

A large industrial facility, possibly a refinery or chemical plant, is shown at night. The scene is illuminated by numerous bright lights, highlighting the complex network of pipes, metal structures, and scaffolding. A prominent feature is a large, multi-level structure with a central tower and various platforms. The ground in the foreground is dark and appears to be a dirt or gravel area. The overall atmosphere is one of industrial activity and engineering complexity.

# Lycopodium

*The science of solving engineering problems*

## Annual General Meeting

Financial Year 2020

19 November 2020



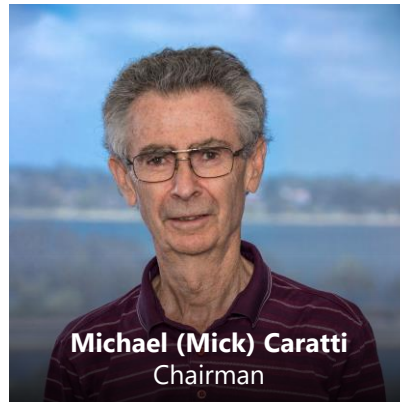


## About Lycopodium

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

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

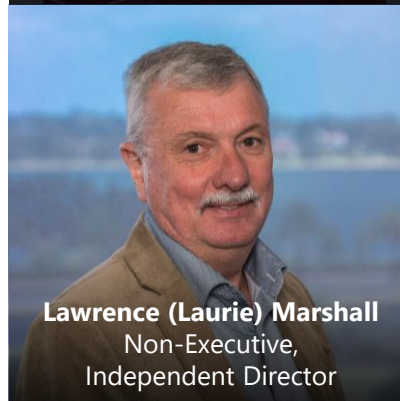
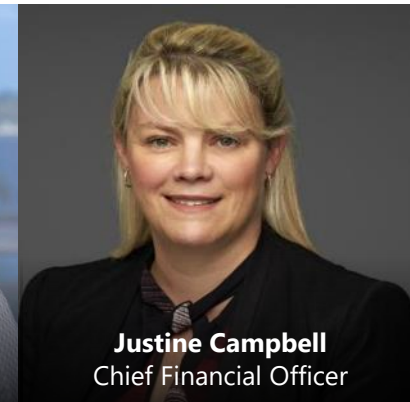
# Corporate Overview



Share Price  
(as at 16.11.20)  
**\$4.10**  
Shares on Issue  
**39.7m**



Market  
Capitalisation  
**~\$162.8m**



Earnings  
per Share  
**29.7 cents**



Full Year  
Dividend  
**20 cents**



## Shareholder Breakdown

Board and Management	41%
Institutions	30%
Retail	29%



# People First – Managing our work safely and in an environmentally friendly way

	FY2020	Current (rolling 12 months)	Target
Hours	2.5 million	2.7 million	
LTIFR	0.0*	0.0*	0.0
TRIFR	1.2	1.4	<3.0
EIFR	0.0	0.0	<2.0

\* Against Construction Industry frequency rate of 7.5  
(Safe Work Australia, *Australian Workers' Compensation Statistics, 2017-18*)



# Core Capabilities

## Sectors



### Resources

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



### Infrastructure

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



### Industrial Processes

- 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

## FY2020 Financial Highlights

Revenue <b>\$211.1m</b>	EBITDA <b>\$27.1m</b>	Profit Before Tax <b>\$18.5m</b>
NPAT <b>\$11.8m</b>	Cash at Bank <b>\$102.9m</b>	Operating Cashflow <b>\$62.2m</b>

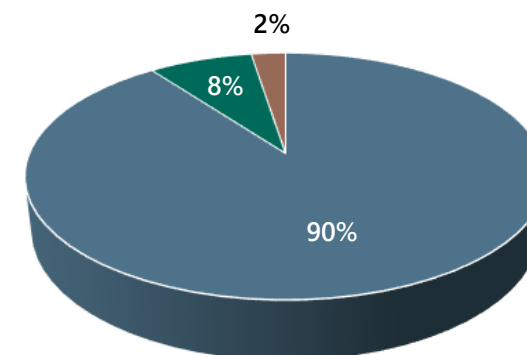
Operating within our core sectors of Resources, Infrastructure and Industrial Processes, during FY2020 we serviced a cross-section of clients with broad geographical reach across Australia, Africa, Asia, Europe, the Americas and Canada.

COVID-19 impact – we safely managed and progressed the delivery of existing projects, but the award and commencement of new opportunities was curtailed, with projects delayed or suspended.

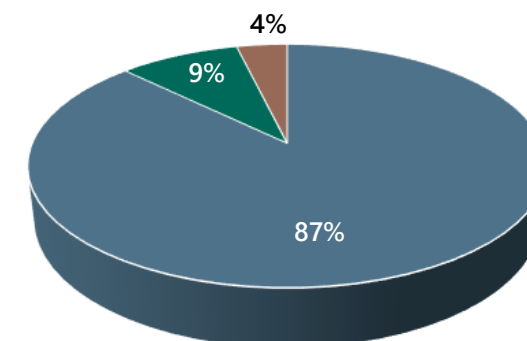
## FY2020 Revenue by Sector

	FY2020	FY2019
Sector	A\$'000	A\$'000
● Resources	189.6	134.4
● Infrastructure	16.2	13.8
● Industrial Processes	5.4	5.8
	<b>211.1</b>	<b>154.0</b>

FY2020



FY2019

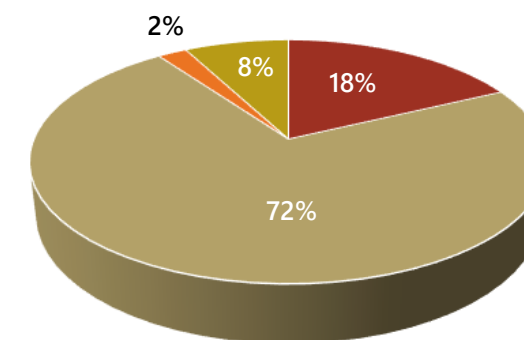


## FY2020 Revenue by Geography

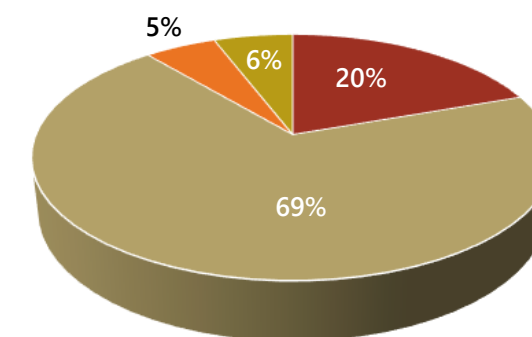
	FY2020	FY2019
Geography*	A\$'000	A\$'000
● Australia	37.8	30.2
● Africa	152.3	106.7
● Americas	4.6	8.2
● Other	16.4	9.0
	<b>211.1</b>	<b>154.0</b>

\* By project location

### FY2020



### FY2019

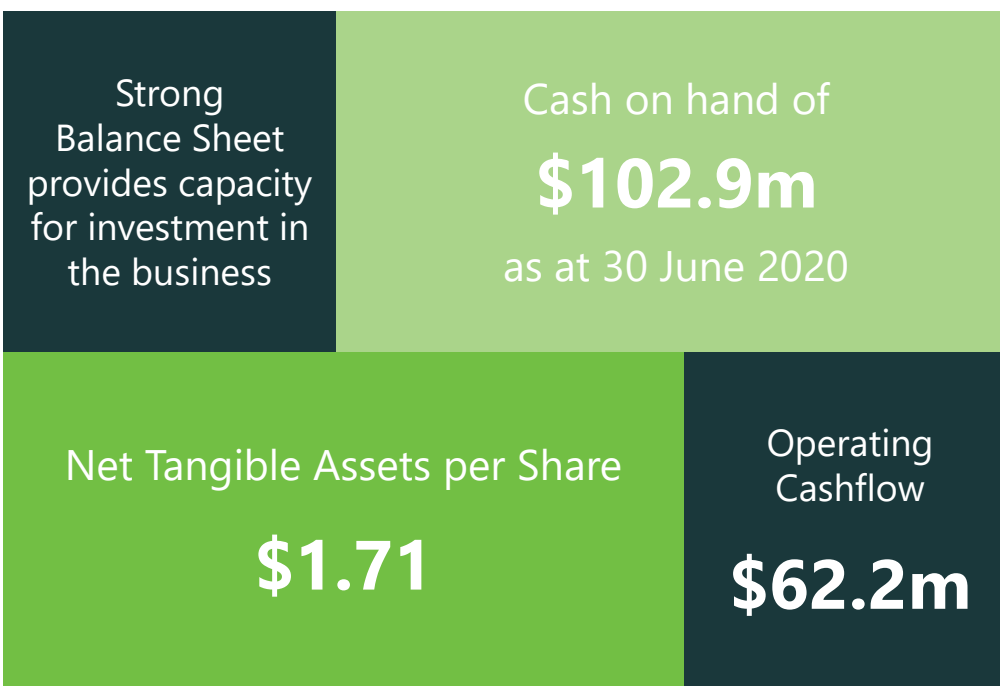




## FY2020 Balance Sheet

	FY2020	FY2019
	A\$'000	A\$'000
Current Assets	134.3	102.8
Total Assets	155.7	119.8
Total Liabilities	77.8	40.4
Equity	77.8*	79.4

\* Decline in equity due to exchange differences arising on translation of foreign controlled entities



# FY2020 Operational Highlights

- Completion of two significant EPCM projects in Burkina Faso – Sanbrado Gold Mine (West African Resources) and Wahgnion Gold Mine (Teranga Gold Corporation), both delivered safely, ahead of schedule and within budget
- Ongoing delivery of Yaouré Gold Mine (Perseus Mining) in Côte d'Ivoire – full-scale construction commenced in September quarter 2019, with COVID-19 manifesting globally only a few months later; construction has remained on time and on budget and the project is on track for 'stretch target' of first gold in December 2020 (contracted date January 2021)
- Completion of engineering and procurement services for the expansion of the Mine Services Area for the Fekola Gold Mine (B2Gold) in Mali
- Commencement of Mondium's EPC delivery of the Western Turner Syncline Phase 2 iron ore project in the Pilbara for Rio Tinto – practical completion of the engineering services achieved within schedule and budget, with delivery ongoing into FY2021
- Delivery of the engineering services scope of Mondium's EPC contract for Talison Lithium's Tailings Retreatment Project at Greenbushes, WA
- Completion of numerous studies across a spectrum of commodities, including gold, copper, lead, zinc, silver, lithium, graphite, mineral sands and sulphate of potash
- Successful completion of past studies has led to the award of further scope on a number of projects, supporting the project pipeline moving into FY2021

# FY2020 Operational Highlights

Continued to focus on maximising opportunities across core services – rail infrastructure management, non-process infrastructure and infrastructure related asset management:

- Rail infrastructure management – services provided during the year included condition surveys and design services for the Australian Rail Track Corporation (ARTC) and the Country Regional Network (CRN), and rail inspection services for various clients including Pacific National, BHP and Southern Ports Authority
- Non-process infrastructure – providing resources to support delivery of the Armadale Road to North Lake Road Bridge Project in Western Australia
- Infrastructure related asset management – optimisation of maintenance for a number of critical assets for the Cape Preston Port Company's Pilbara port facilities, which services CITIC Pacific Mining's magnetite mining operation, the largest magnetite operation in Australia





## FY2020 Operational Highlights

Continued to leverage our expertise in the provision of projects and engineering services in the areas of specialty chemicals, pharmaceutical and heat/mass transfer:

- Completed scope on the Geo40 Silica Extraction Plant in New Zealand, for the design and commissioning of a new facility for the extraction of silica from geothermal fluids
- Provided services on the Kawasaki Heavy Industries' Hydrogen Energy Supply Chain (HESC) project, a world-first pilot project to safely and efficiently convert locally-produced, clean hydrogen for international transport
- Ongoing focus on emerging opportunities in renewable energy and sustainability related projects

## Industrial Processes



**Lycopodium**

# Business Improvement

Focus during FY2020 was on developing and implementing initiatives to support improved organisational connectedness, to facilitate greater collaboration across the company, globally:

- Development of a Corporate Shared Services model to standardise processes and operating platforms across the business for key functions, including Finance, HR, Travel, IT, Legal, Marketing & Communications, and Corporate Development
- Development and implementation of a People Strategy and People Plan, providing a strategic framework for attracting and retaining talent – focus on leadership and succession planning, upskilling, global mobility and talent management.
- Achieved consistency and alignment in the systems, processes and procedures used across the business to increase efficiency and facilitate work and knowledge sharing between offices across the globe



# Innovation

## Digital Twin

- Significant initiative being undertaken by ADP Marine & Modular (ADP), our specialist subsidiary in Cape Town
- Applying advanced digital technology and engineering for process simulation and control to support brownfield optimisation work and greenfield plant design
- Complementing the traditional engineering of the plant as a static digital twin (a digital replica of the asset) through progression towards a connected digital twin to facilitate efficient remote operation of the plant
- This software technology, combined with the specialist in-house skills developed in its use, will facilitate more extensive and cost-effective options analysis and scenario planning during project study phases

## Orway IQ (OIQ)

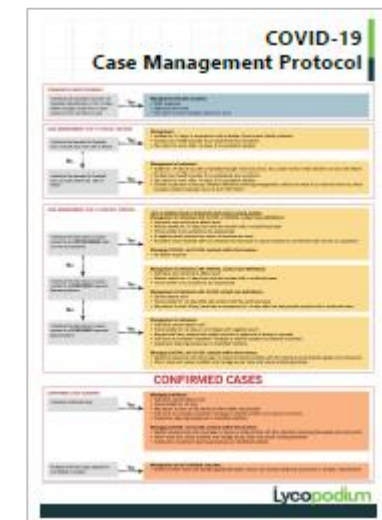
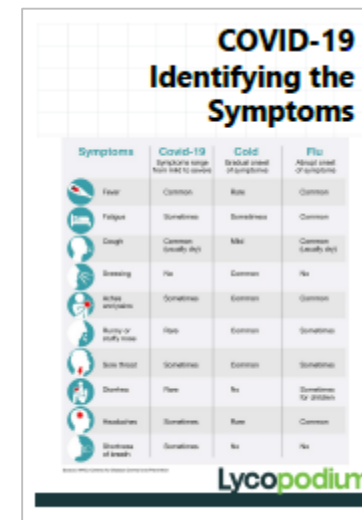
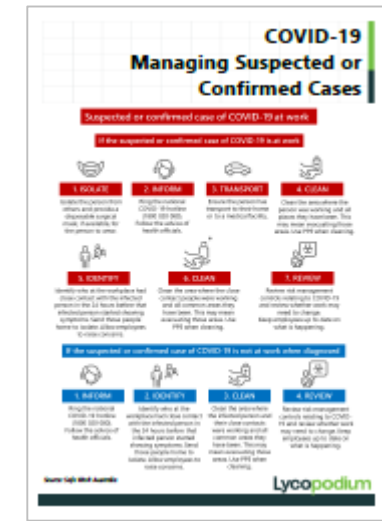
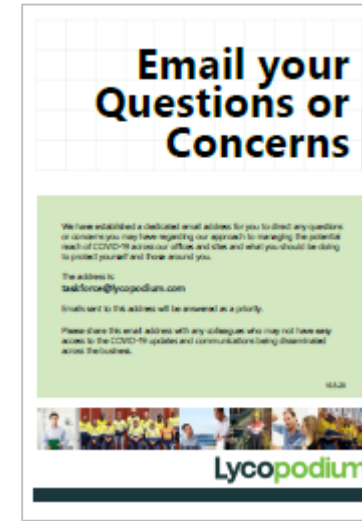
- OIQ is a collaboration between Process IQ and Orway Mineral Consultants (a wholly-owned subsidiary of Lycopodium)
- Company formed to provide remote optimisation consulting services to the minerals processing industry
- MillROC (Mill Remote Optimisation and Consulting), developed by OIQ, is an online platform providing customised dashboards, specialist metallurgical consulting and advanced process control consulting, delivered in real-time
- OIQ has been providing services on three foundation projects implementing MillROC, with these initial projects meeting all technical goals
- Perseus' Yaouré mine nearing completion in Côte d'Ivoire is the first project to be built 'MillROC ready'





# Response to COVID-19

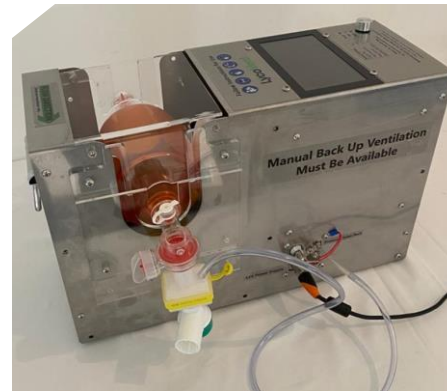
- Despite the growing impact of COVID-19 as events unfolded during the first half of 2020, the progress of our projects in delivery was generally unaffected, as we adjusted our approach to manage the potential implications of the pandemic on our operations
- Supporting and effectively communicating with our geographically dispersed workforce has been critical
- Our response to the crisis has been managed by a dedicated internal taskforce, with actions aligned with the advice provided by the various governments and authorities within the locations in which we operate globally
- Throughout this extremely dynamic period, the health and wellbeing of our people, clients and partners, and the broader communities in which we operate, has remained our priority as we have worked together to maintain business continuity and a pipeline of future work



# Our Community

## Joining the Fight Against COVID-19

- We have designed an electrically operated ventilator, known as LycoVent, for use as an emergency backup
- The portable unit, which is independent of piped oxygen supply, was developed locally in Perth
- We are in the process of applying to the Therapeutic Goods Administration (TGA) under the COVID-19 Emergency Exemption for possible use in Australia and also intend to seek the appropriate listing to allow it to be used to support the communities where Lycopodium operates in Africa
- Recognising the impact of the pandemic on the lives of everyday Australians, we also provided financial contributions to the Salvation Army and St Vincent de Paul Society, to support people in need during these difficult times



## Providing Grass-Roots Support

- Long-term partnership ongoing with the Clontarf Foundation
- Support provided to the Murlpirrmarra Connection, a not-for-profit organisation that delivers programs for Aboriginal youth in the remote communities of Wiluna and Leonora
- In Africa, continue to support BASICS International, an NGO based in Ghana, which is committed to protecting the basic human rights of children to education, shelter, food and safety



**Lycopodium**



# FY2020 Major Projects





# Wahgnion Gold Project

<b>Sector</b>	Resources
<b>Client</b>	Teranga Gold Corporation
<b>Location</b>	Burkina Faso
<b>Commodity</b>	Gold
<b>Scope</b>	Engineering, Procurement and Construction Management (EPCM) services
<b>Processing Capacity</b>	2.0 to 2.7 Mtpa



# Sanbrado Gold Project

<b>Sector</b>	Resources
<b>Client</b>	West African Resources
<b>Location</b>	Burkina Faso
<b>Commodity</b>	Gold
<b>Scope</b>	Engineering, Procurement and Construction Management (EPCM) services
<b>Processing Capacity</b>	2.0 to 2.7 Mtpa





# Yaouré Gold Project

<b>Sector</b>	Resources
<b>Client</b>	Perseus Mining Limited
<b>Location</b>	Côte d'Ivoire
<b>Commodity</b>	Gold
<b>Scope</b>	Engineering, procurement and construction EP(C) services
<b>Processing Capacity</b>	3.0 Mtpa





## Western Turner Syncline Phase 2

<b>Sector</b>	Resources
<b>Client</b>	Rio Tinto
<b>Location</b>	Pilbara, Western Australia
<b>Commodity</b>	Iron Ore
<b>Scope</b>	Engineering, design, procurement and construction of the mineral processing facilities and associated non-process infrastructure Awarded and delivered via Mondium
<b>Processing Capacity</b>	36 Mtpa



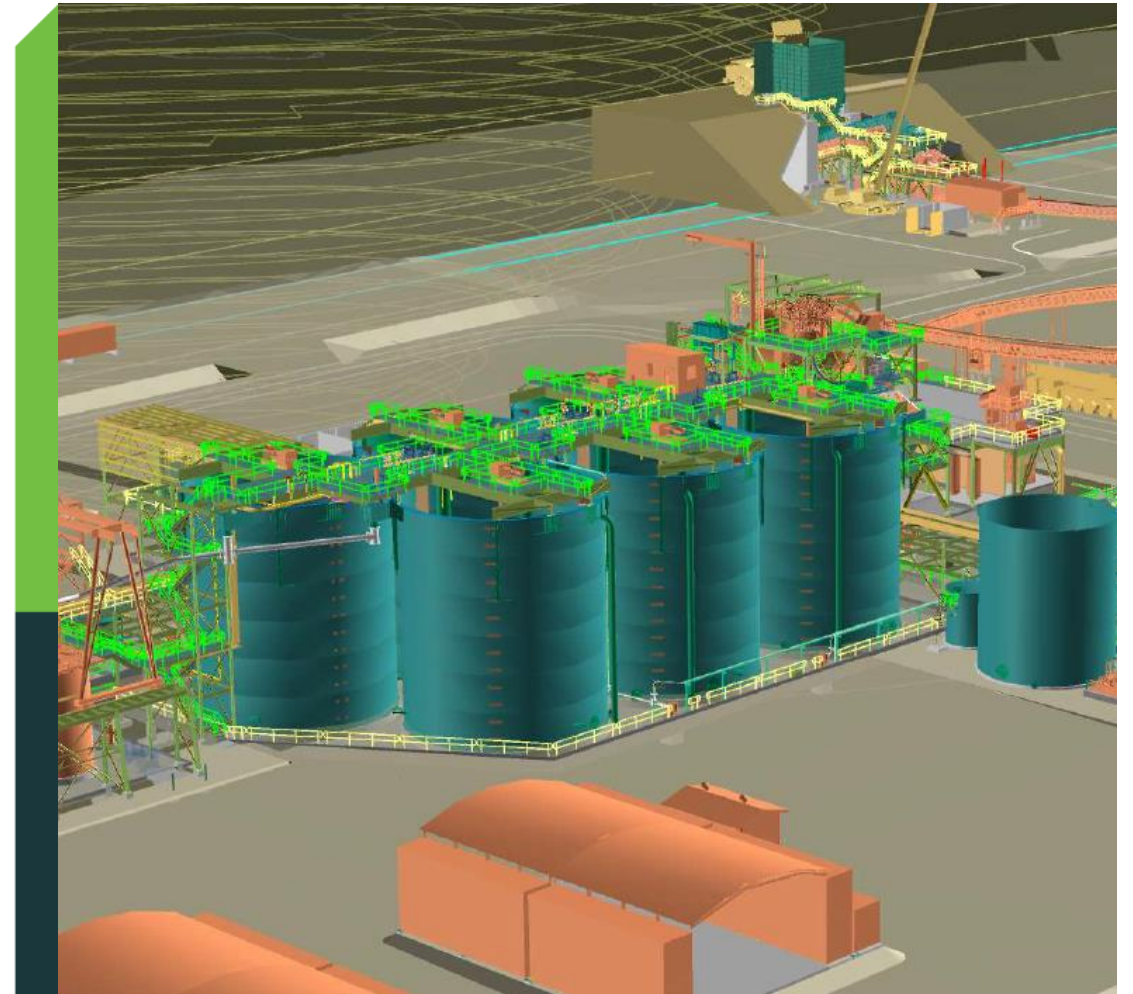
# Tailings Retreatment Project

<b>Sector</b>	Resources
<b>Client</b>	Talison Lithium
<b>Location</b>	Greenbushes, Western Australia
<b>Commodity</b>	Lithium
<b>Scope</b>	Engineering, procurement and construction (EPC) services Awarded and delivered via Mondium
<b>Processing Capacity</b>	2 Mtpa



# Boto Gold Project

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





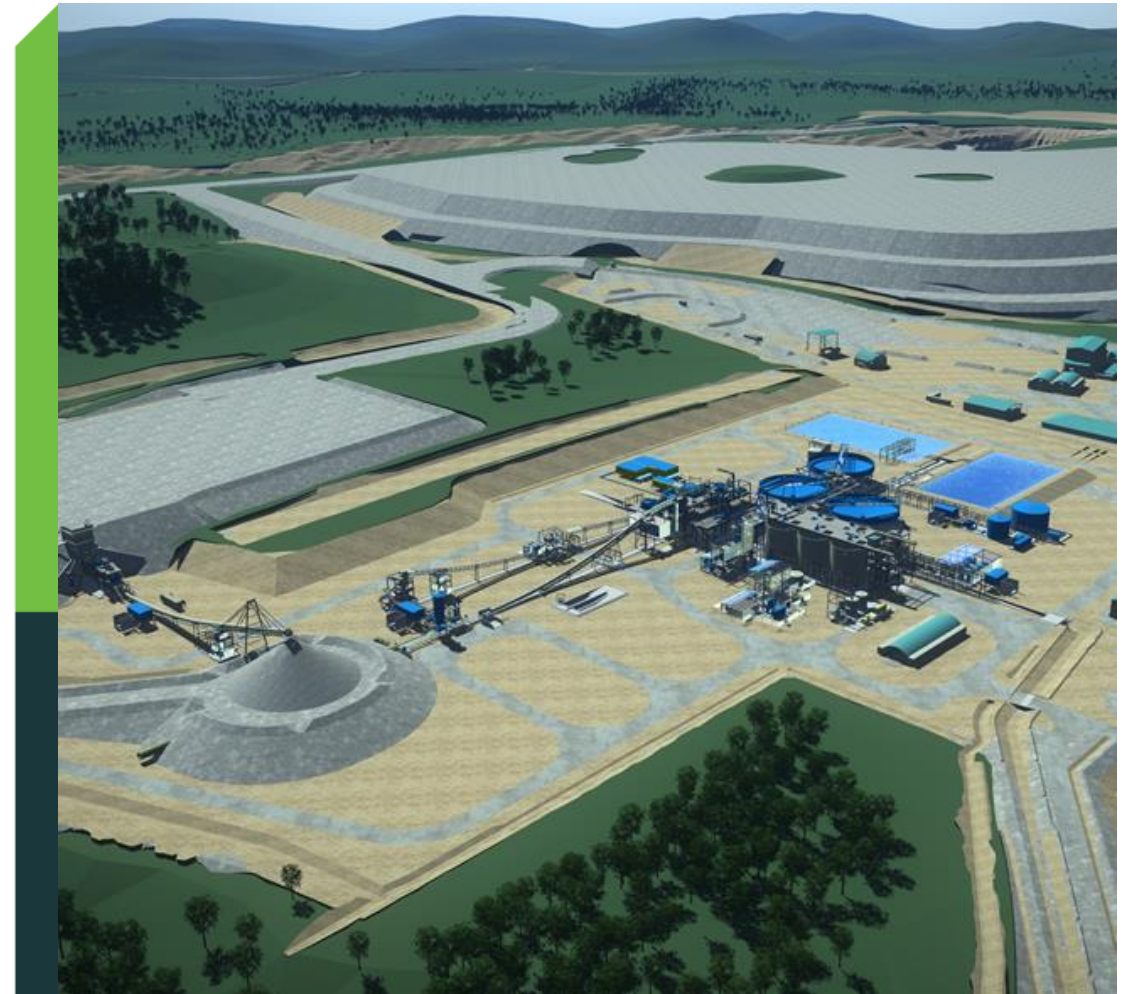
# Fekola Mine Expansion

<b>Sector</b>	Resources
<b>Client</b>	Fekola SA (B2Gold)
<b>Location</b>	Mali
<b>Commodity</b>	Gold
<b>Scope</b>	Engineering and Procurement (EP) services for expansion of the Mine Services Area
<b>Processing Capacity</b>	7.5 Mtpa



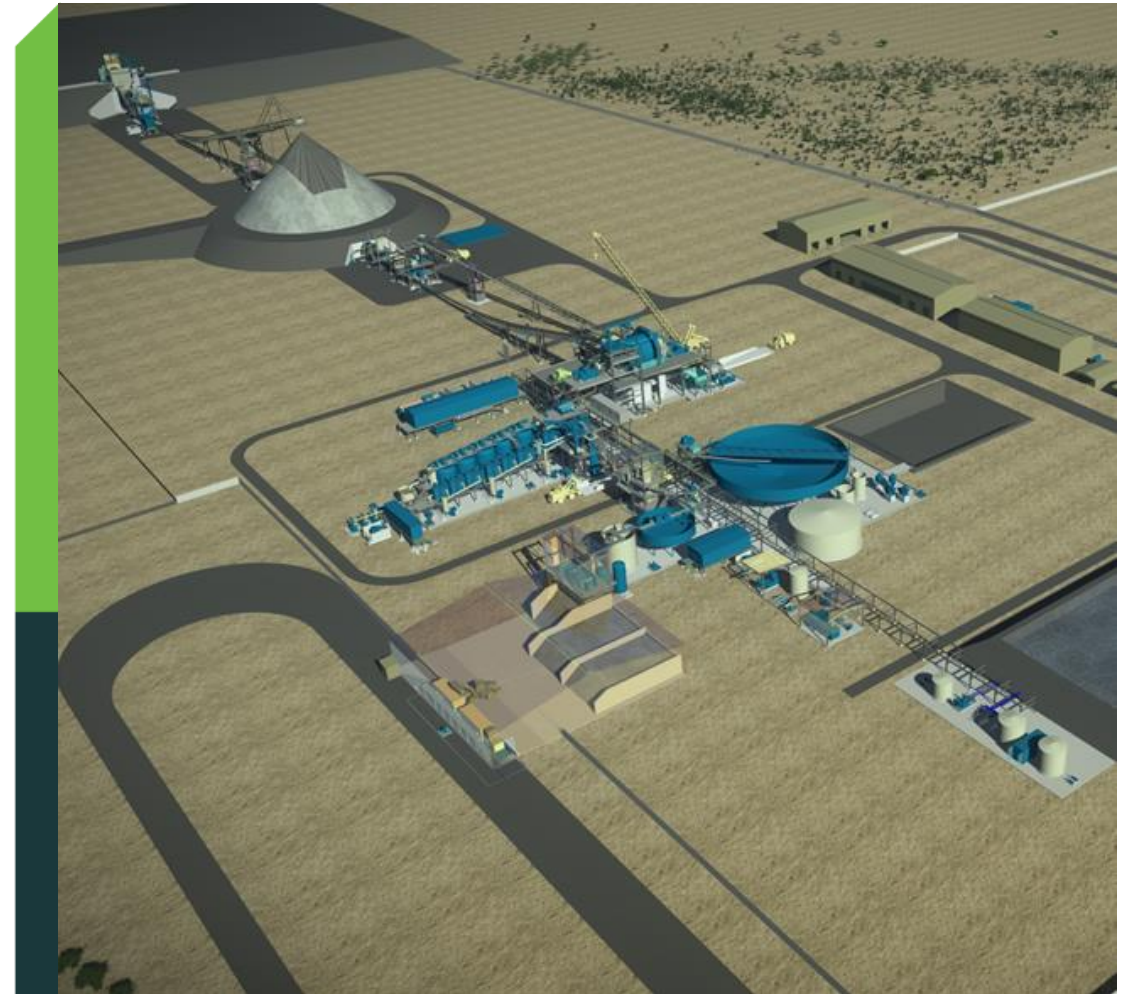
# Ahafo North Stage 3 Study

<b>Sector</b>	Resources
<b>Client</b>	Newmont Ghana Gold Limited
<b>Location</b>	Ghana
<b>Commodity</b>	Gold
<b>Scope</b>	Advancement of engineering design to prepare for the procurement of long lead items and to enable the award of early contracts to support Stage 4 (execution)
<b>Processing Capacity</b>	3.4 to 3.7 Mtpa



# Motheo Copper Project Processing Plant

<b>Sector</b>	Resources
<b>Client</b>	Sandfire Resources Ltd
<b>Location</b>	Botswana
<b>Commodity</b>	Copper
<b>Scope</b>	Optimised Feasibility Study (OFS) and Front End Engineering and Design (FEED) to support long lead procurement and early works site packages
<b>Processing Capacity</b>	3.2 Mtpa





# Recently Awarded New Work



## Recent Awards

Project	Client	Location	Commodity	Scope
Winu	Rio Tinto (via Mondium JV)	Western Australia	Copper	Front End Engineering Design (FEED)
Ahafo South Mine Water Treatment Plant Expansion	Newmont Ghana Gold	Ghana	Gold	Engineering, Design and Procurement Services
Motheo	Sandfire Resources	Botswana	Copper	Engineering, Design and Procurement Services
Gruyere Pebble Circuit Upgrade Project	Gruyere Management Pty Ltd	Western Australia	Gold	Engineering and Procurement Services
Gramalote	B2Gold	Colombia	Gold	Feasibility Study
Venetia Greasebelt	De Beers	South Africa	Diamond	EPC delivery of project scope
Chitotolo Flowsort	Sociedade Mineira Do Chitotolo	Angola	Diamond	Design and supply of a new flowsort
Séguéla	Roxgold	Côte d'Ivoire	Gold	Front End Engineering Design (FEED) and Feasibility Study Optimisation

## Recent Awards

Project	Client	Location	Scope
Inland Rail T2A	ARTC	Victoria/New South Wales	Detailed design of track slews at various locations
North Dynon	Qube	Victoria	Detailed design of terminal reconfiguration
Inland Rail PPP, Operations and Maintenance Technical Advisor	Acciona / Cintra	Queensland	Technical advisor for the Inland Rail PPP, providing operations and maintenance support – scope includes the development of a costed maintenance plan and maintenance implementation plan for the 25 year operational phase
Riverina Intermodal Freight and Logistics Hub	Huon Contractors	New South Wales	Track and civil detailed design of the rail terminal



## Recent Awards

Project	Client	Location	Scope
Chlor Alkali FEED	Coogee Chemicals	Western Australia	FEED study for new Chlor Alkali Facility
Synchrotron Bright Beamline	Innospec GmbH	Victoria	Supply and install hutches for Bright Beamline
Aqueous Ammonia	Energy Australia	New South Wales	Replace Gas Ammonia system with Aqueous Ammonia Plant – Design and Construct
Silt Separator	Lamb Weston	Victoria	Design and Construct Silt Separator

# Outlook and Strategy

The measures implemented to contain the coronavirus pandemic are likely to continue to constrain global economic activity for an extended period – with this uncertainty, our forward strategy is to stay focused on our established relationships to secure ongoing works with key clients

## Resources

### OUTLOOK

- Current global economic outlook is driving up the price of gold – works to our experience and strengths
- Opportunity for sustaining capital works projects in domestic Australian market, due to new developments potentially being delayed

### STRATEGY

- Experience and multidisciplinary capability across a range of commodities and geographies is advantageous – capitalise on opportunities across a broad cross-section of the market
- As clients focus on streamlining their operations to curtail costs, leverage asset management capability to establish recurring revenue streams

## Infrastructure

### OUTLOOK

- Pipeline of identified opportunities across core service offering of rail infrastructure management, non-process infrastructure and infrastructure related asset management

### STRATEGY

- Continue to leverage established long-term partnerships with core client base to secure new opportunities

## Industrial Processes

### OUTLOOK

- Emerging markets, such as cannabinoids, light metals and water purification
- Focus on energy efficiency and clean energy generation

### STRATEGY

- Leverage specialist expertise to support emerging markets
- Opportunity to support renewable energy and sustainability related projects as businesses seek to operate smarter and leaner in response to current economic pressures



Thank You

