# **Quarterly Report**

Period ended 30 September 2022



PUBLICATION DATE 31/10/2022

IGO delivers improved quarter on quarter financial performance with record sales revenue and EBITDA

IGO was deeply saddened to announce the sudden passing of Managing Director and CEO, Peter Bradford on 15 October 2022

Record Group underlying EBITDA of \$398M, up 54% QoQ, following record quarterly NPAT from TLEA

Record quarterly spodumene production at Greenbushes and a continued ramp-up in lithium hydroxide production at Kwinana

Record sales revenue from Nickel Business following first quarter's contribution from Forrestania

Full year production and cash cost guidance maintained for Nickel and Lithium businesses

Increased TLEA dividend paid to IGO of \$106M for the Quarter

Cosmos revised development plan announced with revised capital estimate and project schedule prepared

Net debt reduced to \$396M following \$194M underlying free cash flow and \$220M repayment of revolving credit facility

Payment of FY22 final dividend of \$0.05 per share, fully franked

# Quarterly highlights



#### **Investor Webcast**



An investor webcast has been scheduled for 11.00am AEST (8.00am AWST) on Monday, 31 October 2022.

To access the webcast, please use the following link:

1Q23 Quarterly Webcast

All figures are displayed in Australian Dollars (\$) unless otherwise stated

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# Management Commentary

"The IGO family continues to mourn the recent loss of our Managing Director and CEO, Peter Bradford, who was a passionate, engaged leader who put our people first and helped to create IGO's unique culture. Peter was recognised across the entire mining industry as an inspirational leader, an innovative and strategic thinker and a compassionate mentor.

*"We at IGO are determined to deliver on Peter's aspiration – to make a difference and make the planet better for future generations.* 

"Despite our loss, we are proud to have delivered another strong result this Quarter. Group EBITDA of \$398M represents a quarterly record for IGO, thanks to strong operational performance from both our lithium and nickel businesses.

"Stronger production and higher spodumene prices drove outstanding earnings within the TLEA joint venture and led to IGO receiving its second quarterly dividend of \$106M.

"Within our nickel business, Nova and Forrestania performed to plan, and we are also pleased to announce our Cosmos revised project plan, which lays the roadmap for the successful delivery of this project over the coming year.

"I would like to acknowledge the enormous support we have received from the broader community over the past two weeks. The outpouring of support we have received clearly highlights the impact that Peter had across the entire industry, both locally and globally.

I would also like to take this opportunity to thank everyone at IGO for the support they have given the leadership team following Peter's passing. The commitment and resilience they have shown during this difficult time is a testament to the culture and the Company of which Peter would have been immensely proud"

#### Matt Dusci Acting Chief Executive Officer

# VALE PETER BRADFORD

### 1958 - 2022

IGO was deeply saddened by the passing of Managing Director and CEO, Peter Bradford, on October 15, 2022. Peter was an inspirational leader, a compassionate mentor, and a dear friend.

He had a vision for IGO and inspired all employees to play a part in transforming IGO into the organisation that it is today – a globally recognised, ASX100 listed company focused on creating a better planet.

His passion for mining and resources, and his personal drive to raise the bar across the industry, was unparalleled.

He is dearly missed by us all.



# Group Safety Performance

Total Reportable Injury Frequency Rate (TRIFR) for the 12 months to 30 September 2022 was 20.2 (compared to 20.4 as at 30 June 2022)<sup>1</sup>.

IGO continues to record elevated levels of soft tissue injury, which is impacting our TRIFR. There were no material safety incidents across IGO's managed activities during the Quarter.

The Board and management team acknowledges that our safety performance needs to improve. With safety programs in place, we are looking at complementing this with additional resources, in-field supervision, and workplace focussed safety risk workshops.

# **Group Production & Cost Summary**

	Units	1Q23	4Q22 <sup>1</sup>	QoQ∆	YTD
Total Nickel in Concentrate	t	9,761	6,509	▲50%	9,761
Total Copper in Concentrate	t	2,805	2,814	▼0%	2,805
Nickel Cash cost (payable)	A\$/lb Ni	4.96	2.24	<b>▲</b> 121%	4.96
Spodumene Production	kt	361	338	▲7%	361
Spodumene Unit COGS	A\$/t	253	254	▼1%	253
Lithium Hydroxide Production	t	195	88	<b>▲</b> 122%	195
Lithium Hydroxide Unit Cost <sup>2</sup>	A\$/t	N/A	N/A	N/A	N/A

1. Comparative results for 4Q22 include nil contribution from Western Areas, which was acquired by IGO on 20 June 2022.

2. IGO expects to report on lithium hydroxide unit costs for the Kwinana refinery after the operation has reached commercial production.

# Group Financial Summary

	Units	1Q23	4Q22	QoQΔ	YTD
Sales Revenue	A\$M	285.2	277.9	▲3%	285.2
Underlying EBITDA <sup>1</sup>	A\$M	397.7	258.4	▲54%	397.7
Profit After Tax	A\$M	253.3	107.2	▲136%	253.3
Net Cash from Operating Activities	A\$M	254.8	231.6	<b>▲</b> 10%	254.8
Underlying Free Cash Flow <sup>1</sup>	A\$M	194.4	209.8	▼7%	194.4
Cash	A\$M	283.9	367.1	▼23%	283.9
Net Debt	A\$M	(396.1)	(532.9)	▼26%	(396.1)

1. Underlying measures of EBITDA and free cash flow are non-IFRS financial measures. They should not be considered as alternatives to an IFRS measure of profitability, financial performance, or liquidity. All references to financial measures and outcomes in this Quarterly Report are to unaudited results. Full details of underlying adjustments can be found on Page 4.

<sup>1. 12</sup> month moving average calculated as the number of recordable injuries x 1,000,000 divided by the total number of hours worked. As of March 2022, IGO reports recordable injuries (TRI) as the sum of Lost Time Injury (LTI), Medically Treated Injury (MTI) and Restricted Work Injury (RWI) as required by Part 1.1 r.5 of the WHS (Mines) Regulations



#### Commentary

- Record revenue for the Nickel business of \$285.2M was achieved for the Quarter, with the first quarter's contribution from Forrestania of \$83.4M more than offsetting 27% lower revenue at Nova, which was driven by lower realised nickel prices.
- Record underlying quarterly EBITDA<sup>2</sup> of \$397.7M included a \$285.6M contribution from TLEA, spurred by
  record production and strong spodumene prices at Greenbushes and steady unit COGS. Growth expenditure
  was broadly in line with the prior quarter, whilst corporate overheads were marginally higher than the prior
  quarter due to the integration of Western Areas.
- Net profit after tax (NPAT) for the Quarter was up 136% to \$253.3M (4Q22: \$107.2M), due primarily to the increased profit contribution from the Lithium Business.
- Total cash inflow from operating activities for the Quarter of \$254.8M included continued strong operating cash flows of \$208.8M from the Nova Operation and the Group's first cash flow contribution from the Forrestania Operation of \$25.4M. IGO also received its second dividend from TLEA in the Quarter of \$105.5M, an increase of \$34.8M compared to the dividend of \$70.7M received in 4Q22.
- Cash outflow for investing activities was \$68.7M and included \$58.7M relating to development expenditure (including mine development) on the Cosmos Project.
- Underlying free cash flow<sup>3</sup> was an inflow of \$194.4M for the Quarter, compared to \$209.8M in the prior quarter.
- Cash outflow for financing activities was \$274.7M which included the partial repayment of \$220.0M of the Group's amortising debt facility, together with fully franked dividend payments of \$37.9M, representing the final FY22 dividend of \$0.05 per share. A further \$12.0M related to the on-market purchase of IGO shares to settle share issues under the company's Employee Incentive Plan.
- Debt reduced to \$680.0M, and net debt reduced to \$396.1M.



#### Group Cash Flow Reconciliation - Quarter on Quarter

<sup>&</sup>lt;sup>2</sup> EBITDA (Earnings before Interest, Tax, Depreciation & Amortisation) is a non-IFRS measure. Underlying EBITDA for 1Q23 of \$397.7M and 4Q22 of \$258.4M excludes: 1) acquisition and transaction costs (1Q23: \$0.9M, 4Q22: \$65.7M). EBITDA, prior to these exclusions, for 1Q23 and 4Q22 is \$396.9M and \$192.7M, respectively.

<sup>&</sup>lt;sup>3</sup> Free Cash Flow comprises Net Cash Flow from Operating Activities and Net Cash Flow from Investing Activities. Underlying adjustments exclude: 1) Acquisition and transaction costs (1Q23: \$6.3M, 4Q22: \$0.1M), 2) payments for mineral interests and financial assets (1Q23: \$2.0M, 4Q22: \$5.2M), 3) payment for Western Areas, net of cash acquired (1Q23: \$nil, 4Q22: \$1,168.5M). Free Cash Flow, prior to these exclusions for 1Q23 and 4Q22, is a net inflow of \$186.1M and a net outflow of \$964.1M respectively.



# Lithium Business

IGO's lithium interests are held via the Company's 49% interest in Tianqi Lithium Energy Australia (TLEA), an incorporated joint venture with our partner Tianqi Lithium Corporation (51%). TLEA owns an integrated lithium business, including a 51% interest in the Greenbushes Operation (Albemarle Corporation, 49%), and 100% of the Kwinana Lithium Hydroxide Refinery.

### **Greenbushes Operation (100% basis)**

	Units	1Q23	4Q22	QoQΔ	YTD
Spodumene Production	kt	361	338	▲7%	361
Spodumene Sales	kt	338	355	▼5%	338
Sales Revenue	\$M	1,840	868	▲112%	1,840
EBITDA	\$M	1,619	650	<b>▲</b> 149%	1,619
Unit COGS	A\$/t	253	254	▼1%	253
Unit COGS (plus royalties)	A\$/t	660	618	▲7%	660



#### Production and cost performance

Spodumene Production (Chemical and Technical Grade)

--O--COGS ex Royalties (\$/t sold)



#### Commentary

- Record Greenbushes production for the Quarter on a 100% basis comprised 361,227t of spodumene concentrate, up 7% compared to the June 2022 quarter. Unit COGS (cost of goods sold excluding royalties) was within guidance at \$253/t (4Q22: \$254/t).
- Material mined of 1.36 million bank cubic meters was slightly down for the quarter due to challenges with
  operator absenteeism caused by higher rates of Covid-19 and influenza, together with slower mining due to
  ongoing wet weather. Ore mined for the Quarter was 0.99Mt at an average grade of 2.48% Li<sub>2</sub>O, comprising
  0.93Mt of chemical grade ore and 0.06Mt of technical grade ore.
- Processing performance continued to improve during the Quarter with an 8% increase in overall throughput delivering a new quarterly record of 1,473kt across all plants, while improved recoveries broadly offset lower feed grades. Of note:
  - TGP (Technical Grade Plant) throughput and recoveries improved this Quarter, with stable feed grade
  - CGP1 (Chemical Grade Plant 1) throughput and recoveries increased, while grades were slightly lower QoQ
  - CGP2 (Chemical Grade Plant 2) higher throughput was offset by lower recoveries, with stable feed grade
  - TRP (Tailings Retreatment Plant) ramp-up continued strongly, delivering another quarterly increase in in throughput and recoveries
- Quarterly sales revenue of \$1.84Bn represented a 112% increase on 4Q22, a result of strong spodumene sales volumes of 338kt coupled with a reset in contract pricing for Greenbushes chemical grade spodumene from US\$1,770/t FOB for the second half of FY22 to US\$4,187/t FOB for the September 2022 quarter. The total average realised price for the Quarter was US\$3,729/t due to a delayed shipment of chemical grade spodumene from June 2022 that was in July at the previous benchmark price of US\$1,770/t, as foreshadowed in the prior quarter.

#### **Major Capital Projects**

Key capital projects continued to be progressed at Greenbushes during the Quarter, namely:

- Construction of CGP3 (Chemical Grade Plant 3) with EPCM contractor, Lycopodium. Activities during the Quarter included the continuation of detailed engineering, bulk earthworks and finalisation of the piling design
- Progressed new mine services area to support the expansion of mining activity from 2023
- Construction of Tailings Dam 4 (TSF4) to support the expanded plant throughput
- Expansion of the power supply connection to the grid; and
- Expansion of water storage facilities.

### Kwinana Lithium Hydroxide Refinery (100% basis)

	Units	1Q23	4Q22	QoQΔ	YTD
Lithium Hydroxide Production <sup>1</sup>	t	195	88	▲ 122%	195
Lithium Hydroxide Sales <sup>2</sup>	t	N/A	N/A	N/A	N/A
Sales Revenue <sup>2</sup>	A\$M	N/A	N/A	N/A	N/A
EBITDA	A\$M	21.2	(3.3)	▲742%	21.2
Unit Cost <sup>2</sup>	A\$/t	N/A	N/A	N/A	N/A

1. Excludes previously reported lithium hydroxide production that has been retreated in the plant.

2. IGO expects to report on lithium hydroxide sales volumes, sales revenue and unit costs for the Kwinana refinery once the operation has reached commercial production.

#### Commentary

- Following the first production of battery grade lithium hydroxide in 4Q22 from Train 1, works continued at the Kwinana Refinery during the Quarter to continue to progress the plant toward commercial production while also progressing early works on Train 2.
- A total of \$13.1M of sustaining and improvement capital was spent during the Quarter, including approximately \$9.5M relating to Train 2.
- The following key commissioning activities were progressed on Train 1 during the Quarter:
  - Successful badging of the acid roasting kiln and calciner. This included running the calciner at nameplate capacity
  - Continued rectification and debottlenecking to ensure improved runtimes and throughput
  - Training and improvement of systems/processes to deliver increased reliability
- Trial production for the Quarter resulted in 195t of finished goods lithium hydroxide being produced by Train
   1. This included 100t of battery grade and 95t of premium grade lithium hydroxide, respectively, and excludes
   56t of previously reported lithium hydroxide production retreated in the plant.
- Tianqi Lithium Corporation (TLC) is working closely with TLEA, including embedding senior technical and operating personnel into the operations.
- Further rectification, including around the material transfer system associated with the dryer will be completed at the next scheduled shutdown.

#### **Major Capital Projects**

The early works program continued during the Quarter on Train 2 in preparation for a final investment decision on the recommencement of construction. Key activities on Train 2 in the Quarter included:

- Continuation of the engineering and design, development of scopes of work for construction tender packages and assessment of the condition of idle equipment and materials
- Integration and work procedures for the management of Train 2 construction
- Resourcing of the owners' team
- Onsite early work construction, including installation of a project office facility, project fencing for demarcation
   and construction car park; and
- Negotiation of the EPCM contract.

IGO expects the TLEA Board to be in a position to make a final investment decision on Train 2 during FY23.



#### Lithium Business Governance

Following the recent and sudden passing of Peter Bradford, and to ensure continuity of governance of the Company's interest in TLEA, IGO has nominated Michael Nossal, IGO's Non-executive Chair, to represent IGO on the TLEA Board on an interim basis. Following this appointment, the TLEA Board now comprises:

- James Clarke Independent Director
- Anqi Jiang Director (Chair) (Tianqi Appointment)
- Frank Ha Director (Tianqi Appointment)
- Matt Dusci Director (IGO Appointment)
- Michael Nossal Director (IGO Appointment)

In addition, Matt Dusci has been appointed to the board of Windfield Holdings Pty Ltd, the joint venture Company which owns the Greenbushes Operation.

IGO would like to acknowledge the support offered by the teams at Tianqi, Albemarle and Talison Lithium following Peter's passing. IGO strongly values our relationships with our joint venture partners and appreciates the collaborative approach they have taken during this difficult time.

### Lithium Business Outlook

IGO expects spodumene production and cash costs at Greenbushes next quarter to be consistent with 1Q23.

In parallel, the Talison team will continue to progress the construction of Chemical Grade Plant 3 (CGP3) and the expansion of tailings storage, water storage and new mine services area which will enable the next phase of growth at Greenbushes. The tendering process for the new mining contractor for the expanded operation is ongoing.

At Kwinana, following the successful badging of key areas of the plant during 1Q23 and gradual close-out of commissioning activities, IGO expects Train 1 commercial production for accounting purposes to be achieved at Kwinana around the end of CY23, with operating ramp-up of Train 1 to occur thereafter.

IGO's FY23 production and cost guidance for the Lithium Business otherwise remains unchanged and will be reviewed in the December 2022 Quarter.

Refer to Guidance section at Appendix 1 or further details.



# **Nickel Business**

IGO's nickel business includes the Nova and Forrestania operations, and the Cosmos development project. In addition, IGO is assessing the opportunity to develop a downstream nickel processing operation to produce battery grade nickel sulphate/ precursor for the lithium-ion battery industry.

#### Key Strategic Programs of Work

- Since the completion of the acquisition of Western Areas on 20 June 2022, IGO has been implementing changes to ensure the successful integration of the Western Areas business, systems and people into the IGO business. The addition of the Forrestania and Cosmos assets coupled with the expanded exploration portfolio has provided a unique opportunity for IGO to optimise its nickel business and leverage synergies between these assets. Of note, IGO is working toward embedding a group-wide mining services contract and seeking to consolidate procurement processes.
- IGO is also currently engaging with potential partners with respect to concentrate offtake volumes which are available for contract during 3Q23. 50% of Nova's nickel concentrate and 100% of Forrestania nickel concentrate become uncontracted in this quarter, with part of IGO's consideration focused on the potential to generate stronger commercial outcomes through blending of Nova and Forrestania concentrates. IGO expects to update the market on this program of work in its half-year result in January 2023.
- IGO is also progressing with a nickel downstream study, in conjunction with Wyloo Metals. While no material
  update is provided in this report, studies are progressing to plan which includes detailed metallurgical test
  work, site selection, and engineering. The project has generated high levels of interest with potential offtake
  partners and customers.
- Across our nickel portfolio, IGO is progressing several studies designed to expand the Company's nickel
  resource and reserve base. At Forrestania, the team has completed the metallurgical drilling program for the
  New Morning Feasibility Study. Metallurgical composites have been selected and dispatched for flotation
  testing in 2Q23. In addition, further work has progressed on the respective feasibility studies at Silver Knight
  and Mt Goode. Silver Knight is being assessed as a potential supplementary ore source for Nova, with
  metallurgical studies and environmental assessments currently underway. At Mt Goode, a Pre-Feasibility
  Study is being progressed to assess the potential for Mt Goode to become a viable feed source to a nickel
  downstream project.

	Units	1Q23	4Q221	QoQΔ	YTD
Nova					
Nickel in Concentrate	t	6,572	6,509	▲1%	6,572
Copper in Concentrate	t	2,805	2,814	▼0%	2,805
Cobalt in Concentrate	t	240	233	▲3%	240
Cash cost (Payable)	A\$/Ib	3.14	2.24	<b>▲</b> 40%	3.14
Forrestania					
Nickel in Concentrate	t	3,189	2,860	▲11%	3,189
Cash Cost (Payable)	A\$/Ib	8.70	9.24 <sup>2</sup>	▼6%	8.70

#### **Operational Summary**

1 IGO completed the acquisition of Western Areas on 20 June 2022. The pro-forma (100%) operating and financial results for Forrestania are displayed for the quarter ending 30 June 2022 for information purposes only.

2 Restated to align with IGO cash cost calculation methodology.



	Units	1Q23	4Q22	QoQΔ	YTD
Nickel Production	t	6,572	6,509	▲1%	6,572
Nickel Sales (Payable)	t	5,099	5,039	▲1%	5,099
Copper Production	t	2,805	2,814	▼0%	2,805
Copper Sales	t	3,057	2,855	▲7%	3,057
Sales Revenue	A\$M	201.8	277.9	▼27%	201.8
Underlying EBITDA	A\$M	132.0	209.8	▼37%	132.0
Cash Cost (Payable)	A\$/lb	3.14	2.24	<b>▲</b> 40%	3.14

### Nova Operation

#### Commentary

- A total of 384kt (4Q22: 427kt) of ore was mined at average grades of 1.98% nickel and 0.79% copper in the Quarter (4Q22: 1.76% and 0.72% respectively).
- Nova production was higher for nickel metal due to improved milled grades, while copper metal was slightly lower due to reduced mill throughput. Nickel and copper production were both in line with the prior quarter. Cobalt production was higher by 3% due to higher grade and recoveries.
- Cash costs increased from \$2.24/lb to \$3.14/lb primarily due to lower by-product credits, following lower copper and cobalt prices and lower copper sales. These lower prices accounted for \$0.52/lb of the variance. Cash production costs were also higher than last quarter, with favourable diesel hedging positions expiring in June 2022.
- The Nova processing plant milled 387kt of ore for the Quarter (4Q22: 429kt) at an average nickel and copper grade of 1.97% and 0.79% (4Q22: 1.75% and 0.71%), respectively. Tonnes milled were lower than the previous quarter due to lower runtime and throughput rates.
- Nickel recoveries and copper recoveries were marginally lower at 86.3% (4Q22: 86.5%) and 86.5% (4Q22: 86.7%) respectively.
- Nova sales revenue of \$201.8M was 27% lower than the previous quarter (4Q22: \$277.9M) due to lower average
  nickel sales prices, lower hedging gains and unfavourable debtor revaluations compared with 4Q22, partly offset
  by higher metal sales volumes.
- Nickel concentrate sales totalled 48,541t for the Quarter (4Q22: 47,186t), resulting in the sale of 5,099t of payable nickel (4Q22: 5,039t payable nickel). Copper concentrate sales totalled 10,273t during the Quarter (4Q22: 10,057t), resulting in the sale of 3,057t of payable copper (4Q22: 2,855t payable copper).
- Nova's average nickel price (net of current Quarter hedge revaluations) decreased 24% in the Quarter to \$33,227/t (4Q22: \$43,899/t), resulting in a negative nickel price variance of \$54.4M. The prior quarter average nickel price included a hedge gain of \$50.9M compared to a smaller gain of \$7.0M in 1Q23.
- Copper prices decreased by 8% for the Quarter to average \$11,012/t (4Q22: \$12,026/t), while average cobalt prices decreased 21% to \$76,476/t (4Q22: \$96,328/t).



#### Forrestania

	Units	1Q23	4Q22 <sup>1</sup>	QoQΔ	YTD
Nickel Production	t	3,189	2,860	▲11%	3,189
Nickel Sales (Payable)	t	2,735	1,899	▲44%	2,735
Sales Revenue	A\$M	83.4	69.6	▲20%	83.4
EBITDA	A\$M	13.0	18.7	▼30%	13.0
Cash Cost (Payable)	A\$/lb	8.70	9.24 <sup>2</sup>	▼6%	8.70

1. IGO completed the acquisition of Western Areas on 20 June 2022. The pro-forma (100%) operating and financial results for Forrestania

are displayed above for the quarter ended 30 June 2022 for information purposes only.

2. Restated to aligned with IGO cash cost calculation methodology

#### Commentary

- Total ore mined was 110kt (4Q22: 107kt) from Flying Fox and Spotted Quoll at an average grade of 2.76% nickel in the Quarter (4Q22: 2.84%). Ore production was from lower grade ore sources than the previous quarter. Underground development advanced at both mines and totaled 628m.
- The processing plant milled 154kt of ore for the Quarter (4Q22: 147kt) at an average nickel grade of 2.52% (4Q22: 2.30%). Higher throughput was attributed to increased ore availability due to the scats magnetic sorting, however this resulted in lower nickel recoveries than the previous quarter at 82.1% (4Q22: 84.8%).
- Nickel production was 11% higher than the previous quarter due to increased ore tonnes milled and higher average milled nickel grade offset by lower recoveries. Cash cost of \$8.70/lb was 6% lower compared to the prior quarter (\$9.24/lb) due to higher grade and ore feed tonnes, offset by an increase in cash production costs, primarily due to rise and fall on the mining contract.
- Nickel sales revenue was \$83.4M, 20% higher than the previous quarter (4Q22: \$69.6M). Payable nickel sold was 2,735t (4Q22: 1,899t) and the average nickel price decreased 11% in the Quarter to \$31,007/t (4Q22: \$34,682/t). Revenue in the Quarter included a June 2022 export shipment of 434 payable nickel tonnes which left the port in early July.
- Quarterly EBITDA of \$13.0M includes a once-off inventory fair value adjustment of \$18.6M to reflect Forrestania inventory acquired on 20 June 2022 that was recognised at net realisable value for acquisition accounting purposes.

### **Cosmos Project**

#### Commentary

Total construction and mine development expenditure at the Cosmos Project for the Quarter was \$58.7M, comprising \$25.5M mine development and \$33.2M project capital. Key project development activities progressed during the Quarter include:

- **Processing Plant**: Final plant design being completed. Ordering of all long-lead items completed. Site works continued, including bulk earthworks, concrete work and refurbishment of the existing plant.
- **Process Plant Expansion**: Continuation of negotiations with external engineering group to upgrade the process plant to 1.1Mtpa. Work is proceeding under a letter of intent in the interim.
- Shaft and shaft infrastructure: Construction and fit out of the main shaft continued, including fibrecreting the weathered zone. Assessment and testing of winder components completed. Headframe scope progressed towards award.
- **Paste Plant**: Earthworks and civils completed, and SMP works commenced late in the Quarter.
- **Materials Handling**: Design and Hazop work for the underground and surface continued.
- Energy Supply: The life of mine (LOM) energy supply strategy currently being assessed with the support of an external engineering group. High level proposals were received from interested parties for LOM thermal/solar/wind energy supply options. Work continues to extend and expand the current diesel/gas power



station at site to support activities until the LOM energy supply is in place. Work continues on the site power distribution system, to enable energisation of various areas in the upcoming quarters.

- Aerodrome: Mobilisation for construction of the aerodrome commenced. Crushing and carting of aggregate for the aerodrome is nearing completion. Reassessment of the condition of the airstrip is being undertaken to update the scope of work.
- **Mine development**: Total lateral jumbo development was 1,427m, which included 128m in the Odysseus declines and 1,041m of capital development for LOM infrastructure and level access. Operational development continued in both the north and south ore bodies with 122m of waste development and 136m of ore, respectively. Ore development yielded 16,492t of ore at 1.5%.

#### **Cosmos Revised Development Plan**

Following the acquisition of Western Areas Limited (**WSA**) on 20 June 2022, IGO commenced work toward developing a project optimisation strategy and plan designed to deliver higher production rates for the life of the operation and a more safe and sustainable mine plan. The core elements of this revised plan focused on the following key outcomes:

- Expansion of the processing plant construction scope to increase the nameplate capacity from 0.75Mtpa to 1.1Mtpa.
- Modification and completion of the shaft and shaft infrastructure.
- Additional underground mine development to deliver a higher sustained ore mining production rate in initial stages of the mine life. This plan includes bringing forward the development of the AM6 ore body and commencing a study to determine the technical and commercial feasibility of developing the AM5 ore body.
- Strengthening of project and site infrastructure to ensure an efficient and reliable operation.

Further details of the project delivery plan, revised cost estimate and project schedule is outlined below:

- IGO expects the process plant to be completed during the first quarter of FY24, with first concentrate to be
  produced from ore stockpiles at this time. The shaft and associated infrastructure are expected to be
  completed around the end of CY23, after which the hoisting of ore from the Odysseus shaft will commence.
- IGO considers commercial production for the Cosmos Project will be achieved when the process plant is capable of operating within acceptable limits of its intended operating capacity during the first quarter of FY24.
- IGO's revised estimate represents an increase of between \$370M and \$400M above the total project estimate
  of approximately \$425M implied by the independent expert report (IER) published by KPMG in April 2022<sup>4</sup>.
- Total project costs to 30 June 2022 were \$302M. IGO estimates that the remaining cost to complete the project after this date will be between \$493M and \$523M. This includes all project development activities up until commercial production, plus the forecast costs to complete the shaft and shaft infrastructure that are expected to be completed around the end of CY23. Accordingly, IGO estimates the total cost of the project, including the period prior to IGO ownership, to be between \$795M and \$825M.
- IGO notes the IER, which opined on the fair and reasonableness of the proposed transaction for IGO to acquire WSA, implied a total project cost of approximately \$425M for the Cosmos Project. The increase in IGO's revised estimate above the IER can be broadly categorised as follows:
  - Optimisation Plan: Approximately \$150M of scope changes to optimise the project, including increasing the process plant capacity to 1.1Mtpa during the project build phase and accelerating mining rates to deliver the necessary plant feed, including bringing forward the AM6 development;
  - Timing: approximately \$140M for items that were previously not classified in the project capital estimate (such as sustaining capital or operating costs) that are now included in the project capital estimate; and
  - Rectifications, Omissions and Escalation: Approximately \$95M relates to clear omissions, rectifications, refurbishments and escalations that were not included in the IER, that IGO has deemed necessary in order to deliver a safe, efficient and reliable operation.
- It is estimated that between \$400M and \$425M will be spent in FY23.

<sup>&</sup>lt;sup>4</sup> Refer to ASX Announcement titled "Scheme Booklet Registered by ASIC", released by Western Areas Limited on 28 April 2022



### Hedging

At Quarter end, nickel hedging consists of nickel swaps totaling 9,249t at an average price of \$32,465/t. Of this, 4,449t swaps are due to settle in the December 2022 quarter, with the balance to settle over the remainder of FY23.

### Nickel Business Outlook

Nickel production at Nova is expected to be lower in 2Q23 due to mine sequence resulting in lower grade and recovery resulting in marginally higher cash costs. At Forrestania, nickel production in 2Q23 is expected to trend higher, while Forrestania cash costs are expected to be steady next quarter.

FY23 production at Nova is expected to be within guidance, and production at Forrestania is expected to be at the top end of the guidance range in FY23.

Nova cash costs are being impacted by lower copper by-product pricing and based on the current price outlook would result in cash costs being marginally higher than cost guidance for FY23. FY23 cash cost guidance assumed an FY23 copper price of \$5.65 per pound whilst current consensus forecast pricing indicates an FY23 copper price of \$5.12 per pound.

An update on Nova and Forrestania cash cost guidance will be provided as part of the December Quarter Result.

Refer to Guidance section at Appendix 1 for further details.



# **Exploration and Discovery**

During the Quarter, significant exploration activity was undertaken across the portfolio, with key workstreams targeting the near-Nova, Fraser Range, Paterson, and Kimberley Projects, as detailed below. In addition, IGO was actively working on early-stage exploration activity at the Broken Hill, Copper Coast, Metal Hawk JV, Raptor and Western Gawler Projects (Figure 1).







### Nova and Silver Knight

IGO continues to actively explore for additional nickel-copper-cobalt mineralisation in close proximity to Nova. During the Quarter, diamond drilling was conducted at the Chimera and Orion targets. Geology encountered at Chimera was consistent with previous holes into the prospective intrusion with disseminated nickel-copper sulphides observed throughout, and local areas of heavy disseminated to net-texture nickel-copper sulphides also observed. At Orion, drilling encountered mafic intrusions, however they do not appear to be as prospective as the previous intercepts of the Orion intrusion.

At Silver Knight, a substantial nine-hole diamond drill program was completed during the Quarter. At Silver Knight South, drilling targeting potential extensions to nickel-copper-cobalt mineralisation identified sulphide mineralisation outside of the existing resource. IGO intends to continue work at Silver Knight into the December quarter, when additional targets including Red Queen and Firehawk will be tested, as well as further extensions to Silver Knight South.

### Forrestania Project

IGO acquired the Forrestania Project via the Western Areas transaction in June 2022 and has advanced planning for several diamond drilling programs to commence in 2Q23, including the testing of electromagnetic (EM) conductors at Parker Dome (Turkish Delight and Cherry Ripe), along with a 2D seismic-supported structural target located immediately north of the Spotted Quoll mine (Figure 2).



Figure 2 - Forrestania Project



#### **Fraser Range Project**

Regional exploration activity at the Fraser Range Project included drilling at the Skipjack, Cerberus, Pike North and E1 targets (Figure 3), as well as a program of MLEM. While further interpretation is required, IGO expects that the Cerberus, Pike North and E1 targets are now fully tested, while a narrow interval of copper-zinc sulphide mineralisation identified at Skipack may warrant further work in the future (assay results pending).



Figure 3 - Fraser Range Project

### **Paterson Project**

At the Paterson Project, activity included completion of several cutting-edge geophysical surveys over joint venture projects held with Antipa Minerals, Cyprium Metals and Encounter Resources, which will provide high-quality primary datasets to enable target identification.

Diamond drilling at the EB01 and ET01 targets (Encounter JV, Figure 4) continued during the Quarter, with five holes completed, which were testing trap sites where cupriferous fluids could be channelled via mapped major structures into reactive pyritic mudstones and carbonates. Several intervals of quartz-carbonate veining with variable copper sulphide contents were intercepted.



In addition, programs of air-core drilling were completed across several areas, including NB03, MB01 and NL01 on the Cyprium JV, and ET01 on the Encounter JV.



Figure 4 - Paterson Project

### **Kimberley Project**

Field work at the Kimberley Project during the Quarter included UTV and helicopter assisted geological traversing and/or EM surveying at the Osmond Valley, Sentinel, Yampi and Quick Shears areas (Figure 5).

In addition, diamond drilling was conducted at the Skarloey and Gabriela targets in the Sentinel area, with encouraging results at Skarloey warranting a second drill hole to test a second EM plate. Local minor massive sulphides intersected at Skarloey may be indicative of a deformed Cu-Zn Volcanogenic Massive Sulphide (VMS) system.





Figure 5 - Kimberley Project

### Metal Hawk JV Project

At the Metal Hawk JV Project (IGO 51% non-gold JV interest), exploration is targeting both komatiitic-associated and intrusive style magmatic nickel sulphide systems.

During the Quarter, IGO completed diamond drilling across the Kanowna East area, designed to test a prospective basal contact position of an interpreted prospective ultramafic host sequence positioned 12km along strike to the south of the Silver Swan/Black Swan nickel deposits.

Assay results were returned for a portion of the program, with no significant results returned. DHEM surveys have also been completed on all but one of the diamond holes, with no significant off-hole responses suggestive of massive sulphides identified so far.



# Corporate

#### Passing of Peter Bradford, Managing Director and Chief Executive Officer

As announced on 17 October 2022, IGO was deeply saddened to announce the sudden passing of Managing Director and CEO, Peter Bradford. Peter joined IGO in 2014 and oversaw the transformation of the Company from a base metals and gold business to a globally recognised ASX 100 listed company focused on delivering products which will create a better planet.

While IGO's priority has been to support Peter's immediate family and our own people, the Company has also acted swiftly to ensure business continuity.

Effective 17 October 2022, the Board appointed Matt Dusci as Acting Chief Executive Officer. Matt will be supported by the Executive Leadership Team and the broader IGO leadership group and will continue in this role while the Board conducts a formal search process for a permanent CEO, which will consider internal and external candidates.

Matt has over 25 years' experience in the mining industry. He joined IGO in 2014 and was appointed Chief Operating Officer in early 2018, having previously served as IGO's Chief Growth Officer. Working alongside Peter, Matt has been a driving force in the Company's transformation over recent years and key to its strategic direction. Matt is committed to IGO's purpose and will continue to successfully deliver the Company's strategy.

#### **Board and Executive Appointments**

IGO has also continued to evolve its Board and management structure. During the Quarter, IGO welcomed Ms. Trace Arlaud as a Non-executive Director. Trace is a senior mining executive with over 28 years' experience in the management of mining and site operations and large engineering projects and has held executive management and board positions at companies including Rio Tinto, JDS Energy and Mining, Hatch Associates, McIntosh Engineering/Santec, PT Freeport Indonesia, WMC Resources and Normandy Mining. She is currently CEO of underground mining specialist IMB and serves as non-executive director on the boards of Global Atomic Corporation, Seabridge Gold Inc and Imdex Limited. Trace has experience in underground mine planning and operations and has a significant track record in complex underground mining operations and an acute understanding of the associated safety risks.

Post Quarter end, IGO also appointed Mr. Justin Osborne as a Non-executive Director. Justin is an experienced mining executive and resources technical professional, with over 30 years' association in all aspects of the mining and exploration resource sector, with a highly successful career covering multiple commodities in Australia and internationally. He has held executive management and board positions at companies including Gold Road Resources Limited, Gold Fields Ltd and WMC Resources Ltd, and currently serves as non-executive chair of Matador Mining Ltd and as non-executive director on the boards of Hamelin Gold Ltd and Astral Resources Ltd.

Non-executive Director, Peter Buck, has indicated his intention not to stand for re-election at the Company's Annual General Meeting on 17 November 2022. Justin will assume the role of Chair of the Nomination and Governance Committee.

At the executive management level, Ms. Kathleen (Kath) Bozanic was appointed Chief Financial Officer on 10 October 2022. Kath has been a Non-executive Director of IGO since October 2019 and chaired the Audit and Risk Committee since January 2021. With her appointment as Chief Financial Officer, Kath resigned from the IGO Board of Directors with effect from 30 September 2022. Non-executive Director, Ms Debra Bakker, will assume the role of Chair of the Audit and Risk Committee on an interim basis.

Mr. Scott Steinkrug, IGO's outgoing Chief Financial Officer of 11 years, will remain with IGO to assist in an extended handover to Kath and to commence an alternate role within the Company that will allow him to prioritise more time with his family. Scott has also resigned as Joint Company Secretary and Ms. Kate Barker, IGO's Chief Legal Officer, has been appointed Joint Company Secretary.

### **Environment & Sustainability**

IGO has actively participated in the Dow Jones Sustainability Assessment, part of S&P Global, for the last four years. Following the recent release of the 2022 assessment results, we are pleased to announce an improved total score of 66 (63 in 2021), placing IGO in the 90th percentile of 'metals and mining' companies assessed. Further



results will be shared following the announcement of index memberships and S&P Global Sustainability Yearbook members over the coming months.

As announced in January 2022, IGO is continuing to partner with Zenith Energy to expand our renewable energy generation at Nova, with additional 10MW of solar panels and a 10MWh battery energy storage system. This will allow Nova to operate on a 100% renewable energy basis for up to nine consecutive hours a day in the spring and summer months. The expanded facility will be operational in the December 2022 guarter.

In addition, IGO is working to understand other emerging technologies to remove carbon from our business, including trialing a vanadium redox flow battery system for plant operations, in conjunction with VSUN Energy, and installing an Ultra Standalone Power Station at the Silver Knight Exploration Camp.

### People & Communities

IGO acknowledges the Traditional Owners on whose land we live and work. This Quarter, IGO has continued to actively engage with Traditional Owners and relevant stakeholders to ensure the recognition and protection of Aboriginal cultural heritage. IGO has met with various Native Title holder groups, via their representative bodies, to progress negotiations on land access and heritage agreements over IGO's exploration tenure. IGO has continued its positive engagement with the Ngadju Native Title Aboriginal Corporation in relation to the Mining Lease Application for the Silver Knight deposit and the Tjiwarl Aboriginal Corporation in relation to the Cosmos Project.



# **Reporting Calendar**

KEY DATES	PUBLICATION				
2022					
17 November	Annual General Meeting				
2023					
31 January	FY23 Half Yearly Financial Statements & Webcast (incorporating December 2022 Quarterly Activities Report)				
27 April	March 2023 Quarterly Activities Report & Webcast				
29 July	June 2023 Quarterly Activities Report & Webcast				
	FY23 Full Year Financial Statements & Webcast				
31 August	2023 Annual Report & 2023 Sustainability Report				

# Investor and Media Enquiries:

#### **Richard Glass**

Investor and Media Relations Manager T. +61 8 9238 8300 E. investor.relations@igo.com.au

This announcement is authorised for release to the ASX by the Board of Directors.



# **Further Information**

Further information relating to the performance of the operations of IGO can be found in the Appendices of this report.

Current and historic financial and operational information is available to view, download and analyse via IGO's Interactive Analyst Centre, which can be accessed via the IGO Investor Centre webpage – https://www.igo.com.au/site/investor-center/investor-center1

# Forward-Looking Statements

This document includes forward-looking statements including, but not limited to, statements of current intention, statements of opinion and expectations regarding IGO's present and future operations, and statements relating to possible future events and future financial prospects, including assumptions made for future commodity prices, foreign exchange rates, costs and mine scheduling. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Such statements are not statements of fact and may be affected by a variety of risks, variables and changes in underlying assumptions or strategy which could cause IGO's actual results or performance to materially differ from the results or performance expressed or implied by such statements. There can be no certainty of outcome in relation to the matters to which the statements relate, and the outcomes are not all within the control of IGO.

IGO makes no representation, assurance or guarantee as to the accuracy or likelihood of fulfilment of any forward-looking statement or any outcomes expressed or implied in any forward-looking statement. The forward-looking statements in this document reflect IGO's expectations held at the date of this document. Except as required by applicable law or the ASX Listing Rules, IGO disclaims any obligation or undertaking to publicly update any forward-looking statements or discussions of future financial prospects, whether as a result of new information or of future events. IGO cautions against undue reliance on any forward-looking statement or guidance, particularly in light of the current economic climate and significant volatility, uncertainty and disruption, including that caused by the COVID-19 pandemic.



# Appendix 1

# Guidance

	Units	FY23 Guidance
Nickel Business		
Production		
Nova	t	24,000 - 27,000
Forrestania	t	10,500 - 12,500
Total Nickel Production	t	34,500 - 39,500
Total Copper Production	t	11,000 - 12,000
Total Cobalt Production	t	900 - 1,000
Cash Costs		
Nova Cash Cost (Payable)	A\$/Ib Ni	2.60 - 3.00
Forrestania Cash Cost (Payable)	A\$/Ib Ni	7.50 – 8.50
Total Business Nickel Cash Cost (Payable)	A\$/Ib Ni	4.10 - 4.70
Development, Sustaining & Improvement Capex		
Nova	A\$M	19 – 26
Forrestania	A\$M	11 – 12
Cosmos	A\$M	400 - 425
Total Nickel Business Capex	A\$M	430 - 463
Lithium Business		
Production (100%)		
Spodumene Production	kt	1,350 – 1,450
Lithium Hydroxide Production	kt	Not Provided <sup>1</sup>
Cash Costs		
Spodumene Unit COGS	A\$/t	225 – 275
Lithium Hydroxide Unit Cost	A\$/t	Not Provided <sup>1</sup>
Development, Sustaining & Improvement Capex		
Greenbushes	A\$M	420 - 480
Kwinana	A\$M	15 – 20 <sup>2</sup>
Total Lithium Business Capex	A\$M	435 – 500

1. IGO expects to provide production and cash cost guidance for the Kwinana Refinery once the operation has reached commercial production.

2. FY23 guidance is for Train 1 sustaining capex only. Train 2 capex will be guided once the FID outcome has been determined.

# **Appendix 2**

### **Group Financial Summary**

	2Q22 (A\$M)	3Q22 (A\$M)	4Q22 (A\$M)	1Q23 (A\$M)	YTD (A\$M)
Financials					
Sales Revenue	188.0	245.5	277.9	285.2	285.2
Underlying EBITDA	122.9	232.6	258.4	397.7	397.7
Profit After Tax	52.3	133.0	107.2	253.3	253.3
Net Cash Flow from Operating Activities	72.5	(78.0)	231.6	254.8	254.8
Cash Flows included in the above:					
Net interest income (finance costs)	(0.6)	(0.6)	(0.3)	(7.1)	(7.1)
Exploration and evaluation expenditure	(18.2)	(11.7)	(18.0)	(27.5)	(27.5)
Acquisition and transaction costs	(6.7)	(1.0)	(0.1)	(6.3)	(6.3)
Dividends received from TLEA	-	-	70.7	105.5	105.5
Income tax paid	-	(170.8)	(28.3)	(28.2)	(28.2)
Net Cash Flow from Investing Activities	(51.2)	(11.6)	(1,195.7)	(68.7)	(68.7)
Cash Flows included in the above:					
Mine and infrastructure development	(0.6)	(1.1)	(17.0)	(60.2)	(60.2)
Proceeds from sale of property, plant and equipment	0.1	-		-	-
Payments for investments/mineral interests	(45.6)	-	(5.2)	(2.0)	(2.0)
Payments for plant and equipment	(5.0)	(4.5)	(5.0)	(6.4)	(6.4)
Net payments relating to the sale of Tropicana	-	(6.0)	-	-	-
Payment for acquisition of Western Areas, net of cash acquired	-	-	(1,168.5)	-	-
Underlying Free Cash Flow	73.6	(82.5)	209.8	194.4	194.4
Net Cash Flow from Financing Activities	(1.2)	(39.1)	889.0	(274.7)	(274.7)
Cash Flows included in the above:					
Drawdown (repayment) of borrowings	-	-	900.0	(220.0)	(220.0)
Borrowing costs	-	(0.1)	(9.9)	(0.2)	(0.2)
Dividends paid	-	(37.9)	-	(37.9)	(37.9)
Lease repayments	(1.1)	(1.1)	(1.1)	(4.7)	(4.7)
Purchase of Employee Incentive Plan shares	(0.1)	-	-	(12.0)	(12.0)
Balance Sheet Items					
Total Assets	3,651.1	3,677.0	4,845.2	4,829.9	4,829.9
Cash	569.8	440.2	367.1	283.9	283.9
Marketable Securities	125.3	146.6	208.4	208.1	208.1
Total Liabilities	440.4	359.3	1,410.0	1,215.7	1,215.7
Borrowings	-	-	900.0	680.0	680.0
Shareholders' Equity	3,210.7	3,317.7	3,435.2	3,614.3	3,614.3

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# Appendix 3

## Segment Financial Summary

	2Q22 (A\$M)	3Q22 (A\$M)	4Q22 (A\$M)	1Q23 (A\$M)	YTD (A\$M)
Nova Operation	()	()	()	(,	()
Sales Revenue	188.0	245.5	277.9	201.8	201.8
Underlying EBITDA	128.3	171.6	209.8	132.0	132.0
Cash Flow from Operating Activities	104.8	110.7	214.3	208.8	208.8
Underlying Free Cash Flow	102.3	105.5	209.0	205.7	205.7
Forrestania Nickel Operation					
Sales Revenue	-	-	-	83.4	83 <b>.4</b>
Underlying EBITDA	-	-	-	13.0	13.0
Cash Flow from Operating Activities	-	-	(2.7)	25.4	25.4
Underlying Free Cash Flow	-	-	(2.7)	20.6	20.6
Cosmos Nickel Operation					
Sales Revenue	-	-	-	-	-
Underlying EBITDA	-	-	-	-	-
Cash Flow from Operating Activities	-	-	-	(0.3)	(0.3)
Underlying Free Cash Flow	-	-	(16.1)	(58.7)	(58.7)
Lithium Business (TLEA)					
Underlying EBITDA <sup>1</sup>	8.8	60.5	101.8	285.6	285.6
Cash Flow from Operating Activities	-	-	70.7	105.5	105.5
Underlying Free Cash Flow	-	-	70.7	105.5	105.5
Exploration & Evaluation					
Underlying EBITDA	(16.8)	(12.9)	(20.6)	(24.5)	(24.5)
Cash Flow from Operating Activities	(18.2)	(11.7)	(17.6)	(27.5)	(27.5)
Underlying Free Cash Flow	(18.6)	(11.9)	(18.0)	(27.6)	(27.6)
Acquisition & Transaction Costs					
Cash Flow from Operating Activities	(6.7)	(1.0)	(0.1)	(6.3)	(6.3)
Corporate & Other					
Other Revenue	0.5	0.4	0.5	0.8	0.8
Underlying EBITDA	2.6	13.3	(32.6)	(8.4)	(8.4)
Cash Flow from Operating Activities	(7.4)	(176.0)	(32.9)	(50.8)	(50.8)
Underlying Free Cash Flow	(10.1)	(176.3)	(33.2)	(51.0)	(51.0)

1. Represents IGO's share of net profit from TLEA.



# Appendix 4 **Nova Production Summary**

	Units	2Q22	3Q22	4Q22	1Q23	YTD
Production Details						
Ore Mined <sup>1</sup>	t	413,695	379,634	426,882	384,416	384,416
Ore Milled	t	413,323	409,208	429,341	386,934	386,934
Nickel Grade	%	1.96	1.80	1.75	1.97	1.97
Copper Grade	%	0.79	0.72	0.71	0.79	0.79
Cobalt Grade	%	0.07	0.07	0.06	0.07	0.07
Concentrate Production						
Nickel Concentrate	t	52,807	47,083	48,820	50,538	50,538
Copper Concentrate	t	9,630	8,868	8,884	8,643	8,643
Nickel Recovery	%	86.4	85.5	86.5	86.3	86.3
Copper Recovery	%	87.3	87.4	86.7	86.5	86.5
Metal in Concentrate						
Nickel	t	6,987	6,290	6,509	6,572	6,572
Copper	t	2,884	2,762	2,814	2,805	2,805
Cobalt	t	259	237	233	240	240
Metal Payable in Concentrate <sup>2</sup>						
Nickel	t	5,550	5,033	5,240	5,241	5,241
Copper	t	2,751	2,497	2,569	2,559	2,559
Cobalt	t	110	101	99	102	102
Metal Payable in Concentrates Solo	Ł					
Nickel	t	5,015	5,721	5,039	5,099	5,099
Copper	t	2,863	1,480	2,855	3,057	3,057
Cobalt	t	100	113	95	99	99
Revenue & Expense Summary						
Net Revenue	A\$M	188.0	245.5	277.9	201.8	201.8
Cash Mining Costs	A\$M	(28.6)	(26.4)	(28.6)	(28.7)	(28.7)
Cash Processing Costs	A\$M	(15.3)	(15.9)	(17.4)	(19.0)	(19.0)
Other Site Costs	A\$M	(7.2)	(7.5)	(7.3)	(12.0)	(12.0)
Product Inventory Adjustments	A\$M	7.5	(7.1)	(2.4)	1.6	1.6
Offsite Costs	A\$M	(13.7)	(16.3)	(12.9)	(14.0)	(14.0)
Exploration	A\$M	(0.8)	(0.7)	(1.2)	(0.5)	(0.5)
Mine Development	A\$M	-	(1.1)	(0.9)	(0.1)	(0.1)
Sustaining & Improvement Capex	A\$M	(1.9)	(4.1)	(4.4)	(3.0)	(3.0)
Leasing Costs	A\$M	(0.9)	(0.9)	(0.9)	(2.3)	(2.3)
Depreciation/Amortisation	A\$M	(41.5)	(38.8)	(43.6)	(39.1)	(39.1)
Notional Cost /lb Total Ni Payable	Vietal					
Mining Cost	\$/lb	2.34	2.38	2.48	2.48	2.48
Processing Cost	\$/lb	1.25	1.43	1.50	1.64	1.64
Other Cash Costs <sup>3</sup>	\$/lb	1.88	2.08	2.16	2.41	2.41
Copper, Cobalt Credits	\$/lb	(3.73)	(4.03)	(3.91)	(3.40)	(3.40)
Ni Cash Costs and Royalties <sup>4</sup>	\$/lb	1.73	1.86	2.24	3.14	3.14
Exploration, Development, P&E	\$/lb	0.22	0.52	0.56	0.31	0.31
Depreciation & Amortisation	\$/lb	3.40	3.50	3.77	3.38	3.38

Total mined ore from inside and outside of reserves.
 Payable metal is a function of recovery from concentrate, smelting and refinery, controlled by sales contracts.
 Other cash costs include site administration, notional trucking, notional TCs & RCs, notional wharfage & shipping and notional royalties.
 Cash Costs include credits for copper and cobalt notionally priced at A\$5.16/lb and A\$44.17/lb for 1Q23, respectively.



# Appendix 5

### Forrestania Production Summary<sup>1</sup>

	Units	4Q22	1Q23	YTD
Production Details				
Ore Mined <sup>2</sup>	t	107,269	110,130	110,130
Ore Milled	t	146,709	154,227	154,227
Nickel Grade	%	2.30	2.52	2.52
Concentrate Production				
Nickel Concentrate	t	18,998	21,067	21,067
Nickel Recovery	%	84.8	82.1	82.1
Metal in Concentrate				
Nickel	t	2,860	3,189	3,189
Metal Payable in Concentrate <sup>3</sup>				
Nickel	t	2,290	2,544	2,544
Metal Payable in Concentrates Sold				
Nickel	t	1,899	2,735	2,735
Revenue & Expense Summary				
Sales Revenue (incl. hedging TC's/RC's)	A\$M	69.6	83.4	83.4
Cash Mining Costs	A\$M	(26.5)	(29.1)	(29.1)
Cash Processing Costs	A\$M	(9.4)	(10.0)	(10.0)
Other Site Costs	A\$M	(3.2)	(3.5)	(3.5)
Product Inventory Adjustments	A\$M	6.8	(21.8)	(21.8)
Offsite Costs	A\$M	(6.2)	(6.6)	(6.6)
Exploration	A\$M	(3.4)	(2.6)	(2.6)
Mine Development	A\$M	(4.3)	(3.3)	(3.3)
Sustaining & Improvement Capex	A\$M	(1.4)	(1.7)	(1.7)
Leasing Costs	A\$M	(1.3)	(0.8)	(0.8)
Depreciation/Amortisation	A\$M	(15.8)	(27.6)	(27.6)
Notional Cost /Ib Total Ni Payable Metal <sup>4</sup>				
Mining Cost	A\$/lb	5.25	5.19	5.19
Processing Cost	A\$/lb	1.86	1.78	1.78
Other Cash Costs <sup>5</sup>	A\$/lb	2.13	1.73	1.73
Ni Cash Costs and Royalties	A\$/lb	9.24	8.70	8.70
Exploration, Development, P&E	A\$/lb	1.80	1.35	1.35
Depreciation/Amortisation	A\$/lb	3.13	4.91	4.91

IGO completed the acquisition of Western Areas on 20 June 2022. Accordingly, the pro-forma operating and financial results for 4Q22 are provided for information purposes only.
 Total mined ore from inside and outside of reserves.
 Payable metal is a function of recovery from concentrate, smelting and refinery, controlled by sales contracts.
 4Q22 cash costs for Forrestania have been restated where applicable to align with IGO's cash cost methodology.
 Other cash costs include site administration, notional trucking, notional wharfage & shipping and notional royalties.



# Appendix 6

### Lithium Joint Venture (TLEA) Production<sup>1</sup>

	Units	2Q22	3Q22	4Q22	1Q23	YTD	
Greenbushes Operation							
Production Details							
Total Material Mined (Ore + Waste)	BCM	1,189,508	1,509,300	1,647,461	1,357,615	1,357,615	
Ore Mined	BCM	372,837	340,927	370,803	356,559	356,559	
Ore Mined	t	1,029,548	940,199	1,027,205	986,198	986,198	
Grade Ore Mined	% Li <sub>2</sub> O	2.42	2.22	2.53	2.48	2.48	
Concentrate Production							
Total Spodumene Concentrate Production	t	258,659	270,464	337,780	361,227	361,227	
Financial Summary							
Sales Revenue (FOB)	A\$M	222.4	546.2	868.2	1,839.8	1,839.8	
EBITDA	A\$M	123.1	427.5	649.8	1,618.6	1,618.6	
Exploration	A\$M	1.0	1.0	2.3	2.4	2.4	
Sustaining & Improvement Capex	A\$M	36.4	42.6	60.3	76.1	76.1	
Unit COGS	A\$/t	242	235	254	253	253	
Unit COGS (plus royalties) <sup>2</sup>	A\$/t	388	476	618	660	660	
Kwinana Refinery							
Production Details							
Train 1 – Concentrate Throughput	t		No				
Train 1 – Recovery	%		Not in commercial production				
Train 1 – Production	t		Not in commercial production				
Financial Summary							
Sales Revenue	A\$M		No				
EBITDA	A\$M	(9.0)	(16.6)	(3.3)	21.2	21.2	
Sustaining & Improvement Capex	A\$M	14.4	6.9	18.6	13.1	13.1	
All in Sustaining Cost	A\$/t	Not in commercial production					

1. Results of Operations are reported at 100%. IGO has a 24.99% indirect interest in the Greenbushes Operation and a 49% direct interest in the Kwinana Refinery.

 Cost of goods sold (COGS) is IGO's estimate of cost of goods sold and is inclusive of ore mining costs, general and administrative, selling and marketing, inventory movements and royalty expense.