



Lycopodium

# Annual General Meeting 2019

— Delivering engineering excellence, value and innovation

21 November 2019

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# 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

 <p><b>Michael (Mick) Caratti</b> Chairman</p>	<p>Share Price (as at 15.11.19)</p> <p><b>\$5.30</b></p> <p>Shares on Issue <b>39.7m</b></p>	 <p><b>Peter De Leo</b> Managing Director</p>	 <p><b>Bruno Ruggiero</b> Executive Director</p>	 <p><b>Peter Dawson</b> Executive Director</p>	<p>Market Capitalisation <b>~\$217.7m</b></p>
 <p><b>Justine Campbell</b> Chief Financial Officer</p>	 <p><b>Lawrence (Laurie) Marshall</b> Non-Executive Director</p>	 <p><b>Robert (Bob) Osmetti</b> Non-Executive Director</p>	<p>Cash at Bank (as at 30.6.19)</p> <p><b>\$60.5m</b></p>	 <p><b>Steven Chadwick</b> Non-Executive Director</p>	 <p><b>Rodney (Rod) Leonard</b> Non-Executive Director</p>



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# People First

HSE year-to-date as at end of October 2019:

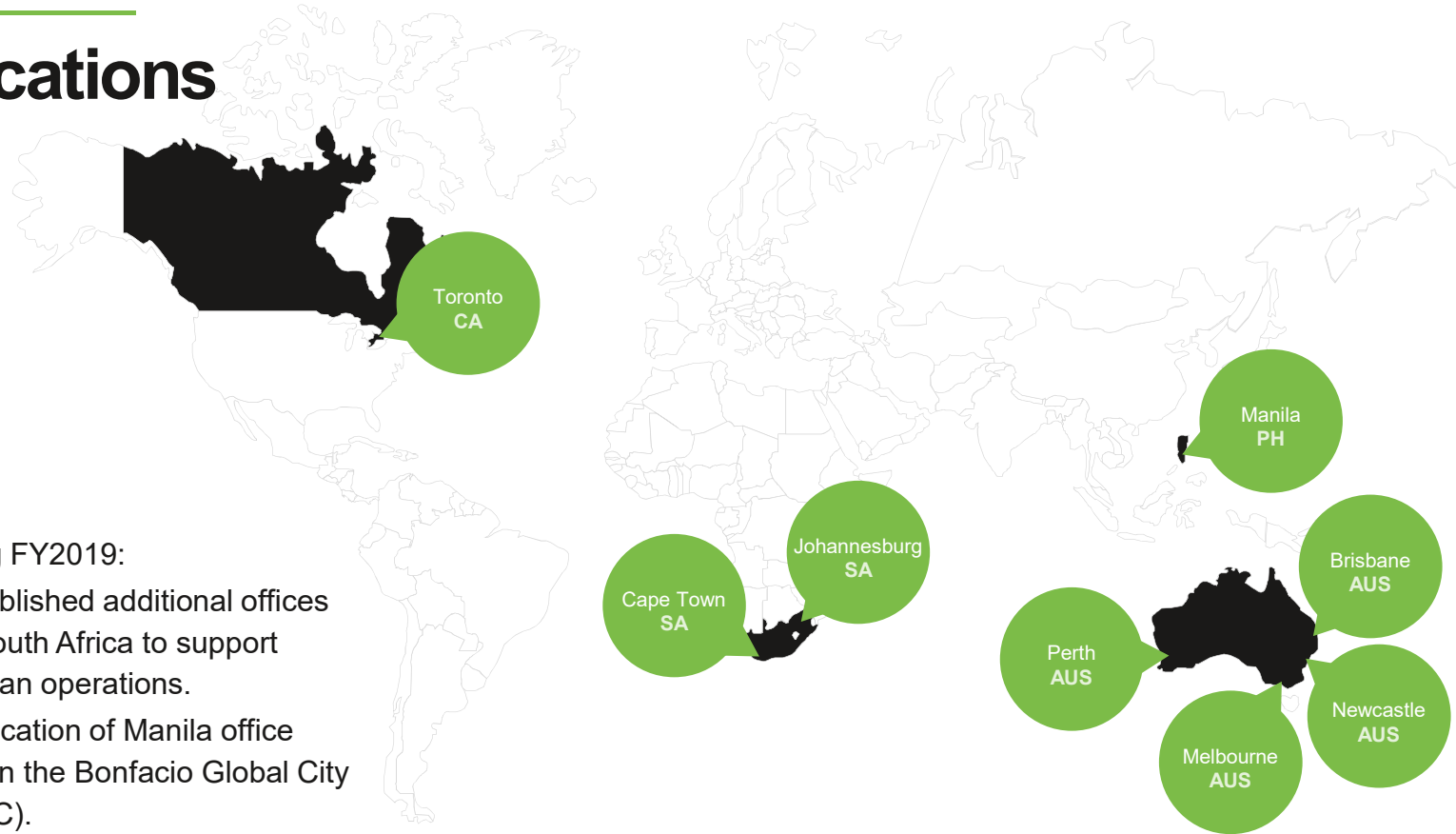
- 2.4 million manhours controlled
- Zero LTI, MTI or debilitating injury of any kind
- LTIFR – 0
- TRIFR – 1.81<sup>1</sup>

<sup>1</sup> Against Construction Industry frequency rate of 8.1  
(Safe Work Australia, *Australian Workers' Compensation Statistics, 2016-17*)

# Core Capabilities

Sectors			Services
 <p><b>Resources</b></p> <ul style="list-style-type: none"> <li>• Gold and Precious Metals</li> <li>• Base Metals</li> <li>• Battery Metals</li> <li>• Specialty Metals</li> <li>• Diamonds and Gemstones</li> <li>• Bulk Minerals               <ul style="list-style-type: none"> <li>• Iron Ore</li> <li>• Minerals Sands</li> <li>• Bauxite</li> </ul> </li> </ul>	 <p><b>Infrastructure</b></p> <ul style="list-style-type: none"> <li>• Railways</li> <li>• Roads</li> <li>• Ports</li> <li>• Non-process Resource Infrastructure</li> <li>• Asset Management</li> </ul>	 <p><b>Industrial Processes</b></p> <ul style="list-style-type: none"> <li>• Pharmaceuticals</li> <li>• Biotechnology</li> <li>• Chemical and Energy</li> <li>• Food and Beverage</li> <li>• Manufacturing</li> <li>• Research and Development</li> </ul>	 <ul style="list-style-type: none"> <li>• Feasibility Studies</li> <li>• Process Development and Optimisation</li> <li>• Engineering and Design</li> <li>• Project Management and Delivery</li> <li>• Project Services</li> <li>• Construction Management</li> <li>• Commissioning and Operations Support</li> <li>• Asset Management</li> </ul>

# Locations



During FY2019:

- Established additional offices in South Africa to support African operations.
- Relocation of Manila office within the Bonfacio Global City (BGC).

# FY2019 Group Highlights

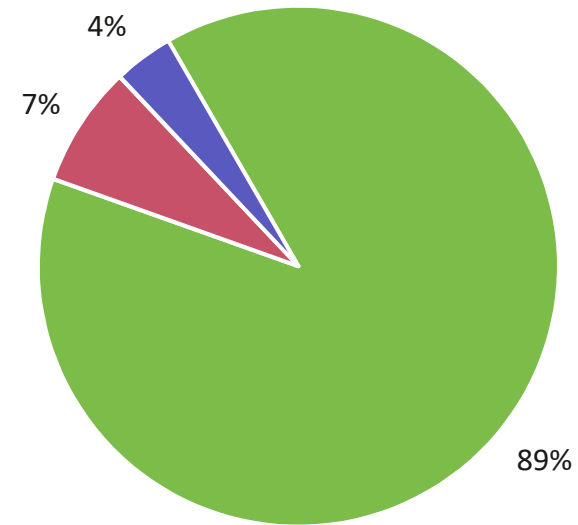
Revenue <b>\$154.0m</b>	NPAT <b>\$16.4m</b>	Fully Franked Dividend <b>30 cents</b>
EPS <b>41.5 cents</b>	EBITDA <b>\$25.1m</b>	Net Tangible Assets per Share <b>182.9 cents</b>

## Operational

- Continued to expand geographical reach within Resources sector.
- Delivered projects via a range of contracting models and further developed capability to deliver EPC projects.
- Established Orway IQ joint venture.
- Improved organisational connectedness to support greater collaboration.
- Delivered on succession planning strategy, with successful transition of new management into critical roles – thank you to retiring founding directors, Rod Leonard and Bob Osmetti, who have been instrumental in establishing our culture and realising success.

# FY2019 Revenue by Sector

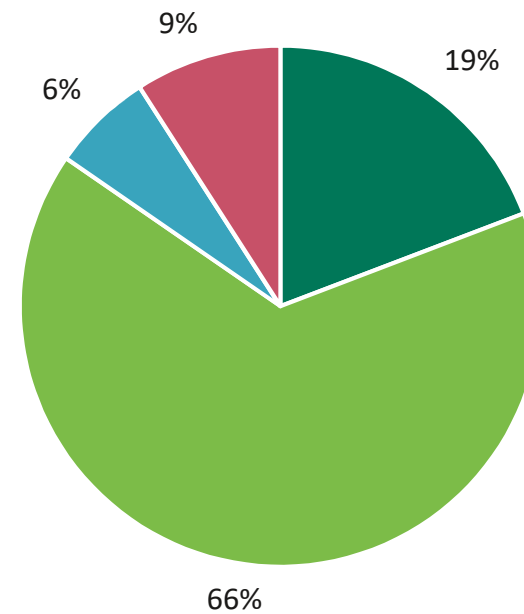
FYE Jun-19	
Sector	A\$'000
Resources	136.8
Infrastructure	11.6
Industrial Processes	5.7
<b>154.1</b>	





# FY2019 Revenue by Geography

FYE Jun-19	
Sector	A\$'000
● Australia	29.6
● Africa	100.8
● Americas	9.7
● Other	14.0
<b>154.1</b>	



# FY2019 Balance Sheet

	June 19	June 18
	A\$m	A\$m
Current Assets	102.8	118.5
Total Assets	119.8	114.4
Total Liabilities	40.4	62.0
Equity	79.4	79.3

Strong  
Balance  
Sheet

Cash on hand of  
**\$60.5m**  
as at 30 June 2019

Net Tangible Assets per Share  
**182.9 cents**

Minimal  
Debt

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# Reward and Retention Policy

- The Remuneration Committee has developed an Executive and Key Staff Reward and Retention Policy.
- These key personnel are critical to the current and future success of the Company and the scheme is designed to reward above-average performance for both existing and future senior managers, enabling future managers to build a shareholding in the Company.
- The scheme adopts a combination of a short-term incentive (STI) to reward the select individuals for their annual performance, and a long-term incentive (LTI), which serves to reward and retain participants for achieving agreed KPIs on the basis of the Company achieving a minimum level of profitability.
- The STI award will be at the discretion of the Board and subject to achieving a minimum hurdle audited NPBT (as measured against group revenue).
- The LTI award will be subject to achieving the minimum NPAT, in addition to a set of individual personal objectives (PO) and Company objectives (CO).
- The total LTI dollar amount will be set and converted to equivalent performance rights at the prevailing Company share price as per the detailed rules of the scheme and there will be a three-year vesting period.
- The total pool available for the reward and retention initiative described under this policy is limited to 10% of annual audited NPAT and all entitlements will be scaled back accordingly due to the effect of the cap on the bonus pool.



# Major Projects

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Lycopodium

# Cobré Panama

<b>SECTOR</b>	Resources
<b>CLIENT</b>	First Quantum Minerals
<b>LOCATION</b>	Panama
<b>COMMODITY</b>	Copper, gold, molybdenum
<b>SCOPE</b>	<ul style="list-style-type: none"><li>• Process plant design</li><li>• Services to non-process infrastructure buildings</li><li>• Field engineering</li><li>• Plant commissioning support</li></ul>
<b>PROCESSING CAPACITY</b>	85 Mtpa



“Cobre Panama goes commercial – one of the smoothest ramp-ups we have seen.”

*Summary: FM declared commercial production at Cobre Panama as at September 1, a month ahead of guidance and two weeks ahead of our expectation. Total copper production through the end of September is 87kt, in line with our forecast of 88kt. Full year production guidance of 140-175kt is unchanged, as is the timing on the ramp-up to 100mtpa.*



# Ity

<b>SECTOR</b>	Resources
<b>CLIENT</b>	Endeavour Mining Corporation
<b>LOCATION</b>	Côte d'Ivoire
<b>COMMODITY</b>	Gold
<b>SCOPE</b>	<ul style="list-style-type: none"><li>• EPCM services for the gold CIL plant</li><li>• EPCM services to increase capacity to 5 Mtpa</li></ul>
<b>PROCESSING CAPACITY</b>	5 Mtpa



## Endeavour Declares Commercial Production of Its Ity CIL Project at Full Nameplate Capacity

*April 8, 2019 – Endeavour Mining Corporation is pleased to announce commercial production of its Ity CIL project, in Côte d'Ivoire, at its full nameplate capacity following a quick ramp up phase.*

*Sébastien de Montessus, President & CEO, stated: "I would like to congratulate the entire team for their hard work in helping us achieve this major accomplishment for Endeavour."*

*Achieving commercial production at the Ity CIL project marks a transformational moment in our history and an inflection point as we significantly increase our free cash flow capabilities."*



# Toka Tindung

<b>SECTOR</b>	Resources
<b>CLIENT</b>	PT Archi Indonesia
<b>LOCATION</b>	Indonesia
<b>COMMODITY</b>	Gold
<b>SCOPE</b>	<ul style="list-style-type: none"><li>• EPCM services for throughput upgrade of the process plant facilities</li><li>• Capacity increase from 2.4 Mtpa to 3 Mtpa</li></ul>
<b>PROCESSING CAPACITY</b>	3 Mtpa





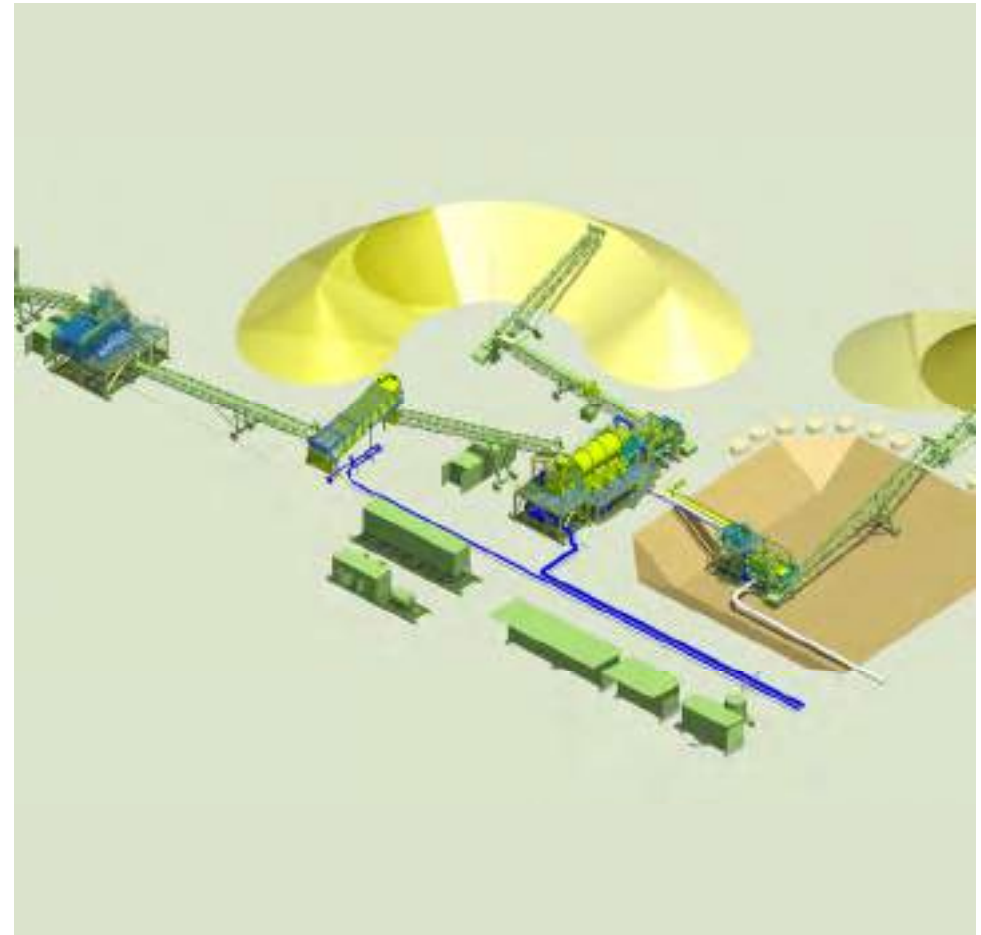
# Wahgnion

<b>SECTOR</b>	Resources
<b>CLIENT</b>	Teranga Gold Corporation
<b>LOCATION</b>	Burkina Faso
<b>COMMODITY</b>	Gold
<b>SCOPE</b>	<ul style="list-style-type: none"><li>• Full EPCM services for the design and construction of the process plant</li><li>• Engineering design for support infrastructure, including accommodation village</li></ul>
<b>PROCESSING CAPACITY</b>	2.7 Mtpa

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# Bonasika

<b>SECTOR</b>	Resources
<b>CLIENT</b>	Guyana Industrial Minerals
<b>LOCATION</b>	Guyana
<b>COMMODITY</b>	Bauxite
<b>SCOPE</b>	<ul style="list-style-type: none"><li>• Detailed engineering</li><li>• Technical procurement support</li></ul>
<b>PROCESSING CAPACITY</b>	<ul style="list-style-type: none"><li>• 350 Ktpa</li></ul>





# Montepuez Ruby Mines

**SECTOR** Resources

**CLIENT** Gemfields

**LOCATION** Mozambique

**COMMODITY** Gemstones

**SCOPE**

- Installation and commissioning of the Recovery Plant
- Designed to incorporate UV-sorting technology

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# Sanbrado

<b>SECTOR</b>	Resources
<b>CLIENT</b>	West African Resources
<b>LOCATION</b>	Burkina Faso
<b>COMMODITY</b>	Gold
<b>SCOPE</b>	<ul style="list-style-type: none"><li>• Full Engineering, Procurement and Construction Management (EPCM) services</li></ul>
<b>PROCESSING CAPACITY</b>	2 to 2.7 Mtpa

*Works currently on schedule and budget*





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# Mt Cattlin

<b>SECTOR</b>	Resources
<b>CLIENT</b>	Galaxy Lithium Australia

<b>LOCATION</b>	Ravensthorpe, WA
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<b>COMMODITY</b>	Lithium
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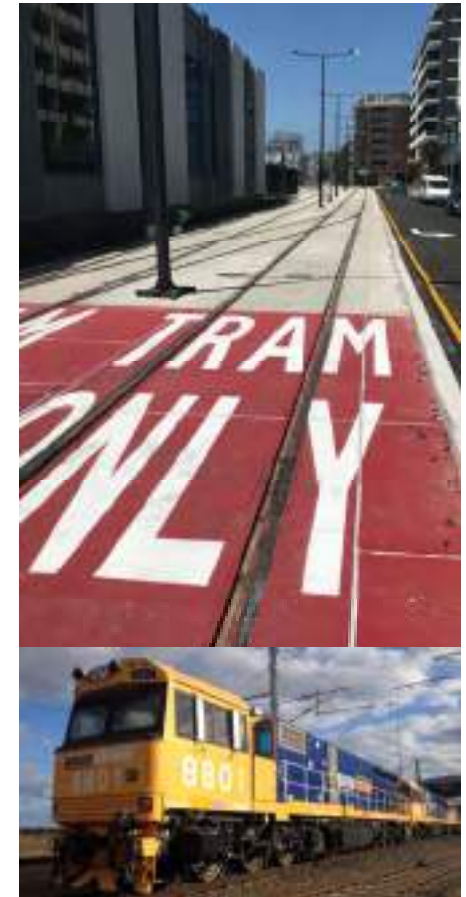
- |              |  |
|--------------|--|
| <b>SCOPE</b> | <ul style="list-style-type: none"><li>• Design and construction of four new process modules to increase yield optimisation of the existing lithium processing facility</li><li>• Awarded and delivered via Mondium</li></ul> |
|--------------|--|
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# Feasibility Studies

SECTOR		Resources		
PROJECT	CLIENT	LOCATION	COMMODITY	COMMENTS
<b>Boto</b>	IAMGOLD Corporation	Senegal	Gold	Preferred EPCM partner
<b>Toliara</b>	Base Resources	Madagascar	Mineral sands	In conjunction with Mineral Technologies
<b>Yanqul</b>	Mazoon Mining Company	Oman	Copper, gold	
<b>Bomboré</b>	Orezone Gold Corporation	Burkina Faso	Gold	Commenced FEED for oxide phase

# Infrastructure Projects

SECTOR	Infrastructure		
PROJECT	CLIENT	LOCATION	SCOPE
<b>Newcastle Light Rail</b>	Downer EDI Limited	New South Wales	Engaged to support the development of the operating and maintenance manuals of the project's infrastructure
<b>Pacific National RIM Services</b>	Pacific National	Across Australia	Provision of Rail Infrastructure Management (RIM) services (3 plus 1 year agreement) to inspect, certify and manage defects at 62 sites across Australia





# Industrial Processes Projects

SECTOR		Industrial Processes		
PROJECT	CLIENT	LOCATION	SCOPE	
<b>Geo40 Silica Extraction Plant</b>	Geo40	New Zealand	Design and commissioning of a new facility for the extraction of silica from geothermal fluids	
<b>Karratha Magnesium Recovery Plant</b>	EcoMag	Western Australia	Further develop the overall plant design process through a Feasibility Study Report	
<b>CSL Centrifuge Cooling Skids</b>	CSL Behring	Victoria	Detailed design of centrifuge cooling skids as part of a new CSL facility to process human plasma into protein-based therapies	





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## Process Optimisation: Orway IQ

- Orway IQ is a joint venture between Lycopodium subsidiary company Orway Mineral Consultants (OMC) and Process IQ Pty Ltd.
- Orway IQ was formed to deliver a remote optimisation consulting service – MillROC (Milling Remote Optimisation Consulting) – to the minerals processing industry.
- The JV draws on OMC’s expertise in comminution design, modelling and optimisation and Process IQ’s expertise in the IIoT (Industrial Internet of Things) cloud-based computing, process control, automation and instrumentation.
- Orway IQ is at the forefront of minerals process optimisation globally, with experts providing remote optimisation consulting services on live data to support mines to increase throughput, recovery, power efficiency and reduced liner wear.
- MillROC applies process models and analysis to real-time plant data which enables expert consultants to provide frequent and high-level advice, including guidance on operating approaches and setpoints.

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## Strategy and Outlook: **Overarching**

- Strong pipeline of projects and key identified prospects.
- Continue to secure EPC projects and further establish Mondium as a leading EPC contractor.
- Further geographical expansion – pursue opportunities in large markets where we are under-represented.
- Pursue annuity type revenue to reduce earnings volatility.
- Leverage expertise and experience for greater return – reward for the risk we manage.
- Create an exciting people experience to attract, engage, inspire and retain a high performing, global, professional workforce.
- Capture, retain and transfer knowledge and drive innovation – strategically leverage knowledge base for the development of our people and to drive continuous improvement.

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# Strategy and Outlook: Sectors



- Diversified offering – broad range of commodities and geographies.
- Gold price remains strong.
- Establishment of Orway IQ, providing remote optimisation consulting service to the minerals processing industry.



- Market rationalisation to fit with core services we provide.
- Focus on rail infrastructure management, non-process infrastructure and infrastructure related asset management.



- Continue to leverage expertise – complex chemistry, heat and mass transfer and solid/liquid separation.
- Emerging opportunities – renewable energy, sustainability related projects, cannabinoids, light metals and water purification.
- Market is broad and remains very competitive.

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# Thank You

*The commitment and talent of our people is fundamental to achieving our success*



Thank you for your attendance today, we are happy to answer your questions

