# Lycopodium

The science of solving engineering problems

# **Investor Presentation**

Full Year Results FY2021

25 August 2021





# **About Lycopodium**

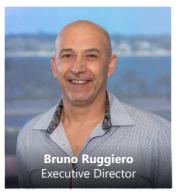
Lycopodium is an innovative and value-driven process, engineering and project delivery organisation.

The Company is headquartered in Perth, Western Australia and is listed on the Australian Stock Exchange (ASX: LYL).



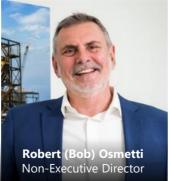
# Michael (Mick) Caratti Chairman

















# **Corporate Overview**

Share Price (as at 17.8.21) **\$4.65** 

Shares on Issue **39.7m** 

Market Capitalisation ~\$184.6m

Earnings per Share
35.7 cents

Total Dividend per Share
25 cents

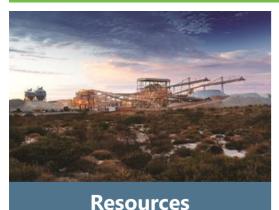
Shareholder Breakdown

Board & Management 41% Institutions 30% Retail 29%

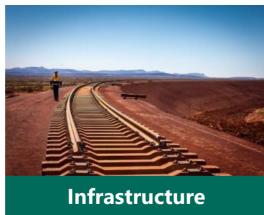


# **Core Capabilities**

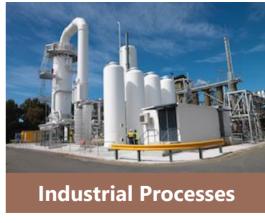
### Sectors



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



- Railways
- Roads
- Ports
- Non-Process Resource Infrastructure
- Asset Management



- Pharmaceuticals
- Biotechnology
- Chemical and Energy
- Food and Beverage
- Manufacturing
- Research and Development

### **Services**



- Feasibility Studies
- Process Development and Optimisation
- Engineering and Design
- Project Management and Delivery
- Project Services
- Construction Management
- Commissioning and Operations Support
- Asset Management





# **FY2021 Financial Highlights**

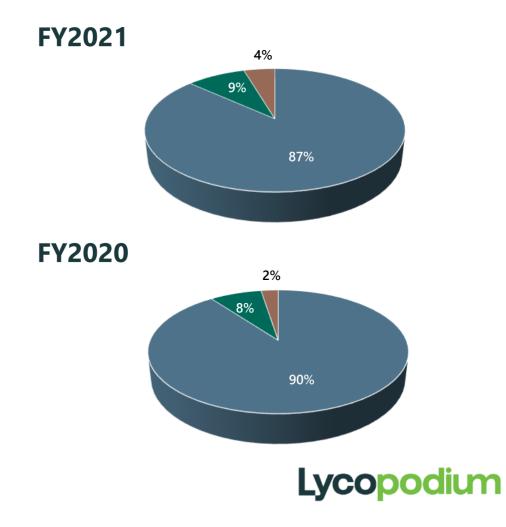
Revenue <b>\$162.2m</b>	EBITDA <b>\$26.5m</b>	Profit Before Tax <b>\$21.5m</b>
NPAT <b>\$14.2m</b>	Cash at Bank <b>\$76.8m</b>	Return on Equity <b>17%</b>

- In spite of the disruptions and uncertainties of the past year, we have continued to win work with existing and new clients across our core operating sectors of Resources, Infrastructure and Industrial Processes
- This has seen revenue remain steady, consistent with the guidance provided at 1H FY2021
- Full-year NPAT is stronger than predicted at halfyear (\$14m vs \$12m)



# **FY2021 Revenue by Sector**

	FY2021	FY2020
Sector	A\$'000	A\$'000
<ul><li>Resources</li></ul>	140.8	189.5
<ul><li>Infrastructure</li></ul>	14.0	16.2
<ul><li>Industrial Processes</li></ul>	7.4	5.4
	162.2	211.1

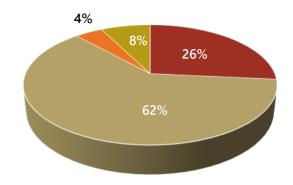


# **FY2021 Revenue by Geography**

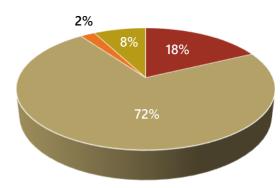
	FY2021	FY2020
Geography*	A\$'000	A\$'000
<ul><li>Australia</li></ul>	42.5	37.8
<ul><li>Africa</li></ul>	100.9	152.3
<ul><li>Americas</li></ul>	6.7	4.6
<ul><li>Other</li></ul>	12.1	16.4
	162.2	211.1

<sup>\*</sup> By project location

### FY2021







# **FY2021 Balance Sheet**

	FY2021	FY2020
	A\$'000	A\$′000
Current Assets	128.7	134.3
Total Assets	164.1	155.7
Total Liabilities	76.4	77.8
Equity	87.7	77.8

- Strong Balance Sheet provides capacity for investment
- Minimal debt
- Net Tangible Assets per Share \$2.04



# **FY2021 Operational Highlights**

### Resources

- Worked across most major commodities, including iron ore, gold, copper, nickel, lithium, graphite, diamonds, platinum and mineral sands
- Projects spread across the globe predominantly in Africa, Australia, Southeast Asia and North and Central America
- Successfully completed our largest EP(C) contract to-date, Perseus' Yaouré Gold Project in Côte d'Ivoire, ahead of schedule and under budget despite the global pandemic
- Award of a number of significant EPCM contracts Motheo Copper Project in Botswana (Sandfire); Bomboré Gold Project in Burkina Faso (Orezone); Ahafo North Gold Project in Ghana (Newmont); Talison Lithium MSA Project in Western Australia (Talison); and the design, supply and project delivery for the Séguéla Gold Project in Côte d'Ivoire (Roxgold, now Fortuna Silver Mines)
- Ongoing delivery of numerous EP and FEED scopes Boto Gold Project in Senegal (IAMGOLD); Navachab Gold Project in Namibia (QKR);
   Cobre Copper Project in Panama (First Quantum); Sukari Gold Project in Egypt (Centamin); Sabodala Gold Project in Senegal (Teranga, now Endeavour); Los Filos Gold Project in Mexico (Equinox); Talison Lithium CGP3 Project in Western Australia (Talison); and the Batu Hijau Copper/Gold Project in Indonesia (PT Amman)
- Mondium continued delivery of the EPC scope for Rio Tinto's Western Turner Syncline Phase 2 iron ore project in the Pilbara region of Western Australia, with completion of this significant project later this year, and the EPC contract for Talison Lithium's Tailings Retreatment Project, a critical element in the expansion of its Greenbushes operation in the south-west of Western Australia
- Studies pipeline has remained strong and continues to deliver subsequent FEED, EP, EPCM and EPC scope opportunities



# **FY2021 Operational Highlights**

- Continued to work with some of Australia's largest rail operators, in both passenger and freight rail systems
- Servicing greenfield and brownfield rail projects, provided design, engineering, technical advisory and rail infrastructure management (RIM) services to various clients, including Pacific National, Crawford Freightlines, New South Wales' Country Regional Network (CRN) and the Australian Rail Track Corporation's (ARTC) Inland Rail initiative
- Also continued to support Main Roads Western Australia (MRWA) in the provision of Project Management services

# Infrastructure





# **FY2021 Operational Highlights**

- Delivered projects and engineering services across key areas of expertise, including specialty chemicals, pharmaceutical, food and beverage production and heat/mass transfer
- This included providing specialist services to Boeing in their aerospace component manufacturing facilities, Kawasaki in Hydrogen related facilities, Commonwealth Serum Laboratories for plasma and blood products as well as base vaccine component production facilities, Thales in defence and munitions, Lamb Weston in food and beverage production, and Energy Australia in the replacement of its gaseous ammonia facility to an aqueous ammonia facility

# **Industrial Processes**





# **Business Improvement**

- Commitment to improving organisational connectedness to support greater collaboration across the Company:
  - Ongoing embedment of Corporate Shared Services model during FY2021, supporting standardisation across key functions, including Finance, Information Technology and Business Systems, People, Marketing and Communications and Legal
  - Technical Assurance Group (TAG) driving consistency in approach across processes and procedures, enabling effective workshare to fully leverage the specialist expertise of our people, regardless of geographical location
- Attracting, engaging and retaining a high-performing, professional workforce – focus throughout the year on recruitment, talent management, leadership and succession planning and learning and development





### **Innovation**

Committed to fostering a culture of enquiry and innovation, we introduced an internal innovation award in 2021 to recognise and reward ideas that inspire us and have the potential to positively impact the business

A number of innovative ideas were progressed during the year:

### **Dry Mining Unit**

- 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 400 ton remotely controlled mobile sand processing machine
- The technology will be implemented at the Grande Côte mineral sands operation in Senegal, the largest single dredge mineral sands operation in the world
- Developed by ADU in Cape Town, the DMU was the inaugural winner of our Innovation Award

### **Digital Twin**

- The connected digital twin approach, whereby the plant is engineered as a static digital twin (digital replica of the asset) using augmented reality and virtual reality technology, enables the static digital twin to be the primary interface for operations and plant maintenance, linked to the connected digital twin running in the background
- The technology, developed collaboratively by ADP and a Tier 1 client, will provide whole-of-life benefits that will lead to better designs and more efficient operations in the future

### **ATA<sup>TM</sup> Technology**

- ADP has designed and constructed a unit to implement ATA<sup>™</sup> technology on a mine site to convert mineral waste slurry into two discrete products – a dewatered solid for landfill, construction and/or reclamation, and a clean water stream that can be immediately reused on site
- The unit is containerised and is currently in test phase at the Orapa diamond mine in Botswana and all process data currently being recorded will be used to generate a design envelope for the full system

### **Orway IQ**

- OIQ is continuing to roll out its MillROC (Mill Remote Optimisation Consulting and Coaching) platform
- The platform provides customised data analysis and dashboards and is used by OIQ's specialist metallurgists and advanced process control consultants to deliver real-time coaching and implementation of continuous improvement initiatives
- Perseus' Yaouré mine was the first project to be purpose-built 'MillROC ready'

### **FBICRC**

- As a key participant in the Future Battery Industries Cooperative Research Centre (FBICRC) based at Curtin University in Western Australia, we are collaborating with researchers, governments and the community to ensure Australia plays a leading role in the global battery revolution, with the development of capability that will enable participation more broadly across the value chain
- We are directly participating in five of the FBICRC's foundation projects



# **People First**

Delivering projects safely for our clients remains a fundamental metric of success and our excellent safety performance is a credit to our delivery teams on the ground

During FY2021, we maintained our strong safety performance:

- 19 million manhours controlled
- Lost Time Injury Frequency Rate (LTIFR) 0.01
- Total Recordable Injury Frequency Rate (TRIFR) 2.1





<sup>&</sup>lt;sup>1</sup> Against Construction Industry frequency rate of 7.6 (Safe Work Australia, *Key WHS Statistics Australia 2020*)

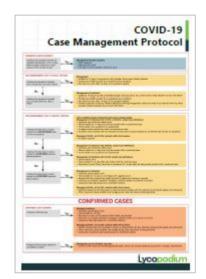
# **Continuing to Manage COVID-19**

- FY2021 represented the first full year operating under the challenges presented by the global pandemic, with varying degrees of restrictions across our operational jurisdictions
- Impact on operations has continued to be well managed, with open lines of communication vital, both internally with staff and externally with clients and other stakeholders, particularly given new projects mobilising in Africa
- Operating protocols are aligned with the advice provided by the various governments and authorities within our operational locations globally
- Focus remains on the health and wellbeing of our people, clients and partners, and the broader communities in which we operate, working together to maintain business continuity
- The mental health and wellbeing of our people has been a particular area of focus, with ongoing support provided











# **Our Community**

Our engagement with the communities within which we live and work is an integral part of how we like to do business and in late FY2021 we established the Lycopodium Foundation, to provide a formal vehicle for the administration of our philanthropic, community engagement and sponsorship activities:

- A key pillar of our engagement strategy is to support social development and education and therefore our established partnerships with the Clontarf Foundation and the Murlpirrmarra Connection in Australia and BASICS International in Africa remain ongoing
- In response to the hardships being felt as a result of the pandemic, we contributed to the Salvation Army and St Vincent de Paul Society to assist families in need in our community and also supported the Child In Need Institute, an NGO which launched a COVID relief campaign to establish assistance centres in metro cities across India
- Also in response to the pandemic, our electrically operated ventilator, LycoVent, obtained its Export Only Listing for use outside of Australia, and in partnership with Australian Doctors for Africa, we intend to make LycoVent available to African hospitals
- Throughout the year, the Company also continued to support various charitable initiatives championed by our staff, including Jeans for Genes, Breast Cancer Care WA and the Cancer Council







# **Major Projects**



# **Yaouré Gold Project**

Sector	Resources
Client	Perseus Mining Limited
Location	Côte d'Ivoire
Commodity	Gold
Scope	Engineering, Procurement and Construction (EP(C)) services
Processing Capacity	3.3 Mtpa

Yaouré was delivered ahead of schedule and under budget, despite the pandemic – construction continued throughout 2020 and the stretch target of first gold in December 2020 was achieved





# **Bomboré Gold Project**

Sector	Resources
Client	Orezone
Location	Burkina Faso
Commodity	Gold
Scope	Engineering, Procurement and Construction Management (EPCM) services
Processing Capacity	5.2 Mtpa





# **Western Turner Syncline Phase 2**

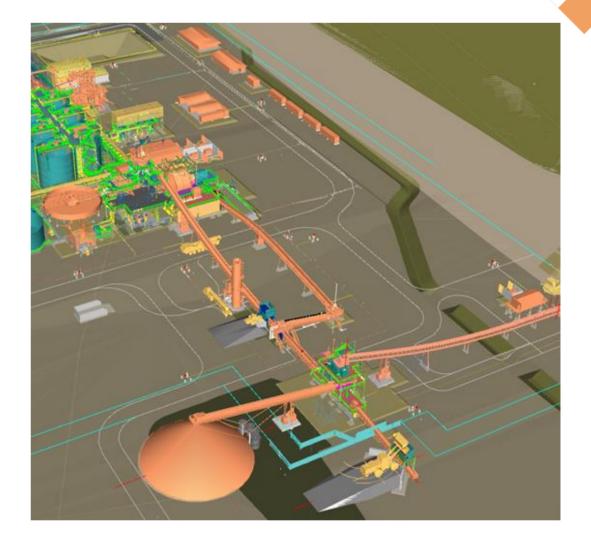
Sector	Resources
Client	Rio Tinto
Location	Pilbara, Western Australia
Commodity	Iron Ore
Scope	Engineering, design, procurement and construction of the mineral processing facilities and associated non-process infrastructure
	Awarded and delivered via Mondium





# **Boto Gold Project**

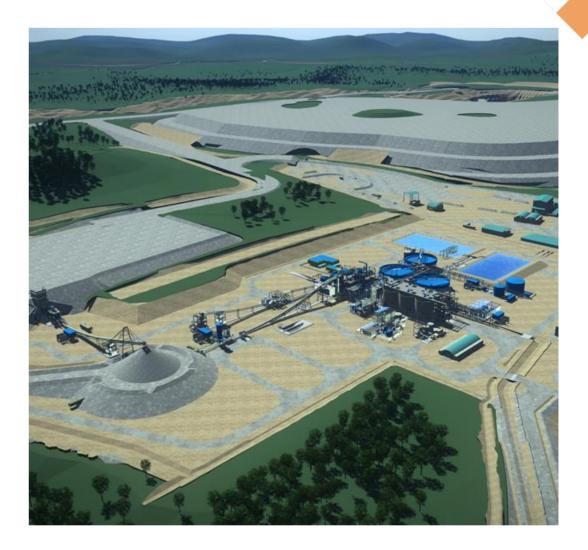
Sector	Resources
Client	IAMGOLD Corporation
Location	Senegal
Commodity	Gold
Scope	Engineering and Procurement (EP) services
Processing Capacity	2.7 Mtpa





# **Ahafo North Project**

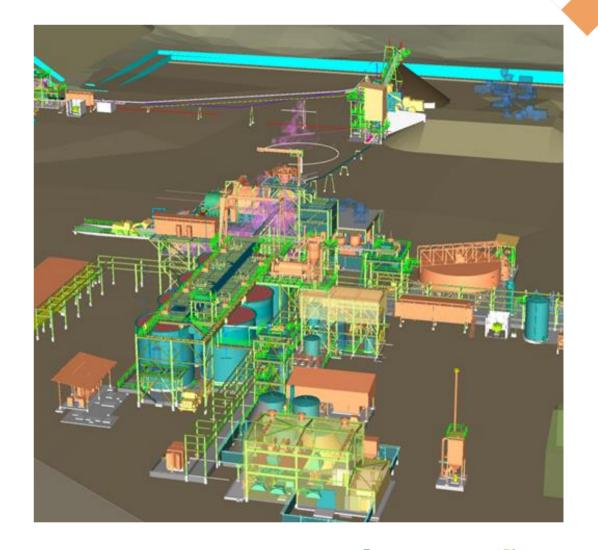
Sector	Resources
Client	Newmont Ghana Gold Limited
Location	Ghana
Commodity	Gold
Scope	Engineering, Procurement and Construction Management (EPCM) services
Processing Capacity	3.4 to 3.7 Mtpa





# Séguéla Gold Project

Sector	Resources
Client	Fortuna Silver Mines Inc
Location	Côte d'Ivoire
Commodity	Gold
Scope	Design, supply and project delivery services
Processing Capacity	1.25 Mtpa





# **Tailings Retreatment Project**

Sector	Resources
Client	Talison Lithium
Location	Greenbushes, Western Australia
Commodity	Lithium
Scope	Engineering, Procurement and Construction (EPC) services
	Awarded and delivered via Mondium
Processing Capacity	2 Mtpa





# **Motheo Copper Project**

Sector	Resources
Client	Sandfire Resources Ltd
Location	Botswana
Commodity	Copper, Silver
Scope	Engineering, Procurement and Construction Management (EPCM) services
Processing Capacity	3.2 Mtpa





# **Cobre Ball Mill 6 Project**

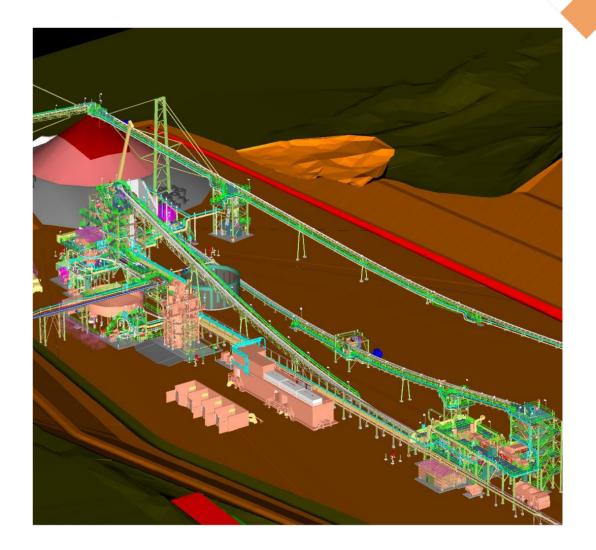
Sector	Resources			
Client	First Quantum Minerals			
Location	Panama			
Commodity	Copper, Gold, Silver, Molybdenum			
Scope	Engineering Design, Procurement Support (Ep) and construction/commissioning support services			
Processing Capacity	100 Mtpa			





# **Navachab Gold Mine Expansion**

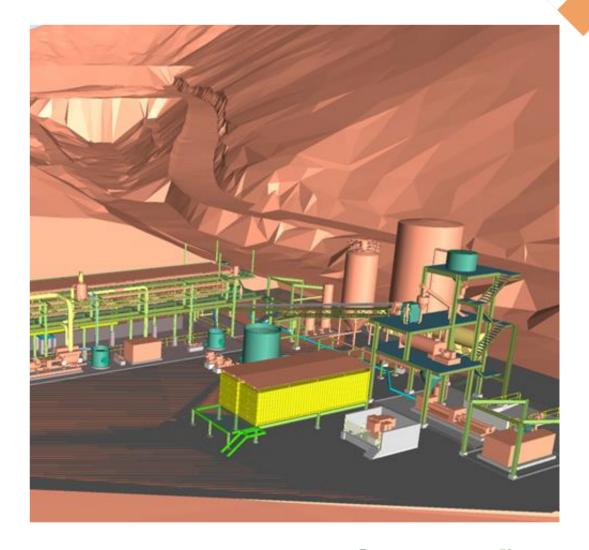
Sector	Resources			
Client	QKR Namibia Navachab Gold Mine Pty Ltd			
Location	Namibia			
Commodity	Gold			
Scope	Engineering and Procurement (EP) services			
Processing Capacity	2.5 Mtpa			





# **Sukari Paste Plant Project**

Sector	Resources			
Client	Centamin			
Location	Egypt			
Commodity	Gold			
Scope	Front End Engineering and Design (FEED) and Engineering and Procurement (EP) services			
Processing Capacity	150 tonnes per hour			





# **Infrastructure Projects**

Project	Client	Location	Scope
Rail inspections and maintenance management	Various port, mine and rail companies	All States	Rail inspections and delivery of maintenance management at rail terminals, yards and sidings
Country Regional Network (CRN) Annual Works Program	John Holland Rail	NSW	Project Management Services
Riverina Intermodal Freight and Logistics Hub	Huon Contractors	NSW	Engineering and Design
Crawford Freightlines Turnout Renewal	Sandgate Management Services	NSW	Rail Infrastructure Management (RIM) Services
Pacific National RIM	Pacific National	All States	Rail Infrastructure Management (RIM) Services
Swan River Crossing	Main Roads WA	WA	Project Management Services



# **Industrial Processes Projects**

Project	Client	Location	Scope
CSL Genesis III & CSL Bay 5	CSL Behring	VIC	Design Consultancy Services
Beamline Shielding Enclosures (MCT & MEX)	ANSTO Synchrotron Facility	VIC	Site Construction and Safety Management Services
Silt Separator	Lamb Weston	VIC	Design and Construct
Aqueous Ammonia	Energy Australia	NSW	Design and Construct



# **Outlook and Strategy**

### **Outlook**

- Resource sector activity remains strong, supporting new development and sustaining capital opportunities going forward – value of iron ore reached an all-time high in FY2021 and demand for gold continues
- Surging demand for resources used in new and low emission technologies is driving the development of copper, nickel cobalt, graphite, vanadium and lithium assets
- Ongoing growth in emerging markets, including waste and recycling, water and wastewater and hydrogen

### **Strategy**

- Development of a more formalised footprint in the renewable energy sector with the establishment of Lycopodium Energy
- Focus on achieving broader geographical reach across Asia-Pacific and the Americas
- Balanced project delivery portfolio mix of EPCM and EPC
- Grow recurring revenue streams
- People Plan continue to attract, engage, inspire and retain a high performing, global, professional workforce
- Innovation and emerging technology digital twinning (ADP and Orway IQ) and Future Battery Industries Cooperative Research Centre (FBICRC)
- Improved knowledge management driving increased efficiency and facilitating work sharing across divisions and subsidiaries globally



# **Questions?**