operating practices. Strong operating performance continues to help mitigate inflationary impacts on costs.

High brine inventory will underpin the start-up of the Stage 2 expansion later this half.

Sales and financial performance

Quarterly product sales were down 16% QoQ to 3,131 tonnes of lithium carbonate of which 42% was battery grade. December monthly production was a record 1,555 tonnes and much of this remained in transit to customers at the end of the month. Sales were also impacted by a build-up of inventory to supply the Naraha hydroxide plant.

Total sales revenue was a record ~US\$151 million. The average price received from third party sales was US\$53,013/tonne on an FOB² basis reflecting continuing strong market conditions.

Cost and margins

Cash cost of goods sold for the quarter was US\$4,682/tonne up 8% from the PCP due to inflationary impacts which were partially offset by materially improved operational performance and a lower proportion of battery grade sales. Gross cash margin for the quarter was 90% or US\$42,024/tonne.

Table 1: Olaroz December quarter production and sales metrics

Metric	Units	Dec Q FY23	Sep Q FY23	QoQ %	PCP Dec FY22	PCP %
Production	tonnes	4,253	3,289	29%	3,644	17%
Sales	tonnes	3,131	3,721	-16%	3,293	-5%
Average price received	US\$/tonne	46,706	40,317	16%	12,491	274%
Third party price received	US\$/tonne	53,013	43,237	23%	12,491	324%
Cash cost of goods sold ¹	US\$/tonne	4,682	4,563	3%	4,336	8%
Revenue	US\$M	151	150	1%	41	267%
Gross cash margin	US\$/tonne	42,024	35,754	18%	8,155	415%
Gross cash margin	%	90%	89%	1%	65%	38%

1. Excludes royalties, export tax and corporate costs

Lithium carbonate pricing

The weighted average price for third party sales of lithium carbonate products in Q3 FY23 is expected to be in line with Q2 FY23.

Resource review

A review of the Olaroz resource is underway which will include the newly acquired Maria Victoria tenements and additional drilling. Further details will be provided once the review is complete.

Stage 2 expansion

Overall construction of the Olaroz Stage 2 lithium facility reached 96% with up to 850 personnel on site during the quarter. Key piping and specialist electrical equipment have been delivered and are being installed onsite after experiencing an initial delay due to manufacturing and supply chain constraints.

By the end of the December quarter all evaporation ponds were complete and commissioned. Lime plant 3 and lime plant 4 are complete, have been commissioned and signed over to operations. Soda ash facilities are in the final stages of commissioning. The carbonation plant has reached 86% completion.

Pre-commissioning activities are underway within the carbonation plant, with full process plant commissioning commencing in the March quarter and progressing through to the June quarter. New operating staff have been recruited and are being trained in Olaroz Stage 1 in anticipation of first production and operations ramp up during the June quarter.

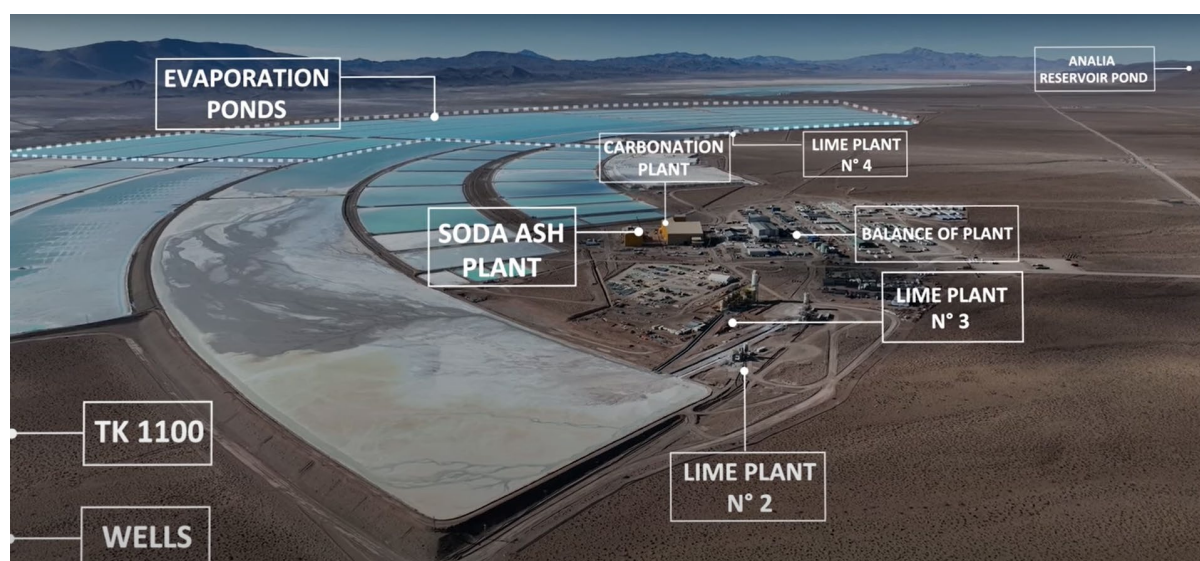


Figure 1: Olaroz site layout with expansion works highlighted

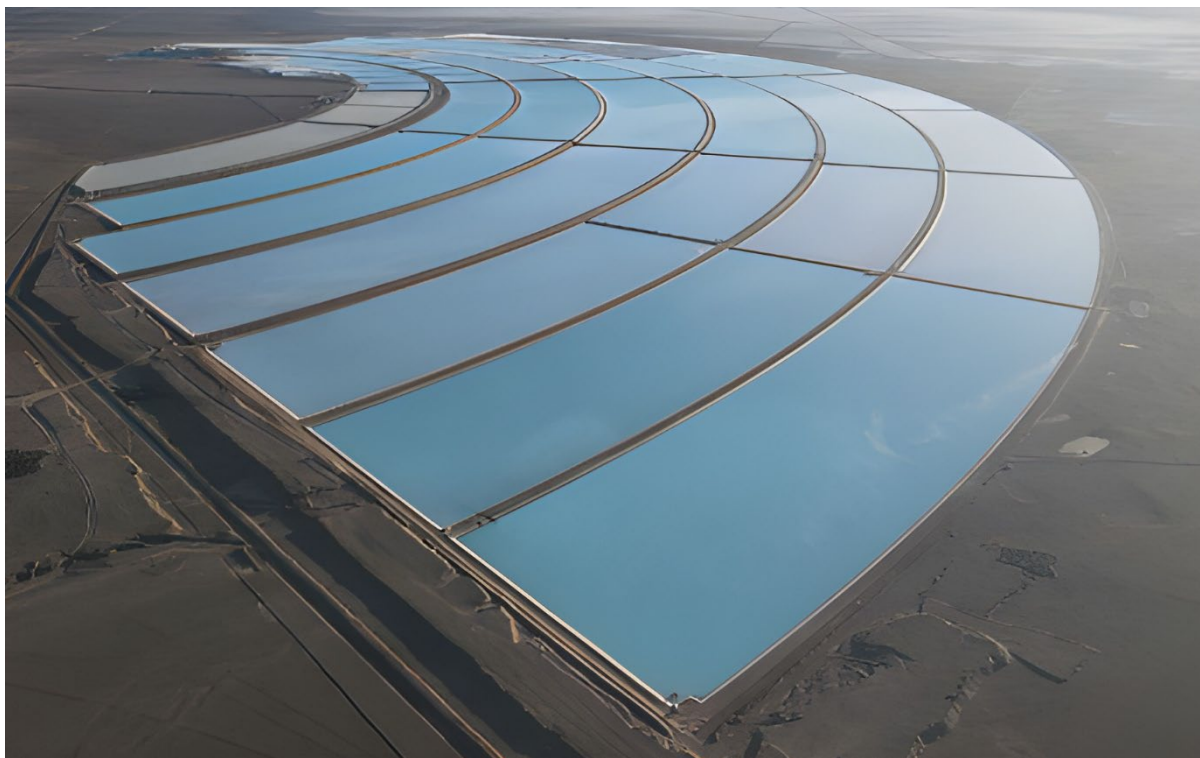


Figure 2: Olaroz pond system (31 ponds)

MT CATTLIN

Spodumene concentrate

Ravensthorpe, Western Australia

Production

During the quarter 16,404 dmt of spodumene concentrate was produced at 5.3% Li₂O grade. Mining volumes increased to 2.6M BCM over the quarter which is up from 2.1M BCM in the September quarter.

Production was limited by ore availability and grade related to patchy mineralisation intersected at the top margin of the main ore lens. Mining is now progressing beyond this zone and the ore grade is forecast to increase in the March and June quarters which will be a key driver of higher production for the second half of the year.

Grade control drilling has been conducted in areas of near-term production which has confirmed the expected grade and location of ore.

Recovery has improved to 37% but this still reflects the fine-grained nature of some of the ore processed during the quarter.

The majority of forecast annual production of 140-150kt will be achieved in the March and June quarters and FY23 cash cost of production continues to be forecast at ~US\$900/t dmt FOB.

Sales and financial performance

15,702 dmt of spodumene concentrate was shipped during the quarter at an average grade of 5.3% Li₂O, generating revenue of US\$83 million at an average realised sales price of US\$5,284/dmt CIF, a 5% QoQ increase, which corresponds to approximately US\$6,000/dmt FOB on an SC6 equivalent.

An additional US\$32 million in revenue was generated from shipments of 53,715 dmt of low grade spodumene concentrate.

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Customer demand in the spodumene market remains robust, driven by strong lithium hydroxide requirements, and pricing in the March quarter is expected to be 5% above the December quarter.

Cost and margins

The FOB cash cost of production for spodumene concentrate for the quarter was US\$1,016/dmt which was higher than the prior period with lower production volume. The gross cash margin for the quarter was 72% for approximately US\$60.1 million. In addition, low grade concentrate sales contributed approximately US\$22.2 million of gross cash margin.

Table 2: Mt Cattlin FY23 quarterly operational and sales performance

Metric	Units	Dec 22	Sep 22
Production			
Recovery	%	37	25
Concentrate produced	dmt	16,404	17,606
Grade of concentrate produced	% Li ₂ O	5.3	5.3
Sales			
Concentrate shipped	dmt	15,702	21,215
Grade of concentrate shipped	% Li ₂ O	5.3	5.4
Realised price	US\$/dmt CIF	5,284	5,028
Revenue ¹	US\$ million	83.0	106.7
Costs of production			
Cash cost of production	US\$/t FOB	1,016	796

1. Excluding marketing and royalties.

Resource extension drilling

Allkem commenced a three-phase resource extension program in mid-April 2022 with the aim of achieving a multiyear mine life extension. Phase 1 and 2 of drilling was completed during the quarter and results to date are generally in-line with expectations and indicate resource and reserve extension potential.

An open pit cut-back feasibility level study including a revised mineral resource and reserve estimate, scheduling, mine planning and detailed pit design is expected by the end of the Q1 CY23.

The third phase of drilling commenced in January and is focussed on further definition in the SW to test additional targets and prospects.

DEVELOPMENT PROJECTS

NARAHA

Lithium Hydroxide

Naraha, Japan

First production of lithium hydroxide was successfully achieved in late October utilising technical grade lithium carbonate from Olaroz. The technology has been proven and utilisation rates of 85% were achieved. Product quality exceeded expectations enabling approximately 200 tonnes of technical grade lithium hydroxide to be sold to third party customers.

The next production run commenced earlier this month with a key milestone being steady state operations.

With first production achieved, the focus will be on progressively increasing the product quality and consistency to reach nameplate capacity of 10ktpa and to achieve qualification of the product by customers.

SAL DE VIDA

Lithium Carbonate

Catamarca Province, Argentina

Sal de Vida is designed to produce 45,000 tpa of predominantly battery grade lithium carbonate through an evaporation and processing operation at the Salar del Hombre Muerto site. Development is being undertaken in two stages with Stage 1 currently in construction targeting 15,000 tpa production capacity.

Project execution

During the month of December, the Catamarca government issued the EIA approval to construct the 3rd string of ponds fully enabling the 15ktpa production capacity. Additionally, a resolution was issued permitting the construction of the solar farm that will provide the Sal de Vida project with 30% solar renewable energy generated on site. Water easements were also issued authorizing back-up sources of industrial water for the project. All permits for the Sal de Vida project are now in place.

Construction of the first two strings of ponds reached 82% completion with the first six ponds completed and filled with brine (Figure 2). The main brine pipeline is complete and 7 out of 9 production wells have been commissioned. Brine evaporation will continue during plant construction to provide evaporated feed for future production.

Camp expansion activities and procurement for long lead items continue. Detailed engineering on the process plant has advanced and mobilisation of site workshops and a concrete plant is ongoing.

The EPC contract for the process plant was awarded during the quarter. Data received during the tender and award process, together with learnings from COVID and a Board review is being incorporated into the project schedule with first production estimated in mid-2024.



Figure 3: Sal de Vida Stage 1: Camp expansion (forefront), earthworks (centre), first 2 strings (background)



Figure 4: Sal de Vida: Earthworks platform for process plant

JAMES BAY

Spodumene Concentrate

Québec, Canada

James Bay is designed to produce ~330ktpa of spodumene concentrate utilising predominantly hydro power over a project life of 19 years.

Project execution

Detailed engineering continues alongside procurement activities including ordering of key long lead items and equipment packages (temporary camps, primary sub-station, process equipment, etc). Progress of engineering was 54% by the end of the quarter with engineering of the process plant package at 75%.

Hydro-Quebec early works are complete and construction crew mobilised to install the powerline to site.

Allkem's key operational personnel have also been recruited.

Material progress has been achieved in the permitting of James Bay with the recent approval by the Joint Assessment Committee (Federal government) of the ESIA. Comex approval (Quebec government and CREE Nation) of the ESIA, agreement of the IBA and procedural construction permitting remain in progress. Once permits are secured, construction will commence and the Company will update guidance for first production.

Positive engagement with community stakeholders continues including additional community consultations, meetings with key Cree stakeholders and discussions with the Eastmain community economic development branch to agree the local economic benefits.

Work is ongoing with engineering contractors to evaluate opportunities to accelerate the construction schedule, including use of prefabricated modules.

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Resource Drilling

A 19,255m resource extension drilling program commenced in late November to test open mineralisation around the current ore body. Drilling progress was 24% at the end of the quarter. A Mineral Resource update is targeted by the end of H1 CY23

OTHER GROWTH PROJECTS

Options continue to be assessed for a material increase in production capacity at Olaroz and the optimal development of both the Olaroz and Cauchari basins based on conventional evaporation technology. Pilot studies were completed in CY22 with other technologies that could enhance productivity. The preferred technologies from the pilot studies will now be selected for further on-site testing.

Studies continue into a dedicated purification facility that is being considered for construction near Jujuy, Argentina and into enhanced brine recovery technologies that aim to increase recoveries from 75% to 95% at both Olaroz Stages 1 and 2.

LITHIUM MARKET

Demand

Demand for lithium chemicals and spodumene concentrate continued to be strong during the December quarter with published lithium prices again reaching new record highs.

Electric Vehicle (“EV”) sales continued to drive demand with December quarter Chinese EV sales reaching record highs at 2.3 million units, a 82% YoY increase. Sales from the key EU countries also posted strong growth at 0.7 million units, up 38% YoY during the quarter. Global sales are forecast at ~3.5 million units for the December quarter, and annual sales are expected to reach ~10.5 million units representing 57% growth YoY. EV sales growth is expected to remain robust in 2023 given strong order books and potential pent-up demand: consensus forecasts for global EV sales indicate sales could reach over 14 million units in 2023. Supportive government targets and policies announced globally (including subsidies or tax incentives), continue to ensure strong fundamentals for future growth.

Spot prices for lithium carbonate and hydroxide again set record prices during the quarter as demand outpaced supply. Spot prices in China softened marginally during the second half of December with price reporting agencies (“PRA”) reporting declines of less than 10% from their peaks in December. This is partially explained by seasonal destocking, scheduled maintenance shutdowns and, reduced working days ahead of Lunar New Year holidays which commences earlier in 2023 than previous years. However, demand is expected to rebound and resume its historical annual growth trajectory following this period as cathode and cell manufacturers seek to replenish stocks.

Outside China, spot prices for lithium chemicals rallied in line with Chinese prices during the quarter but remained more resilient towards the end of December as lower PRA pricing declines were observed relative to China. Ex-China demand remains robust.

Spodumene concentrate spot prices once again registered new record highs, posting gains of 9% PCP and 167% YoY in December reflecting continued tightness in the supply chain for upstream lithium units over this time.

Supply

Estimated lithium chemical production in China was up by ~14% quarter on quarter (“QoQ”), largely due to increased production from hard rock sourced lithium supply.

Spodumene concentrate volumes shipped to China from Australia for October and November 2022 were 23% higher compared to the PCP due to new supply from brownfield expansions and restarted

idle capacity. Despite this increase, the spodumene concentrate market remains tight with limited material available to the open market due to the majority of the product already being locked under existing offtake arrangements or allocated for internal consumption by integrated producers.

CORPORATE AND FINANCIALS

Chairman Appointment

Mr Peter Coleman assumed the role of Independent Non-executive Chairman following the Annual General Meeting held on 15 November.

Finance matters

The government of Argentina has communicated its intention to remove the export benefits that currently apply to lithium chemical production. Whilst the timing of implementing such change and its full effect is not yet known, it is anticipated it would result in the loss of incentives in the range of 1.5% to 4% of revenue.

Progress continues on a proposed US\$200 million project finance facility for the Sal de Vida Project by the International Finance Corporation.

Financial position

At 31 December group net cash⁵ was US\$552 million up US\$105 million from 30 September 2022. Net cash generated from operations and corporate was US\$243.9 million (including US\$52.1 million of cash related to September shipments collected in early October), capital expenditure and working capital movements of US\$110.9 million, funding of Naraha project was US\$13.3 million and Maria Victoria acquisition and Borax divestment US\$14.7 million.

US\$6.8 million and US\$76.7 million have been set aside as pre-completion guarantees for the Naraha debt facility and Olaroz expansion debt facility respectively.

ENDS

This release was authorised by Mr Martin Perez de Solay, CEO and Managing Director of Allkem Limited.

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Forward Looking Statements

Forward-looking statements are based on current expectations and beliefs and, by their nature, are subject to a number of known and unknown risks and uncertainties that could cause the actual results, performances and achievements to differ materially from any expected future results, performances or achievements expressed or implied by such forward-looking statements, including but not limited to, the risk of further changes in government regulations, policies or legislation; the risks associated with the continued implementation of the merger between the Company and Galaxy Resources Ltd, risks that further funding may be required, but unavailable, for the ongoing development of the Company's projects; fluctuations or decreases in commodity prices; uncertainty in the estimation, economic viability, recoverability and processing of mineral resources; risks associated with development of the Company Projects; unexpected capital or operating cost increases; uncertainty of meeting anticipated program milestones at the Company's Projects; risks associated with investment in publicly listed companies, such as the Company; and risks associated with general economic conditions.

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Competent Person Statement

Mt Cattlin

Any information in this announcement that relates to Mt Cattlin's Mineral Resources and Reserves is extracted from the report entitled "Mt Cattlin Resource, Reserve and Operations Update" released on 25 August 2022 which is available to view on www.allkem.co and www.asx.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 announcements and that all material assumptions and technical parameters underpinning the Mineral Resources estimates in the relevant 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.