

Lycopodium

# Shareholder Report

30 JUNE 2023



FY23



Kathleen Valley Lithium Project, Western Australia



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Motheo Copper Project, Botswana

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Front cover image - Séguéla Gold Project, Côte d'Ivoire

# Chairman's Report



**My name is Mick Caratti. I am one of the founders and Chairman of Lycopodium.**

**This publication is designed to introduce you to the Company, telling you who we are, what we do and how we see our future. This report does not replace the statutory financial statements but is designed to provide an informative insight into Lycopodium, in an easier to read layout.**

**In my section of the report, I usually try to give an insight into the industries and markets that our subsidiaries service.**

I noted last year the strong demand for our services and that metal prices had eased at the end of the period. Metal pricing easing extended into this year but has not resulted in a reduction in demand for our services, which bodes well for when inflation and interest rates begin to subside, something we started seeing towards the end of the period. Unlike in previous cycles, the impact of economic slowdown on metal prices seems to have been quite limited, due in the main to the positive influence created by the increased demand for electric cars and the energy transition. Though the price of copper has fallen, the appetite for new copper projects has not. This is not something we would have expected based on previous cycles.

We have always been skeptical of long-range forecasts in the minerals and metal resources sector due to the inherent cyclic nature of the metals markets, however the CO<sub>2</sub> abatement and renewable energy targets being set by the industrialised countries for 2050 are providing an underlying demand for battery minerals and metals that is greater than anything we have previously seen in any commodity. We do not claim credentials in economic or geopolitical forecasting, but based on what we are seeing in the industry, we consider that there is reason to believe that high demand will remain and that this cycle will be materially longer than previous cycles.

I noted last year that vehicle manufacturers were moving to secure their battery raw materials with the mining companies. This has continued and, combined with the established profitability of the companies currently

operating in this field, has facilitated projects that may have been difficult to finance in more normal times.

We have noted since 2020 that there has been a shift in thinking in the manufacturing sector and that the decline in manufacturing in Australia, that started in the 1990s, had reversed as a result of supply chain problems during COVID-19. That change has continued to gain pace and while it is impossible to predict whether it will continue, the range of areas where we are seeing activity implies that it is gaining momentum.

Peter De Leo has set out in the Managing Director's report, which follows, the outlook for the industries that Lycopodium services, a summary of new initiatives undertaken during the period to allow Lycopodium to undertake more work in the future, and a description of the work being done in renewable energy generation and storage. I recommend it to you as it will provide an understanding of the breadth of skill that Lycopodium has developed and is in some ways a better indicator of the Company's value than by simply considering the financial performance, though it has been impressive in this record year.

I believe that, as a result of long-term strategies and good management, the Company:

- has an excellent reputation for delivering projects in the areas we service
- is not committed to sunset industries
- is large enough to be able to undertake a wide range of projects, in size and technologies, in industries that have a bright future

# Chairman's Report

- is not so large that we need to win every job that we tender
- remains flexible enough to redirect our focus when opportunities present
- is involved in research projects that will allow us to identify new technologies where our skills can be applied as they evolve

These assets, combined with its culture and philosophy, will allow Lycopodium to continue to do well in the future as the impact of global warming puts increasing pressure on the supply of renewable and green energy related materials.

Separately, I would like to advise you that I will be stepping down as Chairperson post the AGM and will be handing over to Rod Leonard. Rod is well known to many of Lycopodium's shareholders, having had many roles in the Company including being the Managing Director from 2010

to 2016. Rod has a well-earned reputation in the industry for his depth of understanding across many fields and his honest and thoughtful answers to shareholder queries. Rod led Lycopodium through the growth of the iron ore boom and the difficult readjustment that followed in 2015. Rod has remained a director of Lycopodium as well as serving on other boards and will bring his extensive knowledge of the industry and the Company to the role of Chairman.

It is my intention to remain as a director but believe that it is appropriate that someone with a good understanding of the business and a different perspective takes the Chairman role.

Since the inception of Lycopodium some 30 years ago, it has been a long learning curve, a rewarding adventure, and a privilege to have been involved in Lycopodium from the beginning. It was a small beginning with four other founding partners and over the years it has been a delight to see what has been achieved by the many Lycopods who have contributed to what it is today. I would particularly like to thank the founding partners and managers who developed and have held, over many years, to the original philosophy which Rod described as, not wanting to be the biggest, but to aim to be the best.

I would also like to thank the many people I have worked with over the years; the Lycopods, staff of industry partners with whom I have worked, clients and friends, for the many adventures we have had on the projects on which we worked.

Finally, a thank you to the Shareholders who have seen value in our philosophy – some of whom have been on the register since the Company floated in 2004.

It has been a record year from a financial perspective and all subsidiaries have positively contributed to the result. On behalf of the Board and Shareholders I would like to thank each of our 1,100 staff, contractors and management for a job well done.

I hope you find this document informative and readable and if you would like more information, please give us a call.



**MJ Caratti**  
Chairman  
Lycopodium Limited



# Managing Director's Report



**FY2023 has been a very successful year for the Company, in which we have delivered a significant portfolio of studies and projects around the world, across our core operating sectors of Resources, Infrastructure and Industrial Processes.**

## Full Year Results

**For the financial year ended 30 June 2023, Lycopodium generated revenue of \$327.6 million and net profit after tax of \$46.8 million. These results represent record highs for the Company. The Directors have resolved to pay a final dividend of 45 cents per share. The total dividend for the year is 81 cents fully franked.**

## Activities for the Past Year

With a number of substantial projects underway, we have continued to welcome new people to the business, with more than 1,100 personnel working with us in our offices and on our project sites across the globe.

Investment in our people is critical to attracting and maintaining a high-performing workforce, and therefore throughout FY2023, we have continued to roll out initiatives focused on providing the support and tools required to enable our people to perform at their best.

This includes the introduction of our global HR Information System (HRIS), providing a standardised platform across all operating entities to facilitate workplace efficiencies. Implementation of this system is the first step in the roll out of a broader enterprise resource planning (ERP) system that will tie together a multitude of business processes and enable the flow of data between them, eliminating duplication and supporting data integrity. Development of the ERP has been ongoing throughout 2023, with the platform due to be launched across the business later this year.

We also introduced our new Engagement and Performance Management platform, with our first global employee engagement survey undertaken in late 2022. This platform facilitates an approach of continual performance feedback in managing performance and career pathways, enabling us to listen to our people, reflect on their feedback, and

use this information to develop initiatives and strategies for continuous improvement.

In support of our commitment to fostering a culture of learning and empowering our people to drive their own development, we embarked on the next phase of e-learning at Lycopodium, with the introduction of a new platform focused on delivering specific custom modules using engaging learning techniques.

We also launched a new employee reward, recognition and wellbeing platform, providing staff with access to an array of benefits and discounts, plus health and fitness information and tools. The platform also provides the ability to share staff achievements and awards.

Our Emerging Leaders Program, which was first introduced across our Australian operations in May 2022, has entered its next cycle, this time encompassing talent from around the globe to participate in this nine-month leadership program focused on the development of the middle management levels within the business.

These initiatives, combined with our continued pursuit of winning and executing exciting, challenging and rewarding new work, seeks to make us the employer of choice amongst our peers and allow us to continue to attract, develop and grow our talent pool.

Knowledge management remains an integral strategic focus for the business, and as such, we also continue to invest in

initiatives that support the functionality and effectiveness of our network and systems. This includes updating our project collaboration software, to facilitate efficient access to, and sharing of, information across our global operations.

With a focus on broadening our geographical reach, our Canadian business has grown steadily over the past decade, as the Lycopodium brand has continued to cement itself with clients in the Americas. In 2023 our Canadian team successfully delivered its first major project, the Séguéla Gold Project in Côte d'Ivoire, with first gold pour achieved in May. Earlier this year, we relocated from our existing Toronto office to a nearby location that provides 50% more floor space to accommodate our growing team.

Lycopodium's participation in the energy shift, through our new service offering, Lycopodium Energy, is broad-based and leverages the diverse range of skills that reside within the business. Over the past couple of years, we have

considered participation across a spectrum of industries associated with the energy shift and are now actively participating in a number of initiatives related to renewable energy generation, energy storage, the global battery revolution and decarbonisation. These initiatives are explored in greater detail in the Innovation section of this report.

## Outlook

We have seen a slowing in the global economy during 2023, as interest rates have continued to rise to combat inflationary pressure. Geopolitical tensions have impacted household and business confidence, lowering resource and energy commodity demand. There is however significant upside forecast for investment in commodities intrinsic to the global energy transition, particularly buoyed by the incentives provided for low emission technologies under the US Inflation Reduction Act (IRA).



Introduction of the IRA, coupled with the high price of fossil fuels, is likely to accelerate the push towards low emission technologies, supporting the market expansion of commodities including lithium, copper, cobalt and nickel. A supply deficit is anticipated as early as 2024, with electric vehicle sales expected to double by 2027. The strong demand outlook for battery metals is attracting capital to build global supply, with numerous new projects and expansions in the pipeline.

Demand for iron ore is strengthening, as China, the world's largest importer, returned to normal activity levels and a resumption in infrastructure investment following the abolition of lockdowns and its zero-COVID policy in late 2022. As demand is expected to steadily increase over coming years, this will be supported by the continued development of greenfield and extension projects in Australia by established and emerging producers. Global supply will be further strengthened by emerging producers in Africa, with new projects currently under development.

Global gold demand increased in 2022 to an 11-year high and official sector buying by central banks has seen it remain steady through 2023. Consumer demand for gold, including jewellery, gold coins and bars, is expected to continue to grow over the long-term, while demand remains steady for gold used in the manufacturing of technology, including smartphones and watches, and its use in dentistry and medicine.

For our Infrastructure business, Australia's railway construction and maintenance activity is set to continue to grow in the coming years, with a number of significant, publicly funded projects ramping up across the country. This strong pipeline of new construction work includes heavy haul, freight and passenger projects. Correspondingly, maintenance and rail infrastructure management (RIM) activity is also expected to increase in order to maintain this growing rail network. Growth in maintenance activity is also due to increased rail remediation works required as a result of rising events related to climate change, including floods, droughts, bushfires and coastal erosion.

Within the Industrial Processes sector, we are continuing to see a shift to domestic manufacturing, driven initially by the pandemic and now further led by geopolitical uncertainty. With an impetus for many companies to onshore their operations, the manufacturing industry in Australia is set to expand and become competitive not only locally, but globally. The ongoing development of emerging markets, including waste and recycling, water and wastewater, and hydrogen, is also continuing to drive sector growth. Locally produced hydrogen will be essential to Australia's strategy to decarbonise our economy and increase clean energy exports and will contribute to regional and global decarbonisation targets.

Motheo Copper Project, Botswana





## Managing Director's Report

### Operational Highlights

#### HSE

Our commitment to providing a safe working environment for our people, and delivering projects safely for our clients, is intrinsic to our culture and a fundamental metric of our success.

FY2023 was an extremely busy period of site construction activity, with 8.2 million manhours worked (compared to 3.2 million in FY2022), and a Lost Time Injury Frequency Rate (LTIFR) of zero against an Australian construction industry average of 8.8. This is a significant achievement and a testament to the diligence and commitment of our people on the ground in providing and upholding a safe working environment for everyone.

We remain committed to providing our people with the tools and resources required to maintain our exemplary safety standards. During the year, we engaged our first indigenous HSE trainee, who will soon graduate the traineeship program and take her place on one of our Western Australian projects.

#### Resources

Our delivery of studies and projects spans most major commodities, including in FY2023, gold, lithium, diamonds and gems, copper, nickel, battery minerals, mineral sands, uranium, vanadium and other rare earths. We continue to deliver for our clients around the world, most notably in Africa, Australia, Southeast Asia and North and Central America.

We have a number of significant Engineering, Procurement and Construction Management (EPCM) projects that commenced engineering and onsite works over the past 12 months.

In gold, this includes mobilising to site on the Ahafo North Project in Ghana (Newmont), the Lafigué Project in Côte d'Ivoire (Endeavour) and the Sabodala-Massawa BIOX® Expansion Project in Senegal (also for Endeavour) and commencing engineering design on the Kiaka Project in Burkina Faso (West African Resources) and the Baomahun Project in Sierra Leone (FG Gold). Having completed the construction and commissioning of the Navachab Expansion Project in Namibia (QKR) in late 2022 we have since commenced work on the mine's new primary crushing plant.

Further strengthening our position as a leading partner in the design and delivery of battery metals projects in Australia and Africa, we commenced work on site for two globally significant lithium projects, the Kathleen Valley Project in Western Australia (Liontown), one of the world's largest hard rock lithium deposits, and the Goulamina Project in Mali (Leo Lithium), which will be West Africa's first operating lithium mine. Construction also continued

**FY2023 has seen an ongoing ramp-up of onsite activity, with a number of major projects mobilising to site, in delivery or completed, and with more than 8 million manhours worked over the 12-month period.**

throughout the year on our two projects at the Greenbushes lithium operation in Western Australia (Talisson Lithium), with completion of the Mine Services Area Relocation Project mid-2023 and works progressing on the Chemical Grade Processing Plant #3 Project.

Delivery of the Batu Hijau Process Plant Expansion Project in Indonesia (PT Amman Mineral Nusa Tenggara) is ongoing, extending the life of the mine, one of Indonesia's largest copper and gold mines, until at least 2030.

During the year, we completed a number of major projects, including the Bomboré Gold Project in Burkina Faso (Orezone), the Motheo Copper Project in Botswana (Sandfire), the Cobré Ball Mill 6 Project in Panama (First Quantum), and the Séguéla Gold Project in Côte d'Ivoire (Fortuna Silver Mines). We have subsequently moved on to the next stage of development on two of these projects, the Bomboré Expansion Study and completion of detailed engineering design for the Motheo Expansion Project.

Other projects completed during the year include the engineering scope for the Gruyere Pebble Circuit Upgrade Project in Western Australia (Gruyere Management Pty Ltd), with the structural and mechanical construction work now underway, the Sukari Paste Plant Project in Egypt (Centamin) and progressing design for the Boto Gold Project in Senegal (Managem).

There remains a strong pipeline of studies in delivery, including most notably, the recent award of the Feasibility Study and Basic Engineering scope for Barrick's Reko Diq Copper-Gold Project in Pakistan. Reko Diq is one of the largest undeveloped copper-gold deposits in the world, with the construction and operation of the mine significantly contributing to Pakistan's economy, and we are extremely pleased to have the opportunity to be involved with this major development from inception.

Other notable studies delivered over the period include the Pre-feasibility Study (PFS) and Definitive Feasibility Study (DFS) for Rio Tinto's Winu Copper Project in Western Australia, the DFS for B2Gold's Anaconda Area Project in Mali, the DFS for Perseus' Meyas Sand Gold Project



Pacific National, New South Wales

in Sudan, the DFS for Osino's Twin Hills Gold Project in Namibia, and the Feasibility Study (FS) for Troilus Gold's Troilus Gold Project in Canada.

ADP Marine & Modular (ADP), Lycopodium's specialist subsidiary in South Africa, is continuing to progress Paladin Energy's Langer Heinrich Restart Project in Namibia, providing the EPCM services to bring the mine back into operation. ADP is also delivering the Mutamba Mineral Sands Project pilot plant on a greenfield site in Mozambique for Rio Tinto. The commissioning of the first Dry Mining Unit (DMU) on site at the Grande Côte mineral sands operation in Senegal in September 2022 has been a notable achievement for ADP during FY2023. Client feedback on the performance of the DMU has been very positive and we look forward to developing further opportunities to bring this innovative operating cost saving product to market. Through the year, ADP continued to service its long-term clients, including De Beers/Anglo American with delivery of the FS for De Beers/Anglo American's FutureSmart Diamond Processing Plant in Canada and Namdeb, having signed a new multi-year services contract. Namdeb is in the process of extending the life of its land-based operations for a further 20 years.

As a global leader in comminution circuit design and optimisation, our wholly owned subsidiary Orway Mineral Consultants (OMC), continues to be a critical technical partner to our Resources business. OMC provides specialist services in flowsheet development, optimisation and process design, as well as supporting our clients to maximise operational performance post project completion. Experts in plant dynamic modelling, OMC is also an integral element of our digital engineering strategy.

### Infrastructure

In Infrastructure, we continue to provide design, engineering, technical advisory and Rail Infrastructure Management (RIM) services for greenfield and brownfield rail projects across Australia. The Australian Rail Track Corporation's (ARTC) Southern Highlands Overtaking Opportunities Detailed Design package, to improve the efficiency of freight and passenger services between Sydney and Melbourne, is a significant scope of work undertaken in FY2023. Our Infrastructure business has recently been awarded a three-year contract to conduct visual rail inspections and assessments for 57 Pacific National sites across Australia, which represents a steady stream of work going forward.

### Industrial Processes

In Industrial Processes, the provision of design consultancy services is ongoing for Commonwealth Serum Laboratories (CSL) for the development of base vaccine component production and plasma and blood facilities, including providing the detailed engineering scope for CSL's world-

# Managing Director's Report



class influenza vaccine manufacturing facility being built in Melbourne. Works are also continuing with Australia's Nuclear Science and Technology Organisation (ANSTO) at its Australian Synchrotron facility, in the delivery of Project BRIGHT, to expand both the capacity and capability of the facility's beamline infrastructure. The business has been involved in many of the Energy related initiatives undertaken throughout the year, including in hydrogen, battery minerals, battery recycling and waste to energy technologies.

A comprehensive overview of projects and studies delivered during FY2023 is included later in this report.

## Innovation

Our commitment to innovative thinking, challenging the status quo and seeking ways to do things better, and our participation in the energy shift, has seen us progress a number of significant initiatives throughout the year.

From an internal perspective, we continue to receive outstanding ideas put forward by our people for our bi-annual Innovation Award.

## Digital Engineering

FY2023 has proven to be a foundational as well as pivotal year in the advancement of our digital engineering service offering. Lead by ADP in Cape Town, our focus in the development of our capability over recent years has been three pronged.

Firstly, plant dynamic modelling. This involves extensive use of both dynamic as well as discrete event simulation tools. We have progressed steadily to the point where

several clients, including a major tier one diamond mine, have initiated service level agreements for both development and operational use of our modelling for overall plant optimisation. Andritz, as a partner, together with OMC, are key subject matter experts (SME) in the development and implementation of this capability. In diamonds this is used for both predicting plant performance and carat recovery performance, as well as optimising mine blending and production/revenue profiling, on a routine basis. We are applying this modelling experience into gold, lithium, lead-zinc, fluorspar, diamonds, iron ore and other commodities.

Secondly, we are using the best-of-breed platforms to develop static digital twins, and thirdly, we are integrating both the dynamic and static digital twins into an overall connected twin that can extend (together with our mining digital software partner, Sight Power) to a mine-wide digital twin solution.

## Orway IQ

MillROC (Mill Remote Optimisation Consulting and Coaching) continues to be developed by Orway IQ (OIQ), which is a collaboration between Molycop and Orway Mineral Consultants.

This online platform provides cloud-based, customised data analysis and dashboards for optimisation of mineral processing plants. It is used by OIQ's specialist consultants to deliver real-time coaching and implementation of continuous improvement in plant operations. The main goal for MillROC is to drive efficiency and reduce the carbon intensity when producing mineral concentrates and metals in the processing of minerals.

MillROC





36 MW solar PV power plant, Sukari Gold Mine, Egypt

Based initially around comminution circuit optimisation, OIQ has now expanded MillROC to provide similar services for processes downstream of comminution, such as leach and flotation circuits. In addition to the customised data analysis originally incorporated in the platform, multivariable regression analysis and machine learning tools have been added for deeper analysis of complex systems. Advanced KPIs are set and visualised, with recommended changes in operating practises automated when these KPIs are not achieved.

Our Minerals business is now offering MillROC as an option to be included in all EPCM and EPC projects, enabling us to offer a more comprehensive service to our clients to assist them throughout the commissioning, ramp-up and warranty period to assure project success.

### Renewable Energy Generation and Energy Storage

Our participation in renewable energy generation is through our partly owned entity, ECG Engineering, which has recently completed a battery storage research project at the Sukari Gold Mine in Egypt. One of the complexities associated with combining renewable and thermal energy sources in remote locations is managing the energy system to facilitate stability in voltage and frequency, while ensuring there is adequate inertia in the system to cope with large

spikes in energy demand that can occur during mill startups and similar actions that place a huge energy demand on the system within a short period of time. ECG is a specialist in this area.

Energy storage is *the* key area of global research at present, as cost-effective storage is critical in providing capacity during periods of time when solar and wind sources are not available for energy generation. Energy storage areas in which we actively participate are batteries and hydrogen.

Lithium-ion batteries are standard additions to hybrid renewable/thermal power solutions on mine sites, with capital costs for lithium battery storage currently limiting renewable energy penetration at these sites. ECG routinely sizes and includes lithium-ion batteries in hybrid power system designs.

Hydrogen is a potentially huge area of energy storage. A wide number of hydrogen studies have been funded by ARENA over the past three years, with only a few progressing towards pre-commercial scale operations. Our hydrogen capability sits with our Process Industries business located in Melbourne. Two significant projects in which we are involved are the 2.5 MW Yarwun Hydrogen Calcination Pilot Demonstration Program of Rio Tinto and Sumitomo, and the Hydrogen Energy Supply Chain (HESC) coal-to-hydrogen plant in Loy Yang, Victoria. Our

## Managing Director's Report

participation in a range of other hydrogen studies and projects continues.

We see opportunities in providing balance of plant support to utility scale renewables projects combining solar and wind to produce hydrogen for export, either cryogenically or as ammonia. This is a space that is emerging and although no major export projects have been announced in Australia, we would like to be able to support international technology vendors by "Australianising" their unit processes and then integrating their processes into a consolidated project.

The hydrogen sector is still quite nascent in Australia, but we are well positioned to participate when the sector gains momentum.

### FBICRC

Lycopodium is actively involved in alternative battery chemistries through research conducted as part of our participation in the Future Battery Industries Cooperative Research Centre (FBICRC), with notable alternative chemistries being the vanadium redox flow batteries (VRFB) and sodium-ion batteries. We recently completed a design for the Queensland Government of a multi-user facility to recover battery grade vanadium and other critical minerals. We continue to work with the Queensland Government, along with the FBICRC, to present workshops on how this multi-user facility can be utilised by industry to produce sufficient quantities of battery grade material to undertake compliance testwork with downstream battery manufacturers. Much of this work is being executed from our Brisbane office.

The circular economy for large scale batteries is going to emerge over the next decade. One of the major challenges for battery recycling is the safe storage and transport of batteries, given the high fire risk that exists with partially spent lithium batteries in particular.

Value-adding to battery minerals is a strategic ambition of the Australian federal and state governments and an area of the value chain we are positioning ourselves in which to participate. We reported last year on our Front End Engineering and Design (FEED) of the Pre-Cathode Active Material (PCAM) pilot facility in Western Australia, producing Ni-Co-Mg PCAM. The facility is operating successfully. We were also engaged to design and deliver a lithium ferro-phosphate cathode precursor pilot facility. This work was put on hold to allow market soundings by our client, with the result being an increase in the scale of the facility to meet demand, with this work now proceeding.

The full battery value chain relies on batteries being recycled and valuable metals recovered. We are contributing to this circular economy through a Study and FEED awarded to the FBICRC by the New South Wales Government for a battery recycling project based on a distributed model, where battery "black mass", recovered

from battery shredding facilities located in regional areas, is transported to a centrally located hydrometallurgical processing facility for recovery of the battery metals. Lycopodium is providing design and engineering services to the FBICRC for this project.

### Decarbonisation

We are positioning ourselves as an integrator of technologies along the energy shift value chain as it applies to the minerals sector. In addition to participating in emerging new energy technologies, a major area of activity for Lycopodium is in decarbonisation. Our internal systems are being reviewed and updated to ensure that, firstly, we capture Scope 1, 2 and 3 carbon emissions in our designs and in our project delivery strategies. Given the ever-increasing level of compliance required around carbon reporting, we must be able to accurately report our own carbon footprint and also the carbon footprint of the projects we will deliver for our clients.

Once emissions data is systematically collected, we are able to execute the second major area of our decarbonisation activity – incorporating new designs and technologies to reduce absolute carbon emissions for our clients. This is reliant on collaboration among the core areas of renewable energy generation, mine electrification and process plant design, to displace, reduce, capture, or offset carbon emissions, all of which reside within the capabilities of Lycopodium and ECG.

FBICRC - Pre-Cathode Active Material (PCAM) pilot facility, Western Australia





Clontarf students visiting our office, Perth, Western Australia



Murlpurrmarra Connection Cultural Exchange Weekend, Perth, Western Australia

## Community

We support the communities in which we live and work, in particular social development and education endeavours, through the Lycopodium Foundation.

This includes continuing our partnerships with the Murlpurrmarra Connection and the Clontarf Foundation in Australia, with both organisations supporting the education, self-esteem, life skills and employment prospects of young Aboriginal and Torres Strait Islander people. During the year, we established a Design Scholarship and School-based Traineeship program for Clontarf students.

We have been active in supporting the local Greenbushes community in Western Australia's south-west, where we are delivering a number of projects and studies for Talison Lithium. This includes providing financial assistance for a number of initiatives, including the relocation of the historic Greenbushes Railway Station to the Greenbushes Discovery Centre; support of the Blackwood Youth Action group's Art Program, which supports youth mental health; the Grow Greenbushes initiative, for the Greenbushes Youth Precinct Development; and support of the Greenbushes Primary School's STEM Program.

This year, we are very pleased to have had the opportunity to support the Royal Western Australian Historical Society (RWAHS) in its effort to rehouse the RWAHS within a proposed purpose-built History West Community Centre. Our contribution was made in recognition of the important work undertaken by the RWAHS in the preservation and promotion of Western Australia's history.

In Africa, we continue our long-standing support of BASICS International, a non-government organisation (NGO) committed to protecting the basic human rights of children to education, shelter, food and safety. We are working with the BASICS team to progress its initiative to establish a camp for children in the countryside outside of Accra in Ghana. Also in Ghana, we supported an initiative of our client, Newmont, providing funds towards the construction of a Child Welfare Clinic at St Elizabeth Hospital in Hwidiem and

for the provision of classroom furniture for Our Lady of Apostles Girls Senior High School in Ho.

Throughout the year, we supported various charitable initiatives championed by our staff, including Jeans for Genes, for which we have raised more than \$400,000 since our partnership began back in the 1990's, Movember, the Push-Up Challenge, and the St Vincent de Paul Society.

Our membership with the Australia-Africa Minerals & Energy Group (AAMEG), the peak body representing Australian companies engaged in the development of Africa's resource industry, continues to provide us with a valuable resource in support of the work we undertake in this region.

## Acknowledgement

FY2023 has been a very busy and rewarding year for the business. We secured a wide range of new studies and projects, we mobilised to site on a number of projects, and we successfully delivered several significant projects. On behalf of the Board of Directors, I thank our staff for their hard work and commitment which has enabled us to realise this success. We can all be very proud of the strong position the Company is in as we move forward into FY2024.

I would also like to acknowledge and thank our clients, for the continued trust they place in us to work alongside them in the delivery of their projects.

**Peter De Leo**  
Managing Director  
Lycopodium Limited

Séguéla Gold Project, Côte d'Ivoire



# FY23 Company Highlights



**1,100+ people**

Working globally across our projects and offices



**Zero LTIFR**

Based on 8.2 million manhours worked across Lycopodium managed projects



**\$327.6m**

Revenue



**\$46.8m**

Net Profit After Tax



**117.7 cents**

Earnings per Share



**81 cents**

Full year dividend



**Employer of choice**

Introduction of a suite of initiatives to enable our people to perform at their best



### Energy shift

Actively participating in a number of initiatives related to renewable energy generation, energy storage, the global battery revolution and decarbonisation



### Highest ever



Revenue and profit



Number of EPCM projects in delivery around the world



Return to shareholders



### Innovation

Advancement in digital engineering capability to drive plant optimisation in both development and operations

# FY23 Financial Highlights

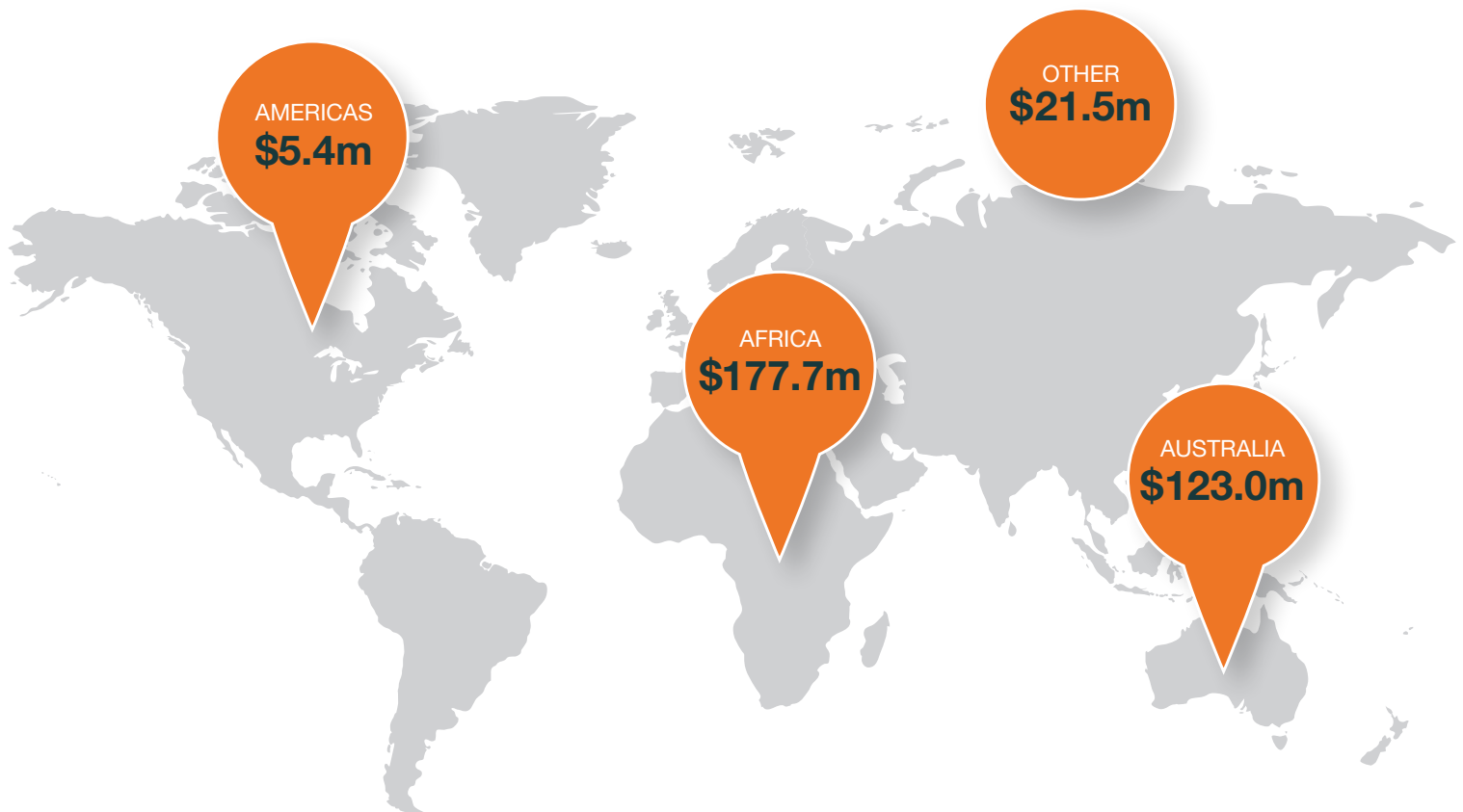
**Operating within our core sectors of Resources, Infrastructure and Industrial Processes, during FY2023 we delivered services for projects around the world – predominantly in Africa, Australia, Southeast Asia and the Americas.**

With a number of significant projects in delivery and a strong pipeline of studies, our financial result for FY2023 represents the best ever achieved in Lycopodium's 30-year history and consequently the highest dividend ever returned to shareholders.

The Company's revenue for the financial year ended 30 June 2023 was \$327.6 million, an increase of 41% on FY2022 revenue (\$232.2m). FY2023 Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) was \$70.5 million and Net Profit After Tax (NPAT) was \$46.8 million, an increase of 72% on the previous record high achieved in FY2022. The return on equity of 44% is an excellent result.

The Company's cash position remains very strong, with cash on hand of \$82.4 million at financial year end. The strong balance sheet continues to provide capacity for investment, with total assets of \$215.9 million, equity of \$113.0 million and net tangible assets per share of \$2.68.

## Revenue by region





Revenue **\$327.6m**

EBITDA **\$70.5m**

NPAT **\$46.8m**

Cash on Hand **\$82.4m**

Total Assets **\$215.9m**

Equity **\$113.0m**

Net Tangible Assets per Share **\$2.68**

P/E Ratio **9.0**  
Based on 30 June financial result

Talison Chemical Grade Processing Plant #3 Project, Western Australia

# Board of Directors



**Michael (Mick) Caratti**  
Non-Executive Chairman



**Peter De Leo**  
Managing Director



**Karl Cicanese**  
Executive Director



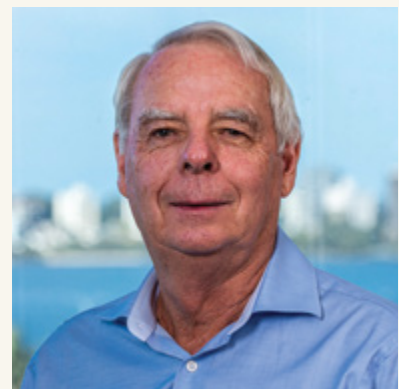
**Bruno Ruggiero**  
Executive Director



**Rodney (Rod) Leonard**  
Non-Executive  
Independent Director



**Louise Bower**  
Non-Executive  
Independent Director



**Steven Chadwick**  
Non-Executive  
Independent Director



Bomboré Gold Project, Burkina Faso

# About Lycopodium

## Defining Lycopodium

**The breadth and depth of our expertise and knowledge is far-reaching. It spans sectors, across continents. The work we deliver is technically challenging, requiring a detailed understanding to convert an idea into reality.**

Whether it's working out how to recover magnesium salts from solar salt fields, or producing biodiesel from animal tallow, we take the science around a project, the chemistry and the physics, and as the interface between science and engineering, use our skills to convert the science into a commercial reality.

Therefore, we believe the appropriate definition for Lycopodium is that we commercialise science.

The sectors within which we operate are diverse. Across resources, infrastructure and industrial processes, the broad and truly fascinating array of projects that we are involved with – most minerals and metals, hazardous and toxic chemical processes, emerging technologies, R&D – give range to a team of industry professionals that is at the forefront of innovation in the delivery of leading technical solutions.

## Our Sectors

### RESOURCES



- Gold and Precious Metals
- Base Metals
- Battery Metals
- Specialty Metals
- Diamonds and Gemstones
- Bulk Minerals
  - Iron Ore
  - Minerals Sands
  - Bauxite

### INFRASTRUCTURE



- Railways
- Non-Process Resource Infrastructure

### INDUSTRIAL PROCESSES



- Pharmaceuticals
- Biotechnology
- Chemical and Energy
- Food and Beverage Production
- Manufacturing
- Renewables
- Water and Wastewater
- Research and Development
- Sustainability and Environment

### SERVICES



- Feasibility Studies
- Process Development and Optimisation
- Engineering and Design
- Project Management and Delivery

- Project Services
- Construction Management
- Commissioning and Operations Support
- Asset Management

## LOCATIONS



## Building on Everything that is Good

We have built our reputation over the past three decades by successfully delivering many projects across the globe, often in very difficult jurisdictions. We have been challenged by a myriad of variables – logistics, climate, cultures and language, to name a few. Despite these challenges, we pride ourselves on delivering against our clients' key metrics, and most importantly – profitably. We define the risks for our client and before we take a job on, we define the risks that will be borne by our shareholders.

We are not perturbed by geography or technology. We are confident in our ability to identify and manage the risks associated with process development, engineering and project delivery. This approach has stood the test of time and placed us among the top project delivery engineers in Australia, Africa, Asia and the Americas.

We continue to build upon everything that is good about that approach.

Those core skills we applied in the early days have evolved into services that we now provide across multiple sectors.

## The Business

### Locations

Our business is global. Within Australia we have offices in Perth, Melbourne, Newcastle and Brisbane. We also have offices in Toronto, Cape Town, Accra and Manila.

### Clients

Our clients are global and include both private and publicly listed companies. Among listed companies, our clients cover the full range, from small juniors, through mid-tier and ultimately to the majors. We occupy a unique position

Cobré Copper Mine, Panama

## About Lycopodium

in the engineering market in that we have both the systems and processes necessary to service Tier 1 clients, but also the flexibility to provide simplified processes for junior and mid-tier clients.

This is a very deliberate strategy – many of our original junior clients have been acquired by majors or have themselves evolved into mid-tier companies. We have grown with them, whilst continuing to support the junior companies as they move along their own growth trajectory.

### Sectors

Lycopodium operates within the Resources, Infrastructure and Industrial Processes sectors.

- Within Resources we cover all commodities and minerals. We are recognised globally for our capability in gold, copper, lithium and diamonds.
- Within Infrastructure we provide design, engineering, technical advisory and Rail Infrastructure Management (RIM) services to the rail industry.
- Within Industrial Processes we cover markets such as pharmaceuticals and biotechnology, food and beverage, chemicals and energy, sustainability and environment.

### Services

As previously stated, our purpose is to commercialise science. The services we offer in commercialising science are independent of and completely transferable between any of the sectors we operate within. Although some of our offices carry higher or lower numbers of professionals within any service, the global nature of our business means we can deliver the requisite service in the requisite sector wherever it is required.

**The following section provides a summary of our services.**

#### Feasibility studies and advisory

Feasibility studies and our associated advisory services are the heart of our business, where we throw big-picture ideas around in concept development and preliminary economic analysis. It's where we solve problems, refine and reduce options during pre-feasibility and, ultimately, deliver certainty in project viability.

It is during the feasibility study that we are able to deliver the greatest value to our clients. An error in process selection or project definition at this early stage is amplified many times over as the project develops and can ultimately be fatal for the project and sometimes for the client.

Kathleen Valley Lithium Project, Western Australia





## About Lycopodium

Quality engineers like Lycopodium, differentiate themselves from the pack with this service. We have a fine track record for preparing studies that are technically and commercially sound and tailored to the client's expectations.

The purpose of our feasibility studies is to help our clients move forward with clarity and confidence.

### Process development and optimisation

The success of industrial processes and resource projects revolves around process development and optimisation. We arguably have some of the best teams in the world working with clients around the globe, covering mineralogy, metallurgy, chemistry, contaminant management and environmental management, among other things.

Whether it's an 85 Mtpa copper concentrator in Panama or a 5 tpd polymeric anti-microbial plant in Australia, process development is the first and most critical step in commercialising the science for a project. Commercial success can only be achieved if the correct flowsheet is developed to match inputs and outputs.

At Lycopodium, we spend our working lives developing new ways to maximise recovery, reduce operating costs, de-bottleneck processes and improve capital efficiency. Through this focus we are able to support our clients to extract maximum value from their operating assets.

### Engineering and design

With age comes wisdom. We have learned many engineering lessons delivering projects in cold climates and desert plains, in tropical jungles and dangerous surf zones. We are continually learning from our experiences, adapting and improving our engineering as new materials come onto the market, new equipment becomes available and new technologies roll out.

In addition to capturing our tacit knowledge from the field, we are heavily invested in preserving our explicit knowledge by being part of the forward group in the evolution of digital engineering. We are working with our clients in the development of digital transformation strategies that will enable us to provide more extensive and cost-effective options analysis and scenario planning during the project study phases, ultimately leading to better designs and more efficient operations in the future.

### Project management and delivery

It's a matter of policy that we manage all our projects in a manner that will not cause our employees, contractors or the general public harm or jeopardise anyone's health. Furthermore, our health, safety and environment policy ensures we minimise our impact on the environment.

Our project management expertise encompasses many things, including but not limited to project execution



planning, project management engineering and general coordination, contracts management and project management services, for the full project lifecycle, from project inception to project handover and into operations.

These skills help deliver a good project for our clients.

With increasing global awareness of social and cultural issues, our clients' access to funding and project success depends more than ever on our ability to address social risks and impacts during project design and construction. We're committed to developing and fostering long-term relationships with local and regional contractors and suppliers, leveraging local supply chains and expertise wherever possible to upskill and encourage local economic growth.

These skills help deliver a good project for local communities.

We take all practicable steps to achieve zero injuries and zero environmental impact, leaving only positive legacies within the communities in which we work.

### Project controls

Good project controls help manage risks for our clients – they also manage risks for Lycopodium.



Bomboré Gold Project, Burkina Faso

Our project controls and project management procedures provide the client and us with transparency on, among other things, budget management, change management, commitments, forecasting, tracking and completions and handover. These fundamental measures represent a single source of truth for project delivery performance, allowing problems or delays to be identified and mitigating steps to be implemented.

Our good project controls are essential for good business.

### Commissioning and operations support

Our process and design engineers are always part of the commissioning team – it's the Lycopodium way. We see, touch and feel the consequences of our decisions. This intimate knowledge means our plants ramp up to nameplate capacity quickly and transition to operating personnel seamlessly. The tacit knowledge gained from having our process and design engineers as part of the commissioning team ensures continuous improvement with all lessons learned 'brought back' to the business and where necessary, captured in future designs.

We have an outstanding track record for bringing projects up to and maintaining nameplate capacity in the shortest time. The impact on cashflow for our clients by achieving production ahead of schedule is enormous and contributes materially to the repeat business we have enjoyed over the years with so many clients.

### Process control and optimisation

The fourth wave of the industrial revolution, known as Industry 4.0, has brought the opportunity for Lycopodium

to leverage further the depth of scientific and engineering knowledge we possess around chemical and resource processes. By leveraging big data and analytics, automation, advanced hardware and machine learning with cloud computing, we are moving into the space of data driven mining decisions and the creation of 'smart mines'.

Our wholly owned subsidiary, Orway Mineral Consultants (OMC), in its joint venture with technology provider, Molycop, has developed a grinding circuit optimisation platform called MillROC (Mill Remote Optimisation Consulting and Coaching). OMC is a global leader in grinding circuit design and optimisation, combining this with the right cloud-based digital platform (visualisations, data analytics, machine learning) and instruments, MillROC is able to optimise mine performance. Staff are coached and trained and advanced KPIs are set and visualised, with recommended changes in operating practises automated when KPIs are not achieved. MillROC fills the gap in skills and knowledge experienced on most operating sites, to assure maximum utilisation and efficiency of assets, optimising production.

### Asset management

In the sectors that we service, the purpose of asset management strategies is to ensure the assets can be maintained and operated within their rated design window for as long as possible. By supporting our clients to track asset performance and monitor where the asset sits within its operating window, we are able to help clients plan for shutdowns rather than have them respond to failures.

## About Lycopodium

### Our People

Like all good organisations we try very hard to attract and retain the brightest and the best, from young graduates just starting out, through to seasoned professionals. We would like to think that we are up there among the best as an employer but we know there is always a need for continuous improvement, adapting to the changing needs of society, demographics and expectations. It is something we take very seriously and strive to maintain the highest standards.

We believe it takes different people to make a difference.

We encourage broad perspectives and differences of opinion. We like to empower people early in their careers and expose them to responsibility, we like our people to have lots of field experience and practical knowledge. That is how the Company began and it is the culture we still work hard to retain today.

Out of this culture a term has evolved. The term is 'Lycopod'.

It is a term created by people who work within the business, it was not created by management nor by shareholders. The following is how a Lycopod has been defined:

**It is an endearing term for the people in our organisation, who are confident and capable when assigned a task and are culturally aligned to Lycopodium's values. It should be noted that Lycopods have a range of personalities and demeanours. Whilst there is a requirement for professionalism at all times, Lycopods are not conformists and are not all from the same mould.**

We like the definition and hope you do too.



# Project Reviews

Bomboré Gold Project, Burkina Faso

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RESOURCES

## Séguéla Gold Project

**Client**

Fortuna Silver Mines Inc

**Location**

Côte d'Ivoire

**Commodity**

Gold

Lycopodium designed and provided supply and project delivery services for the processing plant and associated plant related services and infrastructure for the Séguéla Gold Project in Côte d'Ivoire.

The greenfield development is located approximately 240 kilometres north-west of Yamoussoukro, the political capital of Côte d'Ivoire, and approximately 480 kilometres north-west of Abidjan, the country's commercial capital. The project consists of the near surface Antenna, Agouti, Boulder, Ancien and Koula deposits that are ideally located near existing infrastructure including grid power, transport and water resources.

Lycopodium was responsible for the design and supply of equipment, manufactured goods and all other materials and the construction management, pre-operational testing and commissioning services, as well as the overarching project management, for the delivery of the 1.25 Mtpa, carbon-in-leach gold process plant. First gold pour was achieved in May 2023.

Engaged in the development of the Séguéla Gold Project from inception, Lycopodium previously completed the Preliminary Economic Assessment (PEA) in 2019, Feasibility Study (FS) in 2020, and the Feasibility Study Optimisation (FSO) and Front End Engineering and Design (FEED) for the project in 2021.



RESOURCES

## Motheo Copper Project

**Client**

Sandfire Resources

**Location**

Botswana

**Commodity**

Copper, Silver

Lycopodium provided Engineering, Procurement and Construction Management (EPCM) services for the delivery of the 3.2 Mtpa copper concentrate treatment plant and associated non-process infrastructure for Sandfire's Motheo Copper Mine. The project achieved practical completion in May 2023.

The Motheo Copper Mine is located in Botswana's Kalahari Copper Belt, one of the world's most exciting and emerging copper producing regions and is centred on the development of the T3 Deposit, a significant sediment-hosted copper and silver deposit.

Lycopodium has a long association with the project, having initially undertaken the Definitive Feasibility Study (DFS) for the process plant. We have now also completed detailed engineering design for the 5.2 Mtpa Motheo Expansion Project.

The process plant construction, overseen by Tshukudu Metals Botswana (Pty) Ltd, a wholly owned subsidiary of Sandfire Resources, was delivered via Lycopodium subsidiary ADP Kukama, which operates from Botswana, offering locally based services to the country.

### RESOURCES



## Bomboré Gold Project

### Client

Orezone Gold Corporation

### Location

Burkina Faso

### Commodity

Gold

Involved with the project since inception, Lycopodium delivered the initial study work and Front End Engineering and Design (FEED), followed by the Engineering, Procurement and Construction Management (EPCM) services, for Orezone's Stage 1 Oxide Process Plant for the Bomboré Gold Project. First gold pour was achieved in September 2022.

Bomboré is one of the largest undeveloped gold deposits in Burkina Faso. With a 13+ year mine life, Orezone is developing the project in stages, with Stage 1 focused on the oxides as a carbon-in-leach (CIL) operation with a processing capacity of 5.2 Mtpa. Stage 2, for which we are providing an updated Feasibility Study (FS), focuses on the underlying sulphides, with a separate crushing and grinding circuit feeding the same CIL circuit as the oxides.

### RESOURCES



## Cobré Panama Ball Mill 6 Project

### Client

First Quantum Minerals

### Location

Panama

### Commodity

Copper, Gold, Silver, Molybdenum

Located in Panama, Cobré Panama is one of the largest copper mines in the world, with the production complex including a series of open-pits, a processing plant, a 300 megawatt power station and an international shipping port.

Commencing commercial production in 2019, with a processing capacity of 85 Mtpa, Lycopodium delivered the detailed engineering design for the process plant and provided technical input into the procurement process for the construction of the plant, services and associated infrastructure.

Production capacity at Cobré Panama has continued to be developed, with the addition of a further 22 megawatt ball mill (Ball Mill 6), a screening plant for secondary crushing feed, and a third large diameter water pipeline. The Ball Mill 6 Project, for which Lycopodium has provided engineering, design, procurement and construction support services, is part of the suite of projects that were undertaken to enable the mine to achieve a throughput rate of 100 Mtpa. Construction and commissioning activities were completed in Q1 2023.

The three 28 megawatt SAG mills, four 16.5 megawatt ball mills and two 22 megawatt ball mills at Cobré Panama are amongst the largest installed anywhere in the world.

## RESOURCES



# Mineral Sands Dry Mining Unit

### Client

Eramet Group - Grand Côte Operations

### Location

Senegal

### Commodity

Mineral Sands

ADP was awarded the contract to design and supply a mobile, 1,500 tph Dry Mining Unit (DMU) in April 2021. The machine was fabricated, trial assembled and pre-commissioned in Cape Town before being transported to Senegal and commissioned on site at the Grande Côte mineral sands operation in September 2022.

The DMU represents the radical marriage of underwater track crawler technology with high-capacity skid-mounted materials handling and sand pumping systems, into a single remotely controlled mobile sand processing machine.

The unit allows for large tonnage run-of-mine (ROM) material to be efficiently pumped at high densities to processing facilities, reducing tramming distance and therefore decreasing the use of front-end loaders (FELs), excavators, articulated dump trucks (ADTs) and consequently the consumption of diesel fuel on site.

The remotely operated tracked unit receives mineral sand ROM in excess of 1,500 tph from cycling FELs into a ROM bin. This material is drawn out via a feeder at a controlled tonnage, discharged via a pulping chute, fluidised, and screened into a wet bin. Thereafter it is drawn out and pumped up to two kilometres by a centrifugal pump and booster stations to the wet concentrator plant. The DMU is mobile and relocated every seven days to follow the mining face.

The technology represents an innovative operating cost saving asset for clients in the mineral sands environment and could also be used in other operations where sand or fine overburden material can be slurried and pumped to either a concentrator plant or a tailings facility.

### RESOURCES



## Chemical Grade Processing Plant #3 Project

### Client

Talison Lithium Pty Ltd

### Location

Western Australia

### Commodity

Lithium

Talison Lithium Pty Ltd (Talison) owns and operates the Greenbushes Lithium Operation, located proximal to the town of Greenbushes in the south-west of Western Australia. Established in 1888 to mine tin, it is Western Australia's oldest continuously operated mine. Lithium mining at the site commenced in 1983 and since then, Talison has earned the reputation as one of the world's leading lithium minerals concentrate producers.

The mining and processing operations at Greenbushes have been upgraded and expanded over the decades to increase production and incorporate new technologies as demand for lithium minerals has grown. The development of a third chemical grade lithium processing plant at Greenbushes, Chemical Grade Processing Plant #3 (CGP3), for which Lycopodium is providing the Engineering, Procurement and Construction Management (EPCM) services, will enable Talison to continue to supply the downstream lithium processing industry being established in Western Australia.

The project is anticipated to be completed Q2 2025.

### RESOURCES



## Mine Services Area Relocation Project

### Client

Talison Lithium Pty Ltd

### Location

Western Australia

### Commodity

Lithium

Talison Lithium Pty Ltd (Talison) is expanding lithium mineral concentrate production capacity at its Greenbushes Lithium Operation in Western Australia's south-west, requiring the relocation and increase in capacity of its Mine Services Area (MSA) to enable the open pit expansion to occur.

Lycopodium undertook the Engineering, Procurement and Construction Management (EPCM) contract for delivery of the MSA project. The new MSA provides suitably sized and fit-for-purpose facilities, to safely and efficiently operate and maintain the mining fleet and mine planning activities required to support the planned mining operations.

The MSA facilities include workshops, technical services building, including a Mine Control Centre, diesel fuel storage, distribution and refuelling stations, tyre change and washdown facilities and related infrastructure and ancillary facilities.

Construction activities were completed in July 2023.





RESOURCES

## Navachab Gold Mine Plant Expansion

**Client**  
QKR Namibia Navachab Gold Mine Pty Ltd

**Location**  
Namibia

**Commodity**  
Gold

The Navachab Gold Mine is an open-pit mine located near Karibib, in the Erongo Region of Namibia. It is the oldest gold mine in Namibia and takes its name from the local Navachab farm, which the gold deposit was found beneath.

Lycopodium provided the Engineering, Procurement and Construction Management (EPCM) services for the expansion of the mine, which included a new milling circuit with 1.19 Mtpa capacity and an expansion of the CIP circuit to increase tonnage from 1.36 to 2.46 Mtpa.

Construction and commissioning was completed in December 2022 and Lycopodium has subsequently commenced work on the mine's new primary crushing plant.



RESOURCES

## Sukari Paste Plant Project

**Client**  
Centamin

**Location**  
Egypt

**Commodity**  
Gold

The Sukari Gold Mine is located in the Nubian Desert/ Eastern Desert near the Red Sea, approximately 800 kilometres south-east of Cairo.

It is a bulk tonnage, open-pit and high-grade underground operation that has produced more than 5 Moz of gold since operations began in January 2010. As Egypt's sole gold-exporting mine and the first large-scale modern gold operation in the country, Sukari contributes significantly to Egypt's annual gross domestic product.

Centamin is committed to identifying productivity and cost-saving opportunities across the operation and has therefore invested in a number of initiatives to extend the life of the mine. This includes the installation of a paste plant to supply backfill material for the underground operation. The backfill paste plant supports the construction of ground supports in the underground mine, mixing the mine tailing waste product with additives to produce backfill material that can be placed into previously mined stopes to provide a stable platform for future mining.

Lycopodium provided the Front End Engineering and Design (FEED) and Engineering and Procurement (EP) services for the Paste Plant and was subsequently awarded the commissioning management scope, working together with Centamin, for the commissioning phase of the project.

### RESOURCES



## Ahafo North Project

**Client**  
Newmont Ghana Gold Limited

**Location**  
Ghana

**Commodity**  
Gold

Lycopodium is providing Engineering, Procurement and Construction Management (EPCM) services for the design and construction of the process plant and infrastructure for Newmont's Ahafo North Project.

The Ahafo Gold Mine is located approximately 380 kilometres northwest of Ghana's national capital city of Accra. The Ahafo North Project is a greenfield development located some 30 kilometres northeast of Newmont's existing Ahafo operations, referred to as Ahafo South.

Lycopodium's involvement since inception on the Ahafo North Project includes the initial study work, the advancement of engineering design to prepare for the procurement of long lead items and the development of a detailed project execution plan, schedule and capital cost estimate.

With onsite works commencing in Q1 2023, the development encompasses a series of open-pits with a 3.4 Mtpa process plant (3.7 Mtpa on softer oxide ores) using conventional carbon-in-leach (CIL) technology.

### RESOURCES



## Langer Heinrich Mine Restart Project

**Client**  
Paladin Energy – Langer Heinrich

**Location**  
Namibia

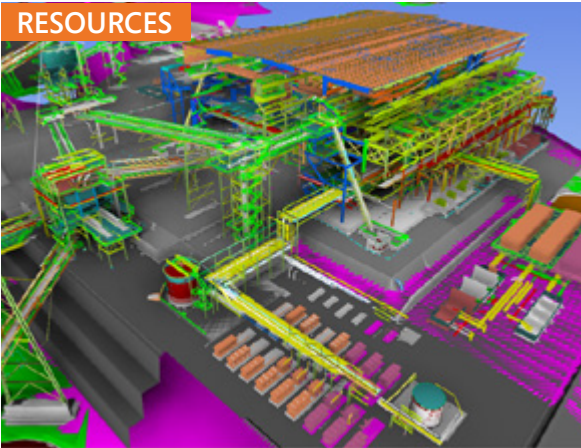
**Commodity**  
Uranium

The Langer Heinrich Mine (LHM) is situated approximately 80 kilometres east of Swakopmund in Namibia and has been in care and maintenance since May 2018 due to sustained low uranium ( $U_3O_8$ ) prices.

With a forecast global  $U_3O_8$  production shortfall and a higher forecast uranium price, Paladin Energy approved the Restart Project for the mine in July 2022, to bring the mine back into operation.

ADP Namibia is engaged to provide engineering, procurement and construction management (EPCM) services to deliver the LHM Restart Project, including repair and refurbishment activities and growth projects, to optimise and debottleneck the process. The engagement has included early planning and design followed by an 18-month construction period, due for completion in March 2024.

Our services include detailed design, field engineering, contract and procurement management, project cost and schedule controls, and the safe construction and commissioning of the works.



**RESOURCES**

## Batu Hijau Expansion Project

**Client**  
PT Amman Mineral Nusa Tenggara

**Location**  
Indonesia

**Commodity**  
Copper, Gold

Batu Hijau is an open-pit copper-gold mine located on the island of Sumbawa in the province of West Nusa Tenggara, about 1,500 kilometres east of Jakarta.

It is the second largest copper and gold mine in Indonesia and has produced more than 8 billion pounds of copper and over 8½ million troy ounces of gold since production commenced in 2000.

In 2020, Lycopodium was awarded the Front End Engineering and Design (FEED) for the development of additional mineral processing capacity to more than double existing production, including primary crushing station, overland conveyor, coarse ore stockpile and reclaim, milling with pebble crushing, flotation circuits and concentrate and tailings system.

In 2021, Lycopodium was subsequently awarded the Professional Engineering and Management Services (PMS) scope to facilitate the process plant expansion. This was then followed by the award of the Engineering Services contract for the development of several key process plant areas, commencing January 2022. Work is expected to be completed in Q4 2023.



**RESOURCES**

## Kathleen Valley Lithium Project

**Client**  
Liontown Resources

**Location**  
Western Australia

**Commodity**  
Lithium

The Kathleen Valley Lithium Project is located on the western edge of the Norseman-Wiluna Greenstone Belt, about 60 kilometres north of Leinster, and 680 kilometres north-east of Perth, Western Australia.

Kathleen Valley is one of the world's largest hard rock lithium deposits and, with an initial 3 Mtpa production capacity, it is expected to supply ~4-500,000 tonnes of 6% lithium oxide concentrate per year. With first production expected in mid-2024, the deposit will also produce tantalum pentoxide, a valuable material used in electronics and optics manufacturing.

Mining will predominately be underground, allowing direct access to higher grade mineralisation while minimising waste and the environmental footprint of the project, with mined ore processed through a Whole of Ore Flotation circuit.

Having initially undertaken the Pre-feasibility Study (PFS) update for the project, followed by Value Engineering Assessments (VEAs) and subsequently the Definitive Feasibility Study (DFS) and Front End Engineering Design (FEED) services, Lycopodium is now delivering the Engineering, Procurement and Construction Management (EPCM) services for the project.

### RESOURCES



## Sabodala-Massawa BIOX<sup>®</sup> Expansion Project

### Client

Sabodala Gold Operations SA  
(Endeavour Mining)

### Location

Senegal

### Commodity

Gold

Sabodala-Massawa is the largest producing gold mine in Senegal, located approximately 650 kilometres east-southeast of the capital city of Dakar and 96 kilometres north of the town of Kedougou.

Endeavour acquired the Sabodala-Massawa complex in February 2021, which included the Sabodala mill and deposits and the nearby Massawa deposits, one of the largest undeveloped open-pit projects in Africa. Massawa is located within trucking distance of Sabodala, creating the opportunity for significant capital and operating synergies.

The integration and expansion of the Sabodala-Massawa complex involves supplementing the current 4.2 Mtpa carbon-in-leach (CIL) plant with a 1.2 Mtpa BIOX<sup>®</sup> (biological oxidation) plant to process the high-grade refractory ores from the Massawa deposits.

Following delivery of the Definitive Feasibility Study (DFS) and Early Works, Lycopodium was subsequently awarded the Engineering and Procurement (EP) and associated Project Management (PM) services, with project construction commencing in Q2 2022.

The new plant includes primary crushing, crushed ore stockpile and reclaim, grinding including pebble crushing, gravity gold recovery, flotation, concentrate regrind, BIOX<sup>®</sup> circuit, CIL circuit, detoxification circuit and gold room. The first gold pour from the BIOX<sup>®</sup> plant is expected in late Q2 2024.

### RESOURCES



## Goulamina Lithium Project

### Client

Leo Lithium

### Location

Mali

### Commodity

Lithium

The Goulamina Lithium Project is located in the Bougouni Region of southern Mali, approximately 150 kilometres south of the country's capital, Bamako.

One of the largest undeveloped hard rock lithium deposits globally, the world-class Goulamina lithium deposit will be West Africa's first operating lithium mine.

Having completed the original Definitive Feasibility Study (DFS) in 2019, Lycopodium provided a DFS Update in December 2021. Engineering and design and procurement and contracting activities progressed throughout 2022, enabling Lycopodium to transition seamlessly into the execution phase, with the award of the Engineering and Procurement (EP) and associated Project Management (PM) services for Stage 1 of the project in November 2022.

Production is anticipated to commence during the first half of 2024.



RESOURCES

## Lafigué Project

**Client**

Société Des Mines De Lafigué SA (Endeavour Mining)

**Location**

Côte d'Ivoire

**Commodity**

Gold

The Lafigué Project is located on the Fetekro property in the northern part of Côte d'Ivoire in the valley of Bandama, 460 kilometres north of the capital Abidjan and respectively 90 kilometres and 45 kilometres northeast of Bouaké and Katiola towns.

Having undertaken the Scoping Study (SS), Pre-Feasibility Study (PFS) and Definitive Feasibility Study (DFS) for the project, Lycopodium was subsequently awarded the Engineering and Procurement (EP) and Construction Management (CM) services.

The process plant is designed to process 4 Mtpa of primary run-of-mine (ROM) ore through primary crushing and screening, secondary crushers, high pressure grinding rolls (HPGR) and grinding via a ball mill. The wet circuit includes gravity concentration (including intensive cyanidation and electrowinning), pre-leach thickening, pre-conditioning, leaching / adsorption, elution, electrowinning and carbon regeneration, gold room with bullion smelting and secure storage facilities, with CIL tailings via a tailings thickener pumped to a Tailings Storage Facility (TSF).

Engineering design is well advanced and nearing completion with construction activities progressing well. First gold is on track to meet the baseline schedule date and anticipated for Q3 2024.



RESOURCES

## Mutamba Mineral Sands Pilot Plant

**Client**

Rio Tinto – Mutamba Mineral Sands

**Location**

Mozambique

**Commodity**

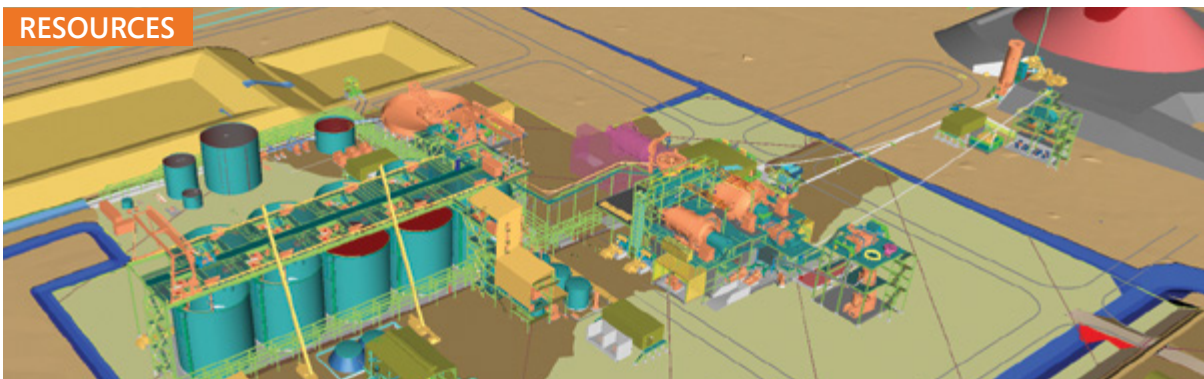
Mineral Sands

ADP is delivering a 120 tph pilot plant to treat mineral sands, on a greenfield site in Mozambique. The site is located in the Jangamo District within the Inhambane Province, approximately 450 kilometres from Maputo, Mozambique's capital city, and 40 kilometres from the ports of Inhambane and Maxixe.

The plant is based on the pilot plant supplied to Richards Bay Minerals (Rio Tinto) in 2022. ADP is providing design, supply, installation and commissioning services for the project. This includes the design and supply of key components, including the grizzly feed hopper and run-of-mine load tip, variable-speed driven belt feeder and conveyor and screening module.

The scope also includes the provision of non-process infrastructure, including a containerised motor control centre and control room building.

### RESOURCES



## Kiaka Gold Project

**Client**  
West African Resources

**Location**  
Burkina Faso

**Commodity**  
Gold

The Kiaka Gold Project is located approximately 140 kilometres southeast of Ouagadougou, the capital of Burkina Faso, and 45 kilometres south of West African's existing Sanbrado Gold Mine.

Lycopodium is providing Engineering, Procurement and Construction Management (EPCM) services for delivery of the project, with major works commencing on site in Q1 2023 and first gold anticipated in 2025.

Kiaka will be mined by conventional open-pit mining methods, with the process plant design incorporating single stage crushing and a semi-autogenous ball mill crusher (SABC) milling circuit with carbon-in-leach (CIL) processing.

### RESOURCES



## Gruyere Pebble Circuit Upgrade Project

**Client**  
Gruyere Management Pty Ltd

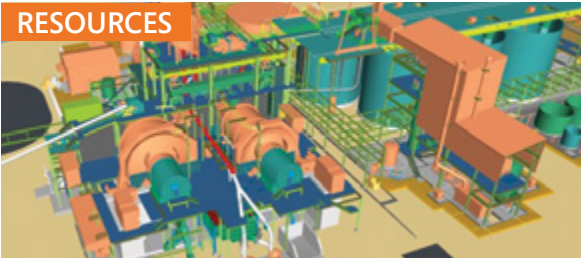
**Location**  
Western Australia

**Commodity**  
Gold

The Gruyere Gold Mine is located in the Yamarna Greenstone Belt, approximately 200 kilometres east of Laverton in Western Australia. Commencing operations in December 2019, the mine's average gold production per annum is estimated at 350,000 ounces.

Lycopodium was engaged to provide the Engineering and Procurement (EP) services required for the implementation of the process plant's pebble circuit upgrade and was subsequently awarded the Construction Management (CM) scope for delivery of the project.

This included the installation of a new crusher bypass conveyor, supporting structure and integration of chute work for improved throughput, greater functionality and reduced spillage. Engineering is complete and the Structural and Mechanical construction work is underway.



RESOURCES

## Baomahun Gold Project

**Client**  
FG Gold Limited

**Location**  
Sierra Leone

**Commodity**  
Gold

The Baomahun Gold Project is located in central Sierra Leone, approximately 200 kilometres east of the capital, Freetown. Baomahun is Sierra Leone’s first large-scale commercial gold mine and represents one of the largest deposits under development in Africa.

Lycopodium delivered a Definitive Feasibility Study (DFS) for the project in 2022 and was then subsequently awarded the Front End Engineering and Design (FEED) contract for the process plant and associated non-process infrastructure in early 2023. The FEED scope comprises optimisation and value engineering activities, including the selection of long lead items.

Upon completion of the FEED, and subject to agreement between FG Gold and Lycopodium, the project will transition into the provision of Engineering, Procurement and Construction Management (EPCM) services, which will entail detailed engineering, procurement of equipment and materials, and construction management, preoperational testing, and commissioning.



RESOURCES

## Boto Gold Project

**Client**  
Managem Group

**Location**  
Senegal

**Commodity**  
Gold

The Boto Gold Project is located in south-eastern Senegal along the highly prospective Senegal-Mali Shear Zone.

Having previously completed the project’s Feasibility Study (FS) in 2018, in 2019 Lycopodium delivered a study update looking at further optimisation of the Boto plant and infrastructure to advance the engineering of the Boto plant with a revised throughput of 2.7 Mtpa.

In 2020 Lycopodium was awarded the first phase of an Engineering and Procurement (EP) scope, which included access road and air strip detailed design and tendering to the construction contractors, as well as progressing the permanent camp and process plant designs with major vendor certified data. An early works package was awarded in 2021, including a road to provide permanent access to the site and engineering for critical plant equipment.

In April 2023, Managem Group purchased Boto from IAMGOLD, and subsequently proceeded to restart the project. Lycopodium was issued with a Limited Notice to Proceed, to undertake a review of the overall process plant design and change the milling strategy from a single stage semi-autogenous grinding (SAG) mill to a SAG and Ball Mill Combination (SABC).

An EP services contract was signed at the end of Q2 2023, with the ultimate view to Lycopodium taking on an Engineering, Procurement and Construction Management (EPCM) role, assuming construction management and project management responsibilities of the overall project.

### INFRASTRUCTURE



## Southern Highlands Overtaking Opportunities Design

### Client

Australian Rail Track Corporation (ARTC)

### Location

New South Wales

### Sector

Rail

The Southern Highlands Overtaking Opportunities Project aims to improve the efficiency and safety of rail services by creating new overtaking opportunities on the Southern Highlands line. This will involve the design and construction of new overtaking opportunities provided through bi-directional crossovers at two separate locations, as well as other infrastructure improvements to support increased capacity and faster travel times for passengers.

Lycopodium was awarded the head design contract on the \$41.6 million project, funded by the Federal Government, that will deliver overtaking opportunities for trains at Werai in the Southern Highlands, and Joppa Junction near Goulburn.

The two locations will each provide two 'double crossovers' approximately two kilometres apart, to allow trains of up to 1,800 metres in length to be overtaken by faster services. This will allow for more efficient movement of freight and passenger rail services, increasing flexibility, and reducing delays and congestion on the ARTC network, particularly for freight and passenger services on the crucial Sydney to Melbourne line.

Site investigations have taken place and detailed design is underway, with construction due for completion in 2024.

Consultation is ongoing with councils and local communities to keep them informed on the project's progress.





INFRASTRUCTURE

## Maxwell Loop Upgrade

**Client**  
Malabar Resources

**Location**  
New South Wales

**Sector**  
Rail

The Antiene Spur line is situated off the Main North line between Singleton and Muswellbrook, New South Wales, and leads to the Maxwell Coal Loop (formerly owned by Anglo American Australia) and the BHP Mt Arthur Coal Loop.

Malabar Resources is an independent Australian-owned mining company based in the Hunter Valley. Malabar Resources purchased the Drayton Open Cut Mine which ceased operations in October 2016, and re-named the mine and associated infrastructure to 'Maxwell Infrastructure'. Malabar is developing a new underground mine and is now producing coal for the steel manufacturing industry.

Lycopodium was engaged to renew the balloon loop to a standard suitable to accommodate loading of coal and transfer to the nearby Port of Newcastle.

Lycopodium was responsible for project scoping, track and civil design, procurement of the construction contractor, and construction and contract management.

The project encompassed several primary tasks, including data collection, track reconditioning, replacement of timber sleepers with heavy-duty concrete ones, installation of crossings for safety, track drainage improvements, culvert renewal, rerailling, and track resurfacing. Additionally, access enhancements were made, redundant infrastructure was removed, and track control markers were installed to monitor the track's condition effectively. Overall, the project aimed to improve railway infrastructure and operational efficiency.



INFRASTRUCTURE

## KiwiRail Yard Improvement Programme Business Case

**Client**  
Stantec NZ for KiwiRail

**Location**  
New Zealand

**Sector**  
Rail

KiwiRail's national network of yards plays a key role in its rail freight business and is vital for freight operations. Despite their importance, many yards have been unable to support KiwiRail's business and national mode share objectives. As a result, KiwiRail sought a business case to assess and identify a prioritised programme for the improvement of these yards through the 2021 Rail Network Investment Programme.

Lycopodium and Stantec assembled a team of industry experts with considerable history in development of Programme Business Cases to meet investment objectives, as well as key personnel with operational expertise in management of rail freight networks.

Lycopodium and Stantec developed agreed objectives in conjunction with KiwiRail to meet planned benefits of improved safety, efficiency, and reliability across the network. Specific interventions at yard and asset levels were developed to meet these objectives and these were presented in seven potential investment programmes, from which a preferred programme was determined.

The Programme Business Case was completed in July 2023. It provided a clear investment pathway for improvement to the network with both short and long-term interventions outlined to ensure benefits can be realised for the network immediately while also allowing for changing freight movements in the future.

### INDUSTRIAL PROCESSES



## CSL Seqirus Project Banksia Flu Cell Culture Manufacturing Facility

### Client

CSL Seqirus (a subsidiary of CSL)

### Location

Victoria

### Sector

Pharmaceuticals

CSL Seqirus is developing a new manufacturing facility on a greenfield site in Tullamarine, Melbourne, to produce influenza vaccines under the title 'Project Banksia', with a scheduled completion date of mid-2026. Lycopodium has been awarded the Process Mechanical and Electrical Detailed Design works for the Flu Cell Culture Manufacturing Facility, as part of the project.

Once complete, Project Banksia will deliver a state-of-the-art facility that will use innovative cell-based technology to produce influenza vaccines for use in both influenza pandemics and seasonal vaccination programs. The new facility will also produce unique products important to Australia's public health needs – including antivenom for Australian snakes, spiders and marine creatures, and the world's only human vaccine for Q-Fever.

This will be the only cell-based influenza vaccine manufacturing facility in the Southern Hemisphere.

The Lycopodium scope comprises process design, equipment specification/selection, functional specification documentation development, P&ID development, 3D modelling of equipment, valving, piping, instrumentation, generation of isometrics for construction of the process facility, electrical design of MCC, PCCs, electrical architecture, drafting loops and single lines diagrams. Detailed design was completed in September 2022 and a select team of Lycopodium employees has been seconded to assist CSL Seqirus in the construction management and commissioning of the facility.



## ANSTO Project BRIGHT

### Client

Caratelli Enterprise (on behalf of ANSTO Synchrotron)

### Location

Victoria

### Sector

Research and Development

Lycopodium was engaged by French vendor Caratelli for site engineering services in support of installing Nanoprobe beamline enclosures that provide personnel radiation protection at the ANSTO Synchrotron facility.

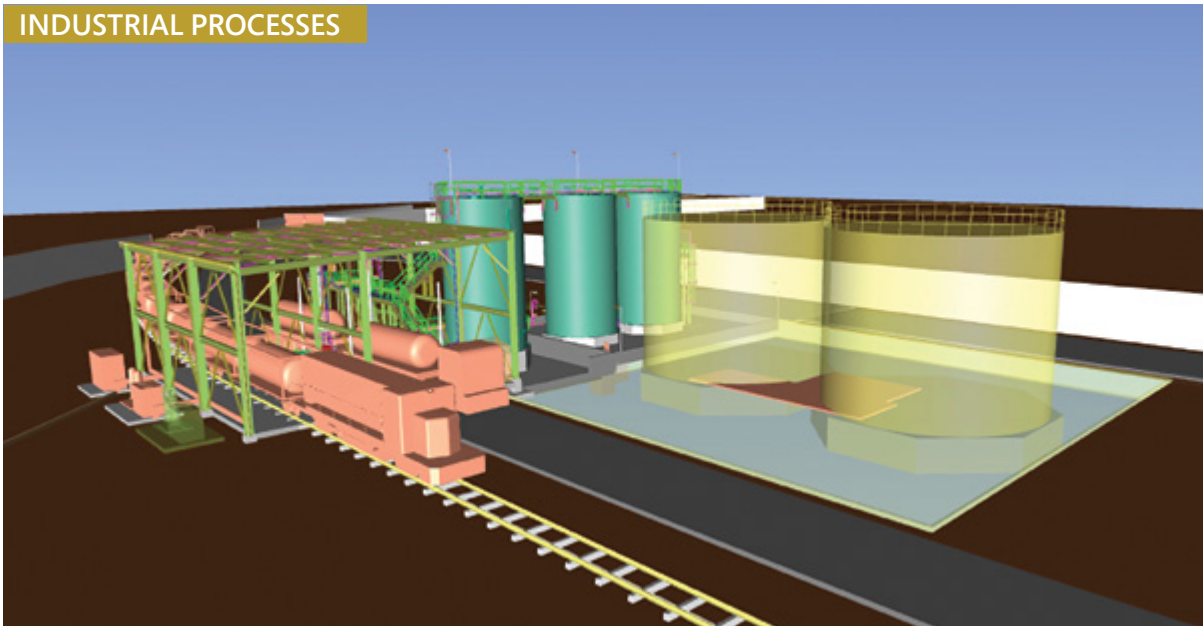
As the principal contractor, Lycopodium managed the installation of the enclosures, while Caratelli provided the design, fabrication, and specialist technical supervision support during the site installation work.

The completed structures underwent rigorous radiation leakage testing by ANSTO to ensure compliance with all radiation safety regulations, allowing for the new scientific experimental equipment to be installed for high-resolution visualisation of specimens' phase and absorption investigations.

Lycopodium's responsibilities included the detailed design and fabrication of the access platform/walkways to meet ANSTO's design requirements.

Our support services extended to site safety management and the engagement of local sub-contractors (and vendors) to support the assembly and installation works, local procurement, and overall coordination of the installation works.

### INDUSTRIAL PROCESSES



## Kalgoorlie Intermodal Liquid Rail Offloading Yard (KILROY) Prefeasibility Study & Detailed Design

**Client**  
Coogee Chemicals

**Location**  
Western Australia

**Sector**  
Chemical and Energy

Lycopodium was engaged by Coogee Chemicals to provide a Prefeasibility Study and a capital cost estimate for establishing an intermodal storage and handling facility for unloading rail cars, storage, and loading of road tankers with bulk chemical product storage at Kalgoorlie.

Coogee aims to streamline the delivery of product, storage, and distribution to local customers via increased capacity rail transportation through the application of either dedicated rail tank cars or larger 'Maxi-Iso' liquid isotainers for the mining industry. This prompted the development of an intermodal facility for unloading of rail cars, bulk storage of product and loading of road tankers.

Lycopodium's responsibilities for the Prefeasibility Study included the development of a preliminary intermodal facility layout and preliminary design work, including P&IDs, to support a capital cost estimate.

Lycopodium subsequently completed the detailed design for the civil/concrete foundations of the rail unloading and tanker loading apron and the storage tank bund areas that allowed Coogee to undertake the first phase of construction works with their rail service provider. These detailed design works were undertaken on a challenging footprint that also had to take into consideration the integration of a future Dangerous Goods storage facility within the same footprint.

Phase 1 construction works are currently underway with completion expected by December 2023.



## SEW Chlorinator Upgrade Works

**Client**  
Jonoco Pty Ltd (on behalf of South East Water)

**Location**  
Victoria

**Sector**  
Water and Wastewater

Lycopodium was engaged to partner with Jonoco (Principal Contractor) to assist with upgrades to two chlorination sites within the South East Water (SEW) network in suburban Melbourne.

The existing chlorinator injection systems at the Lang Lang and Frankston South water treatment plant sites no longer met SEW's operational requirements, having reached their end of service life. SEW required replacement of the old systems with the latest state-of-the-art dosing facilities.

Lycopodium partnered with Jonoco in investigating the template of the upgrades. Lycopodium produced the design and process control documentation for the existing Bunyip and Koo Wee Rup chlorinators. The investigations at Koo Wee Rup and Bunyip were then used to create a Basis of Design document for the Frankston South and Lang Lang sites.

While Lycopodium undertook the detailed design, Jonoco was responsible for undertaking the procurement, site installation and construction, and commissioning works. Lycopodium also provided technical assistance during Jonoco's site works.

Jonoco, with Lycopodium, is presently tendering on future upgrades of South East Water's chlorinators using Lycopodium's Design and Process Control documentation.

# Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the Year Ended 30 June 2023

	Notes	2023 \$	2022 \$
<b>Revenue from Continuing operations</b>			
Revenue from contracts with customers	5(a)	323,879,383	228,711,210
Interest income		1,650,486	563,484
Other income	5(c)	2,041,634	2,882,139
Revenue		327,571,503	232,156,833
Employee benefits expense		(113,617,410)	(85,216,446)
Depreciation and amortisation expense	6	(6,366,509)	(5,621,299)
Project expenses		(7,233,167)	(3,709,202)
Equipment and materials		(39,923,019)	(45,365,867)
Contractors		(76,394,095)	(46,421,321)
Occupancy expense		(2,150,012)	(1,760,674)
Other expenses		(14,393,592)	(13,353,492)
Warranty provision (expenses)/reversal	21	(5,440,853)	9,305,489
Finance costs	6	(839,276)	(886,201)
Share of net (loss)/profit of associates and joint ventures accounted for using the equity method	17	2,063,093	(201,172)
<b>Profit before income tax</b>		<b>63,276,663</b>	<b>38,926,648</b>
Income tax expense	7	(17,718,082)	(12,074,774)
<b>Profit for the year</b>		<b>45,558,581</b>	<b>26,851,874</b>
Profit attributable to:			
Owners of Lycopodium Limited		46,780,431	27,177,701
Non-controlling interests		(1,221,850)	(325,827)
Profit for the year		45,558,581	26,851,874
<b>Other comprehensive income</b>			
Items that may be reclassified to profit or loss			
Foreign currency translation		(3,696,794)	(817,656)
<b>Total comprehensive income for the year</b>		<b>41,861,787</b>	<b>26,034,218</b>
Other comprehensive income for the year is attributable to:			
Owners of Lycopodium Limited		40,268,078	26,030,215
Non-controlling interests		1,593,709	4,003
<b>Total comprehensive income for the year</b>		<b>41,861,787</b>	<b>26,034,218</b>
	Notes	Cents	Cents
Earnings per share for profit attributable to the ordinary equity holders of the Company:			
Basic earnings per share	36(a)	117.72	68.40
Diluted earnings per share	36(b)	117.72	68.40

The above statement of profit or loss and other comprehensive income should be read in conjunction with the notes contained in the FY2023 Financial Report.

# Consolidated Statement of Financial Position

As at 30 June 2023

	Notes	2023 \$	2022 \$
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents	8	82,412,067	100,946,619
Trade and other receivables	9	87,086,807	67,111,605
Inventories	10	275,629	347,627
Derivative assets	16(c)	31,386	-
Other current assets	11	7,308,678	5,518,861
<b>Total current assets</b>		<b>177,114,567</b>	<b>173,924,712</b>
<b>Non-current assets</b>			
Property, plant and equipment	12	8,512,811	6,897,962
Right-of-use assets	13	13,247,239	13,687,667
Intangible assets	14	6,447,888	6,524,274
Deferred tax assets	15	3,709,104	12,621,890
Financial assets measured at fair value through profit or loss	16(a)	3,037,485	2,471,669
Investments accounted for using the equity method	17	3,809,495	2,768,361
Other receivables	18	-	42,459
<b>Total non-current assets</b>		<b>38,764,022</b>	<b>45,014,282</b>
<b>Total assets</b>		<b>215,878,589</b>	<b>218,938,994</b>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade and other payables	19	28,808,966	26,024,079
Contract and other liabilities	5(b)	25,166,322	43,468,918
Borrowings	16(b)	680,136	841,470
Lease liabilities	16(a)	4,494,167	3,426,992
Current tax liabilities		12,909,805	18,960,637
Derivative liabilities	16(c)	-	536,081
Employee benefits	20	9,221,812	8,869,891
Provisions	21	9,578,601	4,087,367
<b>Total current liabilities</b>		<b>90,859,809</b>	<b>106,215,435</b>
<b>Non-current liabilities</b>			
Borrowings	16(b)	-	683,317
Employee benefits	23	1,526,707	671,369
Lease liabilities	16(a)	10,527,166	11,693,453
<b>Total non-current liabilities</b>		<b>12,053,873</b>	<b>13,048,139</b>
<b>Total liabilities</b>		<b>102,913,682</b>	<b>119,263,574</b>
<b>Net assets</b>		<b>112,964,907</b>	<b>99,675,420</b>
<b>EQUITY</b>			
Issued capital	24	18,551,357	19,344,160
Reserves	25	(3,572,691)	(337,504)
Retained earnings	26	99,663,882	81,496,413
Equity attributable to the owners of Lycopodium Limited		<b>114,642,548</b>	<b>100,503,069</b>
Non-controlling interests	27	(1,677,641)	(827,649)
<b>Total equity</b>		<b>112,964,907</b>	<b>99,675,420</b>

The above statement of financial position should be read in conjunction with the notes contained in the FY2023 Financial Report.

# Shareholder Information

The shareholder information set out below was applicable as at 7 August 2023.

## A. DISTRIBUTION OF EQUITY SECURITIES

Analysis of numbers of equity security holders by size of holding:

Holding	Total Holders
1 - 1000	933
1,001 - 5,000	786
5,001 - 10,000	247
10,001 - 100,000	261
100,001 and over	30
	2,257

There were 100 holders of less than a marketable parcel of ordinary shares.

## B. EQUITY SECURITY HOLDERS

The names of the twenty largest holders of quoted equity securities are listed below:

Holding	Ordinary shares	
	Number held	Percentage of Units
1 REESH PTY LTD <THE M J CARATTI FAMILY A/C>	9,046,221	22.76
2 BNP PARIBAS NOMS PTY LTD <GLOBAL MARKETS DRP>	2,783,794	7.00
3 UBS NOMINEES PTY LTD <THORNEY INVESTMENT GROUP>	2,728,583	6.87
4 CHIMAERA CAPITAL LIMITED <BRUNO RUGGIERO>	1,785,997	4.49
5 HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	1,748,280	4.40
6 CITICORP NOMINEES PTY LIMITED	1,715,087	4.32
7 NATIONAL NOMINEES LIMITED	1,393,515	3.51
8 BNP PARIBAS NOMINEES PTY LTD <IB AU NOMS RETAILCLIENT DRP>	1,213,733	3.05
9 CADDY FOX PTY LTD <THE LEONARD FAMILY A/C>	902,930	2.27
10 J P MORGAN NOMINEES AUSTRALIA PTY LIMITED	523,316	1.32
11 GOTTERDAMERUNG PTY LIMITED <GOTTERDAMERUNG FAMILY A/C>	432,078	1.09
12 MR PETER DE LEO + MRS TIANA DE LEO <DE LEO SUPER FUND A/C>	427,314	1.08
13 HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED - A/C 2	414,730	1.04
14 MR DAVID JAMES TAYLOR	325,000	0.82
15 SELSO PTY LTD <THE OSMETTI FAMILY A/C>	266,148	0.67
16 DE LEO NOMINEES PTY LTD <THE DE LEO FAMILY A/C>	253,557	0.64
17 JOHN O'SULLIVAN PTY LTD <J C O'SULLIVAN P/L S/F A/C>	230,000	0.58
18 BOTECH PTY LTD <BOTTECCHIA SUPER FUND A/C>	224,365	0.56
19 MR PETER ROBERT LEMON	210,000	0.53
20 DE LEO NOMINEES PTY LTD <THE DE LEO INVESTMENT A/C>	207,900	0.52
	26,832,548	67.52

## C. SUBSTANTIAL HOLDERS

Analysis of numbers of equity security holders by size of holding:

	Number held	Percentage of Units
1 REESH PTY LTD <THE M J CARATTI FAMILY A/C>	9,046,221	22.76
2 BNP PARIBAS NOMS PTY LTD <GLOBAL MARKETS DRP>	2,783,794	7.00
3 UBS NOMINEES PTY LTD <THORNEY INVESTMENT GROUP>	2,728,583	6.87
4 CHIMAERA CAPITAL LIMITED <BRUNO RUGGIERO>	1,785,997	4.49
5 HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	1,748,280	4.40



# Corporate Directory

## Board of Directors

**Michael John Caratti**  
*Non-Executive Chairman*

**Peter De Leo**  
*Managing Director*

**Bruno Ruggiero**  
*Executive Director*

**Karl Anthony Cicanese**  
*Executive Director*

**Rodney Lloyd Leonard**  
*Non-Executive, Independent Director*

**Steven John Micheil Chadwick**  
*Non-Executive, Independent Director*

**Louise Bower**  
*Non-Executive, Independent Director*

## Audit Committee

Louise Bower  
Peter De Leo  
Rodney Lloyd Leonard

## Remuneration Committee

Steven John Micheil Chadwick  
Michael John Caratti  
Rodney Lloyd Leonard

## Risk Committee

Rodney Lloyd Leonard  
Peter De Leo  
Bruno Ruggiero

## Company Secretary

Justine Campbell

## Notice of Annual General Meeting

The details of the Annual General Meeting of Lycopodium Limited are:  
Fraser Suites Perth  
10 Adelaide Terrace  
East Perth, Western Australia 6004  
10.30am on Tuesday 14 November 2023

## Registered and Principal Office

Level 5, 1 Adelaide Terrace  
East Perth, Western Australia 6004  
+61 8 6210 5222

## Share Registry

Computershare Investor Services Pty Limited  
Level 11, 172 St Georges Terrace  
Perth, Western Australia 6000  
+61 8 9323 2000

## Lawyers to the Company

Steinepreis Paganin  
Level 4, The Read Buildings  
16 Milligan Street  
Perth, Western Australia 6000  
+61 8 9321 4000

## Auditors

RSM Australia Partners  
Level 32, Exchange Tower  
2 The Esplanade  
Perth, Western Australia 6000  
+61 8 9261 9100

## Principal Banker

Australia and New Zealand Bank  
Level 10, 77 St Georges Terrace  
Perth, Western Australia 6000

## Stock Exchange Listing

Lycopodium Limited shares are listed on the Australian Securities Exchange (ASX code: LYL)

## Website

[www.lycopodium.com](http://www.lycopodium.com)

## Corporate Governance Statement

[www.lycopodium.com/investor-relations/corporate-governance/](http://www.lycopodium.com/investor-relations/corporate-governance/)

Lycopodium Limited  
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