# **Market Release**

7 December 2021



# **Newcrest releases Annual Information Form**

Newcrest Mining Limited (ASX, TSX, PNGX: NCM) has released the attached Annual Information Form (AIF) dated 6 December 2021, for the financial year ended 30 June 2021, and filed it with the Canadian regulatory authorities in connection with Newcrest's secondary listing on the Toronto Stock Exchange.

# Important Note

In preparing the AIF, Mineral Resources and Mineral Reserves were initially classified using the 2012 edition of the Australasian Joint Ore Reserves Committee Code (the JORC Code). The confidence categories assigned under the JORC Code were reconciled to the confidence categories in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves 2014 (the CIM Definition Standards). As the confidence category definitions are the same, no modification to the confidence categories was required. Note that NI 43-101 does not allow for Inferred Mineral Resources to be added to other Mineral Resource categories.

Mineral Resources and Mineral Reserves in the AIF are reported in accordance with the CIM Definition Standards. Terminology differences were addressed in that the term "Ore Reserves" in the JORC Code is reported as "Mineral Reserves" using the CIM Definition Standards, and the term "Proved Ore Reserve" in the JORC Code is reported as "Proven Mineral Reserves" using the CIM Definition Standards.

# **Competent Person Statement**

The information in the AIF that relates to Mineral Resources and Ore/ Mineral Reserves is based on and fairly represents information compiled by Ms Jillian Terry. Ms Terry is the Head of Mineral Resource Management, a full-time employee of Newcrest Mining Limited and is entitled to participate in Newcrest's executive equity long term incentive plan, details of which are included in Newcrest's 2021 Remuneration Report. She is a Fellow of The Australasian Institute of Mining and Metallurgy. Ms Terry has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the JORC Code 2012. Ms Terry consents to the inclusion of the material in this report in the form and context in which it appears.

The information in the AIF that relates to exploration targets and exploration results is based on and fairly represents information compiled by Mr Fraser MacCorquodale. Mr MacCorquodale is the General Manager – Exploration and a full-time employee of Newcrest Mining Limited. He is a shareholder in Newcrest Mining Limited and is entitled to participate in Newcrest's executive equity long term incentive plan, details of which are included in Newcrest's 2021 Remuneration Report. He is a Member of the Australian Institute of Geoscientists. Mr MacCorquodale has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code. He consents to the inclusion in this report of the matters based on his information in the form and context in which it appears including sampling, analytical and test data underlying the results.

The information in the AIF that relates to the financial metrics and forecast Life of Mine (LOM) of the Golpu Project on page 103 has been extracted from the Wafi-Golpu Project, Morobe Province, Papua New Guinea, NI 43-101 Technical Report dated June 30, 2020 (the Golpu Technical Report) which is available to view at www.asx.com.au under the code "NCM" and on Newcrest's SEDAR profile. The information in the AIF that relates to the financial metrics and forecast LOM of the Red Chris Project on pages 83 to 84 has been extracted from the Red Chris Technical Report as disclosed to the ASX dated 30 November 2021 which is available to view at www.asx.com.au under the code "NCM" and on Newcrest's SEDAR profile.

The Mineral Resources and Ore/ Mineral Reserves underpinning the production targets on which such information is based are also specified in the Golpu Technical Report and the Red Chris Technical Report, and they have been prepared by Competent Persons in accordance with Appendix 5A of the ASX Listing Rules. Newcrest confirms that all material assumptions underpinning such production targets and forecast financial information in the Golpu Technical Report and the Red Chris Technical Report continue to apply and have not materially changed.

The information in the AIF that relates to Mineral Resources and Ore/ Mineral Reserves has been extracted from the releases titled "Annual Mineral Resources and Ore Reserves as at 31 December 2020" (the Annual Statement); "Cadia PC1-2 Pre-Feasibility Study delivers attractive returns" dated 19 August 2021 (the Cadia release); "Lihir PFS supports gold production growth to 1Mozpa+ from FY24" dated 12 October 2021 (the Lihir release); "Red Chris Block Cave Pre-Feasibility Study confirms Tier 1 potential" dated 12 October 2021 (the Red Chris release) and "Havieron PFS Stage 1 delivers solid returns and growth for future base" dated 12 October 2021 (the Havieron release). The Annual Statement, original Cadia release, the original Lihir release, the original Red Chris release and the original Havieron release (together, the original releases) are available to view at www.asx.com.au under the code "NCM" and on Newcrest's SEDAR profile. Newcrest confirms that it is not aware of any new information or data that materially affects the information included in the original releases and that all material assumptions and technical parameters underpinning the estimates in the original releases continue to apply and have not materially changed. Newcrest confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original releases.

# Authorised by the Newcrest Disclosure Committee For further information please contact

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ANNUAL INFORMATION FORM

 $\mathbf{of}$ 

NEWCREST MINING LIMITED

FOR THE YEAR ENDED JUNE 30, 2021

Dated as of 6 December, 2021

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# **GENERAL MATTERS**

Unless otherwise noted or the context otherwise indicates, the terms "Newcrest", the "Company", the "Corporation", the "Group", "our", "us" and "we" refer to Newcrest Mining Limited and its controlled entities. The information contained in this Annual Information Form ("AIF") is current as of June 30, 2021, unless otherwise indicated. More current information may be available on Newcrest's public website at <a href="www.newcrest.com">www.newcrest.com</a> or on Newcrest's profile at the System for Electronic Document Analysis and Retrieval ("SEDAR") at <a href="www.sedar.com">www.sedar.com</a>.

# FORWARD-LOOKING INFORMATION

This AIF includes "forward-looking statements" and "forward-looking information" within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of forward-looking words such as "may," "will," "expect," "intend," "plan," "estimate," "anticipate," "believe," "continue," "outlook" and "guidance," or other similar words and may include, without limitation, statements regarding estimated reserves and resources, certain plans, strategies, aspirations and objectives of management, anticipated production, study or construction dates, expected costs, cash flow or production outputs and anticipated productive lives of projects and mines. Newcrest continues to distinguish between outlook and guidance. Guidance statements relate to the current financial year. Outlook statements relate to years subsequent to the current financial year.

These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Newcrest's actual results, performance and achievements or industry results to differ materially from any future results, performance or achievements, or industry results, expressed or implied by these forward-looking statements. These factors include, among others: (1) substantial or extended decline in gold or copper prices, particularly as Newcrest is not predominantly hedged in respect of commodity prices; (2) foreign exchange rate fluctuations; (3) increased costs, capital and commodity inputs; (4) exposure to jurisdictions that are subject to political, economic, social, regulatory and other risks and uncertainties; (5) changes in law and regulation and inability to maintain title; (6) obtaining and maintaining relevant authorisations; (7) defects in, or challenges to, mineral title; (8) adverse changes to the taxation and royalty laws in multiple jurisdictions in which we are subject to taxation; (9) climate change; (10) the outbreak of the novel coronavirus or similar outbreaks; (11) changes in rainfall patterns and other climatic effects; (12) availability of financing; (13) asset impairments, write-downs and restructure costs; (14) the occurrence of events for which Newcrest is not insured or for which its insurance is inadequate; (15) the success of its exploration and acquisition activities in replacing gold and copper reserves depleted by production; (16) problems in the management of new acquisitions and integration with existing operations; (17) failure to acquire or develop projects to replace Mineral Reserves; (18) the amount of Newcrest's Mineral Reserves and Mineral Resources are estimates that may not be recoverable in full; (19) difficulties with joint venture arrangements, including disputes with joint venture partners; (20) operating risks and hazards inherent in the mining industry; (21) geotechnical, geothermal and hydrogeological challenges; (22) performance of information technology systems that are critical to its business; (23) ability to acquire and retain key human resources; (24) industrial relations risks; (25) reliance on contractors and exposure to risks relating to their activities; (26) risks relating to the transportation, processing and marketing of gold doré and mineral concentrates; (27) exposure to counterparty and credit risk; (28) maintenance of reputation and social license to operate; (29) legal proceedings, investigations and disputes; (30) occupational health and safety risks associated with mining and metallurgical processes; (31) the impact of extensive environmental laws and regulations; (32) exposure to significant or unanticipated closure costs or rehabilitation liabilities associated with its projects; (33) Newcrest's operations are dependent on maintaining good landowner and local community relations; (34) uncertainty in the development of new projects and mine expansions, and differences between actual capital and operating costs and economic returns from those estimated for a project or expansion prior to production; (35) risks related to Newcrest's relationships and/or agreements with Indigenous peoples; (36) increased scrutiny of human rights practices and regulatory burden from new legislation regarding human rights; (37) the impact of bribery and corruption; (38) price volatility in Newcrest's securities; and (39) service of process, enforcement of judgements and bringing of original actions in Canada.

Forward-looking statements are based on management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect Newcrest's business and operations in the future. Newcrest cannot give investors any assurance that the assumptions upon which management based its forward-looking statements will prove to be correct, or that Newcrest's business and operations will not be affected in any substantial manner by other factors not currently foreseeable by management or beyond its control.

Although the Company has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in the forward-looking information, there may be other factors that could cause actual results, performances, achievements or events not to be anticipated, estimated or intended. Also, many of the factors are beyond the Company's control. Accordingly, readers should not place undue reliance on forward-looking statements. The Company undertakes no obligation to reissue or update forward-looking statements as a result of new information or events after the date of this AIF except as may be required by applicable law. All forward-looking statements disclosed in this document are qualified by this cautionary statement.

#### SCIENTIFIC AND TECHNICAL INFORMATION

For the purposes of this AIF, Newcrest has identified its Cadia Operation, Lihir Operation, Red Chris Operation and the Wafi-Golpu Project as material projects. The scientific and technical information contained in this AIF relating to:

- the Cadia Operation is supported by the Company's technical report entitled "Cadia Operations, New South Wales, Australia, NI 43-101 Technical Report" that has an effective date of June 30, 2020, and was prepared by Mr K. Gleeson, Mr G. Newcombe, Mr P. Griffin and Mr P. Stephenson (the "Cadia Report");
- the Lihir Operation is supported by the Company's technical report entitled "Lihir Operations, Aniolam Island, Papua New Guinea, NI 43-101 Technical Report" that has an effective date of June 30, 2020 and was prepared by Mr K. Gleeson, Mr S. Butt, Mr J. O'Callaghan and Mr C. Jones (the "Lihir Report");
- the Red Chris Operation is supported by the Company's technical report entitled "Red Chris Operations, British Columbia, Canada, NI 43-101 Technical Report" that has an effective date of June 30, 2021, and was prepared by Mr R. Stewart, Mr B. Swanson, Mr M. Sykes, Mr L. Reemeyer, Mr Bing Wang and Mr P. Stephenson (the "Red Chris Report"); and
- the Wafi-Golpu Project is supported by the Company's technical report entitled "Wafi-Golpu Project, Morobe Province, Papua New Guinea, NI 43-101 Technical Report" that has an effective date of June 30, 2020, and was prepared by Mr K. Gleeson, Mr P. Manca, Mr D. Curry and Mr C. Jones (the "Wafi-Golpu Report").

Each of the foregoing persons is a "Qualified Person" as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators ("NI 43-101"). Each of the authors is an employee of Newcrest and is a Fellow of the Australasian Institute of Mining and Metallurgy ("AusIMM"), with the exception of Mr B. Swanson who is a Qualified Member of the Mining & Metallurgical Society of America.

The Cadia Report, Lihir Report, Red Chris Report and Wafi-Golpu Report (collectively, the "Newcrest Technical Reports") are each subject to certain assumptions, qualifications and procedures described in those reports. Reference should be made to the full text of each of the Newcrest Technical Reports, which have been filed with Canadian securities regulatory authorities pursuant to NI 43-101 and are available for review under the Company's profile on SEDAR at www.sedar.com. The Newcrest Technical Reports are not and shall not be deemed to be incorporated by reference in this AIF.

Additional scientific or technical information may be contained in the "Material Properties" section of this AIF that is not derived from the Newcrest Technical Reports, including additional information contained in reports underpinning the Lihir Mine Optimisation Study announced on February 11, 2021, the Lihir Phase 14A PFS announced on October 12, 2021 and the Cadia PC1-2 Pre-Feasibility Study announced on August 19, 2021. The Qualified Persons named as preparing the Newcrest Technical Reports approved the scientific or technical information contained in the "Material Properties" section of this AIF, including such additional scientific or technical information, in their areas of expertise. Except where otherwise disclosed, scientific or technical information in this AIF concerning the mineral properties material to Newcrest is based on information prepared by

Newcrest employees or Newcrest's joint venture partners, and was reviewed and approved by Ms Jillian Terry, Newcrest's Head of Mineral Resource Management, FAusIMM.

#### FINANCIAL INFORMATION AND ACCOUNTING PRINCIPLES

Unless otherwise indicated, reference in this AIF to C\$ are to Canadian dollars, reference to US\$ and \$ are to U.S. dollars and reference to A\$ are to Australian dollars.

All financial information in this AIF is derived from the Company's financial statements which were prepared in accordance with Australian Accounting Standards (including the Australian Accounting Interpretations) and the *Corporations Act* 2001 (Cth) (the "Australian Corporations Act").

The Company's financial statements also comply with International Financial Reporting Standards ("IFRS") including interpretations as issued by the International Accounting Standards Board. This AIF also includes non-IFRS information such as Underlying Profit (profit or loss after tax before significant items attributable to owners of the Company), EBITDA (earnings before interest, tax, depreciation and amortization, and significant items), EBIT (earnings before interest, tax and significant items), EBITDA Margin (EBITDA expressed as a percentage of revenue), EBIT Margin (EBIT expressed as a percentage of revenue), ROCE (return on capital employed)(calculated as EBIT expressed as a percentage of average total capital employed (net debt and total equity)), Leverage Ratio (net debt to EBITDA) (calculated as net debt divided by EBITDA for the preceding 12 months), Free Cash Flow (calculated as cash flow from operating activities less cash flow related to investing activities, with Free Cash Flow for each operating site calculated as Free Cash Flow before interest, tax and intercompany transactions), Free Cash Flow before M&A activity (being Free Cash Flow excluding acquisitions, investments in associates and divestments), All-In Sustaining Cost ("AISC") (determined in accordance with the updated World Gold Council Guidance Note on Non-GAAP Metrics released in November 2018). AISC will vary from period to period as a result of various factors including production performance, timing of sales and the level of sustaining capital and the relative contribution of each asset and AISC Margin reflects the average realised gold price less the AISC per ounce sold.

These measures are used internally by Newcrest Management to assess the performance of the business and make decisions on the allocation of resources and are included in this AIF to provide greater understanding of the underlying financial performance of Newcrest's operations. The non-IFRS information has not been subject to audit or review by Newcrest's external auditor and should be used in addition to IFRS information. Explanations and reconciliations of non-IFRS financial information to the financial statements are included in section 6 of the Operating and Financial Review in the audited consolidated financial statements of the Company for the year ended June 30, 2021. Such non-IFRS financial information/non-GAAP financial measures do not have a standardised meaning prescribed by IFRS and may be calculated differently by other companies. Although Newcrest believes these non-IFRS/non-GAAP financial measures provide useful information to investors in measuring the financial performance and condition of its business, investors are cautioned not to place undue reliance on any non-IFRS financial information/non-GAAP financial measures included in this AIF. When reviewing business performance, this non-IFRS information should be used in addition to, and not as a replacement of, measures prepared in accordance with IFRS, available on Newcrest's website and SEDAR.

Newcrest's Fiscal Year ("FY") commences on July 1 and ends on June 30. The audited consolidated financial statements of the Company for the year ended June 30, 2021, are available electronically from SEDAR.

# CURRENCY PRESENTATION AND EXCHANGE DATA

# Canadian Dollars per US Dollar

The following table sets out the high and low rates of exchange in Canadian dollars for one U.S. dollar during the periods noted, the average rates of exchange during such periods and the rates of exchange at the end of such periods.

		C\$ per US	55		
Year Ended	High	Average Rate	End Rate		
June 30, 2021	1.36	1.20	1.28	1.24	
June 30, 2020	1.45	1.30	1.34	1.36	
June 30, 2019	1.36	1.28	1.32	1.31	

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On November 30, 2021, the exchange rate published by the Bank of Canada was C\$1.28 = US\$1.00.

# Canadian Dollars per Australian Dollar

The following table sets out the high and low rates of exchange in Canadian dollars for one Australian dollar during the periods noted, the average rates of exchange during such periods and the rates of exchange at the end of such periods.

		C\$ per A	\$	
Year Ended	High	Low	Average Rate	<b>End Rate</b>
June 30, 2021	1.00	0.93	0.96	0.93
June 30, 2020	0.94	0.84	0.90	0.94
June 30, 2019	0.98	0.91	0.95	0.92

On November 30, 2021, the exchange rate published by the Bank of Canada was C\$0.91 = A\$1.00.

# **DESIGNATED FOREIGN ISSUER STATUS**

The Company is a "designated foreign issuer" as defined in *National Instrument 71-102 - Continuous Disclosure* and *Other Exemptions Relating to Foreign Issuers* and is subject to the regulatory requirements of the Australian Securities & Investments Commission and the Australian Securities Exchange ("ASX").

# **CORPORATE STRUCTURE**

# Name, Address and Incorporation

Newcrest is a corporation governed by the Australian Corporations Act. The Company's ordinary shares are listed on ASX, the Toronto Stock Exchange ("TSX") and PNGX Markets Limited ("PNGX"). Newcrest also has American Depositary Receipts issued by The Bank of New York Mellon and traded on the over-the-counter market in the United States of America. Newcrest's registered and head office is located at Level 8, 600 St. Kilda Road, Melbourne, Victoria, 3004, Australia.

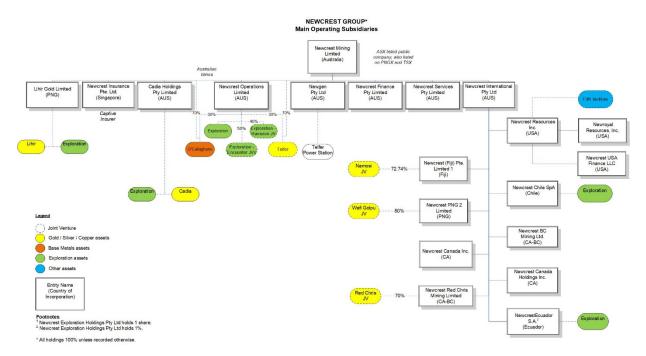
# **Intercorporate Relationships**

The following table sets out Newcrest's main operating subsidiaries as at the date of this document:

Name	Jurisdiction	% of Voting Securities Held (directly or indirectly)
Newcrest Operations Limited	Australia	100%
Cadia Holdings Pty Limited	Australia	100%
Newcrest Finance Pty Limited	Australia	100%
Newgen Pty Ltd	Australia	100%
Newcrest International Pty Ltd	Australia	100%
Newcrest Services Pty Limited	Australia	100%
Newcrest Insurance Pte. Ltd.	Singapore	100%
Newcrest (Fiji) Pte Limited	Fiji	100%
Lihir Gold Limited	Papua New Guinea	100%
Newcrest PNG 2 Limited	Papua New Guinea	100%
Newcrest Resources, Inc.	United States of America (Delaware)	100%
Newroyal Resources, Inc.	United States of America (Delaware)	100%

Name	Jurisdiction	% of Voting Securities Held (directly or indirectly)
Newcrest Canada Inc.	Canada	100%
Newcrest Canada Holdings Inc.	Canada	100%
Newcrest Red Chris Mining Limited	Canada (British Columbia)	100%
Newcrest BC Mining Ltd.	Canada (British Columbia)	100%
Newcrest Chile SpA	Chile	100%
NewcrestEcuador S.A.	Ecuador	100%
Newcrest USA Finance LLC	United States of America (Delaware)	100%

The following chart demonstrates the corporate structure of the Company and its significant subsidiaries with respect to the main assets of the Company, the percentage of voting securities of each subsidiary beneficially owned, controlled or directed, directly or indirectly by the Company. The jurisdiction of incorporation of each entity is shown in the table above.



GENERAL DEVELOPMENT OF THE BUSINESS

# **Company Overview**

Newcrest is one of the largest gold mining companies globally by production, reserves and market capitalisation. In addition to gold, Newcrest also produces copper and silver as by-products. Newcrest has operations in Australia, Papua New Guinea ("PNG") and Canada, interests in potential development projects in PNG, Australia and Fiji, an equity holding in an operation in Ecuador, and exploration activities in Canada, Australia, Chile, the United States of America and Ecuador. As at November 30, 2021, Newcrest had a market capitalisation of A\$19.32 billion.

Newcrest dates back to 1966, when Newmont Mining Limited established an Australian subsidiary, Newmont Holdings Limited, which subsequently changed its name to Newmont Australia Limited. In 1990, Newmont Australia Limited acquired Australmin Holdings Ltd. It subsequently merged with BHP Gold Limited and changed its name to Newcrest Mining Limited. Newcrest maintains its primary listing on the ASX and is also listed on the TSX and PNGX. Newcrest has been listed on the ASX since 1987 (as Newmont Australia Limited until 1991).

The Telfer deposit in Australia was discovered in 1971 and was originally developed and operated by a joint venture between Newmont Holdings Ltd (now called Newcrest Mining Limited) and BHP Gold Limited (now called Newcrest Operations Limited).

The Cadia deposits in Australia were discovered by Newcrest in 1992.

Newcrest completed acquiring its 50% interest in the Wafi-Golpu Project in the 2009 financial year.

Newcrest acquired the Lihir Operation as a result of the merger with Lihir Gold Limited ("LGL") by way of a court-approved scheme of arrangement in August 2010.

Newcrest completed its acquisition of a 70% beneficial interest in the Red Chris Operation and surrounding tenements in British Columbia, Canada, in August 2019 from Imperial Metals Corporation ("Imperial"), who retained a 30% interest.

Newcrest acquired an interest in Lundin Gold Inc. ("**Lundin Gold**"), which owns the Fruta del Norte mine in Ecuador, in 2018. Newcrest currently owns 32% and, in 2020, acquired gold prepay and stream facilities and an offtake agreement in respect of Fruta del Norte.

In October 2021, Newcrest completed a Pre-Feasibility Study for the Havieron Project which triggered Newcrest's entitlement to an additional 10% interest in the Joint Venture for a cumulative 70% Joint Venture interest in accordance with the terms of the exploration farm-in agreement. Newcrest has an option to acquire an additional 5% Joint Venture interest for fair market value, exercisable during the 12 months from December 12, 2021.

# **Three Year Corporate History**

# Strategic Partnership with Lundin Gold Inc.

On February 26, 2018, Newcrest entered into agreements with Lundin Gold to form a strategic partnership with respect to Lundin Gold's assets in Ecuador, particularly their Fruta del Norte gold project ("Fruta del Norte"). The partnership included a US\$250 million private placement, to acquire a 27.1% interest in Lundin Gold. Newcrest also entered into an agreement to earn up to a 50% direct interest in eight separate exploration concessions in Ecuador by spending up to US\$20 million over five years. Newcrest manages these exploration activities.

On December 6, 2019, Newcrest increased its ownership in Lundin Gold to 32%. Newcrest holds a right to appoint two directors to the Board of Directors of Lundin Gold, and appoint one of those directors to the Project Advisory Committee (since renamed the Technical Committee) for Fruta del Norte. In November 2019, Lundin Gold announced first gold production from Fruta del Norte. On February 20, 2020, Lundin Gold announced that Fruta del Norte had achieved commercial production ahead of schedule. On March 22, 2020, Lundin Gold announced that it had made the decision, in consultation with both local officials and the Government of Ecuador, to temporarily suspend operations at Fruta del Norte amid growing concerns regarding the spread of COVID-19. Operations at Fruta del Norte restarted on July 5, 2020 and continued without further COVID-19 related suspension during FY21.

# Cadia Northern Tailings Storage Facility Embankment Slump

On March 9, 2018, an embankment slump of the Northern Tailings Storage Facility ("NTSF") occurred at the Cadia Operation, which resulted in the temporary suspension of all mining and processing activities. Mining recommenced progressively from March 27, 2018 and processing recommenced from April 3, 2018. Approval from the New South Wales ("NSW") Department of Planning, Industry and Environment ("DPIE") to use the first 200 m of the decommissioned Cadia Hill open pit as a tailings storage facility was received in April 2018. Deposition into the pit commenced in early May 2018 and, following a short ramp-up period, the Cadia Operation returned to full production rates approximately two months after the NTSF embankment slump. Approval allowing the full use of the Cadia Hill open pit for tailings deposition was granted in December 2019.

Newcrest appointed an independent technical review board ("ITRB"), which concluded that the dominant factor determining the location of the slump was the existence of a low-density foundation layer in the vicinity of the slump. Other factors that contributed to the slump were the local height of the dam, the prevailing phreatic conditions, and excavation at the toe of the structure in the area of the slump. The detailed findings of the ITRB were factored into studies for the repair of the NTSF. In July 2021, the Newcrest Board approved gating of the NTSF embankment remediation to Feasibility Study. Detailed design work on a single design option is currently in progress with execution expected to cost less than A\$100 million.

Use of the NTSF is subject to a prohibition notice issued by the NSW Resources Regulator which prevents use of that facility for deposition of tailings pending completion of repair works.

In December 2020, Newcrest submitted an application to DPIE for the approval of a modification to increase the permitted processing capacity of the Cadia Operation from 32 Mt/a to 35 Mt/a. Included within the modification is the proposal for the repair of the slumped section of the NTSF and a minor change in the footprint of the NTSF and Southern Tailings Storage Facility ("STSF") to achieve the approved deposition volumes and allow for a change from upstream to downstream and/or centreline lift design. The assessment process for this application has been ongoing since December 2020. On 2 December 2021, Newcrest received notice from DPIE that it had recommended that the modification application be approved subject to conditions including Newcrest commissioning an independent audit report to the satisfaction of the DPIE Secretary in relation to Newcrest's approach to managing and minimising the off-site air quality impacts of the project including NTSF repair construction activities. As at the date of this AIF, Newcrest is awaiting final approval of the modification application by the Executive Director - Resource Assessments, as delegate of the Minister for Planning and Public Spaces.

The risk of tailings storage facility failures is included in the "Risk Factors" section of this AIF under the heading "Newcrest is exposed to a number of operating risks and hazards inherent in the mining industry."

#### **Investment in Azucar Minerals**

In May 2018, Newcrest acquired a 19.9% stake in Azucar Minerals Limited ("Azucar") (formerly known as Almadex Minerals Limited) by way of private placement, for consideration of approximately US\$15 million. Azucar owns the El Cobre copper-gold project in Veracruz, Mexico. As at June 30, 2021, Newcrest's interest in Azucar had been written down to a carrying value of US\$2 million.

# Gosowong Contract of Work Renegotiation

In June 2018, Newcrest's 75%-owned Indonesian subsidiary, PT Nusa Halmahera Minerals ("PTNHM"), the owner of the Gosowong mine in Indonesia ("Gosowong"), entered into an amendment agreement with the Government of Indonesia to amend the Gosowong Contract of Work ("CoW"). The amendment agreement required that Indonesian parties own 51% of PTNHM within two years of signing the amendment agreement. As a result, Newcrest was required to divest at least another 26% interest from its then current shareholding percentage of 75%. On January 31, 2020, Newcrest announced the divestment of all of its interest in Gosowong for total consideration of US\$90 million. Economic ownership was transferred on December 31, 2019 with completion of the sale occurring in March, 2020. US\$60 million of the total consideration has been received by the Company to date, with payment of the remaining US\$30 million deferred in accordance with the terms of the sale agreement.

# Divestment of Séguéla Project and Cote d'Ivoire Exploration Assets

On February 12, 2019, Newcrest entered into an agreement with Roxgold Inc. for the sale of its Séguéla project and its portfolio of regional exploration tenements in Côte d'Ivoire for upfront consideration of US\$20 million cash on completion and a deferred payment of US\$10 million cash, contingent on first gold production from the portfolio.

# Acquisition of 70% Interest in the Red Chris Operation

On March 11, 2019, Newcrest entered into an agreement to acquire a 70% beneficial interest in, and operatorship of, the Red Chris Operation and surrounding tenements in British Columbia, Canada, from Imperial for US\$804

million, subject to debt and net working capital adjustments. The acquisition closed on August 15, 2019. Red Chris is currently an open pit operation, which produces a copper-gold concentrate. Newcrest is evaluating the development of an underground mine to exploit mineralisation at depth and is actively evaluating exploration opportunities in the acquired mineral tenure package. Drilling results returned to date continue to confirm the presence of discrete high grade 'pods' of mineralisation in the East Zone and the potential discovery of additional higher grade zones within the main porphyry corridor. A prefeasibility study for an underground block cave operation at Red Chris was completed in October 2021, with the Red Chris Report being filed on November 29, 2021.

# Farm-in and Joint Venture Agreement with Respect to Havieron Project

On March 12, 2019, Newcrest entered into an exploration farm-in agreement with Greatland Gold plc ("Greatland Gold") that established a joint venture on their Havieron tenement (the "Havieron Project"), which is located in the Paterson Province in Western Australia, 45 km east of Newcrest's Telfer project. Newcrest is the manager of the exploration program during the farm-in period and will remain manager while it holds a majority interest.

On November 30, 2020, Newcrest announced that it had entered into a fully-termed Joint Venture Agreement with Greatland Gold for the Havieron Project, and agreed to provide Greatland Gold with a US\$50 million loan to fund certain early works and growth drilling activities at the Project. Newcrest announced that it had met the Stage 3 expenditure requirement (US\$45 million) and was entitled to earn an additional 20% joint venture interest, for an aggregate joint venture interest of 60%. Newcrest also announced that it had entered into a Farm-in and Joint Venture Agreement with respect to Greatland Gold's Black Hills and Paterson Range East exploration licences, through a new joint venture agreement with Greatland Gold called the Juri Joint Venture.

In October 2021, Newcrest announced that it had completed a pre-feasibility study for the Havieron Project which triggered Newcrest's entitlement to an additional 10% interest in the Joint Venture for a cumulative 70% Joint Venture interest. Newcrest has an option to acquire an additional 5% Joint Venture interest for fair market value, exercisable during the 12 months from December 12, 2021.

#### Approval of Cadia Expansion Project

On October 15, 2019, Newcrest announced that its Board of Directors had approved progression of the first stage of a two-stage expansion of the Cadia Operation to execution, and on October 9, 2020, Newcrest announced that its Board of Directors had approved progression of the second stage to execution. The two stages have an estimated capital cost of US\$860 million (US\$685 million for the first stage and US\$175 million for the second stage)<sup>2</sup> and they collectively look to pursue the development of the next panel cave, PC2-3, and the expansion of plant capacity from 32-33 Mt/a up to 35 Mt/a<sup>3</sup>.

In December 2020, Newcrest submitted an application to DPIE for a modification to increase the permitted processing capacity of the Cadia Operation from 32 Mt/a to 35 Mt/a. On 2 December 2021, Newcrest received notice from DPIE that it had recommended that the modification application be approved subject to conditions including Newcrest commissioning an independent audit report to the satisfaction of the DPIE Secretary in relation to Newcrest's approach to managing and minimising the off-site air quality impacts of the project including NTSF repair construction activities. As at the date of this AIF, Newcrest is awaiting final approval of the modification application by the Executive Director - Resource Assessments, as delegate of the Minister for Planning and Public Spaces.

 $^1$  Stages 1 and 2 of the Cadia Expansion Feasibility Study have been prepared with the objective that their findings are subject to an accuracy range of  $\pm 10$ -15%. The findings in the study and the implementation of the Cadia Expansion Project are subject to all necessary approvals, permits, internal and regulatory requirements and further works. The estimates are indicative only and are subject to market and operating conditions. They should not be construed as guidance.

<sup>&</sup>lt;sup>2</sup> An exchange rate of A\$/US\$ 0.75 was used for Stage 1 of the Cadia Expansion Project. For Stage 2, the following exchange rates were used: FY21 A\$/US\$ 0.70; FY22 A\$/US\$ 0.71; FY23 A\$/US\$ 0.72; FY24 A\$/US\$ 0.73; and FY25+ A\$/US\$ 0.75.

<sup>&</sup>lt;sup>3</sup> While the targeted capacity of the process plant under the Expansion Project is 33Mt/a in Stage 1 and 35Mt/a in Stage 2, the actual milling rate will be subject to regulatory and permitting approvals.

Development of the next panel cave, PC2-3, does not require further permitting as it is generally in accordance with the existing approval and construction commenced in FY21.

On August 19, 2021, Newcrest announced that its Board of Directors had approved the Cadia PC1-2 Pre-Feasibility Study, enabling the commencement of the PC1-2 Feasibility Study and an Early Works Program costing approximately US\$90 million.<sup>4</sup>

# Fruta del Norte Finance Facilities and Offtake Agreement

On April 30, 2020, Newcrest announced that it had completed the acquisition of the gold prepay and stream facilities and an offtake agreement (the "Offtake Agreement") in respect of Lundin Gold's Fruta del Norte mine for US\$460 million from funds affiliated with Orion Resource Partners and Blackstone Tactical Opportunities. The acquisition was structured as a purchase of the shares of the companies that hold the facilities. The acquisition increased Newcrest's direct exposure to the cash flow generated by Fruta del Norte, in-line with Newcrest's stated growth strategy.

The gold prepay credit agreement (the "GPCA") is a non-revolving subordinated credit facility with a face value of US\$150 million to be repaid in cash based on the value of 218,500 oz of gold. Key terms of this agreement include:

- repayment through 19 quarterly cash payments of 11,500oz of gold based on the spot price of gold starting from December 2020 and concluding in June 2025 ("quarterly payments");
- the value of the quarterly payments is determined by the spot gold price which is subject to a risk collar;
   and
- the risk collar is based on an average gold price for three months leading up to each quarterly payment. If the average gold price in any fiscal quarter is greater than US\$1,436/oz or less than US\$1,062/oz, the amount of the next quarterly payment is reduced or increased, respectively, by 15%.

The stream credit facility agreement (the "SCFA") is a non-revolving subordinated credit facility with a face value of US\$150 million that is to be repaid in cash based on precious metal production at Fruta del Norte. The amount of each monthly payment is the sum of the following:

- 7.75% of refined gold processed in the preceding month, multiplied by the excess of the spot gold price over US\$400/oz (subject to an inflationary adjustment), until 350,000 oz is reached; and
- 100% of refined silver processed in the preceding month, multiplied by the excess of the spot silver price over US\$4/oz (subject to an inflationary adjustment), until 6 Moz is reached.

The Offtake Agreement allows Newcrest to acquire 50% of refined gold production from Fruta del Norte up to 2.5 Moz at spot prices determined with reference to a quotational period.

As the holder of the GPCA and SCFA, Newcrest ranks ahead of ordinary equity and behind senior debt holders with regard to preference of cash flows from Fruta del Norte.

#### Equity Raising

On April 30, 2020, Newcrest undertook a A\$1.0 billion underwritten institutional equity placement, and announced a non-underwritten share purchase plan ("SPP") targeting up to A\$100 million (together, the "Equity Raising"). Under the institutional placement, approximately 39.1 million new ordinary shares were issued, equivalent to approximately 5.1% of total outstanding shares as at April 29, 2020. The proceeds from the Equity Raising were used for the purchase of the Fruta del Norte financing facilities and to fund future growth options including the construction of declines at the Havieron Project and the Red Chris Operation. The institutional placement settled on May 5, 2020, and the SPP closed on May 27, 2020. Given the strong support shown by eligible shareholders for the

<sup>&</sup>lt;sup>4</sup> An exchange rate of A\$/US\$ 0.75 was used to convert the Early Works Program cost from AUD to USD.

SPP, Newcrest's Board of Directors exercised its discretion under the terms of the SPP to increase the size of the SPP from A\$100 million to approximately A\$200 million.

# US Bond Issue and Liability Management

On May 8, 2020, Newcrest announced that it had priced a combined aggregate principal amount of US\$1.15 billion of senior unsecured notes (the "**Notes**") as follows, offered in the United States to persons reasonably believed to be qualified institutional buyers pursuant to Rule 144A under the *Securities Act of 1933* (United States), as amended (the "**Securities Act**") and outside the United States in reliance on Regulation S under the Securities Act.

- US\$650 million 10-year Notes maturing 13 May 2030 with a fixed rate coupon of 3.25% per annum; and
- US\$500 million 30-year Notes maturing 13 May 2050 with a fixed rate coupon of 4.20% per annum.

Settlement and completion of the Notes occurred on May 13, 2020 (New York time).

The proceeds were used to repurchase existing near-term corporate bond maturities as follows:

- US\$750 million of Notes that were maturing November 2021; and
- US\$370 million of the \$750 million of Notes that are maturing in October 2022. The remainder of the Notes maturing in October 2022 were redeemed by mandatory redemption in 2021.

# Lihir Front End Recovery Project5

On October 9, 2020, Newcrest announced that its Board of Directors had approved the Lihir Front End Recovery Project progressing to execution phase. The project has an estimated capital cost of US\$61 million and primarily comprises the installation of flash flotation and additional cyclone capacity, as well as cyclone efficiency upgrades, to improve grinding classification and reduce gold losses through the flotation circuits. It is projected to result in an increase in life of mine gold recoveries and incremental life of mine gold production.

# TSX Listing

On October 13, 2020, the ordinary shares were listed and commenced trading on the Toronto Stock Exchange under the symbol "NCM".

#### Cadia Power Purchase Agreement

On December 16, 2020, Newcrest announced that it had entered into a 15 year renewable Power Purchase Agreement ("PPA") with a wind farm developer for an amount of energy which represents a significant part of the future projected energy requirements of its Cadia mine in New South Wales, Australia. The PPA, together with the forecast decarbonization of NSW electricity generation, is expected to help deliver a ~20% reduction in Newcrest's greenhouse gas emissions from calendar year 2024 and is a significant step towards achieving Newcrest's target of a 30% reduction in greenhouse gas emissions intensity by 2030<sup>6</sup>.

#### Wafi-Golpu Environment Permit

An Environment Permit for the Wafi-Golpu Project was granted in December 2020. In March 2021, the Governor of Morobe Province commenced a judicial review application against the State of PNG challenging the grant of an environmental permit for the Wafi-Golpu Project. The Wafi-Golpu JV participants are not parties to this proceeding,

 $<sup>^5</sup>$  The Lihir Front End Recovery Project has been prepared with the objective that its findings are subject to an accuracy range of  $\pm 15\%$ . The findings in the study and the implementation of the project are subject to all the necessary approvals, permits, internal and regulatory requirements and further works. The estimates are indicative only and are subject to market and operating conditions. They should not be construed as guidance.  $^6$  Per tonne of ore treated and compared to a baseline of FY18 emissions. Subject to market and operating conditions in respect of Cadia and the Rye Park Wind Farm.

which is still to be heard and determined. See also reference to the Wafi-Golpu permitting negotiations under the heading *Description of the business – Development Projects*.

# New Landholder Agreements at Lihir

On December 22, 2020, Newcrest announced that its wholly owned subsidiary Lihir Gold Limited had completed the signing of new compensation, relocation and benefits sharing agreements with the mining lease area landholders at its Lihir gold mine in New Ireland Province, Papua New Guinea.

# Havieron Project Approvals

On January 13, 2021, Newcrest announced that its Board of Directors had approved A\$146 million (~US\$112 million, based on an exchange rate of A\$/\$US 0.77) for the construction of the box cut, exploration decline and associated surface infrastructure at the Havieron Project.

Newcrest also announced that it had received the necessary regulatory approvals to commence key early works activities at the Havieron Project. As at 24 November 2021, 237 meters of the exploration decline had been completed.

# Red Chris Project Approvals

On February 11, 2021, Newcrest announced that it had commenced construction of the box cut for the exploration decline at its Red Chris mine in British Columbia, after receiving the necessary regulatory approvals. Newcrest also announced that its Board of Directors had approved C\$135 million (on a 100% basis) of funding for the construction of the exploration decline and associated infrastructure and permitting costs. As at 24 November 2021, 599 meters of the exploration decline had been completed.

#### **Bank Lending Facilities**

On March 2, 2021, Newcrest announced that it had renewed its unsecured bilateral bank lending facilities with its existing 13 bank lenders, extending the maturity dates. Each bank committed approximately US\$154 million in facilities for an overall unchanged quantum of US\$2 billion on similar commercial terms for Newcrest.

The facilities have tenors of three or five years, the aggregate of which is as follows:

- US\$1,077 million of facilities maturing in FY24; and
- US\$923 million of facilities maturing in FY26.

#### Telfer Investment

On August 12, 2021, Newcrest announced that it will proceed with the West Dome Stage 5 cutback at its Telfer operation in Western Australia, underpinning the continuity of operations at Telfer for at least two years. Telfer is strategically well positioned in the highly prospective Paterson Province, with its existing infrastructure and processing capacity providing benefits to the nearby Havieron Project (operated by Newcrest under a Joint Venture Agreement with Greatland Gold) and Newcrest's other exploration projects in the region.

# Progression of Certain Pre-Feasibility Studies to Feasibility Stage

On October 12, 2021, Newcrest announced that its Board of Directors had approved the progression of the following Pre-Feasibility Studies to the Feasibility Stage:

- Red Chris Block Cave Pre-Feasibility Study;
- Havieron Pre-Feasibility Study;
- Lihir Phase 14A Pre-Feasibility Study, following completion of the Lihir Mine Optimisation Study (announced in February 2021); and

• Cadia PC1-2 Pre-Feasibility Study (announced August 19, 2021).

# Impact of COVID-19

Newcrest has worked hard to respond to the threat of the COVID-19 pandemic in cooperation with the communities in which we operate. Since the outbreak of COVID-19, Newcrest has implemented a range of control measures across all of its operations to minimise the risk of infection of its workforce and surrounding communities. These measures include, but are not limited to health screening and testing, physical distancing and use of PPE, quarantine requirements, hygiene education programs, remote working and encouraging and facilitating the vaccination of Newcrest's workforce and local communities against COVID-19.

To date, Newcrest has not experienced any material disruption to its operations as a result of COVID-19. Some project activities have experienced a level of disruption but to date these have been managed to mitigate their impact on overall cost and schedule. The operating cost of managing COVID-19 risks for the 2021 financial year was approximately US\$70 million, of which US\$53 million related to Lihir, driven by more extensive testing, longer quarantining periods, additional accommodation, rostering and other labour costs to minimise risk to our people and communities and to ensure business continuity. Elevated costs related to the pandemic are expected to continue through FY22 and are estimated to be in the order of US\$35-45 million.

Newcrest continues to closely monitor and respond to the developments around COVID-19. In addition, see below with respect to particular sites:

- Cadia Operation. The workforce at Cadia Operation is primarily residential and draws largely upon
  resources within NSW. In late FY21, there was a five week COVID-19 related 'lockdown' in the Orange
  district of NSW in which the Cadia operation is located. Cadia escalated the controls under its Pandemic
  Response Plan in order to manage risks pertaining to the health and safety of its workforce and ongoing
  operations, which continued uninterrupted during this period.
- Lihir Operation. During FY21, Newcrest managed a number of positive COVID-19 cases at the Lihir mine on Aniolam Island with the majority of cases being asymptomatic or presenting minor symptoms. The number of positive cases at Lihir increased in the final quarter of FY21. In response, Newcrest further strengthened its existing COVID-19 controls at Lihir, with a focus on spread containment through extensive contact tracing and isolation procedures. Tracking devices that record close contacts and enable rapid contact tracing have been widely distributed and further controls to segregate the workforce have been implemented. No material impacts to gold production at Lihir have occurred. However, the ability to attract labour, the travel restrictions and contact tracing and associated isolation requirements resulted in an impact to total material mined. Should these conditions persist or worsen, there is the potential for production to be impacted. Newcrest continues to work with local government and communities to implement control measures, including encouraging vaccination against COVID-19 to reduce the risk of transmission of COVID-19 and to prevent serious illness and death in the case of infection.
- Telfer Operation and Havieron Project. Newcrest altered employee rosters to minimise travel and group
  interaction and also suspended drive-in drive-out activities and in person engagement with surrounding
  communities for certain higher risk periods during the pandemic. Newcrest is continuing to work with local
  stakeholders to support COVID-19 related issues, including encouraging vaccination against COVID-19.
- Red Chris Operation. During FY21, Newcrest managed a number of positive COVID-19 cases at Red Chris with the majority of cases being asymptomatic or presenting minor symptoms. Newcrest implemented measures to support the local community, including the alteration of employee rosters to provide for off-site periods and to allow the First Nation employees increased time to self-isolate before returning to their families. Newcrest implemented measures to facilitate and encourage vaccination of its workforce and the local community. In addition, Red Chris implemented testing and screening regimes to identify and isolate positive cases upon entry to site and at prescribed intervals during a shift rotation, significantly limiting COVID outbreaks on site.

# Agreement to acquire Pretium Resources Inc.

On November 9, 2021, Newcrest announced that it had entered into an Arrangement Agreement to acquire all of the issued and outstanding common shares of Pretium Resources Inc. ("**Pretivm**") that it does not already own by way of a Canadian Plan of Arrangement. Pretivm is the owner of the Brucejack operation in the highly prospective Golden Triangle region of British Columbia. Under the transaction, Pretivm shareholders will receive consideration of C\$18.50 per share and Pretivm shareholders will be able to elect to receive either C\$18.50 in cash or 0.80847 Newcrest shares per Pretivm share, subject to proration and an aggregate cap of 50% cash and 50% Newcrest shares. The total consideration offered values all of the outstanding common shares of Pretivm at approximately US\$2.8 billion. The transaction requires approval by 66 <sup>2/3</sup> % of Pretivum shareholders, the Supreme Court of British Columbia and regulatory approvals including under the Investment Canada Act. Completion of the transaction is targeted for the first quarter of calendar year 2022.

#### **DESCRIPTION OF THE BUSINESS**

Newcrest's portfolio is in aggregate low cost and comprises predominantly long life mines and a strong pipeline of brownfields and greenfields exploration projects. Newcrest operates mines in four production provinces located in three countries: Australia, PNG and Canada. Newcrest also has interests in potential development projects in PNG, Australia and Fiji, and an equity holding in an operation in Ecuador. Newcrest continues to search for, and explore in, new greenfields regions that have the potential to deliver the next generation of discoveries.

Newcrest has experience developing and commissioning both large scale and smaller operations. Newcrest has used a range of low cost bulk open pit and underground mining methods to optimise recovery of lower-grade ore, as well as selective underground mining methods to optimise recovery of higher-grade epithermal deposits.

Newcrest's capabilities to find, develop, mine and process a diverse range of deposits—including lower-grade, complex, refractory, deep, narrow or those in poor ground—have been enhanced by ongoing innovation and problem-solving. This includes underground bulk-mining technologies, from early concept studies to full-scale trials. Through this investment, Newcrest has advanced the technical development of caving mining methods with current application at the Cadia and Telfer Operations and planned application at the Wafi-Golpu Project. The application of these technologies at the Red Chris Operation is also being studied.

Discovery of new deposits is an important element in Newcrest's strategy. A key objective of Newcrest's exploration activities is to identify and secure large mineral districts, or provinces, in order to establish long-term mining operations, while enhancing the potential for further discoveries. The principal targets are large porphyry related gold-copper deposits, epithermal gold-silver deposits plus orogenic and sediment-hosted gold deposits.

In addition to the development projects located within provinces where Newcrest already has mining operations, Newcrest is currently, as part of the WGJV, progressing permitting of the Wafi-Golpu Project in PNG. Greenfield exploration activities are also ongoing, which are currently focused on Australia, Canada, United States of America, Ecuador and Chile.

# **Operations**

#### **Operating Mines**

Newcrest's mining operations currently comprise the following operating mines located in Australia, PNG and Canada:

- Cadia Operation, 100% owned by Newcrest and located in central western NSW, Australia, comprising
  the Cadia East underground mine, which produces gold doré and copper-gold concentrate with an elevated
  gold content;
- Lihir Operation, 100% owned by Newcrest and located on the island of Aniolam, PNG, one of the world's largest gold deposits by reserves, which produces gold doré;

- Telfer Operation, 100% owned by Newcrest and located in Western Australia, Australia, comprising open pit and underground mines. Telfer produces gold doré and copper-gold concentrate; and
- Red Chris Operation, located in British Columbia, Canada, currently consisting of an open pit mine which
  produces copper-gold concentrate. Newcrest, through its wholly-owned subsidiary Newcrest Red Chris
  Mining Limited, has a 70% interest in the Red Chris joint venture and is the operator of the mine, with the
  remaining 30% interest owned by Imperial. Newcrest recently released the Red Chris Report evaluating an
  underground block caving operation at Red Chris.

# **Equity Investments**

Newcrest holds equity positions in several mining companies with prospective projects throughout the world. These include the investment in Lundin Gold (32%), the investment in SolGold plc ("SolGold") (13.5%), the investment in Azucar (19.9%) and the investment in Antipa Minerals ("Antipa") (9.9%). These investments provide exposure to operating, exploration and development stage assets in Mexico, Ecuador and Australia, including the Fruta del Norte mine in Ecuador (Lundin Gold), the Cascabel copper-gold project in Ecuador (SolGold), the El Cobre gold-copper exploration project in Mexico (Azucar) and the Wilki exploration project in Western Australia (Antipa). Each of Lundin Gold, SolGold, Azucar and Antipa is treated as an associate of Newcrest for accounting purposes. An associate is an entity that is neither a subsidiary nor joint arrangement, over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

As announced on November 9, 2021, Newcrest also already holds an existing investment in Pretivm (4.8%) and has entered into an agreement with Pretivm to acquire all of the issued and outstanding common shares of Pretium that it does not already own by way of a Canadian Plan of Arrangement. For further information see "Description of the Business – Recent Developments".

#### **Production**

Set out in the tables below are the gold, copper and silver production and sales information for Newcrest for the years ended June 30, 2021, 2020 and 2019, respectively.

*Gold production and sales by site*<sup>(1)</sup>

		Year ended ine 30, 2021	Year ended June 30, 2020		Year ended June 30, 2019	
	Production	Sales	Production	Sales	Production	Sales
Site	(oz)	(oz)	(oz)	(oz)	(oz)	(oz)
Cadia Operation	764,895	766,118	843,338	848,959	912,777	914,017
Lihir Operation	737,082	773,146	775,978	760,724	932,784	964,553
Telfer Operation	416,138	411,336	393,164	391,339	451,991	450,791
Gosowong Operation <sup>(2)</sup>	-	-	103,282	104,449	190,186	199,285
Red Chris Operation <sup>(3)</sup>	45,922	45,643	38,933	37,271	-	
Fruta del Norte <sup>(4)</sup>	129,285	120,181	16,422	_	-	- –
Total	2,093,322	2,116,425	2,171,118	2,142,741	2,487,739	2,528,646

#### Notes:

- (1) All data relating to operations is shown at 100%, with the exception of the Red Chris Operation, which is shown at 70%, and Fruta del Norte, which is shown at Newcrest's 32% attributable share (through its 32% equity interest in Lundin Gold Inc).
- (2) Prior to the divestment on March 4, 2020, Newcrest owned 75% of the Gosowong Operation through its holding in PTNHM, an incorporated joint venture. Production outcomes for the year ended June 30, 2020 represent Newcrest's period of ownership to the divestment date.
- (3) Production outcomes for the Red Chris Operation for the year ended June 30, 2020 are reported from the date of acquisition (August 15, 2019).
- (4) The production outcomes for Fruta del Norte are shown at Newcrest's 32% attributable share and have been sourced from Lundin Gold's news releases.

Newcrest's gold production during FY21 was 4% lower than the prior year, reflecting the divestment of the Gosowong Operation, the expected decline in grade at the Cadia Operation, lower mill throughput at the Lihir

Operation, and lower recoveries at the Telfer Operation. These factors adversely impacting gold production were partially offset by record annual ore tonnes mined and record mill throughput at the Cadia Operation, the inclusion of 129,285 ounces of gold production attributable to Newcrest's 32% equity interest in Lundin Gold Inc. (the owner of the Fruta del Norte mine), twelve months of production from the Red Chris Operation (compared to ten-and-a-half months in the prior year) and higher mill throughput at the Telfer Operation.

Copper production and sales by site<sup>(1)</sup>

				Year ended ne 30, 2020	Year ended June 30, 2019	
	Production	Sales	Production	Sales	Production	Sales
Site	(t)	(t)	(t)	(t)	(t)	(t)
Cadia Operation	106,402	105,444	96,042	96,437	90,841	91,010
Telfer Operation	13,177	12,560	16,278	16,283	15,025	15,047
Red Chris Operation <sup>(2)</sup>	23,145	23,002	25,302	24,432	_	_
Total	142,724	141,005	137,623	137,152	105,867	106,057

Notes:

- (1) All data relating to operations is shown at 100%, with the exception of the Red Chris Operation which is shown at 70%.
- (2) Production outcomes for the Red Chris Operation for the year ended June 30, 2020 are reported from the date of acquisition (August 15, 2019).

Copper production for FY21 was 4% higher than the prior year and was record for Newcrest. This was primarily driven by record annual mill throughput at the Cadia Operation, partially offset by lower grades and recovery at the Telfer and Red Chris Operations.

*Silver production and sales by site*<sup>(1)</sup>

	_	Year ended ne 30, 2021	Year ended June 30, 2020		Year ended June 30, 2019	
	Production	Sales	Production	Sales	Production	Sales
Site	(oz)	(oz) (oz)	(oz)	(oz)	(oz)	(oz)
Cadia Operation	643,007	637,974	574,594	577,650	553,764	553,707
Lihir Operation	38,377	37,741	29,520	29,520	32,017	32,017
Telfer Operation	149,006	149,006	163,500	163,500	211,869	211,869
Gosowong Operation <sup>(2)</sup>	-	-	105,874	111,788	206,857	210,587
Red Chris Operation <sup>(3)</sup>	114,131	111,140	109,943	75,727	_	_
Total	944,521	935,861	983,431	958,186	1,004,507	1,008,180

#### Notes:

- (1) All data relating to operations is shown at 100%, with the exception of the Red Chris Operation which is shown at 70%.
- (2) Prior to the divestment on March 4, 2020, Newcrest owned 75% of the Gosowong Operation through its holding in PTNHM, an incorporated joint venture. Production outcomes for the year ended June 30, 2020 represent Newcrest's period of ownership to the divestment date.
- (3) Production outcomes for the Red Chris Operation for the year ended June 30, 2020 are reported from the date of acquisition (August 15, 2019)

# **Production Guidance**

Newcrest's guidance for the 2022 financial year, is as follows:

gold production: 1,800-2,000 koz;
copper production: 125-130 kt; and
AISC spend: US\$1,840-\$2,040 million.

Newcrest's guidance is subject to market and operating conditions and the production guidance numbers for FY22 assume no COVID-19 related interruptions. However, the AISC expenditure guidance for FY22 includes an estimate of additional costs associated with managing the business in a COVID-19 context (including on matters such as flights, transport, rosters, leave, screening and testing, and disbursements from the Community Support Fund) in the order of US\$35-45 million. This compares to the ~US\$70 million of COVID-19 management costs incurred in the 2021 financial year.

# **Development Projects**

The Wafi-Golpu Project, which is located in the Morobe province of PNG, approximately 65 km southwest of the town of Lae, is owned by the unincorporated WGJV between subsidiaries of Newcrest and Harmony, each owning a 50% interest. The WGJV has submitted the application for the SML required to commence development. On March 19, 2018, the updated Wafi-Golpu feasibility study was released. This study incorporates the findings from the earlier pre-feasibility and feasibility studies announced in February 2016, interpretation of orebody data derived from additional drilling and geotechnical studies, together with further work undertaken on mine design, hydrology, tailings and port and power options. The updated feasibility study draws on extensive data collection undertaken since 2016, providing a deeper understanding of the project's geotechnical, oceanographic, environmental and social parameters.

Permitting negotiations for the Wafi-Golpu Project were suspended in May 2019, due to a court stay order in a judicial review application brought by the Governor of Morobe Province against the State of PNG in relation to the MOU between the State of PNG and the WGJV signed in December 2018. In February 2020 those proceedings (and stay order) were dismissed by the National Court and the Governor of Morobe Province appealed the matter to the Supreme Court. On May 16, 2020, the Prime Minister of PNG and the Governor of Morobe Province announced that they had reached agreement on the future permitting timeframe for the Wafi-Golpu project and that the Governor would withdraw the appeal. However, to date, the appeal has not been formally withdrawn. An Environment Permit for the Wafi-Golpu Project was granted in December 2020. In March 2021, the Governor of Morobe Province commenced a new judicial review application against the State of PNG challenging the grant of an environmental permit for the Wafi-Golpu Project. The WGJV participants are not parties to this proceeding, which is still to be heard and determined. If the Governor's appeal or other legal challenges to the permitting process are pursued, the Wafi-Golpu Project permitting process may be adversely impacted. See also the reference to the decision by the PNG Government to not renew the SML for the Porgera Mine under the heading "Political, Economic, Social and Security Conditions – PNG".

On August 15, 2019, Newcrest acquired a 70% beneficial interest in the operating Red Chris open pit mine and surrounding tenements and became the operator. A prefeasibility study for an underground block cave operation at Red Chris was announced in October 2021, with the Red Chris Report being filed on November 29, 2021. The Red Chris Block Cave Feasibility Study for the implementation of the first of three potential macro mining blocks is expected to be completed in the first half of 2023, with the scope of the study to include:

- Further optimisation of mill throughput rates, including for different resource growth scenarios;
- Detailed block cave footprint design and scheduling focused on access infrastructure and macro block one;
- Material handling system detailed design, including crusher, conveyor, and associated project infrastructure to support the life of mine;
- Processing plant optimisation and detailed design at a feasibility study level;
- Design of the macro block one tailings impoundment area to feasibility study level;
- Refinement and calibration of water balance and water quality models to enable better decision-making capabilities for the project, and to mitigate potential impacts to the receiving environment;
- Enhancing water resource stewardship through optimisation of processes to minimise consumption and maximise reuse;
- Prioritized detailed design of the operational accommodation complex to allow for early implementation;
- Design of the surface infrastructure to feasibility study level of detail;
- Further analysis and inclusion of next generation mining systems, including single pass cave establishment and the use of electric power to offset diesel in the mining process;
- Finalisation of the contracting and procurement strategy for the execution stage; and

• Consolidation of all costs and schedules into a feasibility study financial estimate.

On October 15, 2019, Newcrest announced that its Board of Directors had approved progression of the first stage of a two-stage expansion project for Cadia to execution and on October 9, 2020, Newcrest announced that its Board of Directors had approved progression of the second stage to execution. The two stages have an estimated capital cost of US\$860 million<sup>7</sup> (US\$685 million for the first stage and US\$175 million for the second stage)<sup>8</sup> and collectively look to pursue the development of the next panel cave, PC2-3, and expansion of plant capacity up to 35 Mt/a<sup>9</sup>.

In June 2020, Newcrest commenced the process with DPIE for a modification to increase the permitted processing capacity of the Cadia Operation from 32-33 Mt/a to 35 Mt/a. On 2 December 2021, Newcrest received notice from DPIE that it had recommended that the modification application be approved subject to conditions including Newcrest commissioning an independent audit report to the satisfaction of the DPIE Secretary in relation to Newcrest's approach to managing and minimising the off-site air quality impacts of the project including NTSF repair construction activities. As at the date of this AIF, Newcrest is awaiting final approval of the modification application by the Executive Director - Resource Assessments, as delegate of the Minister for Planning and Public Spaces.

Development of the next panel cave, PC2-3, does not require further permitting as it is generally in accordance with the existing approval and construction commenced in FY21.

In August 2021, Newcrest announced that its Board of Directors approved the PC1-2 Pre-Feasibility Study. The Pre-Feasibility Study updates and defines a significant portion of Cadia's future mine plan, with the development of PC1-2 accounting for ~20% of Cadia's current Ore Reserves. The approval included an Early Works Program which will allow critical infrastructure to be established in parallel with the Feasibility Study before the commencement of the Main Works program in the second half of fiscal 2022.

# **Exploration**

Discovery of new deposits remains an important element in Newcrest's strategy. A key objective of Newcrest's greenfield exploration activities is to discover high-value gold and copper deposits which will be delivered through a portfolio of near-term and longer-term growth opportunities. The principal targets are large porphyry related gold-copper deposits, epithermal gold-silver deposits plus orogenic and sediment-hosted gold deposits. Newcrest has a strong track record of discovering major deposits over the past 25 years, including the deposits at Cadia Hill, Cadia East, Ridgeway and Cracow in Australia, Gosowong in Indonesia and Golpu in PNG.

Greenfield exploration activities are presently focused within five key exploration provinces – the Golden Triangle in British Columbia (Canada) including the Red Chris JV and the GJ project, the Paterson Province (Western Australia) including the Havieron Project, Wilki and Juri Joint Ventures, the Great Basin (Nevada, United States of America), Northern Andes (Ecuador) and Southern Andes (Chile).

Newcrest operates the Havieron Project under a farm-in agreement with Greatland Gold. The project is centered on a deep magnetic anomaly located 45 km east of Telfer in the Paterson Province. The target is overlain by more than 420m of post mineral cover. Newcrest commenced drilling during the June 2019 quarter and a total of 210,629m of drilling has been completed since Newcrest commenced exploration activity. The Havieron mineral system as outlined by drilling to date, is an 650 x 350m ovate shaped NW trending alteration zone in which mineralisation is hosted by variable brecciation, and sulphide accumulations centred on a complex of nested diorite intrusions. Higher

 $<sup>^7</sup>$  Stages 1 and 2 of the Cadia Expansion Feasibility Study have been prepared with the objective that their findings are subject to an accuracy range of  $\pm 10$ -15%. The findings in the study and the implementation of the Cadia Expansion Project are subject to all necessary approvals, permits, internal and regulatory requirements and further works. The estimates are indicative only and are subject to market and operating conditions. They should not be construed as guidance.

<sup>&</sup>lt;sup>8</sup> An exchange rate of A\$/US\$ 0.75 was used for Stage 1 of the Cadia Expansion Project. For Stage 2, the following exchange rates were used: FY21 A\$/US\$ 0.70; FY22 A\$/US\$ 0.71; FY23 A\$/US\$ 0.72; FY24 A\$/US\$ 0.73; and FY25+ A\$/US\$ 0.75.

<sup>&</sup>lt;sup>9</sup> While the targeted capacity of the process plant under the Expansion Project is 33Mt/a in Stage 1 and 35Mt/a in Stage 2, the actual milling rate will be subject to regulatory and permitting approvals.

grades are associated with increases in sulphide accumulations including pyrrhotite, chalcopyrite and pyrite with quartz. The SE Crescent Zone is a geological domain characterised by massive sulphide accumulations. Mineralisation has been observed to over 1,000m in vertical extent below the 420m of post mineralisation cover sequence. Drilling results have been disclosed on sixteen occasions, with the most recent being released on October 28, 2021. In October, 2021, Newcrest announced the completion of a pre-feasibility study for the Havieron Project, which included the declaration of an initial Ore Reserve for the Havieron Project. The release of the pre-feasibility study for the Havieron Project triggered Newcrest's entitlement to an additional 10% in the joint venture for a cumulative 70% joint venture interest. Newcrest may also acquire an additional 5% interest at the end of the farm-in period at fair market value.

Results to date support potential for both high-grade selective and bulk mining methods, which are currently being evaluated. In December 2020, Newcrest announced its initial Inferred Mineral Resource estimate for Havieron (40% interest) of 21Mt @ 2.0g/t Au and 0.31% Cu for 1.3Moz Au and 64kt Cu. In the second half of the FY21 financial year, Newcrest announced that it had commenced its early works program. Subsequent to the completion of the box cut and portal, Newcrest commenced construction of the exploration decline in May 2021, which is critical to achieving first production from the Havieron Project in the next two to three years. Works to progress the necessary approvals and permits that are required to commence the development of an operating underground mine and associated infrastructure at the Havieron Project are ongoing. In October 2021, Newcrest announced an updated Indicated Mineral Resource estimate (40%) of 6.2Mt@3.9g/t Au and 0.64% Cu for 0.77Moz Au and 40kt Cu, and an updated Inferred Mineral Resource estimate (40%) of 15Mt@1.4g/t Au and 0.18% Cu for 0.68Moz Au and 30kt Cu. Completion of a pre-feasibility study underpinned the declaration of an initial Probable Mineral Reserve estimate (40%) of 5.6Mt@3.7g/t Au and 0.54% Cu for 0.64Moz and 29Kt Cu in the same announcement.

Since acquiring a 70% interest in, and operatorship of, the Red Chris Operation and surrounding tenements in British Columbia, Canada, Newcrest has undertaken a Resource Definition program which was designed to obtain geological, geotechnical and metallurgical data to support future studies for underground block cave mining and support the delivery of Newcrest's resource estimate which was delivered in March 2021. In the East Zone, the infill resource drilling results since acquisition have confirmed the presence of multiple discrete higher grade 'pods' of mineralisation. Newcrest is also undertaking a Brownfields Exploration program which is focused on searching for higher grade mineralisation within the Red Chris porphyry corridor. This program has been successful in discovering East Ridge. East Ridge is located 300m to the east of East Zone and is located outside of Newcrest's initial Mineral Resource Estimate. Drilling is ongoing to define the extent and continuity of the higher grade mineralisation. Drilling results have been disclosed on fourteen occasions, with the most recent being October 28, 2021. In March 2021, Newcrest announced its initial Mineral Resource estimate for Red Chris. In June 2021, Newcrest commenced construction of the exploration decline. The commencement of the exploration decline underpins Newcrest's objective of having a block cave in operation at Red Chris within the next five to six years. In October 2021, Newcrest announced the completion of a pre-feasibility study for an underground block caving operation and subsequently filed the Red Chris Report on November 29, 2021. The Red Chris Report included an updated Mineral Resources estimate and Newcrest's initial Ore Reserve estimate for Red Chris.

On February 27, 2020, Newcrest entered into an exploration farm-in and joint venture agreement with Antipa in respect of the southern portion of Antipa's 100% owned ground in the Paterson Province, Western Australia (known as the "Wilki Project"). The Wilki Project covers a strategic landholding of ~2,180 km² surrounding the Telfer operation and is also in close proximity to Havieron. The joint venture to date has completed geophysical surveys and drill testing of a portfolio of blind geophysical targets. This work is ongoing and the results for the majority of this work is pending.

On November 29, 2020, Newcrest entered into the Juri Joint Venture which is a farm in and joint venture agreement with Greatland Gold, with respect to its Black Hills and Paterson East projects, located within the Paterson Province approximately 50km from the Telfer Operation. The new joint venture covers an area of approximately 248km²- First pass drill testing of the priority targets has been completed, review of the results is underway. In May 2020, Newcrest completed the purchase of 100% of the GJ Project, located in the Golden Triangle of British Columbia. The land holding is located adjacent to Red Chris and covers the south west extent of the Red Chris CJ-Donnelly porphyry trend. An initial program of 2,146 km of AEM and gravity surveys has been completed. Drill testing of priority targets will be undertaken in calendar year 2022.

Within South America Newcrest is exploring a portfolio of early stage projects within the Northern Andes (Ecuador) and within the Southern Andes (Chile). Newcrest is also exploring two early stage projects within the Great Basin, Nevada, United States of America.

Brownfield exploration programs are also being conducted around Newcrest's present operations. The brownfield exploration programs are focused on defining additional mineralisation that could potentially extend the presently contemplated mine lives.

# **Competitive Strengths**

*Low cost production*. Newcrest believes that its cost profile compares favourably to the industry. Newcrest's AISC for FY21 was US\$911 per ounce of gold sold.

Long reserve life. Newcrest has a substantial Mineral Reserve and Mineral Resource base. Newcrest has an estimated "reserve life" of approximately 25 years ("reserve life" is indicative and calculated as reported total Proven and Probable Gold Mineral Reserves (contained metal) as at December 31, 2020, divided by reported production on a gold basis only for the 12 months ended June 30, 2021. The reserve life calculation does not take into account future gold production rates or gold recovery rates and therefore estimates of reserve life does not necessarily equate to operating mine life). (See the section of this AIF under the heading "Mineral Reserves and Mineral Resources" for further information.)

*Exploration, development and operational experience*. Newcrest has significant expertise in each phase of the mining value chain:

- Exploration: Newcrest has a track record of discovering major deposits. To date, its exploration activities have led to successful discoveries of deposits at Cadia East and Ridgeway in Australia, Gosowong in Indonesia, and Golpu in PNG;
- Development: Newcrest has developed a significant number of its mining operations, including
  underground and open pit mines, from exploration to operation, including Telfer, Cadia and Gosowong.
  Newcrest uses an internal toll-gating and assessment process that segregates each project into key
  categories of concept, pre-feasibility, feasibility and execution, to permit critical analysis of each stage of
  project development in order to understand uncertainties, evaluate risks and areas of optimisation and
  ensure that viable investment opportunities are identified and pursued. An independent review forms part
  of the overall assessment process at each internal toll-gating stage for major projects; and
- Operations: Newcrest operates all of the open pit and underground mines it owns, including the Red Chris Operation but excluding Fruta del Norte (which is owned and operated by Lundin Gold, in which Newcrest has a 32% equity interest). Newcrest believes that its breadth of direct operational experience and technical expertise, across a range of mining and metallurgical processes, enhances its ability to operate its existing mine portfolio and future mines which it may develop or acquire.

Management expertise. Newcrest's management team has extensive experience in the mining and resources industry, as well as strategic, operational and financial management skills, and a track record of successfully executing exploration, development and operational projects at Newcrest. Newcrest's Managing Director and Chief Executive Officer, Sandeep Biswas, and Finance Director and Chief Financial Officer, Gerard Bond, each have significant experience in the global mining and resources and finance industries. Mr Biswas joined Newcrest in January 2014, as Executive Director and Chief Operating Officer and was appointed Managing Director and Chief Executive Officer in July 2014. Mr Biswas was previously Chief Executive Officer of Pacific Aluminium, a whollyowned subsidiary within the Rio Tinto group, which incorporated operations in Australia and New Zealand. Mr Biswas has also worked for Western Mining Corporation in Australia and Rio Tinto in Canada and Australia. Mr Bond joined Newcrest in January 2012 as Finance Director and Chief Financial Officer and was appointed to the Board of Directors in February 2012. Mr Bond has significant experience in the global financial and resources industry. Mr Bond previously worked at BHP Billiton where he held a number of senior executive roles, including the role of Deputy Chief Financial Officer of its Aluminium business, Acting President of its Nickel business and Head of Group Human Resources. Prior to that Mr Bond worked for Coopers & Lybrand and Price Waterhouse. On May 5, 2021, Newcrest announced that Mr Bond would leave Newcrest in early 2022, after 10 years in the role of

Finance Director and Chief Financial Officer. On November 16, 2021, Newcrest announced that Ms Sherry Duhe had been appointed Chief Financial Officer commencing early in calendar year 2022. Ms Duhe has extensive finance and leadership experience across a range of global organisations, including the past four years as Chief Financial Officer and Executive Vice President at Woodside Energy. Prior to this, Ms Duhe held a range of senior international roles across the energy and resources sectors, including at Shell Exploration & Production, Royal Dutch Shell, ExxonMobil, Duke Energy and J.M Huber Corporation. Current Group Treasurer Kim Kerr will be Acting Chief Financial Officer from December 9, 2021 to coincide with planned leave being taken by Mr Bond. Ms Kerr is a senior finance executive with more than 15 years' experience at Newcrest, including nearly five years as Group Treasurer.

*Investment grade credit rating*. Newcrest's long-term credit ratings from each of Standard & Poor's Rating Services ("S&P") and Moody's Investors Service, Inc. ("Moody's") are BBB and Baa2 respectively.

Newcrest's financial objectives are to meet all financial obligations, maintain a strong balance sheet to withstand cash flow volatility, be able to pursue profitable growth opportunities, and be able to return excess cash generated to shareholders. Newcrest looks to maintain a conservative level of balance sheet leverage. Newcrest's key financial policy metrics and targets, along with recent results, are as follows:

Element	Targets	Actual: as at June 30, 2021	Actual: as at June 30, 2020	Actual: as at June 30, 2019
Leverage ratio				
(Net Debt / EBITDA)	Less than 2.0x	(0.1x)	0.3x	0.2x
Gearing Ratio				
(Net debt / Net debt +				
Equity)	Less than 25%	(1.8%)	6.8%	4.9%
Credit rating				
(S&P/Moody's)	Investment grade	BBB/Baa2	BBB/Baa2	BBB/Baa2
Coverage (cash and	-	US\$3.87 billion,	US\$3.5 billion,	US\$3.6 billion,
committed undrawn bank	At least US\$1.5	including US\$1.87	including US\$1.45	including US\$1.6
facilities)	billion, $\sim 1/3$ in cash	billion cash	billion cash	billion cash

As of June 30, 2021, Newcrest had total assets of US\$14,714 million and was in a net cash position of US\$176 million. In FY2021, Newcrest generated EBITDA of US\$2,443 million, and Underlying Profit of US\$1,164 million, and had cash flow from operations of US\$2,302 million.

#### Cumulative free cash flow (US\$ million)



Note 1: FY2020 includes investments in M&A activity which includes the payment for the acquisition of Red Chris (70% ownership) of \$769 million, the acquisition of Fruta del Norte finance facilities of \$460 million, further investments in Lundin Gold of \$79 million, net proceeds from the divestment of Gosowong of \$20 million and payment of \$3 million for an interest in Antipa.

Free cash flow is calculated as cash flow from operating activities less cash flow related to investing activities.

Newcrest believes that its historical financial results have contributed to its ability to meet current financial commitments while maintaining capacity to fund future project development, exploration activities and acquisitions.

#### **Business Strategy**

In February 2021, Newcrest announced its new company purpose being "Creating a brighter future for people through safe and responsible mining". Newcrest also announced its "Forging an even stronger Newcrest" plan detailing aspirations across the following five pillars which it seeks to achieve by 2025:

We are a safe and sustainable business. Everybody going home safe and healthy every day is Newcrest's paramount priority. Newcrest's safety strategy is built on three key pillars: NewSafe, Critical Control Management, and Process Safety Management. The strategy builds on a strong foundation of group-wide systems and standards which have been enhanced in recent years. Newcrest cares for the communities it works with and the environment, applying sustainable practices across all aspects of its business. Within its business, Newcrest has a range of sustainability-related policies addressing climate change, energy, biodiversity, water stewardship, human rights, Indigenous relations, and community relations. Newcrest is committed to the sustainable discovery, development and production of gold and copper. As a responsible miner, Newcrest must identify, assess and report its responses to climate change challenges. Newcrest's climate change policy outlines its approach as it takes action to manage its climate change risks and opportunities consistent with its objective to sustainably deliver superior returns to its stakeholders. In May 2021, Newcrest set a goal of net zero carbon emissions by 2050, which relates to its operational (Scope 1 and Scope 2) emissions, and will also continue to work across its value chain to reduce Scope 3 emissions. Newcrest believes that adherence to the highest corporate governance standards is critical in order to achieve its vision. Newcrest has a detailed structure for decision making and acceptable standards of behavior.

We have the best people. Newcrest's people are capable, engaged and empowered to deliver superior returns. Newcrest considers the capability of its employees as critical to delivering its strategy. Newcrest is focused on

succession planning, talent management, training and development of its employees as these are key to both attracting and retaining the workforce it needs now and in the future. Newcrest's diversity and inclusion agenda aims to create an environment where everyone has the ability to succeed, recognising that different backgrounds, perspectives and collective intelligence create better business outcomes and make Newcrest an employer of choice.

We are outstanding operators. Through optimising the returns that Newcrest can achieve from its current operating assets, it aims for low-cost, long-life operations. Integrated planning, asset management and rigorous performance programs are utilised to maximise production and minimise costs. The underlying objective is to safely extract the full value potential of its operating assets.

We are a leader in innovation and creativity. Newcrest is targeting technical breakthroughs that, if successful, will optimise current mining and processing while providing significant step changes expected to facilitate future success. Newcrest continues to develop expertise across a broad range of operational technologies and mining and processing techniques. In recent years, Newcrest has placed significant focus on investing in strategic research and development of underground bulk-mining technologies from early concept studies to full-scale trials. Through this investment, Newcrest has advanced the technical development of caving mining methods with past application at the Ridgeway mine, current application at Cadia East, and planned application at the Wafi-Golpu Project and potentially at Red Chris.

We grow profitably. Newcrest seeks to actively grow the value of its business through brownfield and greenfield exploration, combined with a focus on early-entry merger and acquisition prospects in known gold regions. Newcrest continues to pursue the identification of gold and copper resources and reserves through its exploration and development activities. Newcrest is pursuing both brownfields exploration around its existing operations and greenfields exploration, which is currently focused on Australia, the United States of America, Canada, Ecuador and Chile.

Newcrest currently is, and intends to continue to be, primarily focused on the exploration for, and production of, gold and copper. During FY21, sales of gold represented 77.3% of Newcrest's total net sales revenue. Sales of copper represented 22.2% of Newcrest's total net sales revenue. Newcrest is, and intends to remain, a largely unhedged gold producer.

#### **Recent Developments**

# The COVID-19 Pandemic

To date, Newcrest has not experienced any material COVID-19 related disruptions to production or to the supply of goods and services. Some project activities have experienced a level of disruption but to date these have been managed to mitigate their impact on overall cost and schedule.

In its March 2021 Quarterly Report, Newcrest reported that there had been an increase in the number of cases that have tested positive for COVID-19 at Lihir. As at the date of this AIF, the number of COVID-19 cases at Lihir remains at levels that are within the capability of the care and treatment facilities. Newcrest continues to maintain strong COVID-19 controls at Lihir, focusing on containment through contact tracing, isolation procedures and continuation of the vaccine rollout. Newcrest continues to monitor risks associated with workforce shortages, travel restrictions, contact tracing and associated isolation requirements. There remains a risk of COVID-19 impacting production at Lihir and this continues to be closely managed.

Elevated costs related to the pandemic are expected to continue through FY22 and are estimated to be in the order of US\$35-45 million.

All of Newcrest's operations have business continuity plans and contingencies in place which seek to minimise disruptions to the operations in the event that a significant number of operational employees and/or contractors contract the virus. It is expected that these plans will enable operations to continue producing in line with the production schedule and if there are any material impacts, Newcrest will inform the market in line with its continuous disclosure obligations.

#### **Mineral Reserves and Mineral Resources**

The Mineral Reserve estimates reported in this AIF have been approved by Ms Jillian Terry, FAusIMM, Newcrest's Head of Mineral Resource Management, who is a Qualified Person as defined in NI 43-101. The estimates were prepared using industry-accepted practices and were classified in accordance with the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("JORC") Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition (the "JORC Code"). Except as described below, there are no material differences between the definitions of Proven and Probable Mineral Reserves under the applicable definitions adopted by the Canadian Institute of Mining, Metallurgy and Petroleum in the 2014 edition of the CIM Definition Standards – for Mineral Resources and Mineral Reserves (the "CIM Definition Standards") and the corresponding equivalent definitions in the JORC Code for Proved and Probable Ore Reserves, used for reporting purposes in Australia.

It is noted that under the CIM Definition Standards, the completion of a pre-feasibility study is the minimum prerequisite for the conversion of Mineral Resources to Mineral Reserves. The CIM Definition Standards define a pre-feasibility study as "a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on mining, processing, metallurgical, economic, marketing, legal, environmental, social and governmental considerations and the evaluation of any other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve."

A pre-feasibility study within the meaning of the CIM Definition Standards has been completed for all of Newcrest's Operations and Projects. Accordingly, the tables below present Newcrest's total Ore Reserves, as classified in accordance with the JORC Code, that have been classified as Mineral Reserves under the CIM Definition Standards.

The Mineral Resource estimates reported in this AIF have been approved by Ms Jillian Terry, FAusIMM, Newcrest's Head of Mineral Resource Management, who is a Qualified Person as defined in NI 43-101. Estimates were prepared using accepted industry practices and have been classified and reported in accordance with the JORC Code. There are no material differences between the definitions of Measured, Indicated and Inferred Mineral Resources under the CIM Definition Standards and the equivalent definitions in the JORC Code.

Mineral Resources are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Due to lower certainty, the inclusion of Mineral Resource estimates should not be regarded as a representation by Newcrest that such amounts can necessarily be totally economically exploited, and investors are cautioned not to place undue reliance upon such figures. Therefore, no assurances can be given that the estimates of Mineral Reserves or Mineral Resources presented in this AIF will be recovered at the tonnages and grades presented, or at all. See "Forward-Looking Statements" and "Risk Factors". Long-term metal price and foreign exchange assumptions used for estimating Newcrest's Mineral Reserves and Mineral Resources at June 30, 2021 are shown below.

Long Term Metal Price Assumptions	Newcrest and WGJV
Mineral Resource Estimates	
Gold – US\$/oz	1,400.00
Copper – US\$/lb	3.40
Silver – US\$/oz	21.00
Molybdenum – US\$/lb	10.00
Mineral Reserve Estimates	
Gold – US\$/oz	1,300.00
Copper – US\$/lb	3.00
Silver – US\$/oz	18.00
Molybdenum – US\$/lb	8.00
Long Term Exchange Rate A\$:US\$	0.75

Where appropriate, Mineral Resources are also constrained spatially by a notional pit shell based on US\$1,400/oz for gold and US\$4.00/lb for copper. This approach is adopted to eliminate mineralisation that does not have reasonable prospects for eventual economic extraction from Mineral Resource estimates. Cost assumptions are in Australian dollars for all Australian operations and in US dollars for all other operations. Updated mining, metallurgical and long-term cost assumptions were developed with reference to recent performance data. The revised long-term assumptions include performance improvements consistent with changing activity levels at each site over the life of the operation and the latest study for each deposit.

Sampling, analytical and testwork data that underlie the Mineral Reserve and Mineral Resource estimates were verified by Newcrest employees or its joint venture partners, as applicable, under the supervision of Qualified Persons. Verification procedures include industry-standard quality control practices. Geological, survey and density data used in estimation are reviewed and approved prior to upload to project databases. Sample preparation and analyses are conducted by either independent or on-site laboratories and are reviewed and verified prior to use in estimation. The quality assurance procedures, data verification and assay protocols used are in line with industry norms for the elements of interest. Regular internal and external auditing of the Mineral Reserve and Mineral Resource estimation processes and procedures are conducted.

Newcrest's estimates of Mineral Reserves and Mineral Resources as at June 30, 2021, are presented in Tables 1 and 2 below. Mineral Resources and Mineral Reserves are presented on the basis of Newcrest's interest in the operations and projects listed. The Mineral Resources and Mineral Reserves for the Wafi–Golpu Project shown on a 50% basis to reflect Newcrest's property interest are not additive to the Mineral Resources and Mineral Reserves for the Wafi–Golpu Project presented under the heading "Material Properties – Wafi–Golpu Project", where the Mineral Resources and Mineral Reserves are tabulated on a 100% basis.

In this section, the term "Cadia Operation" refers to Cadia East, Ridgeway mine, Cadia Extended and Big Cadia. The term "Telfer Operation" refers to the Main Dome open pit, the West Dome open pit, Telfer underground mine, Camp Dome and Satellites, and O'Callaghans. The term "Operational Province" is used where there are operating mines. The term "Non-Operational Province" refers to projects where there are currently no operating mines.

Table 1: Mineral Reserves Reported in accordance with the CIM Definition Standards as at 30 June, 2021

The following tables present the Mineral Reserves by commodity, in order, for gold, copper, silver, molybdenum, and polymetallic (tungsten trioxide, lead and zinc).

	Proven Mineral Reserves		Probable Mineral Reserves		Total Proven and Probable Mineral Reserves <sup>(1)</sup>		
Gold Mineral Reserves	Dry Tonnes (Mt)	Gold Grade (g/t Au)	Dry Tonnes (Mt)	Gold Grade (g/t Au)	Dry Tonnes (Mt)	Gold Grade (g/t Au)	Insitu Gold (Moz)
Operational Provinces							
Cadia East Underground	-	-	1,300	0.43	1,300	0.43	18
Ridgeway Underground	_	_	80	0.54	80	0.54	1.4
Total Cadia Operation							19
Main Dome Open Pit							
(incl. stockpiles)			8.3	0.44	8.3	0.44	0.12
West Dome Open Pit	-	-	44	0.59	44	0.59	0.83
Telfer Underground	_	_	5.0	1.2	5.0	1.2	0.19
Havieron Underground (40%) <sup>(2)</sup>			5.6	3.7	5.6	3.7	0.64
Total Telfer Operation							1.8
Lihir Operation	63	2.0	250	2.4	310	2.3	23
Red Chris Open Pit (70%)			53	0.36	53	0.36	0.61
Red Chris Underground (70%)			290	0.55	290	0.55	5.1
Total Red Chris Operation (70%)(3)					_		5.7
Total Operational Provinces							50

Non-Operational Provinces							
WGJV – Golpu (50%) <sup>(4)</sup>	_	_	200	0.86	200	0.86	5.5
Total Non-Operational Provinces							5.5
Total Gold Mineral Reserves							55

- Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.
- Havieron Underground refers to the Havieron Joint Venture owned by the Havieron unincorporated joint venture between subsidiaries of Newcrest and Greatland Gold plc. Mineral Reserves are shown as at October 12, 2021 and the figures show represent 40% of the Mineral Reserve. Newcrest's joint venture interest in the Mineral Reserve is currently 40%. Newcrest has now met the Stage 3 farmin requirement and has earned an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Following delivery of the PFS on 12 October 2021, Newcrest is entitled to earn an additional 10% joint venture interest, resulting in an overall joint venture interest of 70% (Greatland Gold 30%).
- Red Chris Operation refers to the Red Chris Joint Venture owned by the Red Chris unincorporated joint venture between subsidiaries of Newcrest (70%) (3) and Imperial Metals Corporation (30%). The figures shown represent 70% of the Mineral Reserve.
- WGJV refers to the Wafi-Golpu Project owned by the Wafi-Golpu unincorporated joint venture between subsidiaries of Newcrest (50%) and Harmony (4) (50%). The figures shown represent 50% of the Mineral Reserve.

		Mineral erves	Probable Mineral Reserves			Proven and P ineral Reserv	
Copper Mineral Reserves	Dry Tonnes (Mt)	Copper Grade (% Cu)	Dry Tonnes (Mt)	Copper Grade (% Cu)	Dry Tonnes (Mt)	Copper Grade (% Cu)	Insitu Copper (Mt)
Operational Provinces							
Cadia East Underground	1	-	1,300	0.29	1,300	0.29	3.7
Ridgeway Underground	=	=	80	0.28	80	0.28	0.23
Total Cadia Operation							3.9
Main Dome Open Pit (incl. stockpiles)							
			8.3	0.087	8.3	0.087	0.0073
West Dome Open Pit	_	_	44	0.053	44	0.053	0.023
Telfer Underground	Ī	-	5.0	0.36	5.0	0.36	0.018
Havieron Underground (40%) <sup>(2)</sup>			5.6	0.54	5.6	0.54	0.029
O'Callaghans	1	-	44	0.29	44	0.29	0.13
Total Telfer Operation							0.21
Red Chris Open Pit (70%)			53	0.42	53	0.42	0.22
Red Chris Underground (70%)			290	0.45	290	0.45	1.3
Total Red Chris Operation (70%) <sup>(3)</sup>							1.5
Total Operational Provinces							5.7
Non-Operational Provinces							
WGJV – Golpu (50%) <sup>(4)</sup>	Ī	-	200	1.2	200	1.2	2.5
<b>Total Non-Operational Provinces</b>							2.5
Total Copper Mineral Reserves							8.2

- Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals. (1) (2)
- Havieron Underground refers to the Havieron Joint Venture owned by the Havieron unincorporated joint venture between subsidiaries of Newcrest and Greatland Gold plc. Mineral Reserves are shown as at October 12, 2021 and the figures show represent 40% of the Mineral Reserve. Newcrest's joint venture interest in the Mineral Reserve is currently 40%. Newcrest has now met the Stage 3 farm-in requirement and has earnt an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Following delivery of the PFS on 12 October 2021, Newcrest is entitled to earn an additional 10% joint venture interest, resulting in an overall joint venture interest of 70% (Greatland Gold 30%).
- Red Chris Operation refers to the Red Chris Joint Venture owned by the Red Chris unincorporated joint venture between subsidiaries of Newcrest (70%) (3) and Imperial Metals Corporation (30%). The figures shown represent 70% of the Mineral Reserve.
- WGJV refers to the Wafi-Golpu Project owned by the Wafi-Golpu unincorporated joint venture between subsidiaries of Newcrest (50%) and Harmony (50%). The figures shown represent 50% of the Mineral Reserve.

	Proven Mineral Reserves		Probable Mineral Reserves			Total Proven and Probable Mineral Reserves <sup>(1)</sup>		
Silver Mineral Reserves	Dry Tonnes (Mt)	Silver Grade (g/t Ag)	Dry Tonnes (Mt)	Silver Grade (g/t Ag)	Dry Tonnes (Mt)	Silver Grade (g/t Ag)	Insitu Silver (Moz)	
Operational Provinces								
Cadia East Underground	_	_	1,300	0.71	1,300	0.71	29	
Ridgeway Underground			80	0.66	80	0.66	1.7	
Total Operational Provinces							31	
Total Silver Mineral Reserves							31	

(1) Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.

Malakdanan Minanal		n Mineral serves		e Mineral erves <sup>(2)</sup>	Total Prov	Total Proven and Probable Mineral Reserves			
Molybdenum Mineral Reserves <sup>(1)</sup>	Dry Tonnes (Mt)	Molybdenu m Grade (ppm Mo)	Dry Tonnes (Mt)	Molybdenu m Grade (ppm Mo)	Dry Tonnes (Mt)	Molybden um Grade (ppm Mo)	Insitu Molybdenu m (Mt)		
<b>Operational Provinces</b>									
Cadia Operation	=	_	1,300	83	1,300	83	0.11		
Total Operational Provinces							0.11		
Total Molybdenum Mineral Reserves							0.11		

#### Notes:

- (1) Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.
- (2) Molybdenum Reserves represents the Probable Mineral Reserve from the date of first molybdenum concentrate production which is anticipated to be in calendar year 2021.

	Tonnes		Grade		Contained Metal		
Polymetallic Mineral Reserves <sup>(1)</sup>	Dry Tonnes (Mt)	Tungsten Trioxide Grade (% WO <sub>3</sub> )	Zinc Grade (% Zn)	Lead Grade (% Pb)	Insitu Tungsten Trioxide (Mt)	Insitu Zinc (Mt)	Insitu Lead (Mt)
O'Callaghans							
Proven Reserve	-	-	_	-	_		-
Probable Reserve	44	0.36	0.65	0.32	0.16	0.29	0.14
Total Polymetallic Proven and							
Probable Mineral Reserves					0.16	0.29	0.14

Note:

(1) Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.

# Table 2: Mineral Resources Statement as at June 30, 2021

The following tables present the Mineral Resources by commodity, in order, for gold, copper, silver, molybdenum, and polymetallic (tungsten trioxide, lead and zinc). In each case, Measured and Indicated Mineral Resources are tabulated separately from Inferred Mineral Resources.

Mineral Resources are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Gold Measured and Indicated Mineral Resources	Measured Mineral Resources							
(inclusive of Gold Mineral Reserves)					easured and I eral Resourc	red and Indicated   Resources <sup>(1)</sup>		
,	Dry Tonnes (Mt)	Gold Grade (g/t Au)	Dry Tonnes (million)	Gold Grade (g/t Au)	Dry Tonnes (Mt)	Gold Grade (g/t Au)	Insitu Gold (Moz)	
Operational Provinces								
Cadia East Underground	=	=	2,700	0.36	2,700	0.36	30	
Ridgeway Underground	-	=	110	0.57	110	0.57	1.9	
Other	32	0.30	80	0.35	112	0.34	1.2	
Total Cadia Operation							33	
Main Dome Open Pit (incl.								
stockpiles)	14	0.40	1.9	0.44	16	0.40	0.21	
West Dome Open Pit	_		89	0.64	89	0.64	1.8	
Telfer Underground	-	=	25	1.8	25	1.8	1.5	
Havieron Underground (40%) <sup>(2)</sup>			6.2	3.9	6.2	3.9	0.77	
Other	_	_	0.44	2.9	0.44	2.9	0.040	
Total Telfer Operation			0.11	2.9	0.11	2.9	4.3	
Lihir Operation	63	2.0	530	2.3	590	2.2	43	
Red Chris Open Pit (70%)	7.7	0.17	200	0.28	210	0.28	1.9	
Red Chris Underground					-		-	
(70%)	-	_	470	0.46	470	0.46	7.0	
Total Red Chris Operation								
(70%) <sup>(3)</sup>							8.9	
<b>Total Operational Provinces</b>							89	
_								
Non-Operational Provinces								
WGJV – Golpu, Wafi, and								
Nambonga (50%)(4)		_	400	0.84	400	0.84	11	
Namosi JV (72.49%) <sup>(5)</sup>			1,300	0.11	1,300	0.11	4.6	
Total Non-Operational Provinces							15	
2.0							10	
Total Gold Measured and								
Indicated Mineral								
Resources <sup>(6)</sup>							104	

Calledonal Manual Danas and	Inf	erred Mineral Resourc	es <sup>(1)</sup>
Gold Inferred Mineral Resources	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (Moz)
Operational Provinces			
Cadia East Underground	500	0.24	3.8
Ridgeway Underground	41	0.38	0.50
Other	11	0.70	0.25
Total Cadia Operation			4.6
Main Dome Open Pit (incl. stockpiles)	-	-	-
West Dome Open Pit	2.2	0.70	0.05
Telfer Underground	17	1.4	0.77
Havieron Underground (40%) <sup>(2)</sup>	15	1.4	0.68
Other	4.4	1.1	0.16
Total Telfer Operation			1.7
Lihir Operation	67	2.3	4.9
Red Chris Open Pit (70%)	7.7	0.23	0.06
Red Chris Underground (70%)	130	0.32	1.3
Total Red Chris Operation (70%)(3)			1.3

Total Operational Provinces			12.4
Non-Operational Provinces			
WGJV – Golpu, Wafi, and Nambonga (50%) <sup>(4)</sup>	110	0.77	2.7
Namosi JV (72.49%) <sup>(5)</sup>	130	0.08	0.33
Total Non-Operational Provinces			3.1
Total Gold Inferred Mineral Resources <sup>(6)</sup>			15.5

- Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals. Havieron Underground refers to the Havieron Joint Venture owned by the Havieron unincorporated joint venture between subsidiaries of Newcrest and Greatland Gold plc. Mineral Resources are shown as at October 12, 2021 and the figures show represent 40% of the Mineral Resource. Newcrest's joint (1) (2) Greatland Gold plc. Mineral Resources are shown as at October 12, 2021 and the figures show represent 40% of the Mineral Resource. Newcrest's joint venture interest in the Mineral Resource is currently 40%. Newcrest has now met the Stage 3 farm in requirement and has earnt an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Following delivery of the PFS on 12 October 2021, Newcrest is entitled to earn an additional 10% joint venture interest, resulting in an overall joint venture interest of 70% (Greatland Gold 30%).

  Red Chris Operation refers to the Red Chris Joint Venture owned by the Red Chris unincorporated joint venture between subsidiaries of Newcrest (70%) in the former of 200%.
- and Imperial Metals Corporation (30%). The figures shown represent 70% of the Mineral Resource.

  WGJV refers to the Wafi-Golpu Project owned by the Wafi-Golpu unincorporated joint venture between subsidiaries of Newcrest (50%) and Harmony
- (4) (50%). The figures shown represent 50% of the Mineral Resource.
- Namosi refers to the Namosi unincorporated joint venture, in which we have a 72.49% interest. The figures shown represent 72.49% of the Mineral Resource.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Copper Measured and Indicated Mineral Resources		d Mineral ources	Indicated Mineral Resources		Total Measured and Indicated Mineral Resources <sup>(1)</sup>		
(inclusive of Copper Mineral Reserves)	Dry Tonnes (Mt)	Copper Grade (% Cu)	Dry Tonnes (Mt)	Copper Grade (% Cu)	Dry Tonnes (Mt)	Copper Grade (% Cu)	Insitu Copper (Mt)
<b>Operational Provinces</b>							
Cadia East Underground	ı		2,700	0.26	2,700	0.26	6.9
Ridgeway Underground	ı		110	0.30	110	0.30	0.31
Other	32	0.13	80	0.19	110	0.17	0.19
Total Cadia Operation							7.4
Main Dome Open Pit							
(incl. stockpiles)	14	0.068	1.9	0.082	16	0.069	0.011
West Dome Open Pit	_		89	0.061	89	0.061	0.055
Telfer Underground	ı		25	0.43	25	0.43	0.11
Havieron Underground (40%) <sup>(2)</sup>	ı	I	6.2	0.64	6.2	0.64	0.04
O'Callaghans	ı	I	69	0.29	69	0.29	0.20
Total Telfer Operation							0.42
Red Chris Open Pit (70%)	7.7	0.24	200	0.34	210	0.33	0.70
Red Chris Underground (70%)			470	0.40	470	0.40	1.9
Total Red Chris Operation (70%)(3)							2.6
Total Operational Provinces							10.4
Non-Operational Provinces							
WGJV – Golpu, Wafi, and Nambonga							
(50%) <sup>(4)</sup>			340	1.1	340	1.1	3.7
Namosi JV (72.49%) <sup>(5)</sup>	_		1,300	0.35	1,300	0.35	4.6
<b>Total Non-Operational Provinces</b>							8.3
	· · · · · · · · · · · · · · · · · · ·						
<b>Total Copper Measured and Indicated Mineral Resources</b> <sup>(6)</sup>							19

Copper Inferred Mineral Resources	Inf	ferred Mineral Resour	ces <sup>(1)</sup>		
Copper Interred Winter at Resources		Copper Grade			
	Dry Tonnes (Mt) (% Cu) Insitu Copper (M				
Operational Provinces					
Cadia East Underground	500	0.17	0.86		

D:41	41	0.40	0.17
Ridgeway Underground	41	0.40	0.17
Other	11	0.52	0.058
Total Cadia Operation			1.1
West Dome Open Pit	2.2	0.07	0.0015
Telfer Underground	17	0.43	0.072
Havieron Underground (40%) <sup>(2)</sup>	15	0.18	0.03
Others	14	0.37	0.052
O'Callaghans	9.0	0.24	0.022
Total Telfer Operation			0.18
Red Chris Open Pit (70%)	7.7	0.27	0.02
Red Chris Underground (70%)	130	0.30	0.38
Total Red Chris Operation (70%) <sup>(3)</sup>			0.40
Total Operational Provinces			1.7
Non-Operational Provinces			
WGJV – Golpu, Wafi, and Nambonga (50%) <sup>(4)</sup>	92	0.68	0.62
Namosi JV (72.49%) <sup>(5)</sup>	330	0.37	1.2
Total Non-Operational Provinces			1.85
Total Copper Inferred Mineral Resources(6)			3.6

- (1) Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.
- Havieron Underground refers to the Havieron Joint Venture owned by the Havieron unincorporated joint venture between subsidiaries of Newcrest and Greatland Gold plc. Mineral Resources are shown as at October 12, 2021 and the figures show represent 40% of the Mineral Resource. Newcrest's joint venture interest in the Mineral Resource is currently 40%. Newcrest has now met the Stage 3 farmin requirement and has earnt an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Following delivery of the PFS on 12 October 2021, Newcrest is entitled to earn an additional 10% joint venture interest, resulting in an overall joint venture interest of 70% (Greatland Gold 30%).
- Red Chris Operation refers to the Red Chris Joint Venture owned by the Red Chris unincorporated joint venture between subsidiaries of Newcrest (70%) (3) and Imperial Metals Corporation (30%). The figures shown represent 70% of the Mineral Resource.

  WGJV refers to the Wafi-Golpu Project owned by the Wafi-Golpu unincorporated joint venture between subsidiaries of Newcrest (50%) and Harmony
- (4) (50%). The figures shown represent 50% of the Mineral Resource.
- Namosi refers to the Namosi unincorporated joint venture, in which Newcrest has a 72.49% interest. The figures shown represent 72.49% of the Mineral
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Silver Measured and Indicated Mineral	Measured Reso			l Mineral urces		leasured and neral Resour		
Resources (inclusive of Silver Mineral Reserves)	Dry Tonnes	Silver Grade	Dry Tonnes	Silver Grade	Dry Tonnes	Silver Grade	Insitu Silver	
Operational Provinces	(Mt)	(g/t Ag)	(Mt)	(g/t Ag)	(Mt)	(g/t Ag)	(Moz)	
Cadia Operation	_	_	2800	0.64	2800	0.64	58	
Total Operational Provinces							58	
Non-Operational Provinces								
WGJV – Golpu, Wafi (50%) <sup>(3)</sup>	_	_	400	1.7	400	1.7	22	
Total Non-Operational Provinces							22	
Total Silver Measured and Indicated Mineral Resources <sup>(4)</sup>							80	

Silver Inferred Mineral Resources	Inferred Mineral Resources(1)					
	Dry Tonnes (million)	Silver Grade (g/t Ag)	Insitu Silver (Moz)			
Operational Provinces						
Cadia Operation	540	0.47	8.1			
Total Operational Provinces			8.1			
Non-Operational Provinces						
WGJV – Golpu, Wafi (50%) <sup>(2)</sup>	87	1.7	4.8			
Total Non-Operational Provinces			4.8			
Total Silver Inferred Mineral Resources.			12.9			

- (1) (2)
- Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals. WGJV refers to the Wafi-Golpu Project owned by the Wafi-Golpu unincorporated joint venture between subsidiaries of Newcrest (50%) and Harmony (50%). The figures shown represent 50% of the Mineral Resources.

  Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- (3)

Molybdenum Measured and Indicated Mineral	Measured Mineral Resources			ed Mineral ources	Total Measured and Indicated Mineral Resources <sup>(1)</sup>		
Resources (inclusive of Molybdenum Mineral Reserves)	Dry Tonnes (Mt)	Molybde num Grade (ppm Mo)	Dry Tonnes (Mt)	Molybdenu m Grade (ppm Mo)	Dry Tonnes (M)	Molybdenu m Grade (ppm Mo)	Insitu Molybde num (Mt)
<b>Operational Provinces</b>							
Cadia Operation	_	-	2,700	66	2,700	66	0.17
Total Operational Provinces							0.17
T 1							
Total Molybdenum							
Measured and Indicated							0.17
Mineral Resources <sup>(2)</sup>							0.17

# Notes:

- Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. (1)

Inferred Mineral Resources <sup>(1)</sup>								
Molybdenum Inferred Mineral Resources								
	Dry Tonnes (million)	Molybdenum Grade (ppm Mo)	Insitu Molybdenum (Million tonnes)					
Operational Provinces								
	500							
Cadia Operation		25	0.012					
Total Operational Provinces			0.012					
Total Molybdenum Inferred Mineral								
Resources			0.012					

- Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Polymetallic Measured and	Tonnes		Grade		Contained Metal		
Indicated Mineral Resources (inclusive of Polymetallic Mineral Reserves)	Dry Tonnes (million)	Tungsten Trioxide Grade (% WO3)	Zinc Grade (% Zn)	Lead Grade (% Pb)	Insitu Tungsten Trioxide (Mt)	Insitu Zinc (Mt)	Insitu Lead (Mt)
O'Callaghans							
Measured Mineral Resource	_	-	_	-	-	-	-
Indicated Mineral Resource	69	0.34	0.53	0.26	0.24	0.36	0.18
Total Measured and Indicated							
Polymetallic Mineral							
Resources(1)	69	0.34	0.53	0.26	0.24	0.36	0.18

	Tonnes	nnes Grade			Contained Metal		
Polymetallic Inferred Mineral Resources	Dry Tonnes (million)	Tungsten Trioxide Grade (% WO3)	Zinc Grade (% Zn)	Lead Grade (% Pb)	Insitu Tungsten Trioxide (Mt)	Insitu Zinc (Mt)	Insitu Lead (Mt)
O'Callaghans							
Inferred Mineral Resource	9.0	0.25	0.19	0.11	0.023	0.017	0.0097
Total Inferred Polymetallic							
Mineral Resources <sup>(1, 2)</sup>	9.0	0.25	0.19	0.11	0.023	0.017	0.0097

- (1) Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.
- (2) Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

#### Sales and Marketing

#### Commodity Markets

The price of gold and copper are both determined by market forces based on global trading.

#### The Gold Market

The gold market is quite extensive and a number of options exist for its sale. Primarily the world's most liquid and recognised gold market is the London Bullion Market Association ("LBMA"). Major markets also exist in the United States ("COMEX"), China ("SHFE") and Japan ("TOCOM").

Factors influencing the price of gold include speculative positions taken by investors or traders in gold, Exchange Traded Fund actions, actual or expected gold sales by central banks and the International Monetary Fund, changes in demand for gold as an investment, industrial and jewellery demand, expectations with respect to the rate of inflation, the strength of the US dollar (the currency in which the price of gold is generally quoted) and of other currencies, interest rates (including negative interest rate environments), global or regional political or economic events (including monetary policy easing), and production and cost levels in major gold-producing regions. The shift in gold demand from physical demand to investment and speculative demand may exacerbate the volatility of gold prices.

The current demand for, and supply of, gold may affect gold prices but not necessarily in the same manner as current supply and demand affects the prices of other commodities. The supply of gold consists of a combination of new production and existing fabricated gold held by governments, public and private financial institutions, industrial organisations and private individuals.

As the amount of gold produced globally in any single year constitutes a very small portion of the total potential supply of gold, variations in current production do not necessarily have a significant impact on the global supply of gold or on its price.

During FY21 the price of gold varied significantly with a high of US\$2,064/oz on August 6, 2020 and a low of US\$1,684/oz on March 8, 2021. The average price for FY21 was US\$1,850/oz. The gold price variability, including the reduction from its high in August 2020, was driven primarily by higher interest rates, especially in the third quarter (January to March 2021) and late June 2021, following hawkish statements by the US Federal Reserve.

Newcrest produces gold in doré form and in copper-gold concentrate. The doré is further refined to LBMA Good Delivery standard and is therefore readily accepted globally for sale.

## The Copper Market

Unlike gold, the global demand for copper metal is mainly related to industrial activity. Global copper supply comes primarily from mine production, with a significant amount of mine production being in the form of concentrate. Copper-gold concentrate is produced by Newcrest's mines at the Telfer, Cadia and Red Chris Operations. Unlike copper metal, there is no terminal market for copper-gold concentrate, so it is smelted into copper metal for end sale. When Newcrest's mines sell copper-gold concentrate to smelters, the mines are paid for a portion of the copper metal extracted from the copper-gold concentrate and any by-products, subject to penalties for impurities (e.g. arsenic, bismuth, fluorine) contained in the copper-gold concentrate. The smelters charge the mines treatment and refining charges and the smelters may retain some exposure to movements in the copper price through a price participation mechanism.

Prices for copper are generally controlled by supply-demand fundamentals, but volatility can be high and the fluctuation in exchange-traded metal prices can be substantial, even on a daily basis. During FY21 the copper price increased from a low of US\$6,024/t on July 3, 2020 to a high of US\$10,449/t on May 11, 2021. The progressive increase in the copper price during FY21 was driven by increased demand, linked to infrastructure spending and government stimulus following the COVID-19 pandemic, and supply side concerns in Chile and Peru.

## Copper-Gold Concentrate and Gold Bullion Sales

Newcrest primarily generates its revenue from the sale of gold bullion and copper-gold concentrate.

# Copper-Gold Concentrate Sales

Copper-gold concentrate is produced at the Cadia, Telfer and Red Chris Operations. Newcrest is paid for the copper, gold and silver content in the copper-gold concentrate, less a series of deductions commonly referred to as "realisation charges". Generally these realisation charges are agreed between Newcrest and the respective smelter or merchant customers on an annual basis (in the case of frame or long-term contracts). Newcrest is one of the world's largest producers of copper concentrate with a high gold content. The gold content in concentrate from the Cadia Operation has generally been between 40–60 g/t, and the gold content in concentrate from the Telfer Operation has generally been between 50–80 g/t. Newcrest's copper-gold concentrate is sold primarily into Asia, where the majority of the concentrate is sold to established smelters in Japan and South Korea. However, sales into the Philippines, India and China through both direct sales to smelters and via merchants have diversified Newcrest's customer base for copper-gold concentrate.

Newcrest aims to secure customers for a majority of its copper-gold concentrate production from smelters pursuant to long-term contracts. The majority of these smelters are located in Japan and South Korea. The remaining copper-gold concentrate production is sold to merchants through shorter term agreements or spot sales, as described in more detail under the heading "Other Merchants". Merchants on-sell the copper-gold concentrate to smelters under their own commercial agreements. In the case of copper-gold concentrate from the Telfer Operation, the allocation to merchants is generally higher.

Generally, Newcrest enters into long term or "frame" contracts with Newcrest's preferred smelters, which can be either "block" contracts or "brick" contracts. In a block contract, 100% of the quantity for each contractual period is priced at one time (usually in one-year periods). Brick contracts typically price 50% of each year's annual quantity over a two-year period. Consequently, with brick contracts the volatility of commercial terms is decreased,

as commercial terms applied in any one-year period will be the average of agreed terms over two years. Newcrest's frame contracts vary in duration from three to seven years.

Cadia East commenced commercial production on January 1, 2013. The majority of copper-gold concentrate production from Cadia East is currently sold under long-term or "frame" contracts. The balance is sold under "spot" sales agreements with merchants.

The Telfer Operation has been producing copper-gold concentrate since 1987. For 2022, Newcrest has frame contracts for the copper-gold concentrate with two smelters and four merchants. Spot sales with these and other merchants also take place from time to time.

The open pit at the Red Chris Operation has been producing copper-gold concentrate since 2015. Following the acquisition by Newcrest of a 70% beneficial interest in the Red Chris Operation and surrounding tenements, and operatorship, in August 2019, Newcrest Red Chris Mining Limited has undertaken all of the management of sales and marketing activities for the sales of the copper-gold concentrates from the Red Chris Operation, with the majority of concentrate sold to Asia via merchants.

#### Other Merchants

Sales to merchants generally account for less than 50% of Newcrest's copper-gold concentrate sales on a long-term basis. The actual percentage will vary depending on the mines and actual production quantities. There are approximately 10 merchants active in the concentrate market. Merchants have tended to play a diminishing role in the Japanese market. However, in South Korea, China, India and Eastern Europe the merchants have maintained their importance.

Newcrest has a number of long-term sales contracts in place with merchants and has also executed a number of spot sales with merchants that have proven to be successful in terms of both performance and financial return. Newcrest may increase sales to merchants from time to time to take advantage of favorable economic terms.

## **Shipping Arrangements**

All copper-gold concentrate is shipped on a cost, insurance and freight free out ("CIF") basis where Newcrest arranges a carrying vessel and insurance on behalf of the buyer. Most of the global trade in concentrate is made on a CIF or cost and freight basis.

## Copper-Gold Concentrate In-Store Sales

From time to time, Newcrest makes in-store sales of copper-gold concentrate. Historically, most in-store sales have been to merchant customers. In the case of in-store sales, a title and holding certificate executed by Newcrest replaces the bill of lading as the title document to the concentrate. Concentrate that is covered by this certificate is held for the buyer in the storage shed until shipment.

## Gold Doré and Bullion

Gold doré bars, from which gold bullion is produced, are produced at Newcrest's Cadia, Lihir and Telfer Operations. Gold doré is an alloy consisting mostly of gold but also containing copper, silver and other metals. Gold doré is sent to refiners to produce gold bullion that meets the required market standard of 99.95% pure gold. Gold doré transportation is undertaken by a recognised security transportation company included in the refining agreement with the refinery. There are a number of providers in the market of these services, so Newcrest is not reliant upon a sole provider.

The refiner bears the risk and insures the gold doré from the time it arrives at the specified delivery location. Title passes from Newcrest when Newcrest's metal account has been credited with the appropriate amount of metal.

Newcrest uses the Western Australia Mint in Perth (the "**Perth Mint**") under a long-term contract to refine gold doré from the Lihir and Telfer Operations. In February 2021 a new refining contract for Cadia was established with ABC Refinery in Sydney. Prior to that time Cadia doré was also refined by the Perth Mint.

Credit exposure to the Perth Mint and ABC Refinery is limited to two business days. The Perth Mint is wholly owned by the Western Australian Government (rated AA+/Aa1). The ABC Refinery is not rated but Newcrest benefits from a guarantee from its parent entity.

Credit risk related to bullion is limited due to the prompt sale of bullion once refined. Newcrest can sell the bullion that is refined at the Perth Mint locally or choose to swap the bullion electronically to its bullion accounts in London. The bullion refined at the Perth Mint and ABC Refinery is generally sold on a spot price basis to customers, minimising credit exposure to two business days. Gold bullion customers are usually Newcrest's relationship banks and are subjected to internal credit reviews. These transactions do not have any sales restrictions and do not require formal sales contracts in place.

Newcrest's gold bullion sales in the 2021 financial year represented 39% of its revenue. Newcrest's gold bullion was sold to customers in Australia and Canada.

#### Competition

Newcrest's primary business focus is the production of gold and copper, and to a lesser extent silver. These products are sold at prices dictated by world market forces, which Newcrest cannot influence. As a price taker, Newcrest's competitive position is primarily determined by its ability to control costs, both operating and capital, in comparison to those of other producers globally. The cost structure of each operation is driven by, amongst other things, location, grade and nature of the orebody, management skills, country and local fiscal policies. Major input costs such as labour, power and consumables are supply and demand driven and consequently, Newcrest has limited influence over these costs.

Newcrest competes with other mining and exploration companies in connection with the acquisition of mining claims and leases and in connection with the recruitment and retention of qualified employees. There is significant competition for mining claims and leases and, as a result, the Company may be unable to continue to acquire attractive assets on terms it considers acceptable.

## **Employees and Labour Relations**

As at June 30, 2021, the Company had 4,886 full time equivalent employees and 7,841 contractors.

The Company has an Industrial Relations Policy in place and a wide range of policies and standards which govern the conduct, fair treatment, and equal opportunity of all employees across the group.

The Company has a number of employment agreements and industrial instruments in place. In Australia, the majority of operational employees at Cadia and Telfer are employed pursuant to an Employee Collective Agreement ("ECA") entered into at each site in 2021 and 2020 respectively, each with a four-year term. Unions are present and have a legal right to represent eligible employees at the Cadia and Telfer Operations. During the term of each of these ECAs, Newcrest has experienced no industrial action at either site.

Legal proceedings involving the certification of the United Steel Workers' Union (USW) at the Red Chris Operation concluded on 29 September 2021, resulting in the certification of the USW as the bargaining agent for eligible Red Chris employees for the negotiation of a collective bargaining agreement.

The Lihir Operation has a combined workforce of up to 7,204 people, with more than half being contractors. Employees are engaged on common law contracts. A significant percentage of operations personnel are from the nearby villages and are supported with bus transportation. Other PNG nationals are FIFO from other islands and the mainland of PNG. The expatriate employees either live residentially on Aniolam Island or are FIFO. There is no union representation for any of the employees of the Lihir Operation.

Most aspects of Newcrest's business require specialised skills and knowledge. Such skills and knowledge include the areas of exploration, resource modelling and mine engineering, mineral processing, and environmental management. The Company has a number of employees with extensive experience in mining, geology, exploration and development. The hiring and retention of staff is challenging in the Australian mining sector due to the strong resources employment market and competition for skilled employees and contractors. As a result, Newcrest, like other Australian mining companies, has been looking to various mechanisms to increase the available labour pool, for example, by recruiting internationally and collaborating with tertiary institutions to encourage more graduates in mining-related disciplines.

#### MATERIAL PROPERTIES

For the purposes of this AIF, Newcrest has identified its Cadia Operation, Lihir Operation, Red Chris Operation and the Wafi-Golpu Project as material properties. The following is a description of each of Newcrest's material properties.

## **Cadia Operation**

Certain portions of the following information are derived from and based on the assumptions, qualifications and procedures set out in the Cadia Report. For a more detailed overview of the Cadia Operation, please refer to the Cadia Report noted above and the Market Release dated August 19, 2021 announcing the Cadia PC1-2 PFS, which are available under Newcrest's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a> and on Newcrest's website.

## Project Description and Location

The Cadia Operation is located approximately 25 km south-southwest of the town of Orange in NSW, and approximately 200 km west-northwest of Sydney.

The operation is 100% owned by Newcrest through its wholly-owned subsidiary, Cadia Holdings Pty Ltd ("CHPL"). The Cadia Operation consists of six granted Mining Leases ("ML") (ML1405, expiry date 4/10/2038; ML1449, expiry date 4/10/2038; ML1472, expiry date 22/10/2021 (renewal pending); ML1481, expiry date 7/3/2022; ML 1689, expiry date 11/9/2034; and ML 1690, expiry date 10/9/2034) and five granted Exploration Licences (E(P)L 1024, expiry date 20/05/2019 (renewal pending); EL3856, expiry date 20/05/2024; EL4616, expiry date 7/11/2021 (renewal pending); EL4620, expiry date 18/11/2024; EL5609, expiry date 22/08/2024), with a total approximate area of 215 km². The Ridgeway deposit is within Mining Lease 1449; the Cadia East, Cadia Extended and Big Cadia deposits are within Mining Lease 1405. Mining Leases do not have statutory annual expenditure requirements. All statutory obligations to retain the Exploration Licences as current had been met as at June 30, 2021.

CHPL predominantly owns all land/properties covered by the six Mining Leases and a number of properties in the surrounding area. Newcrest may be required to acquire further properties in the vicinity of the mines where mining operations may have environmental impacts upon those properties which exceed certain specified limits. There are no major property agreements that will affect mining operations or the life-of-mine ("LOM") plan. An Environmental Protection Licence covers the operations within the six Mining Leases plus the Blayney and Cadia dewatering facilities, and ancillary infrastructure.

The NSW government levies state royalties on production. Currently, gold, silver, copper and molybdenum are levied at 4% ex-mine value (value less allowable deductions).

Current environmental liabilities are in line with those to be expected from a long-life mining operation where mining activities have been conducted via open pit and underground mass mining methods.

# Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Cadia Operation is accessed by sealed road from Orange. Commuter airlines provide Brisbane to Orange, Sydney to Orange, and Melbourne to Orange services. The Orange airport is about 12 km northeast of the Cadia Operation.

Mining and exploration activities are conducted year-round. The area experiences the warmest temperatures from November to March and the coolest from May to August. The lowest mean monthly rainfall occurs March and April and the highest mean monthly rainfall occurs in August.

Elevations range from approximately 600 m AHD to 1,000 m AHD. The region is characterised by gently-undulating hills, cleared open grassland and vegetation consisting mainly of scattered paddock trees, with isolated patches of remnant woodland and shelterbelts, and State Forest plantations of Monterey Pine. The dominant land use in the Orange region is agriculture, principally grazing (sheep and cattle), cropping, and orchards.

The bushfire season in the Cadia Valley area and Central West Region is generally from mid-November to mid-March. Depending on factors such as weather, fuel loads (build-up of leaf litter and broken branches), and drought indices, this season can be extended from early September to late April. There are moderate fuel loads associated with the open forest and woodland areas within the Cadia East subsidence zone and the tailings storage facilities ("TSF") expansion areas that may present a fire hazard.

The deposits are located in an area which has been seismically active both prior to and subsequent to the commencement of mining by Newcrest. These events can produce seismic loading, and this risk is taken into account in infrastructure design.

#### History

The discovery of copper and gold in the Cadia Operation area dates back to 1851. The field experienced sporadic production from several deposits within the district until the first half of the 20th century. Extensive copper mining occurred at the Cadia (now called White Engine), Iron Duke (now Big Cadia), West Cadia and Little Cadia mines. From 1918–1929 and 1941–1943, underground and quarrying operations were undertaken at Big Cadia.

Prior to Newcrest's interest, Pacific Copper Limited and Homestake Australia Limited conducted exploration in the Big Cadia area, including soil sampling, core, reverse circulation ("RC"), and rotary air blast ("RAB") drilling.

Newcrest acquired the property in March 1991.

The production figures that follow are reported using fiscal years. Cadia East has produced, between 2011 and June 30, 2021, approximately 5.0 Moz of gold and 522,549 t of copper. Ridgeway produced 3.9 Moz of gold and 487,000 t of copper between 2002 and 2018. From 1999 to 2018, the Cadia Hill open pit produced 4.3 Moz of gold, and 372,000 t of copper. No production occurred from either Ridgeway or Cadia Hill in the 2021 financial year. The sources of production were in the form of doré and copper-gold concentrate.

## Geological Setting, Mineralisation and Deposit Types

The Cadia East, Cadia Extended, and Ridgeway deposits are considered to be examples of alkalic porphyry gold-copper-style mineralisation. The Big Cadia deposit is a skarn-style occurrence. The Cadia district deposits are located in the eastern Lachlan Fold Belt of NSW. The basement rocks in the Cadia district are Ordovician siltstones and volcanic units of the Weemalla Formation. They are conformably overlain by andesitic to basaltic andesitic lithologies of the Ordovician Forest Reefs Volcanics. Mineralisation-related Ordovician to Silurian alkalic intrusions young eastwards across the Cadia Valley, with Ridgeway being the oldest deposit in the district and Cadia East the youngest.

Three main intrusive complexes were identified. The Cadia Intrusive Complex consists of pyroxene diorite, monzodiorite and occasional pyroxenite in the west to monzonite, quartz monzonite and quartz monzodiorite in the

east. The Ridgeway Intrusive Complex comprises multiple mafic monzonite to quartz monzonite phases. The Cadia East Intrusive Complex consists of monzodiorite and quartz monzodiorite to quartz monzonite dykes.

The Cadia East deposit occupies a mineralised zone 2.5 km in strike length, 600 m in width and over 1,900 m in vertical extent. Mineralisation at Cadia East is divided into two broad overlapping zones: an upper, copper-rich disseminated zone and a deeper gold-rich zone associated with sheeted veins.

The Ridgeway deposit is a subvertical body of quartz–sulphide vein stockwork mineralisation with an elliptical, pipe-like geometry, elongated along a northwest-striking axis. Stockwork dimensions are approximately 400 m east—west, 250 m north—south and the deposit extends to a depth in excess of 1,000 m. Mineralisation at Ridgeway and Ridgeway Deeps occurs in dense quartz vein stockworks and sheeted arrays.

The Cadia Extended deposit has dimensions of about 1,200 x 1,100 m, and extends to about 900 m depth. Gold and copper mineralisation are closely associated with sheeted quartz–calcite–sulphide veins that cut obliquely across the host quartz–monzonite porphyry.

The Big Cadia iron–copper–gold skarn deposit is hosted by an intensely-altered, bedded, calcareous volcaniclastic unit. The Big Cadia deposit has dimensions of 1,000 x 200 m, and a drill-tested depth extent of about 400 m. Chalcopyrite and minor gold are closely associated with bladed hematite, magnetite and epidote (with lesser chlorite–quartz–calcite) replacements.

# **Exploration**

In FY21, Newcrest completed rock chip and soil geochemical sampling, reprocessing of magnetic, dipole-dipole induced polarisation ("IP"), two-dimensional Mount Isa Mines distributed acquisition system ("MIMDAS") IP data, diamond drilling and technical studies. Geochemical sampling was used as a first-pass tool to define areas of pathfinder element anomalism to assess areas for buried gold-copper mineralisation. Drilling was focused on testing conductivity anomalies outlined in MIMDAS IP data, targeting Cadia-style mineralisation concealed by post mineralisation cover rocks. Exploration activities remain focused on a number of deposit models including porphyry gold-copper, intrusion-related gold-base metal quartz-carbonate veins and breccias, replacement style magnetite/hematite-copper-gold skarns and distal reduced gold skarns. In FY22, Newcrest plans to undertake near mine drilling activity including drilling at Cadia East, re-assessment of Big Cadia and updating of geological models and the exploration of the Newcrest 100% and the Junction Reefs exploration ground. Newcrest's current and planned exploration activities are discussed in this AIF under the heading "Cadia Operation - Exploration, Development and Production".

## Drilling

Drilling was completed in support of exploration evaluations, Mineral Resource and Mineral Reserve estimates, mine planning, geotechnical and hydrogeological evaluations, grade control, and infrastructure site sterilisation. Drilling completed includes core, RC, aircore, RAB, sonic, and percussion drill types.

Drilling completed to September 30, 2021 comprises a total of 5,679 drill holes (1,505,156 m). A total of 616 drill holes (about 436,720 m) support resource estimation at Cadia East, and 532 drill holes (about 258,622 m) support resource estimation at Ridgeway. Mineral Resource estimates at Cadia Extended are supported by 449 drill holes (about 113,391 m) and 558 drill holes (about 71,447 m) support the Big Cadia resource estimate.

The drilling of the Cadia East deposit includes NQ3 (47.6 mm core diameter), HQ3 (63.5 mm) and PQ (85 mm) core sizes. Drilling at Ridgeway is predominantly LTK60 (44.0 mm), NQ (47.6 mm) or HQ (63.5 mm) sizes. Most drill holes are collared as PQ or HQ for accurate and safe drilling. The hole size is then reduced at the geologist's discretion as the drill hole advances. Drilling at Cadia Extended include NQ, HQ, and RC holes. The Cadia Extended RC program was primarily for production purposes in the period the open pit was operational. The Big Cadia deposit drilling consists of PQ, NQ, HQ and RC holes.

Drill core is photographed, logged and recoveries are recorded. Drill hole collar locations are surveyed using differential global positioning system ("**DGPS**") instruments. Down-hole surveys are performed at regular down-hole intervals primarily using FlexIT instrumentation. Eastman, single-shot, multi-shot, Maxibore, north-seeking gyro, and standard gyroscopic tools have also been employed.

Drill spacing in Cadia East ranges from approximately 20 m x 20 m in the better drilled deposit areas to about 200 m spacing on the less well drilled portions of the deposit. Ridgeway Deeps drill spacing ranges from approximately 30 x 30 m to about 100 x 100 m. Drilling at Cadia Extended ranges from approximately 50 x 75 m on the deposit edges, to, over a 150 m strike extent, 50 x 50 m spacing in the centre of the deposit. The drill spacing at Big Cadia varies from 25 x 25 m in the upper elevations to 50 x 50 m spacing at depth. The term "true thickness" is not generally applicable to porphyry-style deposits as the entire rock mass is potentially mineralised and there is often no preferred orientation to the mineralisation. In areas that display porphyry-style mineralisation, in general, most drill holes intersect mineralised zones at an angle, and the drill hole intercept widths reported for those drill holes are typically greater than the true widths of the mineralisation at the drill intercept point. The Big Cadia deposit is essentially flat-lying. Drilling is typically near-vertical. This drill orientation is acceptable for the majority of the mineralisation orientation at Big Cadia, and results in drilled widths that approximate true widths.

Drilling is ongoing at Cadia East in support of operations; current drilling is primarily for geotechnical purposes. The last drill hole in the drill database for Ridgeway was completed in September 2012, for Cadia Extended was completed in October 2008, and for Big Cadia was completed in December 2008. No drilling has been conducted at any of these three deposits since those dates.

#### Sampling, Analysis, and Data Verification

RC samples could be taken on 1 m or 2 m intervals, with rig-mounted cyclone splitters. Core sampling intervals have varied over time, with most programs sampling on nominal 1 m or 2 m intervals. Following splitting with a core saw, core samples are organised into shipments and the primary laboratory takes possession of the samples at site and transports them to the laboratory location.

The primary assay laboratory since 2010 is the Newcrest Services Laboratory, located in Orange ("NSLO"). The laboratory holds ISO 17025 accreditations and is not independent of Newcrest. During 2018, the Intertek Laboratory, located in Perth, Western Australia and ALS Chemex in Orange could be used as check laboratories. Both are independent of Newcrest and hold ISO 17025 accreditations.

Samples are dried, crushed to 2 mm, and pulverised to 95% passing 106 μm. Gold analysis at NSLO consists of a fire assay using a nominal 30 g or 50 g sample charge, four-acid digest/atomic absorption spectroscopy ("AAS") read. Copper and a multi-element suite are determined by inductively coupled plasma—optical emission spectrometry ("ICP–OES") after four-acid digest. Other assays include sulphur >10% by Eltra, and cyanide-soluble copper ("CuCN") by timed leach.

Density determinations use the water displacement method. There are 14,779 density determinations in the database for Cadia East, averaging 2.76 t/m³. Density is assigned to the resource model by lithology and gold grade. There are 9,421 density determinations for Ridgeway, with a mean of 2.80 t/m³. Bulk density is assigned by domain during estimation. There is a total of 1,030 measurements for Cadia Extended, averaging 2.68 t/m³. Density is assigned by lithology during estimation. There is a total of 539 bulk density measurements at Big Cadia. Density is assigned by lithology type and oxidation state.

Quality assurance and quality control ("QA/QC") measures include regular insertion of standard reference materials ("SRMs"), field duplicate and blank sample materials prior to submission of samples to the laboratory to monitor laboratory accuracy and precision and sampling sequencing and precision. Data imported into the database are subject to validation, which includes checks on surveys, collar co-ordinates, lithology data, and assay data. The checks are consistent with industry norms.

Sample security at the Cadia Operation has not historically been monitored. Sample collection from drill point to laboratory relies upon the fact that samples are either always attended to, or stored in the locked on-site preparation

facility, or stored in a secure area prior to laboratory shipment. Chain-of-custody procedures consist of sample submittal forms to be sent to the laboratory with sample shipments to ensure that all samples are received by the laboratory.

Newcrest includes both internal verification processes and independent third-parties in the data verification steps:

- internal verification: laboratory inspections; review of geological procedures, resource models and drill plans; sampling protocols, flow sheets and data storage; specific gravity data; logging consistency, down hole survey, collar coordinate and assay QA/QC data; geology and mineralisation interpretation; and
- external verification: December 2011 review of the acQuire resource development database by Minffordd Pty Ltd; March 2013 review of resource development and ore control databases by acQuire Technology Solutions; review of the 2016 Cadia East resource model by SRK Consulting (Australasia) Pty Ltd ("SRK"); and reviews of the 2015 Cadia Extended and Big Cadia models by SRK in late 2015. Review of the Cadia East 2021 Mineral Resource model update was conducted by Derisk GeoMining Consultants in July 2021 and review of the Cadia East 2021 Mineral Reserve model was conducted by Golder Associates in August 2021.

Newcrest operates a steering committee, the Resources & Reserves Steering Committee ("RRSC"), to ensure appropriate governance of development and management of resource and reserve estimates, and the public release of those estimates. This is achieved by ensuring regular RRSC review meetings, and internal and external reviews.

No material issues with the database including sampling protocols, flowsheets, check analysis programs or data storage have been identified to date from the checks performed. The database is acceptable for use in Mineral Resource estimation for the Cadia East, Ridgeway, Cadia Extended and Big Cadia deposits, and can be used to support Mineral Reserve estimation and mine planning at Cadia East and Ridgeway.

## Mineral Processing and Metallurgical Testing

Laboratories and testwork facilities used during metallurgical evaluation included AMML, ALS Townsville, ALS Brisbane, Metso Minerals Process Technology ("Metso"), JKTech, Metcon, Enviromet, Optimet, Amdel, Normet, and Lakefield Laboratory (Canada). These facilities are independent of Newcrest. Metallurgical testwork facilities are typically not accredited for metallurgical testwork techniques.

Metallurgical testing programs were conducted since the 1990s to test the amenability of the mineralisation to conventional separation processes for gold, copper, and molybdenum. Based on these tests, two concentrators, Concentrator 1 and Concentrator 2, were constructed using conventional flotation and gravity separation methods and have subsequently treated the Cadia Hill, Ridgeway, and Cadia East mineralisation. Both concentrators have undergone throughput upgrades, including operational improvements, over the years.

At Cadia East, testwork has included optical mineralogy, X-ray diffraction ("XRD") and mineral laboratory analysis ("MLA"); comminution tests (drop-weight ("DWi"), semi-autogenous grind ("SAG") mill comminution ("SMC") tests, Bond ball work index ("BWi"), rod work index ("RWi") and abrasion ("Ai")); gravity testwork; rougher and cleaner flotation tests, primary grind and regrind size sensitivity tests; evaluation of alternate reagents; flash flotation testing, fluorine depression batch flotation tests, and locked cycle flotation tests. Overall average LOM recovery forecasts are 81% gold recovery, 87% copper recovery, and molybdenum recovery rates (relative to plant feed) are expected to range between 65% and 75%. Molybdenum recovery is driven by molybdenite morphology, which is related to increases in head grade. Fluorine is the only known deleterious element identified. Since 2017, all material within the plant has been processed through a Jameson cell, giving maximum fluorine rejection, particularly of the entrained fluorine-bearing minerals, and therefore unlikely that fluorine levels in copper concentrate will exceed the maximum contractual limits over the LOM.

Testwork completed on the Ridgeway deposit includes BWi, DWi, SMC tests; comparison to the original feasibility data; gravity and flotation testing; primary grind and regrind sensitivity flotation tests; and locked cycle confirmatory tests. Recovery forecasts for the overall LOM are 81% for gold, and 87% for copper. During its operating history, Ridgeway produced a high-quality copper concentrate with high gold grades, payable silver

credits and relatively low levels of impurities that did not attract a penalty from smelters. There are expected to be no deleterious elements in any Ridgeway Lift 2 concentrates.

Samples selected for metallurgical testing during feasibility and development studies for Cadia East and Ridgeway were representative of the various styles of mineralisation within the different deposits. Samples were selected from a range of locations within the deposits. Sufficient samples were taken, and tests were performed using sufficient sample mass for the respective tests undertaken. Variability assessments are supported by mill production and extensive underground exposures.

Flotation tests were completed on the Cadia Extended mineralisation. The Cadia Extended deposit is the underground extension of what was referred to as the Cadia Extended open pit that was mined and processed during 2003 and 2004. Average gold and copper recoveries were 74% and 84% for 2003–2004, respectively. Recovery functions based on Cadia East mineralisation performance are in line with the historical recoveries from mining, and provide an adjustment for feed grade. There is limited variability testwork completed specifically for Cadia Extended. Available data should be reviewed for spatial representivity prior to any mining operations that include this mineralisation.

The mineralisation of the Big Cadia deposit has been subject to BWi and abrasion tests; sulphide and oxide flotation tests; primary grind sensitivity, gravity and magnetics separation tests; and cyanide and acid leach tests. Recovery forecasts include consideration of copper grades and weathering state, and range from 35–90% Cu and 45–70% Au. The Big Cadia mineralisation is atypical of mineralisation within the Cadia Operation, as much of the material is strongly to weakly weathered with a leached and enriched profile resulting in common secondary copper minerals especially chalcocite and pseudo-malachite. Additional testwork will be required to fully establish the metallurgical variability across the deposit.

No formal deleterious element assessment has been undertaken for the Cadia Extended or Big Cadia mineralisation.

## Mineral Resource and Mineral Reserve Estimates

#### **Mineral Resources**

## Cadia East

The Mineral Resource estimate was based on a combination of lithological and structural domains, and a 0.1% Cu grade shell.

Elements estimated include gold, copper, silver, molybdenum, sulphur and fluorine using 10 m composites. No grade caps were applied for any element. Density was assigned to the resource model by lithology and gold grade. Estimation was undertaken using ordinary kriging ("**OK**"). The block model and informing composites were validated using a combination of visual inspection in plan and section, nearest-neighbour ("**NN**") model comparison, swath plots, grade—tonnage curves, and direct block simulation.

There are no Measured Mineral Resources estimated for Cadia East. All Mineral Resources were classified as Indicated or Inferred. Classification of the resource model was based on drill hole density, grade and geological continuity using the average weighted distance to data in conjunction with the gold slope of regression.

The Cadia East Mineral Resource estimate was reported within a potentially economic outline determined by the net smelter return ("NSR") values of each block in the resource model. The NSR was the estimated proceeds from the sale of mineral products after the application of metal recoveries and deduction of transport, smelting, refining and marketing charges, as well as royalty payments. The reporting confines were expanded in places to fully encompass the panel cave footprints. Because of the lack of selectivity of the panel caving mining method, the entire in-situ contents of the outline were reported. Using the reported resource metal price assumptions and costs aligned with the current and future expected recoveries and charges Mineral Resources are reported above an A\$18.00/t NSR cut-off.

## **Ridgeway**

Six geological domains, seven structural domains, and six grade domains were used in estimation.

Elements estimated included gold, copper, silver and sulphur on 4 m composites. No grade caps were applied during estimation. Bulk density was assigned by domain. Estimation was undertaken using OK. The block model and informing composites were validated by filtering the models and checking for any un-estimated blocks, comparing the global statistics of each domain and variable with the corresponding block estimates, comparing the composite and block grades in slices throughout the deposit, locally comparing drill holes and estimated blocks in cross-section and plan, and comparing the models to the previous estimate by area and level.

The Ridgeway resource classification was reviewed in relation to sample density, hole spacing, survey method, geological interpretation and confidence in the geological model (especially fault projection), and geologically through slope of regression. Indicated and Inferred Mineral Resources were classified.

The estimate was reported assuming an underground mass mining method, likely block/ panel caving. There was an assumption of a change in the mining method at 5040 mRL, from sub-level caving to block caving. The conceptual cave was constructed by assigning an NSR value to all blocks in the resource block model, determining a cave footprint string, and projecting directly to the top of the cave column. Mineral Resources were reported inclusive of internal zones of non-mineralised diluting material. These zones can include low-grade-barren monzonite zones and late stage pyroxene porphyry dykes. Mineral Resources were reported using an A\$18.00/t NSR cut-off, based on Cadia East as an analogue.

## Cadia Extended

Domains used in estimation included lithology, oxidation surfaces, and structures. Grade shells were established for gold, copper and molybdenum.

Gold, silver, copper, sulphur and molybdenum were estimated using 10 m composites. Grade caps were applied to gold, copper and molybdenum data. Bulk density was assigned by lithology. Estimation was undertaken using OK. Models were validated using a combination of visual inspection, NN block model and declustered mean analysis, swath plots, and discrete Gaussian change of support models.

Blocks that had copper estimates, within drill holes that were within a 60 m spacing, were classified as Indicated Mineral Resources. No Measured or Inferred Mineral Resources were classified.

The Mineral Resource estimate is constrained by an outline that approximates the degree of selectivity afforded by a block cave mining method. The NSR calculation reflects the generally low grades within the deposit, and cost assumptions benchmarked to Cadia East. Using the reported resource metal price assumptions and costs aligned with the current and future expected recoveries and charges, Mineral Resources are reported above an A\$18.71/t NSR, based on Cadia East as an analogue.

## Big Cadia

Domains used in estimation included lithology, oxidation surfaces, and structures.

Gold, silver, copper, sulphur and molybdenum were estimated using 4 m composites. Grade caps were applied to gold, silver, copper, sulphur and molybdenum data. Bulk density was assigned by lithology and oxidation state. Estimation was undertaken using OK. The block model and informing composites were validated using a combination of visual inspection, swath plots, and discrete Gaussian change of support models.

Due to data support issues with the inclusion of >50% legacy (non-Newcrest) data, all blocks were classified as Inferred Mineral Resources.

Mineral Resource estimation assumed open pit mining methods and the Mineral Resources are confined within a conceptual open pit shell. Depletion for historical mining activities was included.

#### **Stockpiles**

Stockpiles generated from the mining of the former Cadia Hill open pit are estimated as Measured Mineral Resources. The estimates use data from grade control protocols during operations with the cut-off based on revenue and costs at the time of production. No allowance for degradation in recoveries due to long-term stockpiling is included.

## Mineral Resource Estimate Tables by Deposit

Mineral Resource estimates are reported with an effective date of June 30, 2021 and are reported inclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Mineral Resources are provided by deposit in the following tables.

## Measured and Indicated Mineral Resource Statement, Cadia East

D	Т	Grade		Contained Metal					
Resource Classification	Tonnes Mt	Au g/t	Cu %	Ag g/t	Mo (ppm)	Au Moz	Cu Mt	Ag Moz	Mo Mt
Measured	_	_	_	_	_	_	_	_	_
Indicated	2,700	0.36	0.26	0.64	66	30	6.9	55	0.17
Total Measured and Indicated	2,700	0.36	0.26	0.64	66	30	6.9	55	0.17

#### Inferred Mineral Resource Statement, Cadia East

	Tonnes	Grade				Contained	Metal		
Resource Classification	Tonnes Mt	Au g/t	Cu %	Ag g/t	Mo (ppm)	Au Moz	Cu Mt	Ag Moz	Mo Mt
Inferred	500	0.24	0.17	0.47	25	3.8	0.86	7.5	.012

Notes to Accompany Cadia East Mineral Resource Table:

- Mineral Resources are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Luke Barbetti, MAIG, whose job title with Newcrest is Principal Integrated Planning and who is a Newcrest employee.
- 2. Mineral Resources are reported inclusive of those Mineral Resources that have been converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 3. Mineral Resources that are potentially amenable to underground mass mining methods are based on the following assumptions. conceptual panel cave outline; due to the non-selective nature of this mining method, the entire volume within the outline is reported including internal dilution; metallurgical recovery assumption of 81% gold recovery; 87% copper recovery; estimate reported within a NSR constraint of A\$18.00/t that was based on the December 2020 Mineral Reserve input cost assumptions: mine operating cost of A\$5.37/t, mineralisation treatment operating cost of A\$9.58/t, and general and administration ("G&A") cost of A\$3.06/t. Sustaining capital costs were not included. Commodity price assumptions are US\$1,400/oz gold, US\$3.40/lb copper, US\$21/oz silver and US\$10/lb molybdenum and exchange rate for metal price conversion of A\$:US\$ 1:0.75.
- 4. Tonnages are metric tonnes. Gold and silver ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper and molybdenum tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 5. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

## Measured and Indicated Mineral Resource Statement, Ridgeway

Розония	Tonnes	Grade		Contained Metal			
Resource Classification	Mt	Au g/t	Cu %	Ag g/t	Au Moz	Cu Mt	Ag Moz
Measured	_	_	_	_	_	_	_
Indicated	110	0.57	0.30	0.74	1.9	0.31	2.5
Total Measured and Indicated	110	0.57	0.30	0.74	1.9	0.31	2.5

#### Inferred Mineral Resource Statement, Ridgeway

	Tonnes	Grade			Contained Me	tal	
Resource Classification	Mt	Au g/t	Cu %	Ag g/t	Au Moz	Cu Mt	Ag Moz
Inferred	41	0.38	0.40	0.43	0.50	0.17	0.56

Notes to accompany Ridgeway Mineral Resource tables:

- Mineral Resources are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Luke Barbetti, MAIG, whose job title with Newcrest is Principal Integrated Planning, and who is a Newcrest employee.
- 2. Mineral Resources are reported inclusive of those Mineral Resources that have been converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 3. Mineral Resources that are potentially amenable to underground mass mining methods are reported using the following assumptions: an A\$18.71/t NSR cut-off; copper price of US\$3.40/lb, gold price of US\$1,400/oz, exchange rate for metal price conversion of A\$:US\$ 1:0.75; mine operating cost of A\$5.31/t; mine sustaining capital cost of A\$0.79/t; mineralisation treatment operating cost of A\$8.30/t; mineralisation treatment sustaining capital cost of A\$0.89/t; tailings dams sustaining capital cost of A\$0.75/t; and G&A cost of A\$2.67/t.
- 4. Tonnages are metric tonnes. Gold and silver ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 5. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

## Measured and Indicated Mineral Resource Statement, Cadia Extended

Resource	Tonnes	Grade		<b>Contained Metal</b>	
Classification	Mt	Au g/t	Cu %	Au Moz	Cu Mt
Measured	_	_	_	_	_
Indicated	80	0.35	0.19	0.89	0.15
Total Measured and Indicated	80	0.35	0.19	0.89	0.15

Notes to accompany Cadia Extended Mineral Resource table:

- 1. Mineral Resources are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Luke Barbetti, MAIG, whose job title with Newcrest is Principal Integrated Planning, and who is a Newcrest employee.
- 2. Mineral Resources that are potentially amenable to underground mass mining methods are reported using the following assumptions: an A\$18.71/t net smelter return (NSR) cut-off; copper price of US\$3.40/lb, gold price of US\$1,400/oz, exchange rate for metal price conversion of A\$:US\$ 1:0.75; mine operating cost of A\$5.31/t; mine sustaining capital cost of A\$0.79/t; mineralisation treatment operating cost of A\$8.30/t; mineralisation treatment sustaining capital cost of A\$0.89/t; tailings dams sustaining capital cost of A\$0.75/t; and G&A cost of A\$2.67/t.
- Tonnages are metric tonnes. Gold ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.

4. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

## Inferred Mineral Resource Statement, Big Cadia

	Т	Grade		<b>Contained Metal</b>	
Resource Classification	Tonnes Mt	Au g/t	Cu %	Au Moz	Cu Mt
Classification		g/t	70	IVIUZ	IVIL
Inferred	11	0.70	0.52	0.25	0.058

Notes to accompany Big Cadia Mineral Resource table:

- 1. Mineral Resources are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Luke Barbetti, MAIG, whose job title with Newcrest is Principal Integrated Planning, and who is a Newcrest employee.
- 2. Mineral Resources that are potentially amenable to open pit mining methods are reported using the following assumptions: gold price: US\$1,400/oz Au; copper price: US\$3.40/lb Cu; exchange rate for metal price conversion of A\$:US\$ 1:0.75; transport costs: US\$72.95/wmt (consists of two inputs, US\$35.70, and \$A43.82, converted to US\$); royalty: 4%; gold refining costs: A\$6.00/oz; copper refining cost: A\$0.09/lb; concentrate treatment cost: US\$90/dmt; processing cost: A\$8.30/t; G&A cost: A\$2.83/t; metallurgical recoveries that are based on metallurgical recovery algorithms.
- Tonnages are metric tonnes. Gold ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 4. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

## Measured and Indicated Mineral Resource Statement, Cadia Stockpiles

	Tannag	Grade		<b>Contained Metal</b>	
Resource Classification	Tonnes Mt	Au g/t	Cu %	Au Moz	Cu Mt
Measured	32	0.30	0.13	0.31	0.041
Indicated	_	_	_	_	_
Total Measured and Indicated	32	0.30	0.13	0.31	0.041

Notes to accompany Cadia Stockpiles Mineral Resource table:

- 1. Mineral Resources are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Luke Barbetti, MAIG, Principal Integrated Planning, a Newcrest employee.
- 2. Mineral Resources within stockpiles are reported using the following assumptions: copper price of A\$3.40/lb, gold price of US\$1,400/oz, exchange rate for metal price conversion of A\$1 = US\$0.75; transport costs of A\$109.64/wmt, concentrate treatment charge of A\$98.33/dmt, copper refining charge of A\$0.0932/lb, gold refining charge of A\$8.oz, payable gold of 98%, metallurgical recoveries of 81% for gold, and 87% for copper.
- Tonnages are metric tonnes. Gold ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 4. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

Areas of uncertainty that may materially impact the Mineral Resource estimates include: changes to long-term metal and exchange rate price assumptions; changes in local interpretations of mineralisation geometry, structures, and continuity of mineralised zones; changes to geological and grade shape and geological and grade continuity assumptions; changes to metallurgical recovery assumptions; changes to the input assumptions used to derive the conceptual underground mass mining methods used to constrain the estimates; changes to the input assumptions used in the constraining pit shell for those Mineral Resources amenable to open pit mining methods; changes to the NSR cut-offs applied to the estimates; variations in geotechnical (including seismicity), hydrogeological and mining assumptions; and changes to environmental, permitting and social license assumptions.

## **Mineral Reserves**

Measured and Indicated Mineral Resources were converted to Mineral Reserves at Cadia East and Ridgeway. The Cadia East mine is operating, and the Ridgeway mine is currently on care-and-maintenance. Mineral Reserves are estimated assuming bulk underground mining processes.

Cost estimates used in the preparation of the Mineral Reserves are based on the most recent studies approved by Newcrest relating to the exploitation of the two deposits. The Mineral Reserves include material when delivered to the mine portals that has a recovered value greater than the cost of all downstream processes, including fixed costs. Mine designs supporting the Mineral Reserves were based on the most recently approved pre-feasibility and feasibility studies, and the operating mine life-of-mine plans.

Mineral Reserves are reported with an effective date of June 30, 2020. The estimated Mineral Reserves are supported by a positive cash flow.

#### **Mineral Reserves Statement**

D., L. I.I.		Grade	Grade			Contained Metal		
Probable Mineral Reserve	Tonnage (Mt)	Gold (g/t Au)	Copper (% Cu)	Silver (g/t Ag)	Gold (Moz)	Copper (Mt)	Silver (Moz)	
Cadia East Underground	1,300	0.43	0.29	0.71	18	3.7	29	
Ridgeway Underground	80	0.54	0.28	0.66	1.4	0.23	1.7	
Total	1,400	0.43	0.29	0.70	19	3.9	31	

Probable Mineral Reserve	Tonnage (Mt)	Grade Molybdenum (ppm Mo)	Contained Metal Molybdenum (Mt)
Cadia East Underground	1,300	83	0.11
Total	1,300	83	0.11

Notes to Accompany Mineral Reserves Table:

- Mineral Reserves are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The
  Qualified Person responsible for the Cadia East Underground estimate is Mr Ian Austen, FAusIMM, whose job title at
  Newcrest is Mining Study Manager, and who is a Newcrest employee. The Qualified Person responsible for the Ridgeway
  Underground estimate is Mr Geoffrey Newcombe, FAusIMM, whose job title at Newcrest is Cadia Study Manager, and
  who is a Newcrest employee.
- 2. Mineral Reserves are reported on a 100% basis.
- 3. Mineral Reserves for Cadia East are reported using the following assumptions: panel cave mining method; gold price of US\$1,300/oz, copper price of US\$3.00/lb, silver price of US\$18/oz, molybdenum price of US\$8/lb; US\$A\$ exchange rate of 0.75; NSR cut-off of A\$19.80/t. The molybdenum tonnage estimate assumes that the molybdenum plant is operational during 2021.
- 4. Mineral Reserves for Ridgeway are using the following assumptions: block cave mining method; gold price of US\$1,200/oz, copper price of US\$3.00/lb, US\$A\$ exchange rate of 0.75; NSR cut-off of A\$20.35/t milled.
- 5. Tonnages are metric tonnes. Gold and silver ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper and molybdenum tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 6. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

Areas of uncertainty that may materially impact the Mineral Reserve estimates include: changes to long-term metal price and exchange rate assumptions; changes to metallurgical recovery assumptions; changes to the input assumptions used to derive the cave outlines and the mine plan that is based on those cave designs; changes to operating and capital cost assumptions used, including changes to input cost assumptions such as consumables, labour costs, royalty and taxation rates; variations in geotechnical, mining, dilution and processing recovery assumptions, including changes to designs as a result of changes to geotechnical, hydrogeological, and engineering data used; changes to the shut-off criteria used to constrain the estimates; ability to source power supplies if the assumption of system intact conditions cannot be met; ability to obtain sufficient water to meet operational needs; changes to the assumed permitting and regulatory environment under which the mine plan was developed; ability to permit additional TSF capacities or facilities; ability to maintain mining permits and/or surface rights; ability to obtain operations certificates in support of mine plans; ability to obtain and maintain social and environmental license to operate.

# Mining Operations

A 43 year operating life (2021–2064) supports the Mineral Reserves, which assumes Cadia East will be mined first, with Ridgeway mined at the end of the operating life.

The current Cadia East mine plan is at a minimum of pre-feasibility level of evaluation and outlines the execution of the life of mine plan over a series of three lifts (Lifts 1, 2, and 3). Lift 1 and Lift 2 have an existing panel cave and will, by the end of operations, have four extensions in total each with Lift 3 having one panel extension. The term "Cadia expansion project" refers to a study that was completed in relation to Cadia East to provide additional detail on some aspects of the LOM plan to a feasibility level of confidence. The study focused on debottlenecking activities for the processing facility that will modify the plant to better match the production levels from the caving operation, including provision to treat the lower-grade, copper—gold—molybdenum-bearing mineralisation that will be exploited over the remaining panel caves. It also brought the next extension of the Lift 2 cave, PC2–3, up to a feasibility level of confidence sufficient to gain approval to commence execution.

## Cadia East

The current operations are planned as a series of three lifts (Lifts 1, 2, and 3). The relative elevation of these lifts and all underground infrastructure is expressed in mine height datum which is 5,000 m above AHD (i.e. 5,900 mRL is equivalent to 900 m AHD). Lifts 1 and 2 are approximately 1,200–1,400 m high with their bases located at approximately 4650 mRL and 4450 mRL. Lift 3 sits below Lift 2 with a block height of 275 m and a base at the 4,175 mRL. Lift 1 refers to the following panel caves: PC1–1, PC1–2, PC1–3, PC1–4, PC5001. Lift 2 refers to the following panel caves: PC2, PC2–3, PC2–4 and PC2–5. Lift 3 refers to the following panel cave: PC 3–1.

Cadia East is accessed via two declines, the main access decline, and the conveyor decline.

The mining method involves inducing caving of the rock mass by undercutting a block of ore. Mining proceeds by progressively advancing an "undercut" level beneath the block of ore. Above the undercut level, the overlying host rocks are pre-conditioned using blasting and/or hydraulic fracturing, resulting in controlled fracturing of the ore block.

Following pre-conditioning of the overlying host rocks, broken ore is removed through an extraction level developed below the undercut level. The extraction level is connected to the undercut level by drawbells, through which the ore gravitates to drawpoints on the extraction level. The ore is removed by a load-haul-dump ("LHD") fleet to underground crushing stations.

The main trunk belt is used to transport ore to the surface at a rate of approximately 5,150 t/h. The incline conveyor commences at 4,400 mRL (i.e. the base of Lift 2), extends approximately 7,500 m to the surface and is deposited onto the concentrator coarse ore stockpile where it is gravity-fed into the ore processing system.

Waste rock is removed from the underground workings via the decline and is hauled to the South Waste Rock Facility.

Intact rock strength and competency generally increases with depth and to the east of the mine operations at Cadia East. An overall geotechnical block model was created for the Cadia East underground mining area, and divided into five areas. Modelling results suggested that some of the known faults could influence cave development, and that effective homogeneous preconditioning could increase the recovery of ore by having more material caved from the flanks, and prevent potential hangs-up in the areas that were not caved due to lower intensity hydraulic fracturing. Cave initiation will commence adjacent to existing caves for operations on the Lift 1 and Lift 2 levels. Cave 3 will be initiated under the existing Lift 2 caves. Hydraulic fracturing activities will be conducted in two main functional areas, the orebody and infrastructure areas.

Hydrogeological reviews indicated that estimated groundwater inflows to the Cadia East mine show a rising trend in the inflow over time from 0.3 ML/day to about 1.2 ML/day. Discharge of groundwater in the field will occur in two main areas, baseflow into creeks and into mining voids. The mine is currently pump dewatered. There is no discharge of mine dewatering to the environment, with water reused in processing facilities or recycled into the underground operations.

An El Teniente layout will be used for the extraction level. A number of undercutting processes are planned for Cadia East, including post undercut, and W-cut advanced undercut with apex drive. A monitoring and cave engineering horizon was designed for the 5050 mRL. Additional intake and exhaust ventilation requirements are incorporated in the mine design to accommodate an annual production rate of 35-36 Mt/a.

Infrastructure required to support each cave will include primary crushers, four-way tipple arrangements, run-of-mine ("ROM") and crushed ore bins, and conveyor systems. Equipment requirements include primary development, cave development, and production equipment. A secondary production fleet will support this equipment. These equipment types are conventional to panel cave mining operations. Maintenance workshop facilities, refuelling station, crib rooms, and offices will support the underground operations. The existing 33 kV and 11 kV electrical distribution systems will be extended to supply power to the operating caves.

## Ridgeway

The majority of the Mineral Reserves for Ridgeway are located in the Ridgeway Deeps Lift 2 block cave. This cave is similar in nature to the original Lift 1 cave with a similar downdip extension depth, similar layout and establishment method, and operational targets for 8 Mt/a. Ridgeway is accessed by two declines, the main access and conveyor declines. These would be extended to the Lift 2 workings.

The block cave extraction level for Lift 2 will be located approximately 290 m vertically below the existing Lift 1 extraction level (4500 mRL). There are several mine-scale structures that are likely to affect the geomechanical behaviour of caving, and have an impact on local stability in the undercut and extraction levels of the mine and cave propagation. The geotechnical block model indicates a range of rock mass conditions; generally, the northern region of the footprint is relatively more competent (poor to good quality rock mass), when compared to the southern region (very poor to poor rock mass). Based on previous experience in the Ridgeway Deeps Lift 1 block cave, a significant contrast in drawpoint fragmentation can be expected between the volcanic and sedimentary rocks, and monzonite. The use of post undercut and rock mass preconditioning in Ridgeway Deeps Lift 1 minimised this contrast in drawpoint fragmentation between lithologies.

The design criteria for the pumping system were assumed to be unchanged from Ridgeway Deeps Lift 1 block cave with expected normal flows of 10–30 L/s, and capable of handling emergency flows of 85 L/s. An extension of the existing Ridgeway Mine dewatering watering system is assumed, with the existing pumping infrastructure remaining in use.

The production rate for the block caving option is based on current expectations for the Ridgeway materials handling system and the relative similarity in footprint dimensions of the Ridgeway Deeps Lift 2 block cave to the Ridgeway Deeps Lift 1 block cave. The mine design for Lift 2 assumes an offset herringbone extraction pattern. A total of 248 draw points will be opened. Additional intake and exhaust ventilation requirements are incorporated in the mine design to accommodate a base annual production rate of 8 Mt/a.

It is assumed that the Ridgeway Deeps Lift 1 block cave design will be carried over to Lift 2, with modifications where appropriate. This is also the basis of the mine development plan, essentially replicating the existing ore handling system to accommodate the second block caving lift. Additional infrastructure required will include new crushing chambers and jaw crushers. Equipment requirements include primary development, cave development, and production equipment. A secondary production fleet will support this equipment. These equipment types are conventional to block cave mining operations. New workshop and ablutions facilities will be constructed. The existing Ridgeway Deeps Lift 1 high voltage ("HV") ring is an extension of the original ring and is close to capacity. A desktop demand study indicates an additional 4–5 megawatts ("MW") of electrical power will be required for Ridgeway Deeps Lift 2. The new HV ring through the Ridgeway Deeps Lift 2 developments will be of similar configuration to Ridgeway Deeps Lift 1 design, using similar substation layouts and equipment.

## **Processing and Recovery Operations**

There are two operational concentrators. Concentrator 1 was commissioned in 1998 utilising a conventional semi-autogenous grind ("SAG") mill, pebble crush and ball mill ("SABC") circuit, and had a design capacity of 17 Mt/a. This circuit was upgraded in 2012 for the processing of Cadia East ore with the addition of a high-pressure grinding rolls ("HPGR") circuit and third processing train to achieve a design capacity of 20 Mt/a. Concentrator 1 currently operates at a nominal rate of 25 Mt/a with the improved rate the result of several operational improvements.

Concentrator 2 was commissioned in 2002 using fully autogenous grinding ("AG") and had a target capacity of 4 Mt/a. This concentrator has undergone several upgrades since commissioning (including a conversion to SAG milling, the addition of a Vertimill in a tertiary milling duty, additional regrind capacity, the addition of secondary and tertiary crushing ahead of the SAG mill, and flotation circuit debottlenecking), and currently operates at a rate of 7 Mt/a.

Concentrator 1 consists of a gyratory crusher crushing excess ore stockpiled on the surface; a screening plant; two cone crushers for secondary crushing of screen oversize; a HPGR for further size reduction ahead of SAG milling; a single 20 MW SAG mill in open circuit configuration with oversize pebbles returning to the screening plant; three ball mills in closed circuit with hydrocyclones; flash flotation and gravity concentrator processing of hydrocyclone underflow, gravity concentrator processing of flash flotation concentrate; and rougher and scavenger flotation of the slurry from three ball mill circuits (i.e. flotation Trains 1, 2, and 3) with concentrate reporting to regrind mills; a HydroFloat installation on Train 3 rougher tailings; cleaner flotation circuits using both conventional and Jameson cell technology; and thickening of rougher tailings before pumping to the tailings storage facilities.

Concentrator 2 consists of an overland conveyor system transporting ore from the main coarse ore stockpile ("COS") to the processing plant; secondary and tertiary crushing using conventional cone crushers; a SAG mill in closed circuit with two pebble crushers; a ball mill and Vertimill (0.93 MW) in closed circuit with hydrocyclones for secondary grinding; another Vertimill (2.2 MW) for tertiary grinding; flash flotation and gravity concentrators processing hydrocylone underflow; additional gravity concentrator treating flash flotation concentrate; and rougher and scavenger flotation (conventional cells) processing grinding circuit product; regrind mill; cleaner flotation stages utilising both conventional and Jameson flotation cells; thickening of rougher tailings before pumping to tailings storage facility; and thickening of final gold/copper concentrate product.

The combined, thickened copper concentrate slurry, with a grade of 23–26% copper, is pumped to Blayney where it is filtered and railed to Port Kembla before export. Approximately 15% of the gold in feed ore is recovered from the gravity concentrator product via shaking tables and then smelted on site to produce gold doré for sale.

Recent studies envisage increasing total combined plant capacity from 30-32 Mt/a up to 35 Mt/a. Higher plant throughput will be achieved through debottlenecking projects such as the installation of a third secondary crusher and associated conveyor upgrades for Concentrator 1. In the case of Concentrator 2, debottlenecking is expected to include upgrades to the secondary and tertiary crushers and associated conveyors and upgrade to primary cyclone feed pumps and cyclones. Additional tertiary milling and rougher flotation capacity will assist in maintaining or improving overall plant recovery. Studies have commenced to investigate downstream flotation and dewatering requirements to handle the planned higher throughputs. The Concentrator 1 upgrade is likely to see the further use of HydroFloat technology treating combined Train 1 and 2 rougher tailings with the reground HydroFloat concentrate processed via existing or a new flotation cells.

Concentrator 1 uses approximately 60% of the site total power consumption, with Concentrator 2 using a further 15%. The processing plant uses a combination of on-site recycled water (e.g. thickener overflow and TSF return water) and make-up water sources have included Cadiangullong Dam, Rodds Creek Dam, Belubula River, Flyers Creek Weir, Cadia Creek Weir, Orange Sewage Treatment Plant treated effluent, on-site groundwater extraction bores, and site run-off.

Key processing reagents include collectors, frother, lime, and flocculant with other key materials being mill grinding media.

The copper concentrate currently produced from Cadia East is readily marketable and sold under contract to any of several smelters in Asia, primarily to Japanese and Korean facilities. The concentrate is a high-quality clean copper concentrate with typical copper grade, high gold grades, payable silver credits and relatively low levels of impurities. Any excess concentrate from long-term contract quantities can be sold into the trader/spot market. The Cadia Operation produces doré which is delivered to a gold refinery in Australia to produce refined gold and silver. Refined gold is sold on the open market. Refined silver is credited to the refiner to offset gold and silver refining cost or sold on the open market.

Contracts are in place to support copper concentrate sales and transport and gold refining. Other major contracts cover items such as electricity supply, bulk commodities, operational and technical services, mining and process equipment, earthworks projects, security, transportation and logistics, and administrative support services. Contracts required to support the future Cadia East and Ridgeway developments are expected to be in line with existing contract terms and norms.

## Infrastructure, Permitting, and Compliance Activities

#### Infrastructure

Existing infrastructure includes the following: operating panel cave mining operations at Cadia East; block cave operations at Ridgeway (currently on care and maintenance); Ridgeway and Cadia East decline and conveyor incline boxcuts and portals, hardstand areas, contractor area, mine workshops, general stores building, fuel storage facility, and administration and ablution facilities; underground crushing, handling and incline conveyor systems to transfer ore and waste rock mined from Cadia East and Ridgeway to the Cadia Operation processing facilities; ventilation shafts; Concentrator 1 and Concentrator 2, molybdenum plant (under commissioning); TSFs and associated tailings pipelines, pumps and tailings water return infrastructure; concentrate dewatering facilities; concentrate loading and handling facilities; water management structures; water pipelines and pumping stations; electrical substations and associated electrical infrastructure; support facilities such as truck and vehicle shops, warehouse, offices, clinic and emergency response facilities, and environmental monitoring facilities.

All required road accesses to support the LOM plan are in place. As the Cadia Operation is a drive-in drive-out site, there are no accommodation requirements.

Power is currently supplied by the state-owned electricity firm, Essential Energy, from Orange via a dual high voltage transmission line. The site power consumption is approximately 155 MW with 45 MW used for underground mining and 110 MW for the process plants. At completion of the Cadia expansion project, the electrical demand is expected to peak at around 194 MW. Under existing arrangements, the Cadia Operation receives supply at 132 kV from the TransGrid Orange North 132 kV switching station, through an Essential Energy dual-circuit 132 kV transmission line. The combined dual circuit has a technical rating limitation of approximately 284 MVA, and the connection agreement between Essential Energy and Newcrest has a contractual limit of 205 MVA.

TransGrid modelling of the mid-western NSW transmission system has identified supply restrictions under various contingent scenarios. Under system intact conditions, the regional transmission system has sufficient capacity to meet the increased power demands of the Cadia expansion project. Capital expenditure is required within the TransGrid transmission system to remove the network constraints under N-1 and N-2 reliability conditions. TransGrid have initiated a Regulatory Investment Test for Transmission ("RIT-T") to identify network or non network solutions to address the restrictions within the regional 132 kV supply to Bathurst, Orange and Parkes. The

RIT-T process takes approximately 2 years to complete prior to identifying the preferred solution which then leads into the project execution phase. The preliminary Project Specification Consultation Report (PSCR) was issued in March 2021 which identified an estimated completion date of 2025 for the network solution option. Cadia is continuing to support TransGrid through formal RIT-T submissions advocating for the network solution to reduce or eliminate the restrictions within the regional 132 kV transmission network.

# **Current Environmental, Permitting and Social Status**

Newcrest presently holds a Project Approval for the Cadia East Project (06\_0295) under the *Environmental Planning and Assessment Act 1979* (as modified) that provides for mining operations until June 30, 2031. Newcrest holds an approval under the *Environment Protection and Biodiversity Conservation Act 1999* ("**EPBC Act**") that is current until June 30, 2031.

Detailed baseline studies were completed at each major development stage of the Cadia Operation. It is expected that a number of social, cultural heritage and environmental baseline studies will require updating to support mine life beyond June 30, 2031. Due to the assumed project start date at the end of the Cadia expansion mine life, no environmental impact assessment or approvals have yet been completed specifically for Ridgeway Deeps Lift 2.

#### **Environmental Considerations**

Monitoring is undertaken across the Cadia Operation and includes the following key areas: noise monitoring; air quality monitoring; blast and vibration monitoring; groundwater level and quality monitoring; spring monitoring; surface water flows and quality; aquatic ecosystem monitoring; rehabilitation monitoring; and pollution discharge monitoring. The mining leases further require a Mining Operations Plan to be prepared that outlines significant disturbance, rehabilitation plans and mine closure strategies. Development not otherwise covered by existing approvals and Mining Operation Plans will require new authorisations.

#### Stockpiles, Waste Rock Storage Facilities, and Tailings Storage Facilities

The majority of the surface stockpiles generated from the mining of Cadia Hill and Ridgeway were processed through the concentrator facilities. There are still some stockpiles classified as Mineral Resources relating to Cadia Hill.

The current waste rock materials and low-grade ore categories are classified using colour nomenclature that reflects the management approach to that material (yellow, green, blue and pink). Low-grade ore and mineralised waste (yellow and green materials) are placed in accessible parts of the South Waste Rock Facility for reclamation. Blue waste rock can be used as construction material (e.g. for raising of the TSFs). Pink waste material is encapsulated with a combination of a low permeability layer and a cover of blue waste rock over each layer of pink waste material. The cover system is designed to reduce oxygenation and infiltration rates.

There are three tailings storage facilities: the NTSF, the STSF, and the mined-out Cadia Hill open pit ("Cadia Pit TSF"), each of which are located within the area held under Mining Leases. Tailings were shown to be non-acid-forming ("NAF").

The NTSF design consists of an earth and rock-fill dam, with 10 embankment raises undertaken. All raises since 2005 have involved upstream construction. The STSF is also an earth and rock-fill dam, with, to date, six embankment raises undertaken, also generally using the upstream method.

On March 9, 2018, a mobile slump (the "Event") occurred in the southern wall of the NTSF, causing it to lose containment of tailings. The tailings were captured within the basin of the STSF. An ITRB investigation of the Event was completed in April 2019 and has been publicly released. The ITRB findings were that the dominant factor controlling the location of the Event was the presence of a previously-unidentified lithological unit, the Forest Reef Volcanics Unit A, which forms a low-density foundation layer within a variably weathered volcaniclastic succession that has a complex geological history. This material, noted the ITRB, has only been found near the failure zone. The key ITRB recommendations were that Newcrest:

- continue to work on ensuring that the design and maintenance of the foundations take into account any
  weak material comparable to that in the area of the NTSF slump, as well as the limited drainage within the
  body of both the NTSF and STSF and the potential for liquefaction of the tailings;
- enhance the level and type of monitoring equipment, including monitoring within the foundations of the TSFs, to ensure that the foundation is behaving as intended; and
- approach the design, construction and operation of upstream tailings dams using a more precautionary view.

There has been no other abnormal movement in the NTSF wall, or release of material from the NTSF. Use of the NTSF is subject to a prohibition notice issued by the NSW Resources Regulator which prevents use of that facility for deposition of tailings pending completion of repair works.

Newcrest engaged expert engineering firms to confirm that the STSF remained safe to operate. Consistent with recommendations from these experts, in 2018 Newcrest commenced construction of buttresses in two areas of the STSF, which have been completed. In designing this buttressing, Newcrest and its external engineers assumed the potential presence of weak material analogous to that in the area of the NTSF slump, and adopted conservative strength parameters.

Newcrest was granted approval on April 20, 2018 to use the former Cadia Hill open pit as a TSF. The operations are currently permitted to deposit tailings to 713 mAHD. The elevation raise provides an additional 177 Mt of storage capacity, equivalent to approximately seven years of additional deposition into the TSF.

The detailed findings of the ITRB were factored into studies for the repair of the NTSF. In July 2021, the Newcrest Board approved gating of the NTSF embankment remediation to a feasibility study. Detailed design work on a single design option is currently in progress with execution expected to cost below A\$100 million.

A new TSF facility will be required to support the LOM plan plant production after 2037 when existing capacity will be filled. The capital and operating cost estimates include provision for the new TSF.

## Water Supply and Water Management

Water supply is characterised by variable supply sources. Water requirements are proportional to the amount of mineral processing and significant water storage is required to provide consistent supply. The amount of water taken from each source is dependent on the conditions set through agreement or licensing and the physical amount available.

The water supply scheme comprises recycling of water used on-site and make-up water required to compensate for losses in the system. Mine water and excess water in the TSFs is recycled. Make-up water sources comprise extraction from the Belubula River, Cadiangullong Dam, Flyers Creek Weir, Cadia Creek Weir, Orange Sewage Treatment Plant treated effluent, on-site groundwater extraction bores, and site run-off. Harvesting of water on-site is licensed at 4,200 ML/a. Newcrest has an annualised 7,205 million litres of licensed entitlements on the Belubula River. The City of Orange has commissioned, but not yet finalised, a feasibility study on options for reuse of effluent from the Orange Sewage Treatment Plant for municipal purposes. This may result, in the next 5–10 years, in this water source no longer being available for Cadia Operation purposes. Newcrest also manages water that accumulates in the Cadia Pit TSF (from tailings supernatant water and rainfall runoff) by recovering (pumping) this water to the water management system for re-use in processing.

Droughts have, in the past, resulted in a prolonged period of very low water supply. Drought conditions are a risk to future operations if unduly prolonged. Newcrest had noted that if rainfall remained at historic lows (with 2018 and 2019 being at the level of 1-in-100 year lows) then there was potential that production may be impacted by the end of calendar year 2020, although ultimately this risk did not materialize. Newcrest's latest internal modelling indicates that even under a return-to-drought scenario, Cadia has enough water to sustain at least five years uninterrupted operations. However, beyond that period, if the drought returned, production at Cadia may be impacted. The LOM plan assumes that the majority of water will be recycled. Newcrest continues to pursue further water saving initiatives, both in the plant and by way of optimisation of onsite bores.

Water management structures and facilities include: tailings storage facilities return water system including the Central Pumping Station; process water pond; Cadia Pit TSF, NTSF, and STSF; sediment dams and ponds containing site runoff; waste rock storage facility leachate ponds; Cadiangullong Dam; Cadia Creek Weir; Belubula River pumping system; and the Upper Rodds Creek Dam.

#### **Closure and Reclamation Planning**

The Cadia Mine Closure Plan includes a detailed cost estimate, which is used in determining the closure liability. Additionally, the Mining Operations Plan is a requirement of the mining leases and contains Newcrest's rehabilitation commitments for the period of the plan (usually three years). Existing rehabilitation areas are regularly monitored, and provide evidence that the vegetation is supporting a stable surface.

The closure provision in the financial analysis supporting the Mineral Reserves, which includes the Cadia expansion project, is estimated at A\$124 million.

## **Permitting Considerations**

Newcrest holds all key permits that are required in support of current operations. The Cadia expansion project will trigger a need to evaluate the proposal under various NSW Government environment and mining legislation and key Commonwealth legislation. Changes to the project will require a new application and reviews conducted under a number of these legislative acts.

Due to the long-dated project start date, no permitting assessments have been completed specifically for Ridgeway Lift 2. Similar permit processes to those envisaged for the Cadia expansion project are likely to be required.

## **Social Considerations**

Community Relations are managed in accordance with the Newcrest Communities Policy and Social Performance Standard. Community relations are undertaken by the Health, Safety, Environment and Social Responsibility Department in line with the Cadia Community Relations Strategy. The objective of the Cadia Community Relations Strategy is to provide a strategic and systematic organisational approach to interactions with local communities and stakeholders which facilitate the open exchange of information so that Newcrest can respond to emerging needs at any point of its operations in the Cadia valley area.

Newcrest holds regular forums with local government authorities and residents and contributes to a Community Partnerships Program in which employee volunteers are involved in assessing applications for funding of community projects based on established criteria. In accordance with the requirements of the site's Project Approval, the Cadia Operation has a Community Consultative Committee, which provides a regular forum for discussion of community issues related to Cadia Operation's activities, and for accurate dissemination of material about those activities.

A number of landowners residing in the area south of Cadia's southern boundary have recently established the Cadia District Protection Group (CDPG), an association formed to draw attention and seek action with respect to various complaints and matters relating to Cadia's existing operations and proposed expansion plans, predominantly in relation to environmental matters and Newcrest's application to DPIE for the approval of a modification to increase the permitted processing capacity of the Cadia Operation from 32 Mt/a to 35 Mt/a. Newcrest representatives continue to engage with the CDPG to seek to resolve their concerns. On 2 December 2021, Newcrest received notice from DPIE that it had recommended that the modification application be approved subject to conditions including Newcrest commissioning an independent audit report to the satisfaction of the DPIE Secretary in relation to Newcrest's approach to managing and minimising the off-site air quality impacts of the project including NTSF repair construction activities. As at the date of this AIF, Newcrest is awaiting final approval of the modification application by the Executive Director - Resource Assessments, as delegate of the Minister for Planning and Public Spaces.

## Capital and Operating Costs

Capital and operating cost estimates are presented at an overall pre-feasibility level of study, which is based on completed feasibility and pre-feasibility studies for the Cadia East LOM plan, pre-feasibility-level determinations for the Ridgeway deposit, and LOM plan determinations for the active Cadia East mining operation.

# **Capital Costs**

Capital cost estimates include consideration of contingency, labour assumptions, mining, process, G&A, Owner, and sustaining capital costs. The overall capital cost estimate is provided in the table below.

## **Capital Cost Estimate Summary (LOM)**

Description	A\$ M
Growth capital costs	
Cadia East mine	5,289
Ridgeway mine	805
Processing	419
Infrastructure	1,086
Sub-total growth	7,599
Sustaining capital	
Site	4,145
Sub-total sustaining	4,145
Total Capital	11,744

## **Operating Costs**

The operating cost estimates used in the financial model were developed from a variety of sources. The mining costs were derived from a purpose-built, activity-based cost model, while treatment and G&A costs were based on budgeted numbers. For mining and milling rates greater than the current throughput rate, costs were factored according to estimated fixed/variable components for existing assets and a bottom-up build for new infrastructure. All operating costs are presented in Australian dollars and reflect 2021 market terms. Inputs in currencies other than Australian dollars were converted at exchange rates as per the Newcrest economic parameters. Operating costs include consideration of labour, mine, process, power, maintenance and G&A costs. The overall operating cost estimate is presented below.

## **Operating Cost Estimate Summary (LOM average)**

Cost Area	Units	Value
Mining	A\$/t	5.58
Processing	A\$/t	8.90
G&A	A\$/t	2.76
Total Operating Costs	A\$/t	17.24

## Exploration, Development and Production

In FY22, Newcrest plans to continue exploration activities undertaking target generation and target testing work over the priority exploration targets.

On October 15, 2019, Newcrest announced that its Board of Directors had approved to execution phase the first of two stages in the Cadia expansion project and on October 9, 2020, Newcrest announced that its Board of Directors had approved to execution phase the second stage. The first stage commenced construction during FY21 and comprises commencement of the next cave development (PC2–3), and an increase in the nameplate capacity of the

process plant to 33 Mt/a. The second stage is focused on a further increase in processing capacity to 35 Mt/a and recovery rate improvement projects. In August 2021, Newcrest announced that its Board of Directors had approved the PC1-2 Pre-Feasibility Study. The Pre-Feasibility Study updates and defines a significant portion of Cadia's future mine plan, with the development of PC1-2 accounting for ~20% of Cadia's current Ore Reserves. The approved commencement of the Early Works Program will allow critical infrastructure to be established in parallel with the Feasibility Study before the commencement of the Main Works program in the second half of fiscal 2022.

In FY22, the Cadia Operation is expected to produce between 540 and 610 kozs of gold at an AISC of between negative US\$100 million and US\$30 million <sup>10</sup>.

## **Lihir Operation**

Certain portions of the following information are derived from and based on the assumptions, qualifications and procedures set out in the Lihir Report. For a more detailed overview of the Lihir Operation, please refer to the Lihir Report noted above and the Market Release dated October 12, 2021 announcing the Lihir Phase 14A Pre-Feasibility Study, which are available under Newcrest's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a> and on Newcrest's website.

## **Project Description and Location**

The Lihir Operation is on Aniolam Island, which is part of the Lihir Group in the Province of New Ireland. The island is located approximately 900 km north–northeast of the national capital of PNG, Port Moresby.

The Lihir Operation is 100% owned by Newcrest's wholly-owned subsidiary, LGL. The Lihir Operation consists of a granted SML (SML6, expiry date 16 March 2035), two granted Mining Leases (ML125, expiry date 20/07/2025; ML126, expiry date 20/07/2025), one granted Exploration Licence (EL485, expiry date 31/03/2020 (renewal pending)), five granted Leases for Mining Purposes (LMP34, expiry date 16/03/2035; LMP35, expiry date 16/03/2035; LMP38, expiry date 16/03/2035; LMP39, expiry date 16/03/2035; LMP40, expiry date 16/03/2035), and three Mining Easements (ME71, expiry date 16/03/2035; ME72, expiry date 16/03/2035; ME73, expiry date 16/03/2035) held in the name of LGL. The total area under licence is approximately 257 km².

The Lihir Operation area is situated on land held variously under customary, State of PNG (the "State") and private ownership, including under State lease. The bulk of the land that is or will be affected by development, operations and closure of the Lihir Operation is customary owned. Newcrest has been granted rights to undertake mining and processing of gold and related activities, through negotiations with the State and local governments, and landowners in the area.

Environment Permits for water extraction and waste disposal are in place to support mining operations.

A 2% royalty is payable to the State on the realised prices of all gold and silver doré produced. A production levy of 0.5% is also payable on the gross value of production (i.e., excluding the offsets of treatment and refining charges, payable terms and freight) to the Mineral Resource Authority ("MRA").

PNG is a highly-regulated environment and there are a significant number of permits required. These permits are issued for varying periods and need to be regularly renewed. Although Newcrest has a dedicated permitting team that constantly monitors progress, we are also reliant on the various regulatory bodies issuing the required permits.

Environmental liabilities for the operations are typical of those that would be expected to be associated with an active mining operation in an active geothermal setting in a high rainfall tropical area, and include mining, earthworks, ore pads and waste dumps, roads, settling ponds, camps and associated support infrastructure.

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<sup>&</sup>lt;sup>10</sup> Newcrest's guidance is subject to market and operating conditions together with the increased risk to the general operating environment presented by the COVID-19 pandemic.

# Accessibility, Climate, Local Resources, Infrastructure and Physiography

Most travel to and from the island is via aircraft. Access to Aniolam Island is through the Kunaye airport located about 7 km north of the mine and approximately 3 km north of the Londolovit town site. Newcrest employees are predominantly PNG nationals who are FIFO from a number of different PNG communities or residents of Aniolam Island. The majority of senior management roles are residential, based on Aniolam Island. Expatriate employees typically are FIFO out of Cairns, Australia. Daily travel to the Lihir Operation from the Londolovit residential town site is by road.

Aniolam Island is located at latitude 3° south and does not experience distinct wet or dry seasons. Rainfall is high year-round. Temperatures at the mine site range from 21–34° Celsius. Wind speeds at the mine site are generally light and variable. Mining activities are conducted year-round. Exploration activities may be curtailed by heavy rainfall. The general mine area ranges in elevation from 0–200 masl. Mining is being carried out at elevations below sea level. Natural vegetation on the island is predominantly tropical rain forest.

PNG extends across several major tectonic plate boundaries and is one of the most seismically active regions in the world. Aniolam Island is located in the West Melanesian Arc seismic source zone where earthquakes of up to magnitude eight have been recorded. Most earthquakes in the region result from strike-slip movement but some occur along steeply-dipping reverse faults resulting in a strong vertical motion component and have potential to generate local tsunamis. Both tsunami and earthquake risks were assessed and incorporated into design criteria.

Volcanic activity on Aniolam Island is limited to remnant hydrothermal venting in the Luise Caldera in the form of hot springs and fumaroles. Isolated geothermal activity in the form of hot springs is evident elsewhere on the island.

## History

Prior to Newcrest's interest, exploration and mining activity was conducted by PNG Bureau of Mineral Resources and the Geological Survey of PNG, Kennecott Explorations Australia ("Kennecott"), Niugini Mining Limited ("Niugini"), Rio Tinto Zinc Corporation ("Rio Tinto"), and LGL.

Work conducted included semi-detailed mapping, stream sediment and soil samples, rock chips, hand augers, hand-cut trenches and benches, airborne and ground geophysical surveys, core drilling. The Lihir deposit was discovered in 1982. A feasibility study was conducted in 1988 and updated in 1992. The mine was constructed following grant of the SML in 1995, and the first gold pour occurred in 1997. A geothermal power plant was built in 2007 and a flotation circuit was installed the same year.

Newcrest obtained ownership of LGL in 2010.

From mine start-up in 1997 to June 30, 2021, approximately 16.9 Moz of gold has been produced from the Lihir deposit.

## Geological Setting, Mineralisation and Deposit Types

The Lihir deposit is considered to be an example of an epithermal gold deposit.

Aniolam Island is part of a 250-km long, northwest-trending, alkalic volcanic island chain that sits within an area where several micro-plates (Solomon Sea Plate, South Bismarck Plate and North Bismarck Plate) developed between the converging Australian and South Pacific plates.

Aniolam Island comprises five volcanic blocks: two Plio-Pleistocene volcanic blocks, Londolovit Block and Wurtol Wedge and three Pleistocene volcanic edifices, Huniho, Kinami, and Luise. Areas of hydrothermal alteration occur in each of the volcanic centres.

A 10–100 m thick limestone unit overlies and onlaps volcanic units and dips shallowly to the south.

The Luise volcano consists of a 4 by 3.5 km wide amphitheatre, elongated and breached to the northeast. This is inferred to be a remnant of the original approximately 1.1 km high volcanic cone that underwent sector collapse(s). The Lihir deposit is located in the footwall of the sector collapse detachment surface. Post sector collapse volcanism has also occurred during the modern geothermal-stage, with the emplacement of several diatreme breccia bodies.

The Lihir deposit has dimensions of about 1,500 x 3,000 m and has about 500 m in depth extent. The deposit remains open at depth, along strike, and to the east, where it is currently limited by the Pacific Ocean. Gold is the only metal of economic significance present within the Luise Caldera. Gold mineralisation is a complex and refractory assemblage associated mainly with pyrite and marcasite veinlets, disseminations, replacements, and breccia fillings. The sector collapse event(s) superimposed late-stage, gold-rich, alkalic low-sulphidation epithermal mineralisation upon early-stage, porphyry-style alteration. Gold occurs as solid solution gold in the crystal structure of pyrite grains. It locally occurs as electrum, as gold tellurides, and as native gold associated with quartz, calcite and bladed anhydrite. Newcrest has constructed a detailed alteration model for process planning purposes.

## **Exploration**

Exploration activities in FY21 included geological mapping, soil and rock chip sampling and ground geophysical surveys. Newcrest remains actively focused on exploration within the Niolam Island area. Newcrest's current and planned exploration activities are discussed under the heading "Lihir Operation - Exploration, Development and Production".

## Drilling

Drilling has been completed in support of exploration evaluations, Mineral Resource and Mineral Reserve estimates, mine planning, geothermal, geotechnical and hydrogeological evaluations, grade control, and infrastructure site sterilisation.

Drilling completed to June 30, 2021 comprises core drilling. Drilling has been completed for exploration, resource delineation, geotechnical, pit cooling, and geothermal purposes, and totals 3,766 holes (730,009 m). This includes 58 geotechnical holes for 8109m and five core holes for 795m drilled recently for Phase 14A that will be analysed and considered for the next resource model update. A total of 2,295 drill holes (449,287.23 m) is used in estimation. Core sizes include PQ, HQ and NQ. Triple tube methods are routinely used for geotechnical drilling. RC drilling is conducted ahead of reclaim on some of the low-grade stockpiles. Sonic drill campaigns were completed for metallurgical and geotechnical purposes, but do not support Mineral Resource estimates.

Logging and data collection include collar, lithology, discontinuities, point load tests, bulk density and magnetic susceptibility. Lithology is logged based on the geological unit, with subdivisions created based on alteration and mineralisation. Core recovery is generally excellent with core recoveries around 99%. Historical comparison of core data with blasthole data suggests no appreciable bias related to core recovery.

Drill collars were picked up using either theodolite or DGPS instruments. A variety of methods were used to measure down-hole deviation (dip and azimuth), including Eastman and electronic single shot instrument; the majority of readings were performed using the Eastman camera. Gyroscopic survey methods are typically used for geotechnical drill holes. Depending on the drill hole purpose, not all drill holes may be down-hole surveyed.

Drill spacing is variable, as there are limited drill platform sites available due to the rugged topography. Drilling can vary from 40–100 m spacing, depending on the available drill platform locations. Drilling is typically near-vertical. This drill orientation is acceptable for the majority of the mineralisation orientation, and results in drilled widths that approximate true widths.

Drilling is ongoing in support of operations; current drilling is primarily for geotechnical, pit cooling, and geothermal purposes.

## Sampling, Analysis, and Data Verification

Core sampling intervals have varied over time, with most programs sampling on nominal 2 m intervals. Following splitting with a core saw, core samples are organised into shipments and the primary laboratory takes possession of the samples at site and transports them to the laboratory location. The on-site laboratory was constructed in 1997, and has been the primary preparation and analytical laboratory since that date. The on-site laboratory is not independent and holds no accreditations. After commissioning, the on-site laboratory was operated by LGL until 2010. The on-site laboratory has been operated by Newcrest since 2010. Check samples could be sent to SGS Lae, SGS Townsville, ALS Chemex Brisbane, or NSLO. ALS Chemex Brisbane and the NSLO hold ISO17025 accreditations.

Samples are dried, crushed to 2 mm, and pulverised to 95% passing  $106 \mu m$ . Samples are routinely analysed at the on-site laboratory for gold, copper and sulphide sulphur. The on-site laboratory uses a 25 g aliquot that is fire assayed with an AAS finish for gold. Sulphur is assayed via a LECO instrument, using a proprietary LMC technique. The NSLO uses a 30 g aliquot that is fire assayed with an AAS finish for gold. The major NSLO analytical focus for Lihir Operation purposes is multi-element analysis.

Density determinations are performed by site personnel on whole core samples, using the water displacement method. There is a total of 11,535 determinations available for resource estimation. Density values range from 6.75 t/m<sup>3</sup> in fresh rock to 1.01 t/m<sup>3</sup> in altered and oxidised material.

QA/QC measures include regular insertion of SRMs, field duplicate and blank sample materials prior to submission of samples to the laboratory to monitor laboratory accuracy and precision and sampling sequencing and precision. Data imported into the database are subject to validation, which includes checks on surveys, collar co-ordinates, lithology data, and assay data. The checks are consistent with industry norms.

Sample security at the Lihir Operation has not historically been monitored. Sample collection from drill point to laboratory relies upon the fact that samples are either always attended to, or stored in the locked on-site preparation facility, or stored in a secure area prior to laboratory shipment. Chain-of-custody procedures consist of sample submittal forms to be sent to the laboratory with sample shipments to ensure that all samples are received by the laboratory.

Newcrest includes both internal verification processes and independent third-parties in the data verification steps:

- internal verification: laboratory inspections; review of geological procedures, resource models and drill plans; sampling protocols, flow sheets and data storage; specific gravity data; logging consistency, down hole survey, collar coordinate and assay QA/QC data; geology and mineralisation interpretation; and
- external verification: review of the 2016 Resource Model by Derisk Geomining Consultants in March 2021 and the 2021 Reserve Model by Golder Associates in March 2021.

The Mineral Resource and Mineral Reserve estimates are subject to regular RRSC review meetings, internal competent person reviews, and independent external competent person reviews.

No material issues with the database, including sampling protocols, flowsheets, check analysis program or data storage, have been identified to date from the checks performed. The database is acceptable for use in Mineral Resource and Mineral Reserve estimation, and can be used to support mine planning.

#### Mineral Processing and Metallurgical Testing

Laboratories and testwork facilities used during metallurgical evaluation include: Sherritt International Corporation, Metso, Hazen Research Inc., Pocock Industrial, IPRC, Lakefield, E.L. Bateman, Eimco, RESCAN, Alberta Research Council, Dorr-Oliver, Lurgi, Davy McKee, and NSR Environmental. These facilities are independent of Newcrest. Metallurgical testwork facilities are typically not accredited for metallurgical testwork techniques.

Metallurgical testwork supporting the original process design included comminution (crushing (impact), rod mill, ball mill, abrasion, MacPherson's SAG indices), flotation, pressure oxidation ("POX"), and mineralogy. The plant commenced operations in 1997 at a nominal 2.8 Mt/a. Alterations to the plant have included: installation of heat exchangers, pebble crushing circuit and expansion to a nominal 4.6 Mt/a (2003); an additional grinding and flotation plant upgrade to 6 Mt/a (2007); plant upgrade consisting of primary jaw crushers, grinding circuit ("HGO2"), additional flotation capacity, additional autoclave ("AC4") and oxygen plant, second carbon-in-leach ("CIL") circuit, and theoretical capacity increase to 11–12 Mt/a (2013; however, throughput typically was 9–10 Mt/a); and a change to partial POX in 2014 has seen throughputs achieve 14–15 Mt/a rate.

The average metallurgical recovery for gold over the LOM plan is predicted to be 80.7%. The period where open pit and stockpile material is treated is projected to be about 80.9%. The period at when stockpile material only will be treated is anticipated to have a recovery of approximately 78.0%. Daily and monthly recovery varies, based on ore grade, the fraction of milled ore sent to flotation, and the amount of stockpiled ore being treated. These values include recovery uplift from projects of 1.2% from the current base.

Naturally fine-grained ores (mostly argillic materials) and clays (from fresh or stockpile ore) can impact on both plant throughput and recovery. For the crushing and materials handling areas, wet and sticky ores are managed through blending and on-going mechanical modifications to conveyors and chutes etc. Once in slurry form, these ores can display high and variable non-Newtonian shear-thinning behaviour, which can impact the milling, flotation, POX and CIL circuits. However, dilution with fresh or sea water has been found to be effective in controlling slurry rheology to date.

The maximum proportion of fines and clays (mainly from argillic ores) that can be treated within the plant is not known with certainty. There is some risk that high proportions of such ore types in plant feed may lead to both lower recovery and throughput, until an adjustment to the mine plan and/or additional plant modifications can be implemented.

There are no penalty elements that are expected to affect doré sales. Deleterious components in the ore such as clays, chloride, copper and carbonate content can affect various aspects of plant operation, but are typically localised and to date, have had short-term effects.

## Mineral Resource and Mineral Reserve Estimates

## **Mineral Resources**

The database close-out date for the Mineral Resource estimate is November 25, 2016. Geological interpretation is supported by core, rotary drilling, in-pit mapping, and grade control sampling data. Only core drill holes are used to support estimation.

Five structural domains and three alteration domains were used in estimation. Domain boundary contacts were defined as either soft, firm, or hard. All core data are composited 12 m downhole; this composite length corresponds to the mining bench height. Outliers are capped such that the tail of the distribution is reasonably contiguous. Domain cap limits vary by domain and range from 5–30 g/t Au. No capping was applied to sulphide sulphur composites. Block density data were estimated via OK, based on alteration domains. Variograms were calculated for gold, sulphide sulphur, arsenic, silver, calcium, carbonate, copper, and molybdenum.

Gold and sulphide sulphur were estimated with the non-linear uniform conditioning ("UC") method into large 100 x 100 x 12 m panels in their respective domains. The panel UC grade–tonnage curve was subdivided into 20 x 20 x 12 m selective mining unit blocks for the final output model. Local uniform conditioning ("LUC") post-processing from the UC panels was performed. Minor elements (silver, copper, arsenic, carbonate, calcium, and molybdenum) were estimated directly into the selective mining unit blocks using OK.

The block model and informing composites were validated using a combination of visual inspection in plan and section, NN model comparison, swath plots, grade–tonnage curves, and direct block simulation.

Reconciliation based on blasthole sampling is considered to be acceptable, and the results are adequate to provide validation support for the Mineral Resource estimate.

Mineral Resources were classified as either Indicated or Inferred Mineral Resources, based on a combination of the estimation slope of regression and the variogram-weighted distance. Mineral Resources are reported within a conceptual open pit shell and a marginal cut-off grade of 1 g/t Au. A conceptual deep water coffer dam alignment east of the original shoreline constrains the maximum seaward extent of reasonable mining scenarios for open pit mining. Mineral Resources contained within stockpiles are classified as Measured as they are derived from grade control models.

Mineral Resources are reported with an effective date of June 30, 2021 and are reported inclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

#### Measured and Indicated Mineral Resource Statement

Confidence Category	Tonnage (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)
Measured	63	2.0	4.0
Indicated	530	2.3	39
Total Measured and Indicated	590	2.2	43

#### **Inferred Mineral Resource Statement**

Confidence Category	Tonnage (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)
Inferred	67	2.3	4.9

Notes to accompany Mineral Resource tables:

- 1. Mineral Resources are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Ms Lauren Elliott, MAIG, whose job title at Newcrest is Principal Ore Deposit Knowledge, and who is a Newcrest employee.
- 2. Mineral Resources are reported inclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 3. The Mineral Resource estimate is reported within a conceptual open pit shell that is based on the following assumptions: gold price of US\$1,400/oz, variable pit slope angles that range from 10–55°; metallurgical recovery from Whittle optimisation of 79.7%; mining costs of US\$4.20/t, and processing and G&A costs of \$37.30/t.
- 4. Tonnages are metric tonnes. Gold ounces are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 5. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

Areas of uncertainty that may materially impact the Mineral Resource estimates include: the lack of stationarity in gold domains; changes to long-term gold price assumptions; changes in local interpretations of mineralisation geometry and continuity of mineralised zones; changes to geological shape and continuity assumptions; changes to metallurgical recovery assumptions; changes to the operating cut-off assumptions for open pit mining methods; changes to the input assumptions used to derive the pit shell used to constrain the estimate; changes to the marginal cut-off grade assumptions used to constrain the estimate; variations in geotechnical, geothermal, hydrogeological and mining assumptions; and changes to environmental, permitting and social license assumptions.

#### **Mineral Reserves**

Indicated Mineral Resources were converted to Probable Mineral Reserves. Inferred Mineral Resources within the mine plan are reported as waste. The Mineral Reserve estimation assumes 100% mining recovery with no dilution or ore loss.

Mineral Reserves are confined within an optimised open pit shell that assumes the following: a marginal cut-off grade of 1.0 g/t Au; gold price of US\$1,300/oz Au; treatment charges/refining charges of US\$2.24/oz; 2% royalty and Production Levy of 0.5%; mining costs of US\$5.11/t mined ex-pit; processing costs of US\$23.26/t milled; sustaining capital costs of US\$4.35/t milled; G&A costs of US\$7.96/t milled, an average metallurgical recovery of 81.5%, and pit slope angles that range from approximately 10–55°. The estimate assumes that cold water injection will sufficiently cool rock temperatures to allow for mining to progress. This assumption is supported by an internal pre-feasibility-level study and associated trial work.

The final reserves design was based on the revenue factor = 1 optimum shell. A sequence of eight cutbacks including Phase 14A have been used to develop the remainder of the reserves ultimate pit. Cutbacks to develop the Kapit area were created in a lateral sequence from south to north to facilitate pit cooling and drainage, to allow time for overlying stockpile reclaim and processing, and for completion of the Kapit seepage barrier to be constructed between Luise Harbour and the pit crest. Cutback shells were chosen with a sufficient size to allow practical mining and ramp access. Cutback designs conform to the open pit design procedures, which include use of approved slope parameters, 28 m wide ramps at 10% gradient, and a minimum mining width of 40 m. The planned final dimensions of the pit are approximately 2,000 x 1,400 m, with a final depth of approximately 300 m below sea level.

As the Lihir Operation is constrained by the ore tonnes that can be processed by the mill, only the higher-grade fraction of ore is processed through the mill while the lower-grade fraction is stored in long-term stockpiles. As a result, a period of low-grade stockpile processing is expected at the end of the mine life when mining operations have been completed.

Mineral Reserves have an effective date of June 30, 2021. Mineral Reserve declaration for the Lihir Operation is supported by a positive cash flow.

#### **Mineral Reserves Statement**

Confidence Category	Tonnage (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)
Proven	63	2.0	4.0
Probable	250	2.4	19
Total Proven and Probable	310	2.3	23

Notes to accompany Mineral Reserves table:

- 1. Mineral Reserves are reported using the 2014 CIM Definition Standards, and have an effective date of June 30, 2021. The Qualified Person for the estimate is Mr Steven Butt, FAusIMM, whose job title at Newcrest is Group Manager Mine Technical Services, and who is a Newcrest employee.
- 2. The Mineral Reserve estimate is reported based on the following assumptions: open pit mining method; gold price of US\$1,300/oz, open pit mining method, 2% royalty, 0.5% Production Levy, treatment and refining charges of US\$2.24/oz; variable pit slope angles (inter-ramp) that range from 10° to 55° and up to 85° in Phase 14A; metallurgical recovery from Whittle optimisation of 82.2%, and output life-of-mine average modelled metallurgical recovery of 81.5%; dilution and mining recovery of 0 and 100% respectively; average stripping ratio of 1.7:1 (waste:ore); mining costs of US\$5.11/t mined; processing costs of US\$2.26/t milled, sustaining capital costs of US\$4.35/t milled, and G&A costs of US\$7.96/t milled.
- 3. Tonnages are metric tonnes. Gold ounces are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 4. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

Areas of uncertainty that may materially impact the Mineral Reserve estimates include: changes to long-term gold price assumptions; changes to exchange rate assumptions; changes to the resource model or changes in the model reconciliation performance including operational mining losses; changes to geometallurgical recovery and throughput assumptions; changes to the input assumptions used to generate the open pit design; changes to operating, and capital assumptions used, including changes to input cost assumptions such as consumables, labour costs, royalty and taxation rates; variations in geotechnical and mining assumptions; including changes to designs, schedules, and costs, changes to geotechnical, hydrogeological, geothermal and engineering data used; changes to assumptions as to pit cooling and seepage barrier development and operation; ability to source sufficient quality

water supplies to support process plant operations; changes to the assumed permitting and regulatory environment under which the mine plan was developed; continued ability to use sub-sea waste and tailings disposal methods; ability to maintain mining permits and/or surface rights; and the ability to maintain social and environmental license to operate.

## Mining Operations

The forecast completion date for the mining operation is FY37 based on the Mineral Reserves, and the forecast completion date for the processing operation is FY42, giving a mine life of 16 years, and a process life of 21 years, with the last production year being a partial year.

Production mining is conducted by Newcrest using an Owner-operated equipment fleet and an Owner workforce. A separate mining contractor uses a smaller pioneering fleet to develop new working areas on the steep caldera slopes.

Production mining is by conventional open pit methods, using a fleet of 500 t class (operating weight) hydraulic face shovels loading into 135 t capacity rear-dump haul trucks, with a recently-demonstrated mining rate of 33 Mt/a ex-pit. Ore and waste are drilled and blasted on 12 m benches and mined in a single pass. Mining of Phase 14A cutback will be conducted by a dedicated mining fleet which will comprise a small excavator and dump trucks mining 3m flitches to enable the installation of the ground support to achieve the required steeper wall in this cutback. Backfilling the Phase 14A cutback will occur after the completion of mining and will act as a buttress supporting long-term stability of the highwall.

Where practicable, walls are drilled with a pre-split to assure stable wall rock conditions. The ground is frequently too hot for conventional explosives, requiring high-temperature blasting products and specialised blasting procedures for mining in hot ground. A majority of ex-pit ore is allocated by gold and sulphur grade into a blend plan agreed with process plant staff along with existing stockpiled ore. Mill feed is based on the blend plan and can be comprised of reclaimed ore from the ROM stockpiles, direct ex-pit ore and existing stockpile ore.

Waste rock from the open pit is either dumped into 1,500 t capacity barges for off-shore submarine disposal or stockpiled for use as road base, bench sheeting, stemming or construction fill. Submarine waste disposal is carefully planned and controlled to achieve a continuous rill along the steeply-sloping sea floor and minimise the potential for uncontrolled slumping.

Pit slope designs were developed in conjunction with recommendations from external consultants. Slope performance is continuously monitored and reviewed, with local adjustments to slope designs made where necessary. Slope parameters are incorporated into a set of contiguous slope domain solids which cover the extents of the resource model framework. Each domain solid is assigned an appropriate inter-ramp angle ("IRA") and batter and berm configurations for pit design work. IRAs vary from 10–55° with batter angles varying from 25–70°. The Phase 14A design utilises civil engineering techniques, in conjunction with existing mining practices, to increase pit wall angles. The upper Argillic horizons without ground support typically have an unsupported slope angle of ~45° which has been increased to ~77° using soil anchors to provide stability. The soil anchors will be installed in the upper benches of the cutback to support the steeper wall angles in these areas. The slope angles of the lower benches will be similar to the existing walls in Phase 14. The increase in pit wall angle enables access to ore within the current permitted pit shell. The soil anchors provide ground support in the form of multi-strand anchors with shotcrete and/or high tensile wire mesh as face support in the Argillic and upper Epithermal zones.

The Lihir Operation receives on average 4.4 m of annual rainfall, and has extensive groundwater volumes, both of which are managed through a pit dewatering program and surface water management facilities incorporated into the open pit designs.

The Luise Caldera is still geothermally active, with temperature modelling indicating current rock temperatures in some areas within the ultimate pit design exceeding 100°C. The active zone is extensive within the Kapit area. Geothermal depressurisation for Kapit area has been underway since 2004, using a program of steam relief and monitoring wells. Temperature modelling and pressure trends to date indicate that depressurisation alone will

ultimately be insufficient in some locations to allow mining to proceed in accordance with current life-of-mine plans. From 2017–2019, progressive trials and studies were completed to test the practicality and effectiveness of cold-water injection as a means of actively reducing rock temperatures in targeted areas in advance of mining.

The work to date has demonstrated the practicalities of construction, measured the rate of cooling and estimated costs associated with cold water injection to a pre-feasibility level of study. This work supports that the cold-water injection project can cool mining areas to below 150°C as required in the mine plan as input to the Mineral Reserve estimate.

Current technology allows mining of hot ground with temperatures up to about 150°C. A procedure is used to control all mining activities in areas identified as containing potential borehole geysering or geothermal outburst areas.

Development of the Kapit sector of the open pit will require development of a seepage barrier between Luise Harbour and the pit crest to prevent seawater ingress into the open pit. The seepage barrier will be a significant structure, and will be engineered to cope with earthquake and tsunami events. It will also require the concurrent processing and/or relocation of the Kapit Flat low-grade stockpile, currently situated on top of the Kapit sector; prestripping/development of >150 Mt of overlying argillic clay waste rock; construction of a perimeter drainage channel around the Kapit sector to divert rainfall run-off from the caldera slopes around the pit footprint; and geothermal cooling and depressurisation of the Kapit sector to a temperature at which mining can be safely undertaken.

An elevated cut-off strategy is employed where only high- and medium-grade material is fed to the mill, while the lower-grade fraction is stockpiled for later processing. An average of approximately 30% of ore mined is sent to long-term low-grade stockpiles. High-grade ore (typically >3 g/t Au) is always fed to the plant first, while medium-grade ore (2–3 g/t Au) is partially blended to achieve the required feed properties of ore type and sulphur grade. The planned cut-off between medium-grade and low-grade material can be adjusted if needed, depending on ore supply and phase development. Material above the marginal cut-off grade of 1 g/t Au is stored in long-term stockpiles for processing progressively over the LOM. The marginal cut-off grade assumes a reduction in sustaining capital and G&A costs at the end of mine life, allowing marginal material to be economically processed. Over the life of the mine it is expected that up to 75-85 Mt of low-grade material will be stockpiled, to be fed to the plant toward the end and after active mining operation. In-pit stockpiling will be utilised along with Kapit North stockpile to accommodate the stockpile requirements. The in-pit stockpile will be reclaimed during development of the final cutback.

On average approximately 40 Mt/a of material is planned for mining ex-pit with approximately 20–25 Mt/a required for stockpile reclaim, ore blending for mill feed purposes, and rehandle movements. The remaining ex-pit LOM strip ratio is approximately 1.7:1 (waste:ore).

## **Processing and Recovery Operations**

As the gold mineralisation is refractory, the process plant consists of crushing and grinding followed by partial flotation, pressure oxidation, and then recovery of gold from washed oxidised slurry using conventional cyanidation.

The Lihir Operation has changed from a "full oxidation" treatment plant to a partial oxidation plant. The current operating strategy, termed the "Lihir operating strategy" or "LOS", exploits the benefits of partial oxidation to maximise gold production rates. The LOS is a self-correcting system. If a feed is presented to the autoclave that is too low in sulphide sulphur, then the autoclaves will slow down to maintain front-end temperatures; hence, forcing more ore to flotation which increases sulphur grade, allowing increased throughput, and reaching a new operating equilibrium. The LOS maximises and optimises the gold production rate at all times irrespective of equipment downtime or ore type (within reason) and reflects a flowsheet with a wide operating window. In normal operation there is significantly more milling capacity than autoclave capacity. As a result, a substantial amount of ore is typically sent to flotation to match autoclave throughput.

The plant has two primary crushing circuits and three grinding circuits. All three circuits can be directed to flotation as necessary and all three circuits can go "direct" to the autoclaves as necessary. Two rougher flotation circuits are

installed. Thickened ore slurry, which is a mixture of flotation concentrate and whole ore, is pumped to four parallel autoclave circuits via six slurry storage tanks. Oxidised slurry (with some fine flotation tailings) passes through two trains of a two-stage counter-current decantation circuit, where it is washed with process water and seawater, and neutralised with lime. Gold is recovered from the neutralised slurry by cyanide leaching using conventional CIL technology.

The tailings disposal method is by deep sea tailings placement ("**DSTP**"). The average power demand from the process plant is 115–126 MW/a. This is met by a combination of heavy fuel oil ("**HFO**"), and geothermal sources. The processing plant uses a combination of seawater, untreated fresh water and various treated water streams. Key processing reagents are oxygen (generated on site), lime and cyanide. Grinding media are also required. Other minor reagents are for flotation (collector and frother) and flocculent for thickening.

Gold is a freely-traded commodity with spot pricing readily available. The Lihir Operation has refining contracts in place, and produce gold doré bars, which are securely transported to a refinery. A number of refineries within the Asia–Pacific region have the capacity to refine doré; the Perth Mint is currently the preferred refinery.

There are currently eight major contracts in place to support the Lihir Operation. These contracts cover items such as refining, security transport, data management and invoicing, mining contracts, sea freight, catering and accommodations support, air transport, and labour hire. Contracts are negotiated and renewed as needed. Contract terms are in line with industry norms, and typical of similar contracts in PNG that Newcrest is familiar with.

# Infrastructure, Permitting, and Compliance Activities

#### Infrastructure

Roads connect the mining operation with the village of Putput, the accommodation centre at Londolovit, and the airstrip at Kunaye. Haul roads run between the crushing facilities and ROM stockpiles, the barge-loading dock in Luise Harbour, and the low-grade stockpiles. A wharf was constructed at Putput for general cargo ships and tankers.

Mine facilities, including ROM stockpiles, crushing facilities, and mine support facilities, are located in the Ladolam Creek valley, immediately to the east of the ultimate pit boundary. An explosive magazine is located to the west of the ultimate pit boundary. The processing plant is on the northwestern side of Putput Point on relatively flat land adjacent to the shoreline and on the gentler lower slopes of the eastern end of the Luise Caldera. Support buildings include a main office, laboratory, training building, warehouses, plant workshop, and an emergency and security services building. Facilities for handling and transport of the various fuels, reagents, and consumables required by the processing plant are located near the general ship berth and the processing plant. Port facilities are installed to service oil tankers, general cargo ships, passenger ferries and work boats.

Infrastructure for the workforce includes housing and camp accommodation, and related community facilities such as a school, medical centre, supermarkets, an open market and a police station, as well as associated messing and recreation facilities, and plants for water and sewerage treatment. The Londolovit accommodation centres provide housing for senior staff living on site and a number of government employees. Single persons' quarters are provided for commuting personnel.

Power is produced at site by a combination of HFO reciprocating engines and geothermal steam turbines. Geothermal power is forecast to decline in the medium term as a result of mining impacting producing wells, seepage barrier construction and the gradual depletion of the heat reservoir. The mine plan allows capital for replacement of geothermal power with HFO-generated power aligned with the forecast ramp down. Upgrades to the existing HFO power station to provide additional power and improved efficiency and emissions have been progressed to the feasibility study stage The near-term focus at Lihir is on energy efficiency options such as applying Battery Energy Storage Systems ("BESS") to store Lihir's surplus energy when not required and to discharge the energy in a controlled and desired manner when needed. The BESS project was selected for closer examination for Lihir as it allows for reducing fuel consumption, improving overall operating costs and facilitating the provision of energy when required. Newcrest has been carrying out a range of studies on the application of BESS. The outcomes of

these studies has meant that 100% of the reciprocating engine spinning reserve can be offset by BESS at Lihir. This innovative opportunity has yielded encouraging results so far and has progressed to a more detailed feasibility study.

## **Current Environmental, Permitting and Social Status**

Baseline studies were completed in support of permitting and operations in the period from 1988–1992. Additional studies were conducted to support the Production Improvement Program Environmental Impact Statement (completed in 2005) and the Million Ounce Plant Upgrade Project Environmental Impact Statement (completed in 2009). Mine development and operations commenced in 1997 in accordance with the agreed development plans stipulated in the Approved Proposal for Development, which forms the basis of the Mining Development Contract ("MDC") and the subsequently issued SML6. The original Environmental Plan associated with mine development was completed in 1995 and approved by the PNG Environment Minister. The *Water Resources Act* and associated environmental legislations that governed various water use permits in 1997 were repealed and amalgamated under the *Environment Act 2000* (Papua New Guinea) ("PNG Environment Act"). Under the PNG Environment Act there are environmental permits for waste discharge and water extraction. Two environmental impact statements ("EISs") were prepared under the PNG Environment Act, namely the 2005 Production Improvement Program EIS and the 2009 Million Ounce Plant Upgrade EIS.

Newcrest completed a major plant upgrade in 2013, which did not require any change to the then-current rate of mining or to the extent of the pit footprint. Instead, additional ore processing was made possible by increasing the rate of processing for stockpiled low-grade ore and increases to tailing disposal. The EIS for this expansion was submitted to the PNG Department of Environment and Conservation ("DEC") and ultimately approved by the Environment Minister in February 2011. The existing discharge and abstraction permits were updated in March 2012.

A regulatory-approved Environmental Management and Monitoring Plan ("EMMP") is used to manage and monitor the predicted potential environmental impacts from the project, and is updated every four years for review and endorsement by the PNG Conservation and Environment Protection Authority ("CEPA"; formerly DEC). The current version of the EMMP for the Lihir Operation for the period 2019 to 2022, was approved by CEPA in December 2018. In addition, an annual environmental report is prepared and submitted to CEPA. Newcrest has an operating environmental management system ("EMS").

#### **Environmental Considerations**

Newcrest maintains a central compliance system for all sites, including the Lihir Operation, to report environmental incidents, notifications, investigations, tracking of actions, reporting, inspections and track action completion. Newcrest conducts additional reviews, research and monitoring in-house or with external specialists and consultants and independent experts to examine company activities that have a potential risk of impacting the environment. Newcrest's applied research and management plans aim to develop a better understanding of the surrounding environment in which the mine operates and to provide plans to minimise the impacts associated with mining activities.

# Stockpiles, Waste Rock Storage Facilities, and Tailings Storage Facilities

All major long-term stockpiles, except Kapit North and Wild West, lie within the planned final pit boundary and all stockpiles are scheduled to be processed or relocated in conjunction with pit development over the life of mine. It is planned to use the Phase 9 pit void and Kapit North for low-grade stockpiling to meet LOM plan requirements. There is acid and metalliferous drainage ("AMD") generated from storage of ore stockpiles prior to processing. This requires management of runoff and drainage to ensure discharges comply with the requirements of the site's Environment Permits. Newcrest is currently undertaking studies to assess appropriate means of treating, mitigating and/or managing AMD as the basis for an amendment to the Environment Permit for Waste Discharge.

Waste rock from the mine is either transferred into 1,500 t capacity barges for off-shore submarine disposal within the boundaries of the SML, or stockpiled for use as road base, bench sheeting, stemming or construction fill.

Submarine waste disposal is carefully planned and controlled to achieve a continuous rill along the steeply-sloping sea floor and minimise the potential for uncontrolled slumping. Alternate deposition strategies are under review.

Tailings are disposed using a Deep Sea Tailings Placement (DSTP) methodology. DSTP was selected as the preferred tailings management option from an environmental and social point of view because the Lihir Operation has limited space for terrestrial tailings storage and is a seismically active region. Baseline studies were undertaken prior to the approval by PNG environmental authorities and commencement of DSTP. The process tailings consist of a dilute mixture of treated mineralised material and seawater from the cooling water systems and are discharged through the DSTP system at a depth of approximately 125 m. Given that the waste rock and tailing materials contain sulphide minerals (including pyrite), submerging these materials prevents oxidation and potential AMD generation.

Ongoing monitoring of DSTP is conducted under a regulatory-approved EMMP. Detailed seabed and tailings footprint surveys are conducted every five years as per EMMP requirements; these surveys include seabed bathymetry, ocean water quality, seabed physio-chemical characterisation, and abundance of deep-sea marine fauna. There have been no significant operational, compliance, environmental or social issues related to the operation of the DSTP system since Newcrest's acquisition of LGL in 2010.

# Water Supply and Water Management

The rugged topography, steep stream gradients and high earthquake risk on Aniolam Island mean that there are extremely few locations suitable for cost effective construction of large volume water storages. Furthermore, those locations most amenable to large dam construction are also those most suitable for human habitation, and have the greatest population density and resource value to the local community. As a consequence, development of water supply yield on the island is necessarily focused on run-of-river and/or groundwater resources.

The operational water demand is currently met by a combination of raw water from a weir constructed on the Londolovit River, caldera extraction via the Kapit spring and seawater supplement. Fresh water from pit diversion can also be substituted into the process plant supply.

Prolonged drought conditions are a risk to continued plant operations due to the lack of water. Sea water substitution measures can be implemented in the plant under major drought conditions and can mitigate a portion, but not all, of the drought-related effects on production. Newcrest has developed and implemented a water conservation strategy to support operations during low rainfall periods. This includes minimising non-essential usage, maximising use of seawater throughout the process plant and maintaining a minimum base flow in the Londolovit River in accordance with regulatory permit requirements.

## **Closure and Reclamation Planning**

In compliance with the regulatory requirement, LGL commissioned a conceptual mine closure plan in 1995, which was submitted to the PNG Government, and which has been periodically updated. A detailed Mine Rehabilitation and Mine Closure Plan is required to be submitted to the regulator five years prior to the planned cessation of operations.

Newcrest's Communities Policy, Environmental Policy, Environmental Standards, Mine Closure Management Standard, Social Performance Standard, Cultural Heritage Management Plans and Mine Closure Management Guidelines require the ongoing assessment and mitigation of potential environmental, cultural heritage and social impacts at every phase: from exploration through to project development; into active operation, and eventual closure and post closure.

The Mine Closure Management Standard outlines a multi-disciplinary approach to closure planning that meets regulatory and corporate requirements, while also considering stakeholder expectations. Ongoing engagement on mine closure planning with regulators, the community and industry enables us to achieve our objectives to be environmentally and socially responsible.

Mine closure plans are regularly reviewed and updated throughout the life of each operation as 'live' documents to support mine planning and progressive rehabilitation. The plans include the assessment of closure risks and opportunities for the business. For each update, the plans and cost estimates are independently reviewed by expert third parties to ensure the plans and associated costings meet both Newcrest standards (including the Assurance Standard) and Accounting Standards. The level of detail in both the planning and costing is refined as the operation gets closer to closure, including the financial provisions.

The Lihir Operation currently has a bond in place with the MRA for PGK111,000. Newcrest's financial assurance obligations will be reviewed, in line with the Mining Project Rehabilitation and Closure Guidelines introduced in late 2019 by the Mineral Resources Authority of Papua New Guinea to cover the existing and proposed disturbances over the next five years. A 2016 closure cost assumption of approximately US\$89 million was used in the cash flow analysis that supports Mineral Reserves. Newcrest regularly updates closure costs provisions in accordance with internal guidelines. The most recent closure cost estimate as of June 30, 2021 is US\$180 million. The increase in closure cost is not considered material to the Mineral Reserves.

# **Permitting Considerations**

Newcrest currently holds the key applicable permits required to support current operations. Permit renewals are applied for where required. Amendments to currently granted Environment Permits are undertaken as required and where operational changes trigger a formal amendment process under the PNG Environment Act and associated regulations.

Newcrest is continually identifying and assessing projects to improve operational performance. Some projects arise from the routine assessment of the review of the Life of Province Plan (LOPP) and others are generated to improve a specific area of project performance such as costs, safety, community or environmental impact. Where these changes constitute a substantial change to the scope of the operations or pose additional risk of causing harm to the environment, an amendment to the project's permits may be required. An assessment of whether permitting is required is made during the project development process and applications prepared and submitted if required to support project execution.

#### **Social Considerations**

Commitments to the local community around compensation and community development were embodied in an Integrated Benefits Package Revised Agreement signed in 2007 (the "IBP Agreements"), which incorporated the Lihir Sustainable Development Plan. The IBP Agreements were replaced in December 2020 when a new suite of compensation, relocation and benefits sharing agreements (the "Lihir Agreements") were signed between LGL and the Lihir tenement landholder and relocation family groups. The Lihir Agreements were then registered with the Registrar of Mining Tenements on 10 May 2021, with their implementation starting on 1 July 2021.

Newcrest has established generally good working relationships with local communities and although occasional disputes do occur, they are relatively minor in nature. The last disputes which resulted in brief disruptions to operations occurred in 2014–2015.

## Capital and Operating Costs

## **Capital Costs**

Cost estimates were prepared as part of the Lihir Operation FY21 LOM plan and Phase 14A PFS supporting Mineral Reserve estimates for the Lihir Operation. The majority of costs are based on current period budget-level detailed forecasts, adjusted for Newcrest's long-term economic parameters inclusive of key consumables price forecasts. Sustaining capital costs largely comprise site infrastructure upkeep and mobile equipment replacement costs. An allowance for miscellaneous equipment, small projects, and other minor capital costs has been included for mining, processing, and site general. The sustaining capital cost estimate is based on current budget level costs, combined with recent average sustaining capital expenditure. Sustaining capital costs total LOM \$1,523 million. Newcrest has made allowances for non-sustaining capital to pursue a variety of interrelated and inter-dependent studies, that

include, but are not limited to, the seepage barrier, pit cooling, front-end plant recovery, alternative power generation and miscellaneous studies aimed at optimising production outputs.

Provision has been made in the capital estimate for a number of major studies required to support LOM plan assumptions. The non-sustaining capital cost estimate for major projects contemplated in the Mineral Reserves estimate was developed in accordance with Newcrest standards and guidelines. Non-sustaining capital costs total LOM \$1,090 million. Capital costs will total US\$2,613 million over the anticipated LOM.

The sustaining capital cost estimate is provided in the table below.

## **Sustaining Capital Cost Estimate Summary (LOM)**

	Average Sustaining Capital Cost (US\$ M/a)	Sustaining Capital Cost (US\$ M)	% of Estimate
Sustaining Capital Description			
Mining (excl Phase 14A)	26	528	35
Mining (Phase 14A only)	14	68	4
Processing	37	733	48
Infrastructure (power and utilities) and General and administrative	10	194	13
Totals	76	1,523	100

Note: sustaining capital cost estimates exclude production stripping.

## **Operating Costs**

The operating costs used in the financial model were derived from a variety of sources. The mining costs were derived from a purpose-built, activity-based cost model, while ore treatment and G&A costs were based on budgeted numbers, adjusted for Newcrest's long-term consumable price forecasts. Costs based on budgeted activity were factored to match LOM activity levels for estimated fixed/variable components for existing assets and a bottom-up build for new infrastructure or activities. All operating costs are presented in United States dollars, and reflect 2021 market terms. Inputs in currencies other than US\$ were converted at exchange rates as per Newcrest's economic parameters. The overall operating cost estimate is presented below.

# **Operating Cost Estimate Summary (LOM average)**

Cost Area	Units	Value
Mining cost (excl Phase 14A)	US\$/t ore milled	11.20
Ore treatment	US\$/t ore milled	24.07
G&A	US\$/t ore milled	9.21
Site costs	US\$/t ore milled	44.48
Mining cost (Phase 14A only)	US\$/t ore milled	15.07

#### Exploration, Development and Production

In FY22, the Lihir Operation is expected to produce between 700 and 800 kozs of gold at an AISC of between US\$1,070 million and US\$1,160 million 11.

<sup>&</sup>lt;sup>11</sup> Newcrest's guidance is subject to market and operating conditions together with the increased risk to the general operating environment presented by the COVID-19 pandemic.

Newcrest plans to continue exploration activities in FY22, comprising soil and rock chip sampling, across the exploration tenure subject to community access negotiations and COVID-19 restrictions. Resource development drilling is also planned to take place targeting mineralisation outside current Mineral Reserve pit design.

### **Red Chris Operation**

Certain portions of the following information are derived from and based on the assumptions, qualifications and procedures set out in the Red Chris Report. For a more detailed overview of the Red Chris Operations please refer to the Red Chris Report noted above, which is available under Newcrest's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

### Project Description and Location

Red Chris is a copper—gold open pit mining operation located in northwest British Columbia, Canada, approximately 18 km southeast of the Iskut village, 80 km south of Dease Lake, and 12 km east of the Stewart-Cassiar Highway 37.

The Red Chris Operations are managed by an unincorporated joint venture, the Newcrest Red Chris Joint Venture, between Newcrest Red Chris Mining Limited, a wholly-owned Newcrest subsidiary, and Red Chris Development Company Ltd. a wholly-owned subsidiary of Imperial. Newcrest has a 70% joint venture interest and is Project manager, and Imperial has a 30% interest.

The Red Chris property comprises the Red Chris Main claim group and the Red Chris South group that collectively consist of 77 mineral tenures covering a total area of approximately 23,142 ha. The main tenures for purposes of the LOM plan are five mining leases issued on 20 June 2012, for a term of 30 years, with an expiry date of 20 June 2042.

All land in the immediate vicinity of the Red Chris Operations is Crown land.

Royalties are payable on the five mining leases and 31 of the mineral claims are subject to a net smelter return royalty held by the Tahltan Heritage Trust, and subject to the confidentiality terms of the Impact, Benefit and Co-Management Agreement ("IBCA"). Annual advance royalty payments commenced in October 2016. All or portions of four of the mining leases and 19 mineral claims are also subject to a 1.0% net smelter return royalty held by International Royalty Corporation, a subsidiary of Royal Gold Inc. ("Royal Gold"). The Red Chris South claim group is subject to a 1.5% net smelter return royalty held by Canada Carbon Inc.; however, the royalty may be reduced to 0.5% by payment from Newcrest to Canada Carbon Inc. of \$1 million.

Under the *Mineral Tax Act* in British Columbia, operators pay taxes at the following rates: 13% of the net revenue proceeds derived from the operations of a mine for the current fiscal year; and 2% of the net current proceeds derived from the operations of a mine for the current fiscal year. The owners of mineral lands under the *Mineral Land Tax Act* also pay an annual tax on mineral lands regardless of whether minerals are produced from that land. The tax is based on the size of the tenure holding, and the rate ranges between C\$1.25/ha (up to 20,235 ha) and C\$4.94/ha (more than 404,686 ha).

An IBCA between the Tahltan Central Government, the Iskut First Nation, the Tahltan Band and the Red Chris Operations is in place. The IBCA was restated and amended on 15 August 2019 in connection with Newcrest's acquisition of its interest in the Project.

Current environmental liabilities are in line with those to be expected from a long-life mining operation where mining activities have been conducted via open pit.

# Accessibility, Climate, Local Resources, Infrastructure and Physiography

Road access to the Red Chris Operations area from Highway 37 is via an 18 km-long gravel road. Most of the Project is accessible only by foot or by helicopter. The nearest airports with regular commercial flights are in Terrace and Smithers, each approximately 500 km to the south. The Dease Lake airport, approximately 80 km to

the north via BC Highway 37, is the transit point for the fly-in/fly-out operations. Chartered aircraft fly employees to the Dease Lake airstrip from where they are transported by bus to the mine site.

Mining and exploration activities are conducted year-round. The climate in the Project area is northern temperate with moderately warm summers and cold dry winters.

The Project is situated on the eastern portion of the Todagin upland plateau that forms a subdivision of the Klastine plateau along the northern margin of the Skeena Mountains. Elevations on the plateau are typically  $1,500 \pm 30$  m, with relatively flat topography broken by several deep creek gullies.

Vegetation consists of spruce and balsam forest cover with stands of aspens and scrub conifers at the lower elevations while buckbrush, willow and slide alder are common along the steep-sided, incised creek valleys. At higher elevations dwarf birch, willow and balsam dominate. Above the tree line at about the 1,370 m elevation contour, alpine grasses and flowers are the predominant vegetation.

The Red Chris Operations are located within the territory of the Tahltan Nation. The Tahltan collectively hold rights to hunt, fish, trap and harvest berries and other food and medicinal plants throughout their asserted traditional territory. Tahltan members of local communities traditionally hunt moose, caribou, sheep, goat and groundhog in the Project vicinity.

The mine area falls within the area covered in the Cassiar Iskut Stikine Land and Resource Management Plan. Exploration and development for minerals and energy, including development of road access, are acceptable activities throughout the plan area outside of protected areas, subject to regulations of statutes.

### History

Prior to Newcrest's Project interest, companies that had been actively exploring in the Red Chris area included Bolero Resources Corporation, Conwest Exploration Ltd., Great Plains Development Company of Canada Ltd., Silver Standard Mines Ltd., Ecstall Mining Limited, Texasgulf Canada Ltd., Dryden Resource Corp., Falconbridge; Norcen Energy; Teck Corporation, American Bullion Minerals Ltd. ("American Bullion"), bcMetals Corporation ("bcMetals"), and Imperial. From 1956–2018, activities included: reconnaissance and geological mapping; geochemical sampling (soil, rock chip, trenches); geophysical surveys (induced polarization, ground magnetic, very low frequency electromagnetic ("ZTEM"), seismic, direct current induced polarization and magnetotellurics, borehole acoustic televiewer surveys); core drilling; metallurgical testwork; mineral resource and mineral reserve estimates; acid base accounting studies; baseline environmental studies; petrographic studies; water bore and condemnation drilling in support of mine development; environmental studies and surveys in support of project permitting; and mining studies. Imperial commenced mine construction in May 2012, and construction was completed May 2014. The first full year of open pit mine production was 2016.

Newcrest acquired a 70% interest in the Red Chris Operations in 2019.

Production from 2015 to Q3 2021 totals 66 Mt processed, generating 491 Mlb copper, 305 koz gold and 962 koz silver contained in concentrates.

# Geological Setting, Mineralisation and Deposit Types

The Red Chris deposit is considered to be an example of a porphyry copper-gold deposit.

The regional geological setting comprises island arc volcanic, sedimentary, and plutonic rocks of the Middle to Late Triassic Stuhini Group, the Early to Middle Jurassic Hazelton Group, and the Middle and Upper Jurassic to Lower Cretaceous Bowser Lake Group, which form the accreted geological terrane of Stikinia in the northern Intermontane Belt of the Canadian Cordillera. Several large calc-alkalic Late Triassic plutons of the Stikine suite, including the Red Stock, host to the Red Chris deposit, cut the Stuhini Group.

The Red Stock is about 8 km long by 1.5 km wide at surface and elongate in the east—northeast direction. It is divided into three main intrusive phases. Several significant faults cut the Red Stock, influence patterns of mineralisation and alteration, and involve late mineral and/or post-mineral displacement.

The Red Chris deposit is about 3.4 km in strike length, 0.3 km in width and over 1.3 km in vertical extent. There are two main zones, East and Main. The Main zone is 1,200 m in strike length, 300 m width and has been drill tested to 1,300 m depth. The East zone is 1,200 m in strike length, 300 m in width and has been drill tested to 1,400 m depth.

Mineralisation consists of thin wavy or thicker planar quartz veins containing chalcopyrite, bornite and magnetite; these minerals are also disseminated outside the veins. In the upper part of the deposit, the bornite-rich mineralisation was overprinted by sericite and clay alteration and associated sulphidation. Gold occurs as microscopic inclusions in the copper sulphides, and occasionally as free grains in high-grade zones.

# **Exploration**

Work conducted by Newcrest since 2019 includes updates to Mineral Resource and Mineral Reserve estimates, internal mining studies to assess potential block caving operations, additional environmental and supporting studies, core drilling, geophysical surveys (ZTEM, gravity, magnetics) and completion of a pre-feasibility study on block cave operations.

Newcrest's current and planned exploration activities are discussed in this AIF under the heading "Red Chris Operation - Exploration, Development and Production".

# Drilling

Drilling was completed in support of exploration evaluations, Mineral Resource and Mineral Reserve estimates, mine planning, geotechnical and hydrogeological evaluations, grade control, and infrastructure site sterilisation.

Across all programs, a total of 1,477 drill holes and test pits (about 400,974 m), has been completed. Core drilling is the predominant drill type. A total of 487 core holes (287,535 m) support the Mineral Resource estimates, from the Texasgulf, American Bullion, bcMetals, Imperial Metals, and Newcrest drill programs.

Core sizes included PQ3 (83.1 mm core diameter) HQ (63.5 mm), HQ3 (61.1 mm), NQ (47.6 mm), NQ3 (45.1 mm), and BQTK (40.7 mm). Geological logging varied by operator. During Imperial and Newcrest programs, data collected included qualitative descriptions of lithology, alteration, mineralisation, veining, and structure, including orientation of key geological features. The geotechnical data collected included core recovery, rock quality designation, fracture counts, core strength, and overall ratings, with special attention paid to the occurrence of slickensides and fault gouge. All drill cores were photographed, prior to cutting and/or sampling the core. Magnetic susceptibility readings were taken. Core recovery is close to 100% and the sample quality is considered to be excellent. Drill collar locations were surveyed using either total station or global positioning system instruments. Down-hole surveys were performed using Reflex or TruShot tools.

Drill spacing varies in the deposit ranging from approximately  $50 \times 50$  m in the better drilled deposit areas in the East zone to about  $100 \times 200$  m spacing on the less well drilled portions of the deposit in the Gully zone. The term "true thickness" is not generally applicable to porphyry-style deposits as the entire rock mass is potentially mineralised and there is often no preferred orientation to the mineralisation. In areas that display porphyry-style mineralisation, in general, most drill holes intersect mineralised zones at an angle, and the drill hole intercept widths reported for those drill holes are typically greater than the true widths of the mineralisation at the drill intercept point.

Drilling is ongoing at Red Chris in support of operations. Current drilling is primarily for step-out and geotechnical purposes.

## Sampling, Analysis, and Data Verification

In the earlier drill programs, core was split and sampled at nominal 3 m intervals. During the Imperial drill programs, samples were taken at maximum 2.5 min intervals from sawn, halved-core. Newcrest took nominal 2 m samples from sawn, halved-core. Blasthole sampling collects about 3–4 kg sample from each 12 m approximate length blasthole. Following splitting, core samples are organised into shipments and the primary laboratory takes possession of the samples at site and transports them to the laboratory location.

Third-party, independent analytical and sample preparation laboratories have included Min-En Laboratories in Smithers, BC, Chemex Laboratories Ltd., North Vancouver, BC, International Plasma Laboratory Ltd. in Vancouver BC, ALS Chemex, Vancouver, BC (successor to Chemex), Acme Laboratories in Vancouver BC, and Bureau Veritas Commodities Canada Ltd. in Vancouver, BC. Imperial used the Mt Polley and Red Chris mine laboratories, which are not independent, for check assaying and grade control, respectively.

Sample preparation and analytical methods varied over time. Early sample preparation consisted of crushing to minus ¼ inch and pulverizing to 95% passing 150 mesh; crushing to -10 mesh, and pulverizing to 95% passing 150 mesh. More recently, sample preparation consisted of crushing to 80% passing a nominal 3–5 mm, and pulverizing to 85% passing 200 mesh, and crushing to 95% passing 4.75 mm, and pulverised to 95% passing 106 μm.

Initially copper assays were performed using AAS on a three- or four-acid digest. Later, copper and iron were analysed by ICP atomic emission spectroscopy ("AES") with an aqua-regia digestion. During early programs, gold was assayed using fire assay on a 30 g or one assay ton sample weight. Later programs used a 30 g sample by fire assay with an ICP-AES finish. Selected samples were analysed using a 30-, 31-, 36- or 48-element suite via ICP. Carbon and sulphur were determined by Leco.

QA/QC procedures were in place for the Imperial and Newcrest drill programs. The process generally involved submission and analysis of standard reference materials, blanks, and duplicates. Newcrest conducted a detailed QA/QC review of the data in the database as at end-February 2021. Drilling reviewed was primarily from the Imperial (2007–2018) and Newcrest (2019–2021) campaigns. Overall, the dataset is acceptable for use in preparing a Mineral Resource estimate for copper and gold.

Over 90% of the Imperial assay data were electronically loaded into acQuire from the original laboratory assay files. Historical assay data prior to Imperial's Project interest were imported and validated as part of verification in support of technical reports prepared under NI 43-101.

Newcrest includes both internal verification processes and independent third-parties in the data verification steps:

- internal verification: laboratory inspections; review of geological procedures, resource models and drill plans; sampling protocols, flow sheets and data storage; specific gravity data; logging consistency, down hole survey, collar coordinate and assay QA/QC data; geology and mineralisation interpretation; and
- external verification: a number of data verification programs were conducted in support of technical reports on the Project, from 2004–2021. These indicted, that at the time each database iteration was reviewed, there were no significant issues that would have precluded Mineral Resource estimation or imposed confidence classification limits on certain data support.

Newcrest has implemented a steering committee, the Resources & Reserves Steering Committee ("RRSC"), to ensure appropriate governance of development and management of resource and reserve estimates, and the public release of those estimates. This is achieved by ensuring regular RRSC review meetings, and internal and external reviews.

No material issues with the database including sampling protocols, flowsheets, check analysis programs or data storage have been identified to date from the checks performed. The database is acceptable for use in Mineral Resource and Mineral Reserve estimation.

### Mineral Processing and Metallurgical Testing

#### **Open Pit**

The Red Chris process plant was commissioned on open pit ore in 2015. Testwork on the open pit ores was primarily completed at G&T Metallurgical Services in Kamloops, BC during 2004.

The metallurgical testwork on open pit ores supporting the current process plant design included mineralogy, grind size tests, batch flotation tests, locked cycle flotation tests (pulp density, pH, reagent dosage, flotation residence time and grind size effects), gravity concentration testwork, ball mill and rod mill grinding work index tests, evaluation of metallurgical variation between the Main and East zones, and a pilot plant program. The testwork indicated that a conventional grinding and flotation process plant design could be used.

Recovery predictions made prior to Newcrest's Project interest were significantly higher than seen in actuality from the plant. Newcrest has completed two orebody knowledge programs to more reliably predict the performance of the remaining ore in the open pit.

Recovery for copper and gold are defined by four metallurgical domains with recovery formulas being a function of the gold and copper grade in combination with the mill production rate. These regression equations are informed by plant recovery performance data. The LOM copper recovery was estimated to be 79% and gold recovery was estimated to be 51% within the Mineral Reserves amenable to open pit mining.

### **Block Cave Project**

Laboratories used since 2019 include Base Met Laboratories in Kamloops, BC, ALS Laboratories in Burnaby, BC and Amtel in London, ON.

The testwork programs informing the 2021 pre-feasibility study on block cave operations ("2021 PFS") process design included: mineralogy (gold diagnostic analysis), comminution tests (hardness index testing ("HIT")); JK breakage parameters ("Axb"); SMC), SAG mill specific energy, Bond indices (DWi, BWi, Ai, specific gravity); gravity recovery (gravity recoverable gold); flotation optimization tests (two-stage flotation); open circuit cleaner at standard and optimized conditions; rougher flotation (grind recovery series, size by size recovery, kinetics, reagent optimization); regrind (Levin tests, Bond indices, cleaner flotation (batch cleaner tests, cleaner dilution tests)); locked cycle tests; concentrate dewatering (concentrate settling, concentrate filtration), HydroFloat tests; and material classification for environmental purposes.

Underground ore was determined to be significantly harder than open pit ore, therefore, requiring increased power input per tonne of ore treated for a given grind size. There is a general increase in hardness with depth, implying that throughput rates and grind size will be impacted positively over the progression of each macroblock (MB) within the block cave design. The flowsheet development testwork confirmed that grinding and flotation are suitable unit operations for Red Chris block cave ore. Marketable concentrates can be produced, with some ore zones enriched in secondary copper minerals such as bornite producing elevated concentrate grades.

The block cave samples show significantly higher gold recovery than open pit material at equivalent head grades as well as greater variance. A lower pyrite content in the ore can reduce the quantity of refractory gold and, therefore, an improvement in flotation recovery of gold. A linear model with head grade was fitted to the copper recovery data at a grind size  $P_{80}$  of 150  $\mu$ m; a maximum of 92% copper recovery was applied to the copper recovery equation as a logical constraint a LOM average copper recovery range of 81–86% is forecast. A predictive equation for gold recovery of the block cave ore at a grind size  $P_{80}$  of 150  $\mu$ m was developed, from which a LOM average gold recovery range of 60–75% is forecast.

The underground variability program showed that most ore samples had lower pyrite content than open pit ores, and some had secondary copper minerals such as bornite. Therefore, results indicated that, on average, concentrate grades in second cleaner concentrate in laboratory tests exceeded the current operational target of 23% Cu. A

maximum of 28% Cu was assumed in regressions to predict concentrate grade. It is possible that the favourable mineralogy of underground ores could result in still higher concentrate grades from time to time.

Samples selected for metallurgical testing were representative of the various styles of mineralization within the different deposit areas. Samples were selected from a range of locations within the deposit zones. Sufficient samples were taken and tests were performed using sufficient sample mass for the respective tests undertaken.

Deleterious elements potentially include mercury and antimony. The current limit for mercury penalty payment is 40 ppm in concentrate. A predictive formula for the mercury in copper concentrate was developed. However, indications are that most underground ores are not expected to produce concentrates that trigger penalty mercury levels. These observations are based on a combination of laboratory testwork results as well as predictions from underground mine plan mercury head grades. Antimony has generally been observed in open pit and underground concentrates at levels below those that would trigger a penalty (0.01%).

#### Mineral Resource and Mineral Reserve Estimates

Mineral Resources and Mineral Reserves are presented on a 100% basis. These Mineral Resources and Mineral Reserves are not additive to the Mineral Resources and Mineral Reserves presented under the heading "Description of the Business - Mineral Reserves and Mineral Resources", which are tabulated showing only Newcrest's interest.

#### **Mineral Resources**

The Mineral Resource estimate was based on a combination of lithological, alteration, and mineralogical domains.

Elements estimated include copper, gold, silver, iron, sulphur, mercury, antimony and arsenic on 12 m composites. The bulk density data were interpolated using an inverse distance weighting to the third power ("**ID3**") interpolation. No grade caps were imposed on the gold or copper data. However, to make sure that the potential smearing of outlier grades was reduced, a grade and distance restriction was applied to selected variables during the estimation process.

Estimation was performed using a combination of OK, three-dimensional OK, co-OK, uniform conditioning, and multivariate uniform conditioning, depending on the variable being estimated. Validation checks included examination of the block model and composites in plan and section views, domain level statistical checks, global statistical checks, comparison of the estimated value with a metal-at-risk analysis for copper and gold, comparison of the multivariate correlation of the input value and the block estimate, discrete Gaussian models, and conditional simulation models (swath plots). All checks indicated that the estimates were acceptable.

No Measured Mineral Resources were classified for material other than stockpiles. All Mineral Resources were classified as Indicated or Inferred. The Mineral Resource was classified based on an evaluation of factors including search strategy, number of informing composites, average distance weighting of composites from blocks, kriging quality parameters, geological and grade continuity, drill spacing and drill data quality, mining method and mining selectivity, and mining rate and cut-off value.

The Mineral Resources potentially amenable to open pit mining methods were constrained within a pit shell, assumed a relative level restriction of 1,112 mRL to define the open pit to underground interface at approximately 50 m below the current LOM open pit design; and assumed reporting above a NSR marginal cut-off value of C\$12.20/t to meet processing and G&A costs.

The Mineral Resources potentially amenable to mass mining underground mining methods (block cave or sub-level cave) were constrained within a conceptual cave footprint based on a potentially economic outline determined by the NSR of each block in the resource model below the open pit shell. The NSR breakeven cut-off value was C\$21.00/t to meet mining, processing, and G&A costs.

# Mineral Resource Estimate Tables

Mineral Resource estimates are reported with an effective date of 30 June, 2021, and are reported inclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Mineral Resources were estimated as at 31 March 2021, and depleted to 30 June 2021.

# Measured and Indicated Mineral Resource Statement, Red Chris

Resource		Tonnes	Grade		<b>Contained Metal</b>	
Classification	Assumed Mining Method	(Mt)	Au (g/t)	Cu (%)	Au (Moz)	Cu (Mt)
Measured		11	0.17	0.24	0.062	0.028
Indicated		290	0.28	0.34	2.6	1.0
Sub-total Measured and Indicated	Open pit and stockpiles	300	0.28	0.33	2.7	1.0
Measured		_	_	_	_	_
Indicated		670	0.46	0.40	10	2.7
Sub-total Measured and Indicated	Underground	670	0.46	0.40	10	2.7
Total Measured and Indicated	Open pit and underground	980	0.41	0.38	13	3.7

Resource Classification	Assumed Mining Method	Tonnes	Grade		<b>Contained Metal</b>	
		(Mt)	Au (g/t)	Cu (%)	Au (Moz)	Cu (Mt)
Inferred	Open pit and stockpiles	11	0.23	0.27	0.083	0.030
Inferred	Underground	180	0.32	0.30	1.8	0.54
Total Inferred	Open pit and underground	190	0.31	0.30	1.9	0.57

Notes to Accompany Red Chris Mineral Resource Tables:

- 1. Mineral Resources are reported with an effective date of 30 June, 2021, using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr. Rob Stewart, FAusIMM, Group Manager Resources, a Newcrest employee.
- 2. Mineral Resources are reported on a 100% basis. Newcrest holds a 70% interest in the Red Chris Joint Venture.
- 3. Mineral Resources are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 4. Mineral Resources that are potentially amenable to open pit mining methods are constrained within a conceptual open pit shell that uses the following input assumptions: metal prices of US\$3.40/lb Cu, US\$1,400/oz Au; mining costs of C\$2.27/t mined, and process and general and administrative (G&A) costs of C\$12.20/t processed; a conventional sulphide flotation producing a copper–gold concentrate; metallurgical recoveries that average 50–61% for gold and 81–83% for copper; a relative level restriction of 1,112 mRL to define the open pit to underground interface; and overall pit slope angles that range from 34-46°. Mineral Resources are reported above a net smelter return of C\$12.20/t.
- 5. Mineral Resources that are potentially amenable to underground mass mining methods are constrained within a conceptual cave footprint, and reported using the following assumptions: metal prices of US\$3.40/lb Cu, US\$1,400/oz Au; mining costs of C\$6.56/t mined, and process and general and administrative (G&A) costs of C\$14.38/t processed; a conventional sulphide flotation producing a copper–gold concentrate; metallurgical recoveries that average 50–61% for gold and 81–83% for copper; a relative level restriction of 1,112 mRL to define the open pit to underground interface; and an underground footprint based on a minimum approximate footprint of 160 x 160 m area with vertical walls and variable height of draw. Mineral Resources are reported above a net smelter return of C\$21.00/t.
- Tonnages are metric tonnes. Gold ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.

 Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

Factors that may affect the Mineral Resource estimate include changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological and grade shape and geological and grade continuity assumptions; changes to metallurgical recovery assumptions; changes to the input assumptions used to derive the conceptual open pit used to constrain the estimate; changes to the input assumptions for assumed block caving operations; changes to the NSR cut-offs applied to the estimates; variations in geotechnical, hydrogeological and mining assumptions; forecast dilution; and changes to environmental, permitting and social license assumptions.

#### Mineral Reserves

Measured and Indicated Mineral Resources were converted to Proven and Probable Mineral Reserves. Inferred Mineral Resources were set to waste. Mineral Reserves were estimated using open pit and block cave underground mining assumptions.

Mineral Reserves amenable to open pit mining were estimated from the resource block model, using the pit design volumes (phase triangulations) for Phase 5, Phase 7 and Phase 8, differentiation of six different material bins, and were reported using an NSR cut-off of greater than C\$15.50/t.

Mineral Reserves amenable to block cave mining methods are supported by the 2021 PFS were reported from macroblocks one, two, and three ("MB1", "MB2", and "MB3"). The macroblocks were sized and designed to produce up to 15 Mt/a, except for MB2, which had a limit of 7.0 Mt/a applied. A shut-off value of \$21/t was used to determine the footprints. A specified shut-off value was subsequently used for each block and draw column that varied by macroblock. The shut-off values applied are, MB1: C\$22.00/t milled, MB2 and MB3: C\$22.80/t milled. Dilution was defined as material below C\$20.70/t that enters the planned ore extraction via mixing. Dilution accounts for about 5.0% of the tonnage (approximately 20.2 Mt).

Mineral Reserves for the Red Chris Operations were reported using the confidence categories set out in the 2014 CIM Definition Standards. Mineral Reserves are reported with an effective date of 30 June 2021. Mineral Reserves were estimated as at 31 December 2021, and depleted to 30 June 2021.

### Mineral Reserves Statement, Red Chris

Reserve		Tonnes	Grade		<b>Contained Metal</b>	
Classification	Mining Method	(Mt)	Au (g/t)	Cu (%)	Au (Moz)	Cu (Mt)
Proven	Open pit and	_	_	_	_	_
Probable	stockpiles	75	0.36	0.42	0.86	0.31
Sub-total Proven and Probable		75	0.36	0.42	0.86	0.31
Proven	Underground	_	_	_	_	_
Probable		410	0.55	0.45	7.2	1.8
Sub-total Proven and Probable		410	0.55	0.45	7.2	1.8
Total Proven and Probable		480	0.52	0.45	8.1	2.2

Notes to Accompany Red Chris Mineral Reserves Table:

- Mineral Reserves are reported with an effective date of 30 June, 2021, using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate of the Mineral Reserves amenable to open pit mining methods and in stockpiles is Mr. Brett Swanson, MMSAQP, Principal Open Pit Planning Engineer and the Qualified Person responsible for the estimate of the Mineral Reserves amenable to underground block cave mining methods is Mr. Michael Sykes, FAusIMM, Mining Study Manager, both of whom are Newcrest employees.
- 2. Mineral Reserves are reported on a 100% basis. Newcrest holds a 70% interest in the Red Chris Joint Venture.
- 3. Mineral Reserves that will be mined using open pit mining methods are constrained within a pit design that uses the following input assumptions: metal prices of US\$3.00/lb Cu, US\$1,300/oz Au; metallurgical recoveries that average 79% for copper and 51% for gold; mining costs of C\$3.2/t mined, and process and general and administrative (G&A) costs of C\$12.5/t processed; and pit slope

- angles that range from 34–46°. Mineral Reserves are reported above a net smelter return of >C\$15.5/t. Full mine recovery is assumed, and Mineral Reserves do not have additional dilution over that incorporated in the resource block model.
- 4. Mineral Resources that will be mined using underground mass mining methods are constrained within a block cave design that uses the following input parameters: metal price of US\$3.00/lb Cu, US\$1,300/oz Au; CA\$:US\$ exchange rate of 0.8; metallurgical recoveries that range from 81–86% for copper and 60–75% for gold; a life-of-mine operating cost of C\$20.34/t milled; and shut-off values of MB1: C\$22.00/t, MB2 and MB3: C\$22.80/t, resulting in an approximate dilution of 5%.
- Tonnages are metric tonnes. Gold ounces and copper tonnes are estimates of in-situ metal and do not include allowances for processing losses.
- Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

Factors that may affect the Mineral Reserve estimates include changes to long-term gold and copper price assumptions; changes to exchange rate assumptions; changes to metallurgical recovery assumptions; changes to the input assumptions used to design the optimized open pit shell; changes to the input assumptions used to derive the cave outlines and the mine plan that is based on those cave designs; changes to include operating, and capital assumptions used, including changes to input cost assumptions such as consumables, labour costs, royalty and taxation rates; variations in geotechnical, mining, dilution and processing recovery assumptions; including changes to designs as a result of changes to geotechnical, hydrogeological, and engineering data used; changes to the NSR cut-off criteria used to constrain the open pit estimates; changes to the shut-off criteria used to constrain the underground estimates; changes to the assumed permitting and regulatory environment under which the mine plan was developed; ability to maintain mining permits and/or surface rights; and the ability to maintain social and environmental license to operate. Factors that are risk-specific to block cave operations, and which may affect the Mineral Reserves include: inrush of water into the underground workings including decline, cave levels and infrastructure areas; poorer rock mass quality and quantity than interpreted; inability to achieve planned decline development rates having impact on schedule and cost; incorrect estimation of cave propagation potentially leading to air blast; and damage to mine workings due to a seismic event.

### Mining Operations

The projected underground mine life is from FY2026 to FY2057, with nameplate capacity of 13.6 Mt/a scheduled to be reached in FY2030.

### **Open Pit**

Open pit operations are conducted using conventional methods and a conventional truck and shovel fleet. The remaining open pit mine life is approximately five years, producing from Q4 FY21 to Q4 FY26.

Pit optimization used the revenue factor 0.98 pit. Pit designs include the following considerations: pit slopes are controlled by bench stability rather than global wall angle stability; ore at the pit bottom can be mined by block cave or stoping; waste rock storage (WRSF) space is limited to 150 Mt unless other PAG disposal areas can be permitted; and pit optimisation guidance. The designs resulted in three remaining pit phases, Phase 5 and Phase 8 in the East zone and Phase 7 in the Main zone. Six geotechnical domains are defined within the open pit, with designed slope angles from 34–46°. Water management in the pit is based around the use of surface drains to direct water from the benches and ramp towards sumps at the base of the pit from where it is pumped into the production circuit. No active or passive groundwater drainage is currently installed within the pit. Metallurgical recoveries were coded into the block model by metallurgical domain. The open pit schedule requires 120 Mt of waste be stored.

The mine uses rotary blasthole drills, drilling variable diameter holes up to 311 mm, and 28 m³ electric hydraulic shovels loading 230 t capacity haul trucks from 12 m benches. The operation is supported by standard ancillary equipment including an 18 m³ front-end loader, track and rubber-tired-dozers, and graders. Ore and waste are drilled and blasted together on 12 m benches and mined in a single pass. Where practicable, walls are drilled with a presplit to assure stable wall rock conditions. Ex-pit ore is allocated by gold and copper grade and either sent to the mill crusher pocket directly or sent to low-grade ore stockpiles. Mineralized waste (material below Mineral Reserve cut-off grade) is segregated and stored for potential future use. NAG rock is used as to line the WRSF and for construction. PAG rock is sent to designated PAG WRSFs.

## **Block Cave Project**

The proposed mine plan uses technology conventional to block cave operations, including mine design and equipment. The planned mining equipment is conventional to block cave operations. The 2021 PFS envisages that the tonnage profile transitions from a predominantly open pit feed in FY26 to an exclusively underground mill feed in FY30 when the nameplate capacity of 13.6 Mt/a is scheduled to be reached. The projected underground mine life is from FY2026 to FY2057.

The ground conditions at Red Chris are interpreted to be "very good", based on data collected from 2018–2020. Six geotechnical domains were assessed for the proposed underground development and cave extents. Cave fragmentation analyses concluded that orebody pre-conditioning via high undercut, blast, and hydraulic means will be required due to the rock quality. All pre-conditioning works will extend from the extraction level of the macroblocks to within 75 m of the ultimate floor of the open pit (580 m above the underground footprint). Modelled cave subsidence shows no major risks with respect to surface mining infrastructure or surface features such as Kluea Lake. Camp Creek may be impacted, and further study is required in terms of in-situ stress measurements and rock mass characterisation. The crater limit will be at the end of the LOM, at year 34, and the crater depth will be 350–400 m below the bottom of the final pit.

The main source of water that will present to the underground was determined to come from direct precipitation (rain and snowmelt) flowing through the caved mass. The planned water management capacity will range from 200–1,500 m<sup>3</sup>/hr over the LOM plan.

Each macroblock footprint will consist of an extraction level, undercut level, and infrastructure development. A single crusher and tipple arrangement will be used for all macroblocks. A perimeter drive on the extraction and undercut level will provide extraction and drill drive access and ventilation to the working areas. The footprint will be ventilated via the access decline and a return air raise. A series of internal ventilation raises will provide exhaust ventilation for the crusher, conveyor, and tipple areas. Access to the mine will be via two declines: the exploration/access and conveyor declines. The mine layout includes declines, ventilation infrastructure, footprint access, crusher location, and footprint layout. Primary ventilation will be achieved through three fresh air intakes, and two exhaust raises. Heating will be employed.

Extraction levels for all macroblocks are based on the standard extraction level layout using an El Teniente layout. The planned mining sequence is based on a combination of grade and geotechnical considerations. MB1, which hosts the high-grade portion of the Mineral Reserve will be the first to be mined. MB2 will be a southern extension of MB1, and with cave rules and stress orientation dictating that MB3 is opened from southeast to northwest, MB2 must be opened prior to MB3.

Infrastructure required to support the block cave will include primary crushers, five-way tipple arrangements, ROM and crushed ore bins, and conveyor systems. Equipment requirements include primary development, cave development, and production equipment. A secondary production fleet will support this equipment. These equipment types will be conventional to block cave mining operations. Underground workshops, offices, and refuge stations will support the underground operations.

### Processing and Recovery Operations

# **Current Plant**

Plant design for treating open pit ores was based on metallurgical testwork, and was a standard porphyry copper flowsheet employing SAG and ball milling, flotation, regrinding, thickening and filtering to produce a copper concentrate at a moisture content of 8% for export. Subsequent to the initial construction, the plant has undergone the following changes: installation of a pebble bypass system on the SAG mill, installation of an additional rougher flotation cell to increase rougher flotation residence time, and installation of a third flotation column to increase capacity of the cleaner circuit.

The plant as at May 2021 consisted of a SAG mill–ball mill–pebble crushing (SABC) comminution circuit housed in a single process building. The target grind size was a  $P_{80}$  of 150  $\mu m$ , with throughput taking precedence over grind size, resulting in typical grind sizes closer to 170–180  $\mu m$ . The flotation circuit was configured to produce a copper concentrate with a grade of 23–24% Cu. Originally configured as a two-stage cleaning circuit, the plant was often operated with only a single stage of cleaning due to insufficient capacity in the cleaner columns; this was addressed by installation of the third flotation column.

Process improvements are underway, and include: installation of a third Eriez Cavitation Tube Column in the cleaners, which started commissioning in June 2021; and installation of two pre-rougher duty Eriez StackCells, due to be completed by Q1 2022. Newcrest is investigating the installation of a tailings thickener for NAG cyclone overflow.

### **Block Cave Project Plant**

The 2021 PFS evaluated two process options:

- a Central Case, that would treat 13.6 Mt/a of underground ore through the existing SABC circuit plus a new single-stage SAG circuit; this concept was within the current maximum permitted throughput of 38,000 t/d average, 13.87 Mt/a;
- an Upside Case, that would treat 15 Mt/a of underground ore through the existing SABC circuit plus a new single-stage SAG circuit, with SAG mill discharge configurations modified to allow coarsening of grind size, and addition of a HydroFloat coarse particle flotation circuit.

In both cases, flotation and concentrate dewatering upgrades were included to allow processing of higher head grade underground ore. The Central Case was selected as the basis for the 2021 PFS.

The Central Case expansion will largely keep the existing process operation, adds an additional grinding line and expands some unit operations to suit block cave ore. Upgrades will include a new coarse ore stockpile, single-stage SAG mill, pre-rougher StackCells, new regrind circuit and expansion of the concentrate dewatering circuit. The ore properties of underground ore are expected to be sufficiently favourable to discontinue sulphide scavenger flotation, which is required for most open pit ores. The existing regrind ball mill would be removed to create space for an expanded cleaner flotation circuit. The expansion scenario considered that the ongoing process improvement projects would be online prior to the block cave expansion, including Cleaner Column 3, Phase 1 pre-rougher StackCells (treating cyclone overflow from the existing SABC circuit), and NAG tailings thickening.

#### Markets

The Red Chris Operations' current market for the open pit concentrate is Asia (primarily China) due to China's comparative advantage i.e., nil or low penalties imposed on the elevated mercury and antimony, and lower transportation cost compared to Europe. An ongoing dialogue is maintained with smelters globally regarding their interest in the Red Chris Operations' concentrate. For the reasons mentioned above, the strongest demand will remain to be from Chinese smelters, though counterparty evaluation needs to be carefully considered.

The assumption in the 2021 PFS is that the additional concentrate tonnage that is produced from the block cave project will either be added to existing contracts (those contracts will be expanded) or sold to new smelters customers in Asia or Europe with whom direct communication already takes place. It is not expected that Newcrest will need to pay a premium for market access. At an average LOM grade of 24.4% Cu, the Red Chris concentrate is slightly below premium concentrate grades, but is still expected to attract market interest.

# Infrastructure, Permitting, and Compliance Activities

### Infrastructure

The existing mine infrastructure includes an open pit, divided between the East and Main zones; two stockpiles (low-grade, coarse ore); one WRSF; the tailings impoundment area (TIA) complex; non-contact water diversion

structures; power supply; process plant, process facilities; exploration facilities; medical and ambulance facilities administrative and warehouse facilities; maintenance facilities; water treatment facilities; waste treatment facilities; and accommodations camp.

The transition to block cave mining and associated changes to processing will be supported by existing infrastructure as well as infrastructure upgrades. Infrastructure upgrades are required in the following areas: new mobile equipment maintenance and workshop facility; pumping upgrade from the north reclaim dam to the booster station; seepage mitigation modifications for the TIA; new cyclone sand plants and tailings thickener for dewatering NAG tailings cyclone overflow; associated modifications to tailings pipelines for the cyclone sand plants, thickeners. and short term tailings deposition; dust cover for the coarse ore stockpile; and accommodations camp upgrades.

New infrastructure requirements for the block cave project envisaged in the 2021 PFS include: operations accommodation complex, site asset operation centre, mine dry, concrete/shotcrete batch plant; expansion of existing North dam and South dam, new Northeast dam, relocated North Reclaim dam and South Reclaim dam, new Northeast Reclaim dam. North Valley pumping wells, North Valley seepage wells, make-up water booster pumps and pipelines for fresh and reclaim water, potable water treatment plant, fire water supply to operations accommodation complex, decline conveyor; propane, diesel storage and distribution; air compressors to supply compressed to underground utility stations; sewage treatment plant, septic field; ditches around the operations accommodation complex; expansions to switchgear and substations, mine substation, site-wide reticulation; communications backbone feeding surface and underground facilities; surface haul roads, access to conveyor portal, ventilation raises, process plant, TIA dam access roads; laydown areas, construction offices, warehouse, maintenance shops, water utility supply pump/pipeline from south reclaim pond; and stockpile pads, TIA reclaim dam diversion ditches, Camp Creek diversion, and Beaver Creek diversion.

Road access to the mine site is constructed, and operational. There will be new haul roads and site roads as envisaged in the 2021 PFS to allow access to the various locations, including the TIA, conveyor portal area, exploration portal, ventilation pads and reclaim dams at the TIA.

Concentrate is transported 320 km from the mine south to the Stewart Bulk Terminals at the Port of Stewart. Concentrate is stored in sheds at the bulk terminal until there is a sufficient stockpile to ship load. The current philosophy of shipping concentrate through the Stewart Bulk Terminals is assumed to be maintained for the block cave project.

### **Current Environmental, Permitting and Social Status**

Extensive environmental baseline data collection and monitoring of the area has occurred since 2003. Site-specific baseline studies were completed to support the 2004 Environmental Assessment Application and subsequent 2010 Joint *Mines Act* and *Environmental Act* Permit Application, as well as associated addendums to permit applications. Following receipt of the Environmental Assessment (EA) certificate (M05-02), *Mines Act* permit (M-240), and *Environmental Management Act* ("EMA") permit (105017), approvals for mine construction commencement (2012) and operational authorization (June 2015), the Red Chris Operations have continued to collect comprehensive environmental monitoring data to support effective environmental management.

Baseline characterization studies included data collection on dust, noise and vibration, potential visual impacts, air quality and meteorology, groundwater and surface water quality and quantity, hydrogeology, aquatic resources and fisheries, terrestrial ecosystems including vegetation and wildlife, and cultural heritage and archaeological studies. The 2021 PFS noted that additional information would need to be collected in the areas of dust, noise, and air quality in support of future block cave operations.

## **Environmental Considerations**

There is an environmental management system ("EMS") in place for the open pit operations, which includes associated plans, procedures, policies, guidelines, auditing, and compliance. The EMS and environmental management plans ("EMPs") will be updated to incorporate the block cave project. Key mitigation measures that have been identified for impacts assessed during the 2021 PFS will inform the updates to the EMPs.

# Stockpiles, Waste Rock Storage Facilities, and Tailings Storage Facilities

The Red Chris Operations use a grade binning ore control system based on NSR value of mineralized material. High- and medium-grade ore is generally fed to the crusher directly with low-grade ore stockpiled for later use as required. A mineralized waste stockpile has been retained as a potential buffer for the mill in the event of production interruptions from the mine, should low-grade ore stockpiles become depleted. Mineralized waste treatment would be contingent on sufficiently high metal spot prices to make processing the material economically viable. The stockpile is not included in the Mineral Reserves but is based on a cut-off that pays for processing, general and administration plus stockpile rehandle costs.

Sufficient WRSF space was designed to store 150 Mt of NAG and PAG waste. The open pit schedule requires 120 Mt of waste be stored. The block cave mine will produce about 2.9 Mt of PAG waste, which will be stored on the existing permitted facilities. NAG material will be used for site construction, including the TIA.

The TIA is currently permitted for 302 Mt of tailings, the containment of which is provided by a single impoundment with natural topography, and the LOM design incorporates three dams, the North, South, and Northeast dams. To support the proposed block cave operation, the TIA will be expanded to a capacity of about 550 Mt. The design assumes raises on the North, South and Northeast dams above that which is currently permitted, and relocation of certain of the reclaim dams and associated seepage interception systems.

# Water Supply and Water Management

The main source of water for the process plant is reclaim from the main pond at the TIA and, when constructed, will be from the planned thickener and cyclone sand plant. Groundwater pumping from a deep aquifer is the main source of makeup water when needed to meet process water demands.

The TIA will be the main water management reservoir for the Red Chris Mine. Inputs to the TIA will include water from the tailings, runoff from the TIA catchment area, direct precipitation, and pump-back from the reclaim dams. Collected water from the pit and WRSFs, including the low-grade ore stockpile, will be initially routed through the mill for process use before reporting to the TIA with the tailings. Diversion ditches around the TIA will divert noncontact runoff water to the north and south of the TIA as much as practicable.

# **Closure and Reclamation Planning**

A closure plan was developed for the 2021 PFS for the closure of the proposed block cave operation in its entirety, including works associated with the existing open pit operations. Under the British Columbia Environmental Management Act and the Mines Act, maintenance of a five-year mine plan and a closure plan are required for mines operating in British Columbia. The closure plan currently approved is for the closure of the existing facilities to support the open pit mine at Red Chris. A reclamation bond is required to be updated according to the disturbance areas and facilities associated with the M-240 permit. The closure plan for the proposed block cave project was completed for the purposes of development of a closure cost estimate. The estimated total exit cost for the block cave project including decommissioning, closure, and reclamation of mine infrastructure associated with the existing open pit mine is approximately C\$181 M.

# **Permitting Considerations**

The Red Chris Operations are fully permitted for open pit mining.

The BC Reviewable Projects Regulation sets out the criteria for determining which projects are required to undergo an EA; however, Newcrest understands that the block cave project does not meet or exceed the thresholds defined in the Reviewable Projects Regulation; therefore, except in the event that the Project is designated by the Ministry of Environment and Climate Change Strategy, British Columbia ("ENV"), the Project will not require a new EA certificate. However, amendments to the EA certificate will be required in connection with certain phases of the block cave project (such as underground mining) where the activities to be undertaken during such phases are not authorized by the existing EA certificate. The permitting strategy will follow a phased approach. Permitting for

development of the exploration decline (Phases 1 and 2) is complete and the decline is under construction. MB1 is expected to be able to be permitted at the provincial level, through an EA certificate amendment and amendments to the *Mines Act* and *Environmental Management Act* permits. The application for an EA certificate amendment in terms of the *Environmental Assessment Act* may be subject to the agreement yet to be concluded between the Tahltan Central Government and the Province under Section 7 of the *Declaration on the Rights of Indigenous Peoples Act. Mines Act* and *Environmental Management Act* permit amendment applications are expected to be submitted and reviewed concurrently during the EA certificate amendment process.

Extension of the mine's operating life beyond 2040 through the mining of MB2 and MB3 may trigger the need for environmental review at the federal level under the *Impact Assessment Act* and additional permitting under the *Fisheries Act*. These permitting activities are estimated to be initiated after 2035.

#### **Social Considerations**

The mining operations are located entirely within the Tahltan Nation's territory. The proposed block cave project requires an approach that aligns with the Tahltan Nation and leadership and with provincial governments. Since initiating discussions on exploration activities and Red Chris Mine activities, Newcrest representatives continued to meet regularly with Tahltan Central Government representatives, Tahltan leadership, and the Tahltan Nation. While feedback has been largely positive, a range of concerns and interests have been raised.

# Capital and Operating Costs

Capital and operating cost estimates are presented at an overall pre-feasibility level of study, LOM plan determinations for the active Red Chris open pit mining operation, and a pre-feasibility study for the proposed Red Chris block cave project.

# **Capital Costs**

All capital costs for the open pit are considered to be sustaining capital costs and are included in the open pit operating costs.

Capital cost estimates in the 2021 PFS were prepared for the process plant expansions and underground development to produce an estimate with a target accuracy of  $\pm 25$ . The mining establishment capital costs have been estimated using benchmarks from other operations, projects, and studies with an assumption made for Canadian cost differential (where applicable). Footprint mine designs considered haulage scenarios that use single as well as multiple crusher layouts. The reduced distances and the inclusion of a truck loop resulted in a single crusher configuration being selected as the preferred option, substantially reducing the capital required in MB2 and MB3. Capital costs were estimated based on a 13.6 Mt/a throughput assumption and are summarized in the following table

**2021 PFS Capital Cost Estimate Summary** 

Item Estimate (FY22 Real)	Unit	MB1	MB2	MB3	Total
Underground mining (underground mine)	C\$ M	772	179	375	1,326
Raw feed (materials handling)	C\$ M	58	_	_	58
Treatment (plant services & utilities)	C\$ M	157	_	_	157
On-site infrastructure	C\$ M	188	_	_	188
Sub-Total Direct Cost	C\$ M	1,175	179	375	1,729
Construction Indirect costs (support services)	C\$ M	286	19	39	344
Project delivery services	C\$ M	135	10	19	164
Contingency	C\$ M	298	32	66	396
Sub-Total Indirect Cost	C\$ M	719	61	124	903
Total	C\$ M	1,893	240	499	2,632
Indirect	%	61.2	34.0	33.0	52.2

Contingency	%	19.0	15.3	15.2	17.9
Contingency	/0	12.0	13.3	13.4	1/.7

# **Operating Costs**

Four major line items make up the open pit operating cost estimate: the processing cost; G&A; sustaining capital operating cost; and the mining cost. The operating costs were estimated during FY21Q4 forecast period and represent the total open pit cost estimate for the remaining LOM (e.g., before the underground block caving operation is fully implemented). The operating cost estimate for the remainder of the open pit operations is summarized in the table that follows.

**Open Pit LOM Operating Cost Forecast** 

Туре	Units	Total	FY22	FY23	FY24	FY25	FY26	FY27	FY28
Exchange Rate	US:CAN		0.80	0.80	0.80	0.80	0.80	0.80	0.80
Tonnes Moved	Mt	227.4	46.8	43.9	43.8	40.1	37.4	14.5	0.9
Tonnes Milled	Mt	75.0	10.5	11.0	11.0	11.0	11.0	11.0	9.6
Mining Cost	US\$/t	2.9	3.1	3.2	2.5	2.7	2.8	2.8	1.2
Milling	US\$/t	6.7	6.9	6.5	6.3	6.3	6.3	7.2	7.2
G&A	US\$/t	3.3	4.7	3.7	3.6	3.5	3.3	2.2	1.9
Sustaining Capital	US\$/t	3.6	8.5	7.0	2.3	2.3	2.2	1.6	1.6
Processing Cost	US\$/t	13.6	20.1	17.3	12.3	12.0	11.8	10.9	10.7

The block cave project operating cost estimate is presented at an estimation accuracy of  $\pm 25\%$ . All inputs were in Q2 2021 Canadian dollars. No escalation was included in the operating cost estimates, nor was a contingency allocation made during estimation. Operating cost estimate allocations by major area are shown in the following table.

# Operating Cost Estimate, 2021 PFS (by area)

Area	Description	Cost per Tonne (C\$/t milled)
200	Underground mining (Underground Mine)	5.44
300	Raw feed (materials handling)	0.21
400	Treatment (plant services & utilities)	7.10
500	On-site infrastructure	3.26
800	General & administrative	4.33
900	Operating contingency	_
	Total	20.34

Note: numbers have been rounded. Totals may not sum due to rounding.

Mining and processing cost forecasts from the 2021 PFS are shown in the next table.

Operating Cost Estimate, 2021 PFS (C\$/t processed)

	MB1	MB2	MB3	Total
Mining	4.99	5.96	5.96	5.65
Processing	10.36	10.36	10.36	10.36
Site G&A	4.33	4.33	4.33	4.33
Total Cost	19.68	20.65	20.65	20.34

Note: Processing in this table is includes ore treatment + on-site infrastructure

### Economic Analysis

The Red Chris Operations, consisting of the open pit and proposed block cave were valued using a discounted cash flow (DCF) approach. Estimates were prepared for all the individual elements of cash revenue and cash expenditures. The resulting net annual cash flows are discounted back to the date of valuation of start-of-year 30 June 2021. A discount rate of 4.50% was used. Red Chris Operations economics are presented on a 100% basis. Newcrest holds a 70% interest in the Red Chris Operations.

The economic evaluation of the Mineral Reserves supports a mine life of 36 years, from FY22 to FY57. Over the LOM, copper recoveries will range from approximately 81–86% and gold recoveries will range from 60–75%. The average concentrate grade over the LOM is forecast at approximately 24.3% Cu. Royalty provisions in the financial model include provisions made to the Tahltan Nation on the five mining leases under the IBCA, and a 1% NSR payable to Royal Gold on all or portions of four of the mining leases. Federal income tax is levied at a rate of 15% on taxable income and provincial income tax in BC is levied at a rate of 12%, resulting in a combined tax rate of 27%. The BC minerals tax was included, as were conceptual closure costs of C\$181 M. The base case economic analysis assumes 100% equity financing and is reported on a 100% project ownership basis. Newcrest holds an 70% interest in the Red Chris Operations, and Imperial holds the remaining 30% interest.

The economic analysis shows a net present value at 4.5% of C\$2,242 million, and an internal rate of return of 16.1%. A payback period of 3.2 years is based on the earliest date that net accumulated free cash flow is equal to zero. This is calculated from first commercial production that is defined as the date of achieving critical hydraulic radius for the Red Chris block cave, which is assumed to be FY27. All metrics are prior to shareholder loans. The key financial metrics are presented in the following table.

#### **Project Financial Metrics**

Scenario	Unit	LOM Total
NPV	C\$m real	2,242
IRR	%	16.1
Payback (from 30 June 2021)	Years	8.9
Undiscounted cumulative cashflow	C\$m real	5,016
Mine life	Years	36
Open pit mined	Mt	200
Underground mined	Mt	406
Tonnes moved	Mt	654
Tonnes milled	Mt	471
Gold grade	g/t	0.53
Copper grade	%	0.45
Gold production	koz	5,321
Copper production	kt	1,749
AISC	C\$/oz	(60)
AIC	C\$/oz	458
Site costs	C\$/t milled	21.01
Sustaining capital cost estimate	C\$m real	1,761
Production stripping	C\$m real	372
Exploration	C\$m real	99
Non-sustaining capital cost estimate	C\$m real	2,758
Total capital cost estimate	C\$m real	4,991

Notes: AISC = all-in sustaining costs; AIC = all-in costs.

### Exploration, Development and Production

Over the forecast LOM from FY22, the Red Chris Operation (open pit and proposed block cave project) is forecast to produce 5,321 koz of gold and 1,749 kt of copper at an average AISC of negative C\$60/oz. The process plant is anticipated to process a total of about 471 Mt of ore at an average grade of 0.53 g/t gold and 0.45% copper and process recoveries of 60–75% for gold and 81–86% for copper. The average concentrate grade over the LOM is forecast at approximately 24.4% Cu.

In FY22, the Red Chris Operation is expected to produce between 40 and 42 kozs of gold at an AISC of between negative US\$25 million and US\$15 million . 12

In FY22, exploration is expected to see expenditures of approximately US\$21 million. <sup>13</sup> Newcrest plans to continue exploration activities, including drilling the key East Ridge target with the aim of supporting potential future resource delivery, drill testing of the SW Main Zone target, follow up work at Gully and Far West and the commencement of target generation work within the regional tenement tenements.

## Wafi-Golpu Project

Certain portions of the following information are derived from and based on the assumptions, qualifications and procedures set out in the Wafi-Golpu Report. For a more detailed overview of the Wafi-Golpu Project, please refer to the Wafi-Golpu Report noted above, which is available under Newcrest's profile on SEDAR at <a href="www.sedar.com">www.sedar.com</a>.

#### Project Description and Location

The Wafi-Golpu Project is situated within the Morobe Province of PNG, approximately 65 km southwest of Lae, the nearest commercial centre.

The Wafi–Golpu Project is a 50:50 unincorporated joint venture ("JV"), termed the Wafi-Golpu Joint Venture or WGJV, between Wafi Mining Limited ("Wafi Mining") and Newcrest PNG 2 Limited ("Newcrest PNG2"), (collectively the "WGJV Participants"). Harmony is the ultimate parent company of Wafi Mining. Newcrest is the ultimate parent company of Newcrest PNG2.

The WGJV holds two Exploration Licences covering a total area of approximately 129 km², registered in the names of Wafi Mining and Newcrest PNG2. The Golpu deposit is located within Exploration Licence 440 (EL440; expiry date 10/03/2022), with a range of major surface facilities that will support the exploitation of the deposit to be located on Exploration Licence 1105 (EL1105, expiry date 25/01/2023). The Wafi and Nambonga deposits are also within EL440. Both tenements were in good standing as at June 30, 2021.

Each Exploration Licence is subject to the condition that: "Subject to any agreement made under Section 17 of the Act, the State reserves the right to elect at any time, prior to the commencement of mining, to make a single purchase of up to 30% equitable interest in any mineral discovery arising from this licence, at a price pro-rata to the accumulated exploration expenditure and then to contribute to further exploration and development in relation to the lease on a pro-rata basis unless otherwise agreed". If the State chooses to take-up its full 30% interest, the interest of each of Wafi Mining and Newcrest PNG 2 will become 35%.

The proposed Golpu operation ("Golpu Development") is a greenfields development that focuses on the Golpu copper—gold porphyry deposit where Mineral Resources and Mineral Reserves were estimated. Additional Mineral Resources were estimated for the Wafi epithermal gold and Nambonga copper—gold porphyry deposits, however, these deposits are not currently included in the mine plan. The WGJV Participants applied for a SML and ancillary tenements (including Leases for Mining Purposes and Mining Easements) in late 2016, covering proposed Golpu Development facilities and infrastructure as they were understood at the time. The SML application included a Proposal for Development, which incorporated a feasibility study report completed in 2016 (the "2016 Feasibility

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<sup>&</sup>lt;sup>12</sup> Production and financial outcomes represent Newcrest's 70% share. The achievement of guidance is subject to market and operating conditions together with the increased risk to the general operating environment presented by the COVID-19 pandemic.

<sup>&</sup>lt;sup>13</sup> Amount represents Newcrest's 70% share.

**Study**") and supporting application documents such as a National Content Plan. Amendments to these tenement applications were made in March 2018, where the location and/or nature of facilities and infrastructure was refined through an update to the feasibility study completed in 2018 (the "**2018 Feasibility Study Update**"). The Proposal for Development was also updated to incorporate the findings of the 2018 Feasibility Study Update. Additional applications will also be made where necessary. The grant of the SML and related ancillary tenements remains subject to the completion of *Mining Act 1992* (PNG) ("**PNG Mining Act**") and PNG Environment Act processes.

While the WGJV Participants have entered into a compensation agreement for each of EL440 and EL1105, they will need to enter into additional compensation agreement(s) covering land that is the subject of any other tenements that might be required by the Golpu Development. These agreements will need to be registered under the PNG Mining Act to become valid and enforceable. Surface rights for facilities and infrastructure (including roads and pipelines) are provided by the relevant mining tenements under the PNG Mining Act. Where activities will be undertaken on or under customary land, a compensation agreement with the customary landowners is required.

Extraction of water requires a permit under the PNG Environment Act.

The holder of a SML must pay a royalty to the State that is equivalent to 2% of the net proceeds of sale of minerals (calculated as net smelter return or free-on-board ("FOB") export value, whichever is appropriate). A production levy of 0.5% is also payable to the MRA under the MRA Act 2018 on the gross value of production (i.e., excluding the offsets of treatment and refining charges, payable terms and freight).

### Accessibility, Climate, Local Resources, Infrastructure and Physiography

Exploration activities are serviced by an exploration camp that is situated in heavily-forested, mountainous terrain. A combination of roads and access tracks exist between Lae and the Wafi–Golpu Project area. However, the track components are suitable for four-wheel drive vehicles and purpose-built trucks only. During major rainfall events this access route may become closed to vehicular traffic. Current access to the planned Golpu mine site is via a partly-sealed road from Lae to Timini, and a gravel road from Timini (Demakwa) to Wafi, with the trip taking about three to four hours depending on the weather. This road will be replaced by a new road (including bridges), termed the northern access road, as part of the Golpu Development.

Commercial airlines operate flights between the national capital, Port Moresby, and Nadzab airport, which is approximately a one-hour drive by road from Lae. Helicopter access to the Wafi–Golpu Project area is available, with suitable areas at the proposed mine site cleared for landing.

The planned mine site area has a high rainfall and two distinct seasons: a dry season from June to September and a rainy season from December to March. The site is characterised by low wind speeds, high humidity and warm temperatures with an average maximum of 28°C and an average minimum of 21°C. Mining activities are planned year-round. Exploration activities can be curtailed by heavy rainfall. Vegetation in the Wafi–Golpu Project area consists of lowland and mid-mountain tropical forests with some areas of tropical grassland in upper elevations. Some areas are partly cleared as part of subsistence agricultural practices.

The Golpu Development design envisages three separate areas:

- mine area: located on the northern side of the Owen Stanley Ranges in the foothills of the Watut River catchment. The elevation ranges from approximately 100–380 masl. Most of the proposed mine area is steep and mountainous, and is covered by dense tropical rainforest;
- infrastructure corridor: will include the access road connector and pipelines located on the floodplains of the Watut and Markham Rivers. Vegetation primarily consists of partially-cleared forest and cultivated gardens. Elevations in the corridor area are about 100 masl; and
- coastal area: includes the proposed port facilities at Lae, near the Markham River estuary on the Huon Gulf and outfall area about 6 km to the east of the port near the Busu River estuary. These areas are at, or very close to, sea level.

Two sources of earthquakes were identified in the general Wafi–Golpu Project area: shallow-depth crustal events, and subduction events. Due to the close proximity of large earthquake events in relation to the Golpu Development, low-frequency earthquake sensors were incorporated into the seismic monitoring plan. Data collected from these sensors will be used to validate the earthquake catalogue, the ground motion parameters, and formulate site-specific ground motion relations.

# History

Prior to the establishment of the WGJV, exploration had been conducted by CRA Exploration Pty Ltd ("CRAE"), Elders Resources Limited ("Elders"), Australian Gold Fields Limited, Aurora Gold Limited, Abelle Limited, and Harmony. Work in the period 1977–2008 included ridge and spur soil sampling, trenching, ground and airborne geophysical surveys, core and RC drilling, and technical studies. The Wafi deposit was identified in 1983, the Golpu deposit was located in 1990, and the Nambonga deposit was discovered in 2007.

Newcrest obtained an interest in the Wafi-Golpu Project in 2008.

# Geological Setting, Mineralisation and Deposit Types

The deposits discovered to date in the Wafi–Golpu Project area are considered by Newcrest to be representative of a number of mineralisation models, including porphyry copper–gold, high-sulphidation, and low-sulphidation epithermal systems.

The basal geology consists of east to east—southeast-dipping metasedimentary rocks of the Owen Stanley Metamorphic Complex, unconformably overlain by sediments and volcanic sequences of the Omaura Formation and Langimar Beds. These rocks were intruded by a sequence of diorite stocks with the following paragenesis: emplacement of Nambonga, Western and Golpu diorites; emplacement of Livana diorite in the form of a narrow intrusion with associated dykes intruded along previous intrusive contacts; and explosive emplacement of the Wafi breccia complex. Younger units of the Babwaf Conglomerate and the Wafi Conglomerate unconformably overlie the older units and generally occur in fault-bounded depressions.

The Golpu deposit extends over about 800 m north–south x 500 m west–east, and has been drill tested to more than 2,000 m depth. The Hornblende (Livana) Porphyry is the main mineralised porphyry. The other porphyries act either as weak mineralisers (Golpu Porphyry) or as benign hosts (wall rock) from adjacent mineralising porphyries. The dominant copper–gold-bearing sulphide species vary laterally and vertically within the deposit from an inner bornite (plus chalcopyrite) core, to chalcopyrite as the dominant copper sulphide, and grading out to a pyrite-only shell on the mineralisation margin. The porphyry system is mineralised with gold, copper, silver and molybdenum.

The Wafi diatreme complex is a roughly rectangular-shaped feature, 800 x 400 m at surface with steep, inward-dipping sides. Alteration associated with the high sulphidation gold event overprints the Golpu porphyry-style alteration and mineralisation, with the diatreme carrying fragments of the earlier porphyry alteration. The high sulphidation event has remobilised pre-existing porphyry-related copper from the phyllic-argillic altered upper porphyry and deposited this as zoned enargite—tennantite—covellite—chalcopyrite mineralisation. Most of the gold was introduced in association with pyrite of the high sulphidation event. A number of mineralised zones, including the A, B, NRG and Link Zones, were defined in the Wafi deposit. Much of the mineralisation is refractory, and is associated with arsenian pyrite.

The Nambonga diorite stock is a low-grade copper and gold mineralised system, and extends over an area of approximately 200 x 200 m and to a vertical extent of at least 800 m. Much of the mineralisation is associated with silicification, either pervasive or as veins. Mineralisation consists of disseminated and vein-style copper—gold mineralisation and structurally-controlled base metal mineralisation in steeply-dipping lodes.

# Exploration

The WGJV Participants have completed core drilling and numerous technical studies. A feasibility study was completed in 2016 and updated in 2018. Gold-copper exploration potential remains in the greater Golpu area,

including the Western, Northern, Hekeng Zones and the Miapilli target. Newcrest's current and planned exploration activities are discussed under the heading "Wafi–Golpu Project - Exploration, Development and Production".

## Drilling

A total of 791 drill holes (including wedges) were completed in the Wafi–Golpu Project area since 1983, comprising about 267,907 m of core drilling and 17,180 m of RC drilling. Drilling includes holes completed for exploration, resource delineation, geotechnical, and hydrological purposes. A total of 306 drill holes (210,725.45 m), including wedges and re-drills, are used in Mineral Resource estimation at the Golpu deposit. The Mineral Resource estimate at the Wafi deposit is supported by 482 drill holes (205,570.8 m). A total of 34 core holes (18,079.4 m) support the Nambonga deposit Mineral Resource estimate. Due to the location of the deposits in close proximity, and the location of the drill collar, a single drill hole can inform more than one estimate.

Diamond drilling was done by wireline methods using HQ, NQ, and PQ core. There are rare intervals of BQ (36.5 mm) core. Some core was oriented.

Geological logging was both qualitative and quantitative and recorded lithology, mineralisation, alteration mineralogy, weathering, structural characteristics and other physical properties of the core. A consistent geological logging standard and descriptive terminology has been applied since drill hole WR173. Historical logging (CRAE and Elders) was also transformed into this terminology. Detailed geotechnical information, such as rock strength, fracture frequency, rock mass rating ("RMR") and discontinuities was collected for some later core drill holes.

Recoveries average 98.4% within the Golpu deposit. No material relationship was identified between core recovery and grade within the Golpu deposit area. Core recovery at the Wafi deposit is typically good with >90% recovery in the mineralised units. There is no correlation between the gold grade and higher recovery zones. Core recovery within the Nambonga deposit area is typically good with >95% recovery in the mineralised rock types.

Drill hole collars were initially located using a hand-held global positioning system ("GPS") instrument, and later surveyed in the Wafi Grid by a qualified and competent surveyor using theodolite or DGPS instruments. The Elders and CRAE drill holes were surveyed using an Eastman single-shot camera. Downhole surveys were completed on CRAE core holes at the Golpu deposit, typically at 25 m and then every 20–50 m downhole. Harmony/WGJV drill holes were surveyed within the Golpu deposit area using a Reflex downhole survey tool, typically with the first reading at 18 m and then every 30 m thereafter downhole.

## Sampling, Analysis, and Data Verification

All drill core is sampled and assayed over the entire hole length. Most sample lengths at the Golpu deposit are either 1 m (about 80%) or 2 m (about 20%). Sample lengths were mainly 2 m for the earlier drill holes at the Wafi deposit, and then 1 m for all later drill holes. Most core drill hole samples at the Nambonga deposit average 1 m in length, with lengths varying at contacts of mineralised lithological units.

The methods used to derive bulk density values include air/water (approximately 95%) and wax/water (approximately 5%). There is a total of 19,942 determinations available for the Golpu deposit, with means by lithology ranging from 2.43 t/m³ in oxidised material to 2.77 t/m³ in hornblende porphyry. The density values used for the Wafi deposit are derived from the Golpu deposit measurements. There is no apparent relationship between bulk density and grade at Wafi, but there is a weak to moderate correlation between bulk density and RL at the higher oxidised levels. Bulk density domains for the Nambonga deposit were derived from a combination of oxidation, alteration and lithology with mean values assigned to domains ranging from 2.68–2.88.

Third-party, independent analytical and sample preparation laboratories have included Pilbara Laboratories in Lae, SGS Lae and SGS Townsville, Genalysis Lae and Jakarta and Intertek Lae and Jakarta. SGS Townsville obtained ISO9001 accreditations in 2001; there is no accreditation information for SGS Lae in the database. Intertek Lae is the successor laboratory to Pilbara Lae and Genalysis Lae, and is not accredited. Intertek Jakarta, the successor to Genalysis Jakarta obtained ISO17025 accreditation in 2014; accreditations prior to that date are not recorded in the database. Check laboratories have included locations and laboratories in Madang (PNG Analytical), Lae (SGS,

Analabs, Intertek), Wau (SGS), Townsville (Analabs, SGS, ALS Chemex), and Perth (Genalysis, UltraTrace now part of the Bureau Veritas group). Laboratories were all independent; however, accreditations for the time of use are not recorded in the database.

Early sample preparation consisted of crushing to either 2 mm or 5 mm, then pulverising to nominal 75  $\mu$ m. Protocols from the Harmony/WGJV campaigns saw samples crushed to minimum 90% passing 2 mm, and pulverising to minimum 95% passing 106  $\mu$ m.

Analytical methodologies for the majority of the legacy data are not recorded in the database. Information recorded typically consists of the element and detection limit. Legacy analyses were primarily for gold and copper, but a multi-element suite could also be completed. Samples sent to Genalysis/Intertek were assayed for gold, a multi-element suite including copper, silver, molybdenum, arsenic and iron, and sulphur.

All assays are checked and verified in accordance with the Newcrest Resource Development QA/QC and database management procedures. QA/QC procedures were in place for all of the Harmony and WGJV programs. The process generally involves submission and analysis of SRMs, blanks, and duplicates.

Sample security has not historically been monitored. Sample collection from drill point to laboratory relied upon the fact that samples were either always attended to, or stored in the locked on-site preparation facility, or stored in a secure area prior to laboratory shipment. Chain-of-custody procedures consisted of sample submittal forms sent to the laboratory with sample shipments to ensure that all samples were received by the laboratory.

Newcrest includes both internal and third-parties in the data verification steps:

- internal verification: laboratory inspections; review of geological procedures, resource models and drill plans; sampling protocols, flow sheets and data storage; specific gravity data; logging consistency, down hole survey, collar coordinate and assay QA/QC data; geology and mineralisation interpretation; and
- external verification: review of the Golpu drilling, sampling and analytical processes and associated QA/QC procedures by AMC Consultants Pty Ltd in 2012; review of Golpu drill hole collar locations by Quickclose Pty Ltd in 2017; review of the Nambonga database by Maxwell Geoservices in 2008.

The Mineral Resource and Mineral Reserve estimates are subject to regular RRSC review meetings, internal competent person reviews, and independent external competent person reviews.

No material issues with the database including sampling protocols, flowsheets, check analysis program or data storage have been identified to date from the checks performed. The database is acceptable for use in Mineral Resource estimation for the Golpu, Wafi and Nambonga deposits, and can be used to support Mineral Reserve estimation and mine planning for the Golpu deposit.

### Mineral Processing and Metallurgical Testing

Laboratories and testwork facilities used during metallurgical evaluation of mineralisation at the Golpu deposit include: Tunra Bulk Material Handling Research Association; JKTech; ALS laboratories in Brisbane and Adelaide; Metso; Outotec; Paterson & Cooke; SGS Environmental Services; Orway Mineral Consultants; Glossop Consultancy, Ammtec, SGS Lakefield Oretest, Amdel, IML, Fox Anamet, and Optimet. These facilities are independent of Newcrest. Metallurgical testwork facilities are typically not accredited for metallurgical testwork techniques. Internal laboratories operated by Newmont, CRAE, and Rio Tinto were also used during Wafi deposit evaluations.

Metallurgical testwork on the Golpu deposit has included modal mineralogy, copper mineralogy, sulphide grain size information, sulphide association, comminution (SMC test, DWi, BWi, ore hardness), batch flotation, locked-cycle flotation, cleaner/scavenger tests, effect of primary grind size on gold recovery, tailings and concentrate thickening/pumping, concentrate filtration and characterisation; flocculant screening and dynamic settling testwork; rheological characterisation. The outcome of the flowsheet development program for the Golpu deposit was the development and optimisation of two process flowsheets. This facilitated the stage-wise upgrading and modification

of the process plant to accommodate the changing composition of the plant feed over the LOM. The first flowsheet was designed to provide an optimal processing solution for treating high-grade ores with a porphyry content of 75% or more, and was termed the "LEAN flowsheet". The second flowsheet (the "Golpu flowsheet") was designed to treat mineralisation with a porphyry content of less than 75%, and incorporated a pyrite circuit for improved gold recovery from the metasediment-rich material.

Recovery forecasting for the Golpu Development used the metallurgical model derived for year-on-year estimation of metallurgical design parameters. The variability testwork (LEAN flowsheet) indicates metal recoveries for the porphyry-hosted mineralisation (Domain 30 and 33) of 94% for copper and 70% for gold to a 90% confidence level. The metal recoveries are forecast for metasedimentary-hosted mineralisation at 90% for copper and 35% for gold, to a 90% confidence level. Over the LOM, copper recoveries are anticipated to average 94% and gold recoveries are expected to average 68%. Concentrate grade average over the LOM is projected to be 29% Cu and 15 g/t Au. The recoveries predicted for the Golpu Development were benchmarked against a number of operating mines. Forecast copper recoveries are considered to be comparable with other operations that have higher than average copper head grades. Gold recoveries predicted for the Golpu Development are within the range of recoveries achieved in the operations reviewed, and gold recovery shows no clear relationship to gold head grade. There are no known deleterious elements that would affect Golpu Development concentrate marketability.

The mineralisation at the Wafi deposit has been tested using mineralogy, flotation, roasting, POX, bacterial leaching, and comminution work. There is variability between the mineralised zones in the Wafi deposit with the A Zone generally more amenable to direct cyanidation than either the B Zone or Link Zone. A positive correlation exists between arsenic and gold concentration, with the Link Zone having a higher arsenic content than mineralisation in the A and B Zones. Metallurgical recoveries for use in Mineral Resource estimation are assumed to be 91% gold recovery for non-refractory gold mineralisation and minimum of 47% recovery for refractory gold mineralisation. There are no known deleterious elements within the Wafi deposit that would affect doré concentrate marketability.

No testwork has been conducted on the Nambonga deposit. Metallurgical recoveries for use in Mineral Resource estimation for the Nambonga deposit are assumed at 85% for gold, based on the adjacent Golpu deposit as an analogue. There is no information as to whether any deleterious elements are present at Nambonga, because no deposit-specific metallurgical tests were conducted.

#### Mineral Resource and Mineral Reserve Estimates

Mineral Resources and Mineral Reserves are presented on a 100% basis. These Mineral Resources and Mineral Reserves are not additive to the Mineral Resources and Mineral Reserves presented under the heading "Description of the Business - Mineral Reserves and Mineral Resources", which are tabulated showing only Newcrest's interest.

# Mineral Resources

#### Golpu Deposit

Wireframes were constructed for lithology, alteration, oxidation, sulphide distribution and structures. All combinations of lithology, alteration, sulphide distribution and faulting were assessed for use as estimation domains. Geostatistical analysis was conducted to review individual elements and correlations between elements.

A composite database was compiled for each element from the assay table database on 10 m composite lengths. Metal per composite assessments were completed on all gold and copper domains. Top-cuts were applied to copper, gold, silver, molybdenum, sulphur, and iron assays in selected domains. No top cuts were applied to arsenic.

Density was directly assigned to the block model by density domains. Variograms were modelled for all domains, for all estimated elements. Some domains contain limited samples, and in these cases variograms were generated that were similar in structure and range to the closest matching domain.

Quantitative kriging neighbourhood analysis ("QKNA") assessments were focused on the maximum number of samples and search distances to be used in the block estimate. The grade model was estimated with OK using

pairwise variograms for seven elements: gold, copper, silver, molybdenum, sulphur, arsenic, and iron. The estimation uses the domain composites as informing samples, pairwise variogram models for composite weighting and ellipsoidal search neighbourhoods for composite selection. The elements are estimated into a block model with 40 x 40 x 40 m parent cells with 10 m resolution on domain margins; all sub-cells are assigned the parent grade.

The model was validated by comparison with informing composite de-clustered statistics, alternative modelling methods (NN), inverse distance weighting to the second power ("**ID2**"), raw variogram OK, discrete Gaussian models and conditional simulation models, and graphical comparisons (swath plots and grade–tonnage curves).

The Mineral Resource is classified as either Indicated Mineral Resources or Inferred Mineral Resources, based on an evaluation of factors including data spacing and distribution, geological confidence as a function of continuity and complexity of geological features, and estimation quality parameters (for example, average distance to informing samples for block estimation). No Measured Mineral Resources were classified.

The Mineral Resource estimate assumes a bulk mining underground extraction method such as block caving, and are reported above an NSR cut-off.

# Wafi Deposit

Wireframes were constructed for lithology, alteration, oxidation, and structures. Geostatistical analysis was conducted to review individual elements and correlations between elements.

A composite database was compiled based on gold as the primary element from the raw assay database on 4 m composite lengths. Top cuts were determined by review of statistical parameters for gold, followed by silver and copper. Top-cuts were applied to copper, gold, silver, molybdenum, sulphur, arsenic and iron assays in selected domains.

Density was directly assigned to the block model by rock type and oxidation domains based on Golpu deposit analogue averages. Variograms were modelled for all domains for all estimated elements. The minor domains contain limited samples and could not form coherent variograms. In these cases, the estimate used the variograms generated for the major surrounding domains.

The grade model was estimated using OK on 4 m composites for seven elements: gold, copper, silver, molybdenum, sulphur, arsenic, and iron. The estimation used the domain composites as informing samples, back-transformed Gaussian variogram models for composite weighting, and ellipsoidal search neighbourhoods for composite selection. The elements were estimated into a block model with 20 x 20 x 10 m parent cells with 10 m resolution on domain margins. All sub-cells were assigned the parent grade. The parent block size reflects the estimation precision available from the drill hole spacing and the assumed bulk open pit mining methodology.

The model was validated using visual inspection, comparison with informing composite declustered statistics, alternative modelling methods (ID2), and graphical comparisons (swath plots and grade–tonnage curves).

The Mineral Resource was classified as Indicated and Inferred based on factors including data spacing and distribution, geological confidence as a function of continuity, and complexity of geological features, and estimation quality parameters. No Measured Mineral Resources were classified.

An internal mining concept study assuming open pit mining was undertaken by the WGJV in 2013. Information from this study was used in assessing reasonable prospects of eventual economic extraction, factored and updated where applicable. Mineral Resources at Wafi are reported assuming open pit mining methods with limited internal selectivity, and a process method that is anticipated to be a combination of a carbon-in-pulp ("CIP") and CIL operation, with a flotation sulphide recovery mill process. The estimates are reported at cut-offs of 0.4 g/t Au for non-refractory gold mineralisation ("NRG") and 0.9 g/t Au for refractory gold mineralisation ("RG").

## Nambonga Deposit

The geology model for the Nambonga deposit includes lithology, alteration, oxidation, and structures wireframes. Geostatistical analysis was conducted to review individual elements and correlations between elements.

Assays were composited to 4 m intervals, based on gold as the primary element. Top-cuts were determined by review of statistical parameters, graphed data, decomposition analysis and percentage of metal contributed from the highest-grade samples. Top-cuts were applied to copper, gold, silver, molybdenum, sulphur, arsenic and iron assays in selected domains.

Average bulk densities were assigned to the model based on 277 determinations from Nambonga drill core. Variograms were modelled for the combined major domains for all estimated elements. The minor domains contain limited samples and could not support a variogram. In these cases, the variograms generated on major domain data were used for estimation of minor domains.

Grades were estimated using OK on 4 m composites for seven elements, gold, copper, silver, molybdenum, sulphur, arsenic, and iron. Initial results indicated a lack of variability in the estimate, and the estimate was re-run using 2 m composites. The estimation used the domain composites as informing samples, back-transformed Gaussian variogram models for composite weighting and ellipsoidal search neighbourhoods for composite selection. The elements are estimated into a block model with 40 x 40 x 40 m parent cells and 10 m resolution on domain margins. All subcells were assigned the parent grade. The parent block size reflects the estimation precision available from the drill hole spacing and an assumed bulk underground sub-level caving/block caving mining methodology.

The model was validated using visual inspection, comparison with declustered composites, use of an alternative ID2 interpolation method, and graphical comparisons (swath plots and grade–tonnage curves).

The Mineral Resource is classified as Inferred based on evaluation factors including data spacing and distribution, geological confidence as a function of continuity and complexity of geological features, and estimation quality parameters. No Measured or Indicated Mineral Resources were classified.

The estimate assumes a mass mining by block cave or sub-level caving mining method with no internal selectivity would be used. The Mineral Resource is reported using an assumed 0.5 g/t Au cut-off grade.

### Mineral Resource Estimate Tables by Deposit

All Mineral Resources are reported on a 100% basis with an effective date of June 30, 2021. Newcrest has a 50% interest in the WGJV. Mineral Resources are reported inclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Mineral Resources are provided by deposit in the following tables.

# Golpu Deposit Measured and Indicated Mineral Resource Statement

Confidence Category Tonnage (Mt)	Tonnogo	Grade			Contained Metal		
	Au (g/t)	Cu (%)	Ag (g/t)	Au (Moz)	Cu (Mt)	Ag (Moz)	
Measured	_	_	_	_	_	_	_
Indicated	690	0.71	1.1	1.3	16	7.5	28
Measured + Indicated	690	0.71	1.1	1.3	16	7.5	28

## Golpu Deposit Inferred Mineral Resource Statement

C. C. L. Tonnago	Grade			Contained Metal			
Confidence Category	Tonnage (Mt)	Au	Cu	Ag	Au	Cu	Ag
Category (IVII)	(g/t)	(%)	(g/t)	(Moz)	(Mt)	(Moz)	
Inferred	140	0.63	0.85	1.1	2.8	1.2	4.6

Notes to accompany Golpu Deposit Mineral Resource tables:

- Mineral Resources are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr David Finn, MAIG, whose job title with Newcrest is Senior Geologist Targeting, and who is a Newcrest employee.
- 2. Mineral Resources are reported on a 100% basis. Newcrest holds a 50% interest in the WGJV.
- 3. Mineral Resources are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 4. Mineral Resources at Golpu are reported assuming a bulk mining underground extraction method and metallurgical recovery for copper and gold by sulphide flotation. Mineral Resources are reported above a NSR cut-off, which assumes a gold price of US\$1,400/oz Au, a copper price of US\$3.40/lb Cu, mining cost of US\$8.37/t mined, processing cost of US\$9.75/t processed, e G&A costs of US\$4.17/t processed, copper concentrate treatment charge of US\$100/dmt of concentrate, transport cost of US\$33.50/wet tonne of concentrate, and copper refining charges of US\$0.10/lb of recovered copper. Silver and molybdenum were not valued in the NSR cut-off; however, these elements were reported within the Mineral Resource as they were expected to be recovered with minor circuit modifications or concentrate contract negotiations. Over the life-of-mine, it is anticipated that copper recoveries will average 94% and gold recoveries will average 68%.
- 5. Tonnages are metric tonnes. Gold and silver ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 6. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

#### Wafi Deposit Measured and Indicated Mineral Resource Statement

	Tonnaga	Grade		Contained Metal		
Confidence Category	Tonnage (Mt)	Au (g/t)	Ag (g/t)	Au (Moz)	Ag (Moz)	
Measured	_	_	_	_	_	
Indicated	110	1.7	4.4	5.7	15	
Measured + Indicated	110	1.7	4.4	5.7	15	

### **Wafi Inferred Mineral Resource Statement**

		Grade		Contained Metal	
Confidence Category	Tonnage (Mt)	Au (g/t)	Ag (g/t)	Au (Moz)	Ag (Moz)
Inferred	37	1.4	4.2	1.6	5.0

Notes to accompany Wafi Deposit Mineral Resource tables:

- Mineral Resources are reported with an effective date of June 30, 2021, using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Ms Jillian Terry, FAusIMM, whose job title with Newcrest is Head of Mineral Resource Management, and who is a Newcrest employee.
- 2. Mineral Resources are reported on a 100% basis. Newcrest holds a 50% interest in the WGJV.
- 3. Mineral Resources at Wafi are reported assuming open pit mining methods with limited internal selectivity, and a process method that is anticipated to be a combination of a carbon-in-pulp ("CIP") and carbon-in-leach ("CIL") operation, with a flotation sulphide recovery mill process. The estimates are reported at cut-offs of 0.4 g/t Au for NRG mineralisation and 0.9 g/t Au for RG mineralisation. Mineral Resources are constrained within a conceptual open pit shell that uses the following input assumptions: gold price of US\$1,400/oz; mining costs of US\$5.40/t mined, and process and G&A costs of US\$17.30/t processed. Metallurgical recovery is estimated at 91% gold recovery NRG and minimum of 47% recovery for RG. Pit slope approximate overall angles range from 33° in oxidised material to 65° in fresh rock.

- 4. Tonnages are metric tonnes. Gold and silver ounces are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 5. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

# Nambonga Deposit Inferred Mineral Resource Statement

Confidence Category	Tonnage	Grade		Contained Metal	
	(Mt)	Au (g/t)	Cu (%)	Au (Moz)	Cu (Mt)
Inferred	48	0.69	0.20	1.1	0.094

Notes to accompany Nambonga Deposit Mineral Resource table:

- 1. Mineral Resources are reported with an effective date of June 30, 2021, using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Ms Jillian Terry, FAusIMM, whose job title with Newcrest is Head of Mineral Resource Management, and who is a Newcrest employee.
- 2. Mineral Resources are reported on a 100% basis. Newcrest holds a 50% interest in the WGJV.
- 3. Mineral Resources at Nambonga are reported assuming a bulk mining underground extraction method. The Mineral Resource is reported using an assumed 0.5 g/t Au cut-off grade. This cut-off grade is based on the adjacent Golpu deposit as an analogue, assumes an overall mining, processing, and G&A operating cost estimate of about US\$15.50/t, a gold price of US\$1,400/oz, and a metallurgical recovery of 85% for gold. This equates to a cut-off grade of approximately 0.46 g/t Au, based on gold only. Conceptual costs associated with copper and silver recovery were approximated as equivalent to 0.04 g/t Au. The total cut-off grade for reporting purposes was 0.5 g/t Au.
- Tonnages are metric tonnes. Gold ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 5. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

Areas of uncertainty that may materially impact the Mineral Resource estimates include: changes to long-term gold and copper price assumptions; changes in local interpretations of mineralisation geometry and continuity of mineralised zones; changes to geological shape and continuity assumptions; changes to metallurgical recovery assumptions; changes to the operating cut-off assumptions for assumed block caving operations (Golpu and Nambonga); changes to the input assumptions used to derive the conceptual underground outlines used to constrain the Golpu and Nambonga estimates; changes to the input assumptions used to derive the conceptual pit shell used to constrain the Wafi estimate; changes to the NSR values used to constrain the Golpu estimate; changes to the cut-off grades used to constrain the Wafi and Nambonga estimates; variations in geotechnical, hydrogeological and mining assumptions; and changes to environmental, permitting and social license assumptions.

### **Mineral Reserves**

Mineral Reserves are reported for the Golpu deposit only. Indicated Mineral Resources were converted to Probable Mineral Reserves.

The proposed mining method is block caving on three levels. The BC44 extraction level is planned at 4400 mRL, and will extract a total of approximately 67 Mt of material over a seven-year period at a peak annualised 16.84 Mt/a production rate. During caving operations, ore from the block cave drawpoints will be delivered by diesel LHDs to either of two underground gyratory crushers then conveyed to the Watut process plant on surface by an inclined conveyor system. The BC42 extraction level is planned at 4200 mRL, and will extract a total of approximately 93 Mt of material over a nine-year period at a peak annualised 16.84 Mt/a production rate. Materials handling from drawpoint to the Watut process plant is identical to that proposed for BC44. The BC40 extraction level is planned at 4000 mRL, and will extract a total of approximately 240 Mt of material over a 16-year period at a peak annualised 16.84 Mt/a production rate. Materials handling from drawpoint to the Watut process plant will be identical to that of BC44.

The mine to port area, surface services and infrastructure, BC44 and BC42, underground services, and infrastructure areas are designed to a feasibility level of confidence. The BC40 cave footprint and thus extraction level layout, are designed at a pre-feasibility confidence level. The infrastructure for BC40 is identical to that of BC44 and BC42,

and is at a feasibility level of confidence. There will be no additional surface infrastructure for BC40. The mine design consisted of an iterative process that included creation of mining outlines, and design of extraction and undercut layouts, access, and infrastructure including ventilation and materials handling development. The differentiation of ore and waste was based on an NSR cut-off.

Material generated from BC44 cave establishment activities will be categorised as ore when it has an NSR of >US\$10/t. This classification will apply until the first crusher is commissioned at BC44. Such ore will be stockpiled on surface and then used in plant commissioning. Gold produced will be a credit to the capital cost of the Golpu Development up until commercial production is declared. Commercial production will be when the cave has reached its hydraulic radius and is self-sustaining for forward production. Following the commissioning of the first crusher at BC44, the assumption for ore and waste cut-offs is that all material, regardless of grade will be processed to reduce the PAF storage requirements due to limited space and difficulty of construction of large PAF storage facilities.

Ore determination for the block caves is based on net value calculated for all mining blocks, after deduction of operating costs from the NSR for each block. The software package PCBC was used to select the economic block heights and to schedule the optimum extraction sequence for the mixed/diluted draw columns. Cave ore recovery was assumed to be 100% of the planned height of draw. All columns were taken to the maximum economic height on the BC40 level at the shut-off imposed. The shut-offs for BC44 and BC42 were nominal in nature as the transition timing between the caves is based on timing and achieving the highest tonnes and grade into a set timeframe. The nominal shut-off decreased with each cave to maintain head grade. As BC40 is the final level, the shut-off was applied as a true shut-off.

The total mining dilution was estimated to be about 17% with toppling contributing approximately 1.5%. All development, except where there was a risk of adding grade, had mining factors for dilution and recovery applied to accurately represent the expected mined tonnes. All mining volumes (shapes) outside the block model had tonnes contributing but not grade. Such tonnage was allocated to unclassified material (waste).

Mineral Reserves have an effective date of June 30, 2021.

# **Golpu Mineral Reserves Statement**

Confidence Classification	Tonnes (Mt)	Gold Grade (g/t Au)	Copper Grade (%)	Contained Gold (Moz)	Contained Copper (Mt)
Probable	400	0.86	1.2	11	4.9

Notes to accompany Mineral Reserve table:

- 1. Mineral Reserves are reported with an effective date of June 30, 2021 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Pasqualino Manca, FAusIMM, whose job title at Newcrest is Group Manager Mining Studies, and who is a Newcrest employee.
- 2. Mineral Reserves are reported on a 100% basis. Newcrest holds a 50% interest in the WGJV.
- 3. Mineral Reserves are reported using the following assumptions: block cave mining method, gold price of \$US1,200/oz Au, copper price of US\$3.00/lb Cu, above a NSR cut-off of US\$10/t (development), US\$60/t (BC44), US\$40/t (BC42), US\$19.15/t (BC40), and variable metallurgical recoveries by metallurgical domain. The total dilution is estimated to be about 17% with toppling contributing approximately 1.5%.
- Tonnages are metric tonnes. Gold ounces are estimates of metal contained in tonnages and do not include allowances for processing losses. Copper tonnes are estimates of metal contained in tonnages and do not include allowances for processing losses.
- 5. Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Rounding is to two significant figures.

Areas of uncertainty that may materially impact the Mineral Reserve estimates include: changes to long-term gold and copper price assumptions; changes to exchange rate assumptions; changes to metallurgical recovery assumptions; changes to the input assumptions used to derive the cave outlines and the mine plan that is based on those cave designs; changes to operating, and capital assumptions used, including changes to input cost assumptions such as consumables, labour costs, royalty and taxation rates; variations in geotechnical, mining, dilution and

processing recovery assumptions; including changes to designs as a result of changes to geotechnical, hydrogeological, and engineering data used; changes to the shut-off criteria used to constrain the estimates; changes to the assumed permitting and regulatory environment under which the mine plan was developed; ability to obtain mining permits, including timing for finalisation of the SML; ability to obtain agreements to land under customary ownership; ability to permit deep sea tailings placement; ability to obtain operations certificates in support of mine plans; and ability to obtain and maintain social and environmental license to operate.

# Mining Operations

The mine is expected to have a total life of 28 years from first production of the processing plant (excluding construction and closure phases). The peak annual cave production is 16.84 Mt/a with development entering the ore stream being additive to the cave production resulting in a peak production of 17.8 Mt in Year 17.

An evaluation of potential mining methods included consideration of block caving, sub-level caving, sub-level open stoping, and open pit methods. Block caving was selected for the following reasons: orebody geometry and geotechnical conditions; high productivity, low operating cost mining method; and higher-value material located at depth can be accessed earlier.

The proposed mine plan uses technology conventional to block cave operations, including mine design and equipment. The planned mining equipment is conventional to block cave operations. The Golpu underground mine will be located in an area of moderate to high temperatures and high humidity. As such, suitable ventilation and refrigeration systems were designed to support safe production.

Access to the mine workings will be via the Watut and Nambonga declines, with each generating waste rock that will either be used in construction activities, processed or deposited within the waste rock storage facilities ("WRSFs"). Block cave mining will not result in the production of waste rock because all material extracted from the block cave will be fed to the Watut process plant. Block cave mining will cause rock fracturing that will propagate ultimately resulting in a subsidence zone.

During the development of the block cave infrastructure (BC44), ore grade material will be temporarily stockpiled on the process plant terrace for later use during commissioning and initial production from the process plant. During caving operations, ore from the block cave drawpoints will be delivered by LHD vehicles to an underground crusher. The crushed ore will then be conveyed to the surface. The ore conveyor emerging at the Watut declines portal terrace will continue overland for approximately 600 m to deliver crushed ore to a coarse ore stockpile adjacent to the Watut process plant for processing. The mine is planned to operate 24 hours per day, every day of the year, apart from scheduled and unscheduled shutdowns.

A domained geotechnical model was constructed incorporating interpolated data, with the interpolation controlled by the proximity to interpreted structures and boundaries within the domain. The final geotechnical block model consisted of a total of 18 domains (inclusive of a host domain) and 69 sub-domains. A number of those sub-domains were then subsequently filtered by depth sub-categories. Geotechnical modelling indicated that the caves grew freely in response to draw in all rock types in the column and no stalling or hang-ups were observed on the cave sidewalls at the end of production. No significant variations in the size or growth rate of the caves, and therefore mine production, were observed using a range of design material properties in the Livana Porphyry and surrounding rock masses. However, the potential exists for differential or chimney caving in the weak rock especially near contacts or in fault zones. Pre-conditioning of the ore zone was included to reduce this risk. Extraction level drawpoints were placed in the Livana Porphyry at both the BC44 and BC42 elevations to ensure robustness and stability. Crushers were placed in the barren western (diorite) porphyry and located >150 m from the cave footprint to reduce the risk of damage from caving-induced abutment stress.

Measures such as de-stress slots, extension of the undercut to the east of the footprint and development of the east perimeter drive post completion of the eastern undercut extension will be required to ensure development stability.

Groundwater inflows to the mine will commence at the start of the Nambonga decline development. When mine development reaches BC44, the combined total inflows are predicted to be about 240 L/s. After BC44 and BC42

commence production, the inflows will decrease to approximately 150 L/s in Year 16 of the operation. After that time, the inflows are expected to rapidly increase to about 240 L/s as BC40 commences operation, before decreasing to a steady-state rate of approximately 155 L/s. This is due to propagation of the BC40 cave as it reaches major water-bearing oxide aquifers. Once groundwater is removed from oxide aquifer storage, the inflows are projected to be primarily associated with recharge. Dewatering of the mine will be conducted from underground as well as using surface dewatering bores and horizontal drains. A series of sumps and pump stations will be progressively established during decline development. At the surface a network of horizontal drains and dewatering bores will be established around the cave perimeter. During the period from decline development period and Watut process plant start-up, prior to disposal of the mine water from this dewatering system, mine water will be treated at the surface to conform to PNG environmental guidelines. Following start up all water will be consumed by the processing requirements, or disposed of via DSTP. Inflows to the mine and discharge to the environment will be monitored for quality and quantity throughout the LOM. Experience from similar mining operations indicates that once the block cave breaks through to the surface, during heavy rainfall events there will be a high risk of water flows rapidly reporting to the mine workings underground. There is no practical method to seal the subsidence zone. The mine plan will have the following features to deal with high water inflows: emergency water pumping capacity, underground emergency water storage, or allowing for temporary flooding of the lowest mine openings (below major infrastructure).

The ventilation system was designed for a 16.84 Mt/a production capacity. During the capital development period, ventilation needs will be dominated by diesel exhaust dilution requirements, whereas for the steady-state mine the design constraint will be heat rather than diesel dilution. Ventilation will be progressively developed and at peak will consist of the two declines, fan system, and refrigeration plant. The peak installed airflow will be 675 m $^3$ /s, which will be more than the projected 595 m $^3$ /s maximum requirements. The peak installed refrigeration capacity underground and at surface is planned at 37.0 MW $_{\rm AC}$  as compared to the anticipated peak requirements of 35.0 MW $_{\rm AC}$ .

Each of the block cave footprints are planned to use an El Teniente extraction level layout. The average draw column heights will be 320 m (BC44), 490 m (BC42) and 590 m (BC40) with maximum draw column heights of 530 m (BC44), 805 m (BC42) and 1,120 m (BC40). Initial underground access will be via the Nambonga decline to provide earlier and quicker access to underground drill platforms, and a second means of egress and ventilation. Primary underground access will be via the Watut portal and the twin Watut declines to the underground block cave mine. The Watut declines will also form part of the primary ventilation circuit and materials handling system conveying ore to the Watut process plant. A cave engineering level will be established above the Reid Fault at 4,870 mRL for data gathering, further refinement of the rock mass understanding, monitoring of the cave, and potentially for dewatering.

# **Processing and Recovery Operations**

The proposed Watut process plant will be a compact copper concentrator that will be progressively built, in line with the mine ramp-up profile.

The plant is designed to treat 8.42 Mt/a of ore for the first three years of operation. In the fourth year of operation, an additional ball mill and flotation cells will be installed, to support throughput ramp up to 16.84 Mt/a. Installation of a pyrite flotation and regrind circuit will facilitate the processing of ore containing a higher metasediment content from year five onwards.

The plant will run intermittently (campaign treatment) and in 50% turndown mode for the first three years. During the mine ramp-up period, the total volume of the coarse ore stockpile and start-up stockpile will be used to maintain plant utilisation as high as practicable, minimising the number of plant stops. The plant is designed to cater for the ore composition changes over the LOM, and blending is not expected to be required.

The process plant will include the following: crushed ore stockpile and reclaim; single SAG and SAG/ball ("SAB") milling circuit; pebble crusher circuit; copper flotation comprising rougher flotation, copper rougher cleaner (single Jameson cell), which processes the first rougher concentrate, copper concentrate regrind followed by a three-stage copper cleaner, and cleaner–scavenger stage; additional copper flotation cells forming part of the LEAN circuit that will be commissioned approximately nine years post grant of the SML to accommodate the ramping of the process

plant to design capacity of 16.84 Mt/a; a pyrite rougher flotation circuit, which further processes the copper rougher tailings, will be introduced 10 years post SML grant to meet the requirements of the increased metasediment content of the ore, corresponding to a porphyry content of <75%; a pyrite concentrate regrind circuit followed by cleaner and cleaner–scavenger stages; concentrate dewatering and handling; tailings thickening, pumping and water recovery; reagent mixing and distribution (including lime slaking, flotation reagents, and flocculants); grinding media storage and addition; and water and air services.

The weighted average ore composition for the first four years of production is projected to be 84.3% porphyry, while from approximately the fifth year this reduces to 43.1% porphyry content. The weighted average porphyry content over the LOM is projected to be 46.2%, while the remainder of the mill feed is metasediment. In order to achieve <1,000 ppm As in the copper concentrate, the limit of arsenic in the feed ore must be <67 ppm As for the LEAN flowsheet and <39 ppm As for the Golpu flowsheet, assuming all arsenic reports to the concentrate.

The SAG and ball mill high voltage motors will account for approximately 70% of the process plant load, which amounts to nearly 60% of the overall maximum site power demand. Water will be required for process water makeup and reagent mixing. Reagents will include grinding media, frothers, collectors, flocculant, sodium metabisulphite, lime, and compressed air.

An evaluation of the copper market was undertaken as part of the 2018 Feasibility Study Update. It is expected that Asian smelters will contract the Golpu concentrate as long-term feed source. The concentrate will be attractive to these smelters due to the proximity of the mine and consequently shorter transit times, increasing certainty of supply. The Golpu concentrate is expected to be relatively high in copper and low in impurities. Levels of gold-inconcentrate are not expected to be elevated to such levels that would limit marketability in markets such as China and India where high concentrate values may be restricted by working capital constraints. The concentrate is not expected to contain deleterious elements at levels prohibitive to sale to Asian smelters.

No contracts are currently in place in support of the Golpu Development. Major contracts in support of development are likely to include shaft sinking, decline development, pipelines, conveyors, camp construction, port and roads. Major contracts in support of operations are likely to include: accommodations camp management, building maintenance, underground mine infrastructure development, cave establishment, road maintenance, explosives supply, ground support and consumables supply, material transport and logistics to the Port of Lae, infrastructure engineering procurement and construction management, labour training, and infrastructure construction. Contracts will be negotiated and renewed as needed. Contract terms are expected to be within industry norms, and typical of similar contracts in PNG that Newcrest is familiar with.

### Infrastructure, Permitting, and Compliance Activities

### Infrastructure

The Golpu Development is a greenfield site and currently does not have infrastructure to support mining operations. The infrastructure requirements to support the Golpu Development are summarised as follows:

- mine area: proposed block cave mine, underground access declines, portal terrace and waste rock storage
  facilities supporting each of the Watut and Nambonga declines, the Watut process plant, power generation
  facilities, laydown areas, water treatment facilities, quarries, wastewater discharge and raw water make-up
  pipelines, raw water dam, sediment control structures, roads and accommodation facilities for the
  construction and operations workforces;
- infrastructure corridor: concentrate pipeline, terrestrial tailings pipeline and fuel pipeline; mine and northern access roads to connect with the Highlands Highway, laydown areas. New single-lane bridges are proposed over the Markham, Watut and Bavaga Rivers. Laydown areas will be located at key staging areas; and
- coastal area: port facility, including the concentrate filtration plant and materials handling, storage, ship loading facilities and filtrate discharge pipeline; tailings outfall, including a mix/de-aeration tank and associated facilities, seawater intake pipelines and DSTP outfall pipelines, pipeline laydown area, choke station, access track and parking turnaround area.

The existing Demakwa access, Link, and Watut Valley roads will provide initial access to the mine area during construction, while the planned northern access and mine access roads are developed. Due to the steep terrain a number of terraces will need to be built to allow the required infrastructure to be constructed.

Concentrate and terrestrial tailings pipelines will transport the concentrate and tailings slurries from the process plant terrace located within the mine area to the coastal area. The concentrate pipeline will terminate at the concentrate filtration plant in the port facilities area at the Port of Lae, while the terrestrial tailings pipeline will continue through Lae to the outfall area, located between the Wagang village and the mouth of the Busu River. A fuel pipeline will transport fuel from the Lae bulk fuel storage facility at or near the Port of Lae to a storage facility at the power generation facility in the mine area.

Use of intermediate fuel oil was assessed to be the most economic and reliable way to meet mine power demand over the LOM. Other power supply options may be assessed during the permitting phase. During the construction phase, power will be provided by on-site diesel generators. For the operations phase, the WGJV proposes to construct and operate a power generation facility using reciprocating engines to supply power for the mine, process plant and accommodation facilities.

The existing Wafi and Finchif construction accommodation facilities will be operational during the construction phase. Finchif will be retained post-construction. A third accommodation facility, Fere, will be constructed, and used for both the construction and operations phases.

### **Current Environmental, Permitting and Social Status**

The WGJV has completed a number of baseline and supporting studies including physical and biological environment, freshwater environment, nearshore marine environment, offshore marine environment, socioeconomic environment, and cultural heritage characterisation, as well as impact assessments.

An Environmental Inception Report ("EIR") was submitted on May 16, 2017 and approved by CEPA on June 8, 2017.

An EIS was prepared as the statutory basis for the environmental, social and cultural heritage assessment of the Golpu Development under the PNG Environment Act. The EIS objective was to identify potential environmental, social and cultural heritage impacts associated with the Golpu Development and set out the management measures WGJV proposes to address potential adverse impacts. The EIS was submitted to CEPA in June 2018.

An extensive consultation and review process managed by CEPA was completed in accordance with the PNG Environment Act and an Environment Permit for the Wafi-Golpu Project was granted in December 2020. In March 2021, the Governor of Morobe Province commenced a judicial review application against the State of PNG challenging the grant of an environmental permit for the Wafi-Golpu Project. The Wafi-Golpu JV participants are not parties to this proceeding, which is still to be heard and determined. See also reference to the Wafi-Golpu permitting negotiations under the heading *Description of the business – Development Projects*.

## **Environmental Considerations**

There may be potential impacts on terrestrial biodiversity arising from vegetation clearance and infrastructure development. There is also a risk of AMD arising during different phases of the Golpu Development, including in and around Golpu following mine closure. There may be potential impacts arising from damage to or failure of the proposed concentrate, terrestrial tailings and fuel pipelines between the mine and coastal areas. The project design includes proposed management measures to prevent or reduce the likelihood of potential environmental impacts outlined above during project development and operations.

# Stockpiles, Waste Rock Storage Facilities, and Tailings Storage Facilities

A temporary start-up ore stockpile is planned to store ore extracted during the development of the BC44 undercut and extraction levels. It will be built adjacent to the Watut declines WRSF, to stockpile material for processing until the

Watut process plant commences operation. This ore will then be used in the commissioning process. A coarse ore stockpile will be required to maintain a steady supply of ore for the Watut process plant and to minimise fluctuations in the availability of feed material.

Once the underground crusher is installed, all rock will be transferred to the underground crusher and delivered to the surface as part of the ore stream for processing. Unlike typical open-cut mines, this means there is effectively no waste rock generated during operations. Competent NAF material will be used during Golpu Development construction (e.g., for portal terraces) and as lining and capping for the PAF waste rock cells in the WRSFs. The PAF material will be stored in engineered WRSFs adjacent or nearby to the Watut and Nambonga declines.

The WGJV, through the course of its concept, pre-feasibility and feasibility study programs, has assessed a number of options for tailings management. These included pre-feasibility and feasibility-level investigations into the following options for tailings management for the Golpu Development: on-land storage in a TSF, dry-stacking, and DSTP. Based on a desire to minimise impacts on the biophysical and social environment and cultural heritage and adopt the option with the lowest construction, operational and post closure risks, the WGJV adopted DSTP as the proposed tailings management option for the Golpu Development. DSTP will involve the discharge of tailings slurry from an outfall pipeline terminus located approximately 200 m below the ocean surface. On exiting the outfall pipe, the tailings will flow down the sloping seafloor as a density current, with the ultimate deposition of the tailings solids on the deep-ocean floor.

A tailings pump station will be located at the process plant terrace. Tailings will be thickened to recover water and process reagents. A 103 km-long terrestrial tailings pipeline will transport tailings slurry from the tailings pump station in the mine area to the outfall system. The outfall system will include a mix/de-aeration tank, two seawater intake pipelines, and two outfall pipelines.

# Water Supply and Water Management

The mine water management system was designed to capture potentially-contaminated water within the mine area during construction and operations, and manage, including treatment where necessary, this captured water for reuse or disposal. As a general principle, clean (non-contact) water will be diverted around surface works and, where practicable, water will be intercepted (by dewatering) before it can enter the block cave zone or, prevented from entry into the declines, by shotcreting or grouting. This is intended to minimise the volume of water requiring management during construction and operations. During construction, potentially-contaminated mine wastewater will be treated if necessary, prior to discharge.

During operations, treated mine wastewater (from declines, block caves, runoff and seepage and sewage effluent) will be used as the primary water source for the process plant, and as the transport media for concentrate and tailings. Given that the process water demand exceeds the volume of waste for the majority of the time during operations, it is predicted that there will be limited periods during operations in which mine wastewater will require discharge to the Watut River. Water originating from the Watut declines portal and plant terraces, including the coarse ore stockpile area, will require sediment removal, attenuation, testing, and treatment before being released to the environment, or before it may be harvested for use in the process plant. A raw water dam will allow for the local storage of raw water and for the harvesting of runoff water from the site.

# **Closure and Reclamation Planning**

Construction activities will take place over an approximate five-year period and operations (commissioning, rampup and production) will continue for an estimated 28 years. The post-closure period will commence following the cessation of operations. A Closure and Rehabilitation Plan was prepared for the Golpu Development. The primary objectives will be to leave the site safe and stable in the long-term and to assist project-affected communities to access long-term, sustainable opportunities post-closure. A detailed closure schedule for implementation will be developed during the operational stage of the mine as the closure planning progresses. The WGJV proposes undertaking progressive rehabilitation where possible.

A post-production closure cost estimate of approximately US\$75 M was prepared for the cash flow analysis in support of Mineral Reserves.

#### **Permitting Considerations**

For the Golpu Development operations, the tenements required as at June 30, 2021, include:

- one SML;
- six Mining Easements; and
- three Leases for Mining Purposes.

Following consideration of the advice of the Mining Advisory Council, the Minister of Mining may grant any requested Mining Lease, Mining Easement or Lease for Mining Purposes. The Head of State also considers the advice of the Mining Advisory Council in the grant of a SML. Environmental approval for the Golpu Development was sought under the PNG Environment Act and Environment (Prescribed Activities) Regulation 2002. The required approval for the Golpu Development is a Level 3 environment permit. The Golpu Development EIS was submitted to CEPA. An extensive consultation and review process managed by CEPA was completed in accordance with the PNG Environment Act and an Environment Permit for the Wafi-Golpu Project was granted in December 2020. Apart from the PNG Mining Act and PNG Environment Act requirements, the Golpu Development will have to comply with aspects from other forms of legislation. The Golpu Development review process may identify other legislation that must be complied with.

#### **Social Considerations**

The WGJV stakeholder engagement program commenced in 2008 and, since then, the WGJV has worked closely with its many stakeholders to build relationships. In implementing the program and building these relationships, the WGJV placed an emphasis on local communities within the Wafi—Golpu Project area while also considering the interests of the broader Wafi—Golpu Project stakeholder group. The WGJV's approach to consultation was informed by International Finance Corporation Performance Standards and the International Council of Mining and Minerals Sustainable Development Framework. Specialist studies undertaken by the WGJV (e.g., socioeconomic studies involving household surveys, key informant interviews and focus groups) have also provided opportunities for stakeholder engagement. Feedback and issues raised by stakeholders are recorded during engagements for further action as required by the WGJV. This includes an established grievance mechanism.

Stakeholder engagement will continue throughout the Wafi–Golpu Project life, although the frequency and nature of engagement will vary according to the specific stakeholder, and the actions contemplated. The WGJV will endeavour to support and implement continuous, meaningful and gender-appropriate engagement directly with Wafi–Golpu Project-affected communities and will also endeavour to provide communication materials in a format suited to each stakeholder group.

# Capital and Operating Costs

# **Capital Costs**

Capital and operating cost estimates are based on the 2018 Feasibility Study Update and are presented on a 100% basis. The overall capital cost estimate for the Golpu Development is at a minimum at PFS-level ( $\pm 25\%$ ) accuracy. Costs were separated into:

- direct costs: permanent facilities and services required for their installation and include plant and equipment, bulk material, contractor/sub-contractor costs, freight and vendor representatives; and
- indirect costs: costs to support the purchase and installation of the direct costs. This includes the materials
  and services required for field construction but are not incorporated into or accounted for as part of the
  permanent facilities. A standard set of indirect costs with detailed descriptions were calculated in the
  estimate.

Contingency allowances were applied, as appropriate, and were based on evaluations of all major cost categories.

The capital cost estimate is presented in the following table:

# **Summary Capital Cost Estimate by Area**

Description	Execution Capital (US\$ M)	Expansionary Capital (US\$ M)	LOM Total (US\$ M real)	% of Total
Underground mining	819	1,321	2,140	44
Treatment	695	79	773	16
Shared services and infrastructure	210	73	284	6
Regional infrastructure	219	-	219	4
Site support services	117	31	148	3
Golpu Development delivery management	462	144	607	12
Other capitalised costs	187	38	225	5
Provisions	315	178	493	10
Total LOM capital cost (excluding sustaining capital)	3,025	1,864	4,889	100
Sustaining capital	_	693	693	NA
Total LOM capital cost	3,025	2,557	5,582	NA

#### Note:

- Expansionary capital includes all major development capital expenditure post commercial production. Sustaining capital is defined as routine stay-in-business capital expenditure estimated as 2.5% of the asset replacement value (ARV). NA = not applicable.
- The 2018 FSU capital included US\$200 million of capitalised revenue, which has been reclassified due to a change in the accounting standards from July 1, 2021.

## Operating Costs

The operating cost estimate was developed in monthly increments and is based on first principles, being unit consumption rates and unit prices. Prices were quantified as far as possible and where practicable by quotations, with some other values escalated from the 2016 Feasibility Study. The operating cost estimate is derived on a 100% share basis and is expressed in real December 2017 US\$ terms. Where applicable, prices/rates obtained in other currencies were converted to US\$ using the rates of exchange applicable to the base date of the estimate. The operating cost estimate is provided in the following table.

# Operating Cost Estimate by Area (US\$/t milled)

Area	Value			
Underground mining				
Ventilation & refrigeration	1.27			
Production	0.99			
Conveying	0.69			
Engineering maintenance & services	0.56			
Dewatering	0.34			
Crushing	0.15			
Technical services	0.12			
Administration	0.04			
Subtotal underground mining	4.16			
Treatment				
Process plant operations	5.04			
Process plant maintenance	0.91			
Port filtration plant	0.72			

Area	Value
DSTP	0.47
Water treatment plant	0.25
Concentrate pipeline	0.01
Subtotal treatment	7.40
Infrastructure	
Power generation plant	1.34
Infrastructure (roads and buildings)	0.28
Services (power and waste)	0.16
Subtotal infrastructure	1.78
Site support services	
Environmental, community affairs and land	0.89
Commercial	0.92
Occupational health and safety (OH&S)	0.47
Camp Services	0.40
Information technology (IT)	0.33
Travel	0.18
Supply and logistics	0.19
Human resources (HR)	0.09
Subtotal site support services	3.99
Total	17.33

Note: Total is inclusive of cost allocations for closure.

# **Economic Analysis**

The Golpu Development was valued using a discounted cash flow ("DCF") approach. Estimates were prepared for all the individual elements of cash revenue and cash expenditures. Capital cost estimates were prepared for initial development and construction of the Golpu Development, in addition to ongoing operations (sustaining capital). The year of grant of the SML was defined as the first year of initial capital expenditure, and cash flows are assumed to occur in the middle of each period. The resulting net annual cash flows are discounted back to the date of valuation of start-of-year July 1, 2019, because the actual starting calendar year has not been determined. A discount rate of 8.50% was used. Metal prices used were \$1,200/oz Au and \$3.00/lb Cu. The base case economic analysis assumes constant prices with no inflationary adjustments. Royalty provisions in the financial model include:

- Royalty: 2.00% of the net proceeds of sale of minerals (calculated as net smelter return or free-on-board ("FOB") export value, whichever is appropriate); and
- Production Levy: 0.50% of gross revenue from all mining sales.

The economic analysis reflects the following significant changes to the Mining Taxation Regime announced by the PNG Government in November 2016:

- Introduction of a resources rent tax termed the Additional Profits Tax ("APT"). The APT is levied at the 30% corporate income rate on profits above an allowed capital return threshold of 15% per annum (nominal terms), and is thus triggered once a 15% rate of return per annum (nominal) was achieved on prior invested capital. Changes in parameters that result in higher profits have the effect of consuming accumulated capital balance (and 15% per annum uplift rate) much faster, triggering the APT;
- An increase to the Foreign Contractor Withholding Tax ("FCWT") rate from 12% to 15%;
- Suspension of the double deduction for exploration expenditure provided under section 155N of the Income Tax Act, with no additions to this balance post 1 January 2017.

The economic analysis was performed on a 100% in-country basis without consideration of funding or structuring at the WGJV Participant entity level and does not take into account differences in the corporate tax treatment adopted

by each WGJV Participant. As such, the model is designed to be a standalone discrete project model and assumes (for valuation purposes only) that all cash flows are held in-country by the WGJV (i.e., not repatriated to shareholders). For the purpose of calculating the tax payable, all of the extractive activities and associated infrastructure were assumed to be undertaken under a single Mining Lease.

The economic analysis assumed all expenditure, including execution capital expenditure up until first production, was capitalised as allowable capital expenditure ("ACE") and depreciated at a rate of 25% using the diminishing value method, as per PNG tax law. Total historical expenditure (actual and forecast) through to the anticipated SML grant was estimated to be US\$779 M (on a 100% basis).

No salvage value was allocated. Mine closure costs are based on an estimated total closure cost for the operation consisting of an annual spend during operations and a final closure cost incurred over a period of 10 years, starting in the final year of production. This cost is included in operating costs. The conceptual provision for post-production closure costs is estimated at US\$75 M.

The following table summarises the outcomes of the economic analysis.

After-Tax Golpu Development Financial Metrics14, 15

Parameters	Units	Value
Maximum negative cash flow (MNCF)	US\$ M	2,823
Concentrator start from grant of SML	Years	4.75
Payback period from grant of SML	Years	9.54
IRR	%	18.2
NPV	US\$ M	2,604
Operating cost	US\$/t ore milled LOM avg. (real)	17.33
Project execution capital *	US\$ M	2,825
Cash cost (including gold credit) **	US\$//lb avg.	0.26
Total production cost #	US\$//lb avg.	0.81

Note: \* = includes net capitalised revenue of US\$200 M; \*\* = operating costs + treatment charges/refining charges (TC/RC) + realisation expenses less gross gold revenue/copper pounds; # = operating costs + TC/RC + realisation expenses + total LOM capital (including capitalised revenue) less gross gold revenue/copper pounds.

Input assumptions were reviewed as at June 30, 2020, and are considered acceptable.

The NPV of the Golpu Development is most sensitive to changes in the copper price, less sensitive to changes in the copper grade, capital costs, gold price, and gold grade, and least sensitive to changes in operating costs.

### Exploration, Development and Production<sup>6,16</sup>

Over the LOM, the Golpu Development is expected to produce an average annual copper production of approximately 161 kt and an average annual gold production of 266 koz, at an average cash operating costs of approximately US\$0.26 per pound of copper. The process plant is anticipated to process a total of 376 Mt of ore at an average grade of 1.27 g/t gold and 0.90% copper and process recoveries of 68% for gold and 95% for copper.

<sup>&</sup>lt;sup>14</sup> Subject to market and operating conditions and all necessary permits, regulatory requirements and Board of Director approvals and further works.

<sup>&</sup>lt;sup>15</sup> The IRR, NPV and payback period are based on the production targets set out in the Wafi-Golpu Report. The production targets utilise 98% of the full project's probable Mineral Reserves contained metal. See the section of this AIF under the heading "Mineral Reserves and Mineral Resources" for more information as to the Mineral Reserves for the Wafi-Golpu Project. For a more detailed overview of the Wafi-Golpu Project, including the material assumptions underpinning the production targets and financial information deriving from production targets referred to in this AIF, please refer to the Wafi-Golpu Report noted above, which is available under Newcrest's profile on SEDAR at www.sedar.com.

<sup>&</sup>lt;sup>16</sup> The production estimate utilises 98% of the full project's probable Mineral Reserves contained metal. See the section of this AIF under the heading "Mineral Reserves and Mineral Resources" for more information as to the Mineral Reserves for the Wafi-Golpu Project.

### LEGAL AND REGULATORY MATTERS

The following commentary on legal and regulatory matters is a summary only. It is not intended to be, nor should be relied upon as, an exhaustive statement concerning all regulatory requirements affecting the operations of Newcrest.

### **Mining Regulation**

Newcrest's rights to exploit Mineral Reserves and Mineral Resources and deposits are governed by the laws and regulations of the jurisdictions in which these mineral properties lie.

### Australian Regulation

### Mining Legislation

The primary mining legislation that regulates the assessment, development and utilisation of Newcrest's mineral resources in Australia is:

- at the Cadia Operation, NSW, the Mining Act 1992 (NSW); and
- at the Telfer Operation, Western Australia, the *Mining Act 1978* (WA) (the "Western Australian Mining Act").

With limited exceptions, all minerals in their natural condition located on or below the surface of land, are owned by or reserved to the relevant State or Territory in which they occur. The relevant State or Territory is entitled to grant exploration and mining tenements that confer rights on licensees or lessees to explore for and extract minerals in return for the payment by the grantee of royalties. In each State or Territory, there is a minister and a government department responsible for administering the relevant mining legislation. The grant of a mining or exploration tenement is generally at the discretion of the relevant minister or a mining registrar appointed under the legislation in the relevant State or Territory.

The most common forms of tenure are exploration and prospecting licences, mining leases and licences, miscellaneous licences and general purpose leases. Conditions are imposed on the grant of most tenements under the applicable legislation in the relevant State or Territory. Depending on the type of tenure, these include conditions relating to the environment, payment of royalties and annual rent, and required minimum expenditure. If the tenement conditions are not complied with, the tenement may be liable to forfeiture.

#### **Exploration Licences**

### Overview

The holder of an exploration licence is generally authorised to carry out on an exclusive basis exploratory operations of a kind set out in the legislation and the exploration licence within the licence area in respect of the applicable minerals during its term. Exploration licences can be assigned or transferred, however consent of the relevant minister is generally required during the first year after they are issued in Western Australia.

#### Western Australia.

In Western Australia, an exploration licence granted or applied for before February 10, 2006, will remain in force for five years from the date of grant and may be renewed by the Western Australian Mining Minister, in prescribed circumstances, for a period of one or two years, followed by a further period of one or two years. In the case of exceptional circumstances, the Minister may extend the term for a further period or periods of one year. An exploration licence applied for on or after February 10, 2006, will remain in force for five years from the date of grant and may be renewed by the Minister for five years (plus further renewals of two years each), if prescribed grounds exist.

#### New South Wales.

In NSW, an exploration licence takes effect on the date of grant or on such later date or on the occurrence of such later event as the decision-maker may determine and will remain in force for up to six years from the date it took effect and may be renewed for further terms of up to six years each.

### Mining Leases

#### Overview

In most Australian states, if the holder of an exploration licence establishes indications of an economic mineral deposit and complies with the conditions of the exploration licence, the holder has a priority right against all others to apply for a mining lease which gives the holder exclusive mining rights with respect to specified minerals (or all minerals depending on the state) on the property covered by the mining lease. In Western Australia, if the mining lease was applied for on or after February 10, 2006, the lease will most commonly need to provide a mineralisation report which shows the existence of significant mineralisation in relation to the area to which the mining lease application relates and a statement which sets out information about the mining operations that are likely to be carried out on the land including when the mining is likely to commence, the most likely method of mining and the location and area of the required land.

Mining leases can only be assigned or transferred with the consent of the relevant minister.

It is possible for an individual or entity to own the surface of the property and for another individual or entity to own the mineral rights granted under a mining tenement.

In Australia, various ad valorem royalties are paid to State and Territory governments, generally payable by reference to the quantity of mineral bearing ore removed, the quantity of mineral mined or the profits or gross proceeds of sale. The exact basis for calculating royalties depends on which mineral is being exploited and the jurisdiction governing the relevant mining activities.

#### Western Australia.

In Western Australia, the holder of a mining lease is entitled, subject to the Western Australian Mining Act and to the conditions of the mining lease, to work and mine the land, take and remove any minerals and dispose of them, take and divert water subject to the *Rights in Water and Irrigation Act 1914* (Western Australia), and do all things necessary to effectually carry out mining operations in, on or under the land. Mining leases granted in Western Australia are subject to various conditions, including conditions requiring further approvals before mining operations may commence such as approvals relating to environmental impact or for there to be an approved mine closure plan.

In Western Australia, the initial term of a mining lease is 21 years and may be renewed for a further term of 21 years as of right. The Western Australian Mining Minister may further renew the term of a mining lease for successive further periods not exceeding 21 years each. A mining lease granted before February 10, 2006, may have an area not exceeding 10 km². In respect of mining leases granted on or after February 10, 2006, the area is to relate to an identified orebody as well as an area for infrastructure requirements, and the Minister has a discretion to grant the lease in respect of an area that is less than that originally sought by the applicant.

The holder of a mining lease owns all minerals lawfully mined from the land in accordance with the mining lease. However, a royalty is payable to the government in respect of all minerals recovered from a mining lease at the rate prescribed for the relevant commodity in the *Mining Regulations 1981* (Western Australia) and any relevant State Agreement Acts to which the relevant project is subject.

Newcrest holds 30 mining leases at the Telfer Operation that expire on a range of dates between December 17, 2024 and April 27, 2037. Newcrest holds one mining lease at the Havieron Project that expires on 9 September 2041.

In Western Australia, the royalty rate is 2.5% of the spot prices computed as per Western Australian mining regulations for gold and silver, and 5% of the gross invoice value, less allowable deductions (being transport and packaging costs), for copper concentrate.

New South Wales.

In NSW, the holder of a mining lease is entitled to, in accordance with the conditions of the mining lease, prospect and mine the land, carry out primary treatment operations and carry out any ancillary mining activity on the land.

The maximum initial term of a mining lease is 21 years in NSW. A mining lease may be renewed for a period to be determined by the decision-maker, which may not exceed 21 years, except with the Premier's concurrence.

The holder of a mining lease owns all minerals lawfully mined from the land in accordance with the mining lease. However, a royalty is payable to the Crown in respect of all minerals recovered from a mining lease at the rate prescribed for the relevant commodity in the *Mining Regulation 2016* (New South Wales) and the relevant project development agreement with the government (if any).

Newcrest holds six mining leases at the Cadia Operation that expire on a range of dates between March 7, 2022 and October 5, 2038.

In New South Wales, the royalty rate is 4% of the ex-mine value of the bullion and concentrate 'recovered' ('recovered' being sold material and increase in stockpile material), less allowable deductions (being treatment costs, depreciation realisation expenses and administration costs).

### **Environmental Protection Legislation**

The types of environmental approvals that a mining project, including changes and expansions to existing projects, may require depends on the likely impacts on the environment that the project will have, and the significance of those impacts. In general terms, the more significant the potential environment impacts are, the more detailed and lengthy the environmental approvals processes will be, and the more onerous or detailed the resulting approval conditions will be. Ground works usually cannot commence until environmental approvals are issued and, in some cases, management plans have been submitted and approved in accordance with conditions on approvals. Consequently, the environmental approvals process can impact upon the timing of other regulatory approvals and commencement of a project.

There can be substantial costs involved in ensuring that the implementation of a project is done in compliance with environmental approvals and with general environmental legislation and regulations. Failure to comply with relevant environmental approvals, legislation or regulations can have significant implications for a project, including regulatory notices to cease operations, as well as substantial penalties. Environmental approvals can also require ongoing and public compliance reporting. Environmental protection legislation can also require the clean-up of pollution or contamination arising from an incident on site, particularly if pollution or contamination migrates offsite.

In 2012 the Western Australian government introduced legislation establishing the Mining Rehabilitation Fund framework, which requires tenement holders with a rehabilitation liability estimate above a threshold to make non-refundable annual financial contributions. Money in the fund is available to the government to be used if an operator fails to meet rehabilitation obligations and every other effort has been used to recover funds from the operator. Newcrest has been required to make contributions to the Mining Rehabilitation Fund in respect of the Telfer Operation, but such contributions have not been material. The fund does not release operators from the requirement to meet their agreed environmental commitments.

## **Native Title Legislation**

Mineral exploration and mining tenements may cover land that is subject to native title. The common law of Australia recognises a form of native title that, in circumstances where it has not been extinguished, reflects the

entitlement of the Indigenous inhabitants, in accordance with their laws or customs, to their traditional lands. Native title rights and interests do not derive from statute, and must relate to land and waters. They may be communal, group or individual, but are not transferable. Native title legislation exists at both the Commonwealth and State level. The Commonwealth's *Native Title Act 1993* (the "Native Title Act") came into effect on January 1, 1994. The purpose of the Native Title Act is to recognise and protect native title rights and interests, to establish procedures to allow for the valid extinguishment of native title by grants of other interests in land where native title may exist, to provide the basis on which developers may negotiate with native title holders for access to and activities on land covered by native title, and to provide for the administration of native title claims and payment of compensation in certain circumstances. Many of Newcrest's exploration and mining tenements are located on land over which native title claims have been made or determined, or may be made or determined in the future. Newcrest does not, however, expect that native title claims will have a material adverse effect over any of its current operations in Australia.

### **Aboriginal Land Rights Claims**

In NSW, land may also be subject to claims under the *Aboriginal Land Rights Act 1983* (NSW) which, if successful, can result in a grant of interest of land to the claimants. However, claims may only be made against certain Crown land, including land that:

- is not being lawfully used or occupied; or
- is not the subject of an application for, or an approved determination of, native title.

Newcrest does not, however, expect that Aboriginal land rights claims will have a material adverse effect over any of its current operations in NSW.

### **Indigenous Cultural Heritage Legislation**

All jurisdictions are inhabited by Indigenous Peoples. Newcrest also has a pipeline of exploration projects subject to legislation for the protection of sites of particular cultural significance to Indigenous peoples. The primary cultural heritage legislation governing Newcrest's mineral resources is:

- at Telfer Operation, Western Australia, the Aboriginal Heritage Act 1972 (WA);
- at Cadia Operation, NSW, the National Parks and Wildlife Act 1974 (NSW);
- the *Aboriginal Cultural Heritage Act 2003* (QLD);
- the *Heritage Act 2011* (NT);
- the *Heritage Conservation Act 1991* (NT);
- the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth); and
- the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (if Aboriginal heritage is classified as a world heritage property, national heritage place or located on Commonwealth land).

Newcrest does not have any information at present that indicates that any of its tenements in Australia is impacting significant Aboriginal heritage sites protected under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) or the Environment Protection and Biodiversity Conservation Act 1999 (Cth).

The legislation broadly requires consent to be obtained from the Commonwealth, and/or the relevant State or Territory, before relevant sites of cultural significance may be disturbed. Protection of such sites may result in some areas being unavailable for mining or other activities. It is an offence to damage or interfere with an Aboriginal object or place without consent, regardless of whether a site is registered under heritage legislation. There are numerous sites of cultural significance on Newcrest's exploration and mining tenements that have been registered under heritage legislation.

In Western Australia, where Telfer and Havieron are located, the Government has proposed to repeal the existing *Aboriginal Heritage Act 1972* (WA) and replace it with a new regime for the protection of Aboriginal cultural heritage. A bill for the new Aboriginal Cultural Heritage Act was introduced to the Western Australian parliament in November 2021. If enacted as tabled, the Bill would broaden and strengthen the protection of Aboriginal cultural heritage in Western Australia and also introduced new offences and increased penalties.

## Papua New Guinea Regulation

The primary source of PNG mining legislation is the PNG Mining Act, which governs the granting of mining rights and the conditions upon which those rights may be terminated.

Under the PNG Mining Act, all minerals existing on, in or below the surface of any land in Papua New Guinea, including any minerals in any water lying on any land in Papua New Guinea, are the property of the PNG National Government. The PNG Mining Act establishes a regulatory regime for the exploration for, and development and production of, minerals and is administered by the MRA. The PNG Mining Act sets out a detailed regime dealing with: the types of mining tenements which may be granted by the PNG National Government, which include exploration licences, SMLs, mining leases, alluvial mining leases; leases for mining purposes; mining easements; the terms and conditions associated with the issue of such mining tenements, including with regard to the payment of rents, fees and royalties, registration of interests and dealings in tenements; compensation of landowners; and agreements with the PNG National Government.

Under the PNG Mining Act, the PNG National Government may enter into a mining development contract ("MDC") to regulate a mining development. The MDC may contain, amongst others, provisions relating to the acquisition by the PNG National Government of a participating interest in the mining development, provision of infrastructure, local business development, township development, supply and procurement of services, environmental plans and financing.

A mining lease may have a term of up to 20 years and may be extended for periods of up to 10 years. A SML, typically granted in the case of significant mining developments, may have a term of up to 40 years and may be extended by further periods of up to 20 years. Exploration licences are issued for a period of two years, which may be extended for additional two year periods. In 2020, PNG's Parliament enacted amendments to the PNG Mining Act which allow the Minister to reserve land that is the subject of an expired, cancelled, surrendered or relinquished tenement, and upon revocation or expiry, any application by a State entity for the grant of a tenement over that land shall have priority.

Newcrest holds one SML (SML6) at the Lihir Operation that expires on March 16, 2035 and two mining leases (ML 125 and ML 126) that expire on July 20, 2025. SML6 is the primary licence granted to Newcrest by the PNG National Government to mine and process gold-bearing ore at the Lihir Operation, while ML125 and ML126 are ancillary licences for mining limestone and basalt which have no material impact on gold mining operations at the Lihir Operation.

As noted above, it is the current administrative practice of the PNG National Government to reserve the right to take up an interest of up to 30% in new mining projects. The right to take up such an interest, which is recorded as a condition in exploration licences, is exercisable once by the PNG National Government at any time prior to the grant of a mining lease or SML. If the PNG National Government exercises this right, the exercise price is a pro rata share of the historical exploration costs. Once the right is exercised, the PNG National Government becomes responsible for its proportionate share of ongoing exploration and project development costs. The PNG Government acquired a 30% interest in the Lihir project in March 1995. It subsequently swapped its direct interest in the project for approximately 154 million shares in LGL, equating to 17% of LGL. It then transferred half of these shares to Mineral Resources Lihir Limited, now MRL Capital Limited, which was established as a trustee for the people of Lihir. Both the Government and MRL subsequently sold their shares on the open market.

In PNG, citizens have the right to carry out non-mechanised mining of alluvial minerals on land owned by them. These customary rights do not extend over a mining lease unless an alluvial mining lease is obtained.

Almost all land in PNG is held by traditional owners under customary law. The specific elements and rules of the system of customary land tenure vary from place to place, however, customary land ownership is generally based on clans with individuals in each generation having rights of occupation or use. It is not possible for a non-citizen to purchase or lease customary land from its traditional owners. There is considerable difficulty in identifying landowners of a particular area of land because of the absence of a formal written registration system.

Prior to entry on land to conduct exploration, mining or operations ancillary to mining, compensation for loss or damage must be agreed with the landowners or determined by the mining warden, and a written agreement must be entered into with landowners dealing with compensation and other matters.

Cultural heritage in PNG is protected under the *National Cultural Property (Preservation) Act 1965* (PNG) ("NCPP Act"). The principal government institutions responsible for enforcing the NCPP Act are the National Museum and Art Gallery of PNG and the National Cultural Commission, each of which is established under its own enabling legislation.

On October 29, 2021, the PNG Prime Minister announced proposed legislation which, if enacted, would regulate the export of gold from PNG and require that mining companies operating in PNG refine gold with a new National Mint. Under the terms of the Lihir MDC, Newcrest may be required to refine a portion of Lihir's gold production if certain quality and security requirements are met and the terms offered are commercially competitive. Lihir is otherwise free to enter into refining contracts with refineries outside of PNG and currently does so. At this stage, it is unclear whether this proposed legislation will become law and, if so, when it would take effect.

For information on risks in connection with Newcrest's operations in PNG see "Risk Factors — Some of Newcrest's resources and reserves, deposits and mining operations are, and may in future be, located in countries that face political, economic, social and security risks".

### Canadian Regulation

The Red Chris property consists of 77 mineral tenures issued in accordance with the *Mineral Tenure Act* (British Columbia), RSBC 1996 c.292 (the "Mineral Tenure Act"). Mineral Claims are initially valid for one year after recording and may be extended for up to ten years from the application date on a year-to-year basis. To maintain a claim, the recorded holder must, on or before the expiry date of the claim, either perform exploration and development work on that claim (or contiguous block of claims) and register such work or register a payment instead of exploration and development work. Only work prescribed by regulation is acceptable for registration. The value of exploration and development work required to maintain a mineral claim for one year is C\$5/hectare ("ha") for each of the first and second years, C\$10/ha for each of the third and fourth years, C\$15/ha for each of the fifth and sixth years, and C\$20/ha for each subsequent year in accordance with the *Mineral Tenure Act Regulation* (British Columbia) Reg. 529/2004. If a payment is made instead of performing exploration and development work, the payment must be double the value of the required work.

The recorded holder of a mineral claim is allowed to produce a very limited amount of mineralised material. For production in excess of these limits, a mining lease is required. Mining leases in British Columbia are generally issued for an initial term that ranges from 10 to 30 years, and renewal terms are available for a period up to 30 years if the provision of the Mineral Tenure Act have been and continue to be complied with. An annual rental payment of C\$20/ha is required to maintain a mining lease but there are no annual work requirements. Before any mechanical disturbance of the surface of the ground is performed by, or on behalf of, the recorded holder, the necessary approvals and permits under the Mineral Tenure Act must be obtained. Mines in production are subject to taxation by the provincial government.

Mineral claims and mining leases in British Columbia do not confer on the holder any rights to the surface lands in or under which the minerals are located, although to the extent such surface rights are owned by the Crown, the mining rights holder has a right of access on the surface rights and the first right to apply for a lease.

The Mineral Tax Act (British Columbia), RSBC 1996 c.291 imposes a mineral tax on mining operators in British Columbia. The British Columbia mineral tax is a two-part tax that consists of: (a) the 2% "net current proceeds tax", which serves as a minimum tax on the net current proceeds of a mining operator (the net current proceeds of an operator is the amount by which the operator's gross revenue from the mine exceeds the current operating costs (excluding capital costs)); and (b) the 13% "net revenue tax", which applies once payback of the cumulative operating and capital costs has been achieved (the net revenue of an operator is the amount by which the total of the operator's gross revenue for the year (plus government grants, subsidies, and other assistance receivable in the year, and the proceeds from the disposition of capital assets receivable in the year), exceeds the cumulative amount of operating and capital expenditures, and certain investment allowances). The cumulative amount of net current

proceeds tax paid by an operator is fully deductible from the net revenue tax to offset the amount of net revenue tax payable. The British Columbia mineral tax is levied on a mine-by-mine basis.

Indigenous law in Canada is based on constitutionally protected inherent treaty and land rights based on historic Indigenous occupation and traditional land use, historic and modern treaties, negotiated claim settlements and court recognised claim rights. Section 35 of the Constitution Act, 1982 recognizes and affirms the Indigenous and treaty rights of Aboriginal Indian (now commonly recognised as First Nations), Inuit and Metis peoples of Canada ("Indigenous Peoples") and, as a result, both the federal and provincial governments are obligated to "act honourably" when dealing with Indigenous Peoples and to consult, and where appropriate, accommodate Indigenous Peoples when making decisions (approvals, grant of right or license) or taking actions that may affect the Aboriginal or treaty rights of Indigenous Peoples.

The relationship with the Tahltan Nation (as represented by the Tahltan Central Government ("TCG"), the Tahltan Band and Iskut First Nation) on permitting, approvals and other activities is guided by the amended and restated Impact, Benefit and Co-Management Agreement ("IBCA") and the Crown's duty to consult. While the consultation process is the Crown's responsibility, the Crown is able to delegate some or all of the procedural aspects of consultation to project proponents (including the Red Chris Operation), which in turn must work closely with the Crown as they carry out their respective consultation obligations. This is because the project proponent has assessed the project's feasibility before applying, has the most current information, and has the most incentive to conduct a successful consultation. The objective of the consultation process is to provide a fair and transparent forum for the issues and concerns of Indigenous Peoples to be heard and considered in light of the proposed project's activities and impacts on their lands, their rights and the environment, and where appropriate to address such concerns through compensation, accommodation or other mitigation measures. Cultural heritage in British Columbia is protected under the *Heritage Conservation Act 1996* and is a key aspect of First Nations' consultation.

On June 10, 2021, the Province of British Columbia (the "**Province**") announced the signing of a Shared Prosperity Agreement with the Tahltan Nation as represented by the TCG, Iskut Band and Tahltan Band, which amongst other things, sets the foundation to collaboratively achieve long-term comprehensive reconciliation and land-use predictability. On June 15, 2021, the Province was directed by Order in Council to negotiate an agreement under section 7 of the BC *Declaration on the Rights of Indigenous Peoples Act* (2019) with the TCG with respect to the Red Chris mine which would require that decisions under the BC *Environmental Assessment Act*, SBC 2018 c.51 ("**BC EAA**") either (a) would be exercised jointly by the Province and TCG; or (b) could only be exercised by the Province if the prior informed consent of the TCG has been obtained. Decisions under the BC EAA will be required for the construction and operation of a block cave mine at Red Chris.

### Health, Safety and Environment

Newcrest's business is subject to extensive environmental laws and regulations and a variety of general workplace and industry-specific health and safety laws and regulations in the various jurisdictions in which it operates. The financial and operational effects of environmental protection requirements on capital expenditures, earnings and the competitive position of Newcrest are not expected to be material in the period to June 30, 2021. Newcrest also has an ongoing commitment to work with local communities to minimise the adverse impacts of its operations and to improve infrastructure and opportunities for further development.

### Australia

Newcrest's mining operations in Australia are subject to a variety of general workplace and industry-specific health, safety and environment laws and regulations.

Progressively since 2011, each of the State, Territory and Commonwealth governments in Australia - except for the Victorian government - have enacted "harmonised" work health and safety legislation based on the model *Work Health and Safety Act 2011* (the "Harmonised WHS Laws"). The Harmonised WHS Laws deal with the general requirements that are applicable to all workplaces and mining specific requirements are either set out in the regulations or separate statutes, depending on the jurisdiction. In NSW, the mining specific requirements are set out in the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

In Western Australia, work health and safety requirements for mining are currently regulated under the *Mines Safety and Inspection Act 1994* and *Mines Safety and Inspection Regulations 1995*. However, the *Work Health and Safety Act 2020* was enacted by the Western Australian State government in November 2020 and is expected to come into force in January 2022. The Western Australian *Work Health and Safety Act* will consolidate and replace the existing *Mines Safety and Inspection Act 1994*, the general *Occupational Health and Safety Act 1984* and various petroleum safety Acts. There will be three sets of industry specific regulations to support the Western Australian Work Health and Safety Act, which will cover general workplaces (including mines), mining specific provisions and petroleum specific provisions. The State Government has not yet passed draft Work Health and Safety Regulations.

The Western Australian Work Health and Safety Act is broader in scope than the current Western Australian workplace health and safety laws. Most relevantly, as is the case under the Harmonised WHS Laws (including in NSW):

- the primary duty of care will be owed by a Person Conducting a Business or Undertaking (known as a "PCBU") to "workers" (and other persons). "Worker" is defined broadly to include, for example, employees, contractors and labour hire workers;
- a positive duty is also placed on "officers" of PCBUs to exercise due diligence to ensure that the PCBU complies with its duties under the WHS laws. Officers will need to take active steps to comply with the laws to avoid liability and may be prosecuted for breaching due diligence obligations even where the PCBU is not found guilty of an offence; and if more than one person has a duty in relation to the same matter (e.g. principal employer and employer) each person with the duty will be required to consult, co-operate and co-ordinate activities with those other duty holders as a separate, stand-alone duty.

A new offence of industrial manslaughter is also introduced by the new Act. The offence (industrial manslaughter – crime) attracts a maximum penalty of imprisonment of 20 years and a fine of A\$5 million for an individual PCBU, or a fine of A\$10 million for a body corporate. This offence has a high standard of proof, including a requirement for the prosecution to establish the person engaged in the conduct that caused the death of an individual knowing that the conduct was likely to result in death, and in disregard of the likelihood.

There are also extensive environmental obligations established in legislation and regulations in Australia under State, Territory and federal laws. These include rehabilitation obligations with respect to areas which have been mined and are subject to mine closure. The environmental impacts of mining activities are principally regulated through environmental impact assessment and approval under the federal, State and Territory environmental legislation and environmental protection licences or the equivalent, where required, under State or Territory jurisdictions.

Each relevant State and Territory's mining legislation requires mining companies to ensure that on cessation of their activities the mine site is returned as far as possible to its previous natural condition, or an agreed end land use. This broad objective is articulated through conditions imposed under the mining tenements or associated consents or authorisations issued to the tenement holder. State and Territory mining and environmental legislation impose general obligations on all persons not to pollute, not to cause serious or material environmental harm and not to clear land without any required approval or under a relevant section, breach of which may give rise to remediation obligations and could also lead to an enforcement action including prosecution which may result in penalties. Federal environmental legislation also contains offences for persons who undertake an action which has a significant impact on specific matters of environmental significance to Australia without an approval. Federal, state and territory governments are taking steps to minimise procedural duplication as part of the environmental approvals process, however failing to obtain the relevant approval at a state or federal level or breaching an approval may result in penalties.

### Other Jurisdictions

Similar legislation and regulations with respect to health, safety and environment apply in jurisdictions outside of Australia where Newcrest operates. The existing operations at Lihir in PNG and Red Chris in Canada are subject to a range of acts, regulations and regulatory instruments relevant to each jurisdiction.

## Papua New Guinea

PNG's general regulation of workplace health and safety is by the Industrial Safety, Health and Welfare Act (PNG) (the "ISHW Act"). The ISHW Act applies to exploration activities, but does not apply to mining activities, which are instead governed by the *Mining (Safety) Act 1977* (PNG) (the "Mining (Safety) Act").

The Mining (Safety) Act establishes a system of government inspectors, licensing of mine managers, prescribed conditions of employment, safety of working conditions and reporting of accidents. Detailed requirements are elaborated in the Regulations to the Mining (Safety) Act. Penalties are imposed for breaches of the Act and Regulations.

On June 28, 2021, the PNG Department of Mineral Policy and Geohazard Management ("DMPGM") issued a proposed new Mine and Works (Safety and Health) Bill 2021 that is intended to replace the current Mining (Safety) Act. This follows on from engagement with the industry in 2019 when the Chamber of Mines and Petroleum (Chamber) on behalf of the mining industry responded to a questionnaire from DMPGM. The DMPGM is undertaking consultation with stakeholders over the next few months, with an objective to finalise and introduce the new Bill into Parliament by the end of 2021. If promulgated as drafted, the new Act would cover mining operations, quarries, and exploration. It would implement a risk-based approach with a framework of statutory roles but retain prescriptive requirements that are a characteristic of the current Act. The scope of the Bill extends beyond safety and health to mine closure, compensation and other matters leading to potential duplication of responsibilities and oversight with other PNG government agencies and legislation. It also introduces a strict liability industrial manslaughter regime.

The PNG Environment Act controls any activities that can cause environmental harm, including mining. An Environment Permit is a pre-condition of obtaining a mining lease or SML, and requires the submission of a detailed environmental impact study, followed by a regime of extensive public notification and review.

The Director of Environment has extensive powers to direct environment improvement actions and issue clean up orders and impose various administrative fees referred to as environment management fees.

Penalties are imposed for breaches of the PNG Environment Act 2000, or an Environment Permit, which can extend to directors and officers of a corporation.

### Canada

All phases of mining and reclamation with respect to the Red Chris Operation are authorised and/or regulated by British Columbia and the Federal Government of Canada. Mine operations are primarily authorised and regulated under the *Mines Act* (British Columbia), RSBC 1996 c.293 (the "Mines Act") and the accompanying Health, Safety and Reclamation Code for Mines in British Columbia, as administered by the Ministry of Energy, Mines and Low Carbon Innovation (the "MELCI"). The Red Chris mine has received the Permit Approving Mining & Reclamation Program ("Permit M-240") pursuant to the Mines Act, as well as the necessary environmental permits for its current operations.

The Red Chris Operation is also subject to authorisation and/or regulation under certain British Columbia environmental regulations including the *Environmental Management Act*, SBC 2003 c.53 (the "EMA"), as administered by the Ministry of Environment and Climate Change Strategy (the "ENV"); the *Water Sustainability Act*, SBC 2014 c.15, administered by the British Columbia Ministry of Forests, Lands and Natural Resource Operations and Rural Development (the "MFLNRO"); and the BC EAA, as administered by the Environmental Assessment Office.

Environmental monitoring programs at the Red Chris Operation continue as required under authorisations from the relevant regulatory bodies. Such programs include monitoring of surface water (streams, lakes, and diversions), groundwater, seepage and hydrometric data.

As a condition of Permit M-240, a monitoring committee comprised of members from the operator, the Tahltan Nation, the ENV, MELCI and the MFLNRO has been established. In conjunction with this monitoring committee, an environmental oversight committee has been established under the amended and restated Red Chris IBCA as a forum for dialogue between the operator, the Tahltan Central Government and Tahltan Nation representatives. The oversight committee's terms of reference lay out environmental management mechanisms for the committee relating to (i) the Environmental Management System, (ii) Red Chris Operation's environmental compliance, monitoring and performance, (iii) all Red Chris Operations-related environmental information and recommendations concerning environmental matters, (iv) Federal and Provincial permit applications, and (v) environmental monitoring programs.

The Red Chris Operation is also subject to British Columbia's provincial carbon tax under the *Carbon Tax Act*, SBC 2008 c.40 (the "Carbon Tax Act"). Emitters are taxed at C\$35/t of carbon dioxide-equivalent ("CO<sub>2</sub>e"), starting April 1, 2018 and increasing by C\$5/t of CO<sub>2</sub>e per year until reaching C\$50/t of CO<sub>2</sub>e. Due to the COVID-19 pandemic, the scheduled increase for 2020 was delayed until April 1, 2021. The tax rate is currently C\$45/t of CO<sub>2</sub>e and is scheduled to increase to C\$50/t of CO<sub>2</sub>e on April 1, 2022.

### Newcrest's Health, Safety and Sustainability Policies

Newcrest's compliance approach is incorporated in the charter of the Safety and Sustainability Committee of the Board of Directors, which states that the Committee's objective is to assist the Board of Directors in its oversight, monitoring and review of the Company's practices and governance in relation to safety, occupational health, social performance, environment, climate change, sustainability and human rights and security of communities, employees and operations, and compliance with the law.

Newcrest has in place a number of internal policies, standards and management systems, including:

#### **Policies**

- Code of Conduct;
- Safety and Health;
- Sustainability;
- Environment;
- Climate Change;
- Human Rights;
- Anti-bribery, Sanctions and Fraud;
- Water Stewardship;
- Communities;
- Indigenous Relations;
- Tailings Governance Policy;
- Biodiversity Policy; and
- Diversity and Inclusion.

#### **Standards**

- Health and Safety Management System standards;
- Major Hazard Standards for Safety;
- Occupational Health and Hygiene Standard;
- COVID-19 Vaccinations Standard;
- Social Performance Standard and associated Guidelines, including Cultural Heritage Management Guideline;
- Tailings and Water Storage Standard;
- Environmental Standard on Mine Closure Management;
- Environmental Standard on Acid and Metalliferous Drainage Management;
- Environmental Standard on Air Quality;

- Environmental Standard on Biodiversity;
- Environmental Standard on Deep Sea Tailings Placement;
- Environmental Standard on Land Use and Disturbance;
- Environmental Standard on Non-Mineral Waste Management;
- Environmental Standard on Tailings Management;
- Environmental Standard on Cyanide;
- Environmental Standard on Waste Rock Management;
- Environmental Standard on Water Management;
- Environmental Standard on Hydrocarbon and Chemical Management; and
- Newcrest Risk Standard and Framework.

Newcrest aims to comply with the following voluntary codes of conduct with respect to health, safety and sustainability objectives:

- International Council on Mining and Metals 10 Principles (for sustainable mining);
- World Gold Council Responsible Gold Mining Principles;
- Minerals Council of Australia's Framework for Sustainable Development ("Enduring Value");
- Global Reporting Initiative Sustainability Reporting Guidelines;
- Voluntary Principles on Security and Human Rights;
- International Finance Corporation Guidelines;
- Taskforce on Climate-related Financial Disclosures Recommendations;
- International Cyanide Management Institute's International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold;
- Global Industry Standard on Tailings Management; and
- Guidelines from the Australian National Committee on Large Dams ("ANCOLD") are incorporated into Newcrest's internal standards and tailings management framework. This framework also incorporates ICMM tailings management guidance.

## Political, Economic, Social and Security Conditions - PNG

The most recent national elections in PNG, held in mid-2017, resulted in the re-election of Peter O'Neill as Prime Minister. After a vote-of-no-confidence in Parliament that removed Peter O'Neill, James Marape became Prime Minister in May 2019. The next national elections are scheduled to be held in 2022.

In June 2020, the PNG Parliament passed minor amendments to the Mining Act relating to the State's ability to apply for and hold exploration and mining tenements. Prime Minister Marape has consistently stated that changes to the Act do not apply to existing mines (such as the Lihir Operation) or advanced projects (such as the Wafi-Golpu Project). Separately, the PNG Government has also flagged its desire to move to a production sharing regime for mining projects in the future.

There can be no certainty as to what further changes, if any, will be made to the PNG Mining Act under the current or future Governments. Material changes to the PNG Mining Act may have a material adverse impact on Newcrest's ability to own or operate its respective properties and to conduct its business in PNG. On April 24, 2020 the PNG Government announced that the Special Mining Lease ("SML 1") for the Porgera mining operation (a major mining operation in PNG which is not owned or operated by Newcrest) would not be renewed. It subsequently amended the Mining Act and issued a new Special Mining Lease 11 for Porgera to Kumul Mineral Holdings Limited (a Stateowned company). The PNG Government is now negotiating with the Porgera JV participants to establish new arrangements for restarting and operating Porgera. The parties have signed a Framework Agreement and are negotiating final definitive agreements. The PNG Government has stated that the decision not to renew SML 1 related to alleged issues specifically related to environmental damages claims and resettlement at the Porgera mine and has no bearing on any other operations, including Lihir, or advanced exploration projects, including Wafi-Golpu. The PNG Prime Minister stated that Wafi-Golpu remained one of the Government's priority projects for development.

There is a continuing political and social focus on the transfer of benefits from resources (both oil and gas and minerals) to PNG stakeholders, including customary landowners. More broadly, mineral ownership under the PNG Mining Act remains a high-profile social and political issue in PNG.

In addition, disagreements between national and provincial governments in PNG have historically created an uncertain business environment for the mining industry in PNG, and may increase Newcrest's costs of doing business. PNG has a system of provincial-level governments, most of which are funded almost entirely by direct grants from the national government. In the past, disagreements between the two levels of government have included power sharing and revenue arrangements, and such disagreements may resurface in the future. These intergovernment disputes could adversely affect Newcrest's operations in PNG. In particular, permitting discussions on the Wafi-Golpu Project between the PNG Government and the WGJV Participants were, for a period of over nine months, delayed by legal proceedings between the National Government and the Morobe Provincial Government regarding the internal distribution of PNG's economic interests in the project.

Newcrest also faces environmental, legal, regulatory and community risks in PNG. For example, with respect to the Ramu Nickel project (unrelated to Newcrest), a group of landowners brought proceedings against the developers of the Ramu Nickel mine project (in the Madang province of PNG) and the State, seeking to permanently restrain the mine's use of DSTP, which disposes tailings in the ocean, and which had been approved by the State. During the proceedings, the landowners obtained a temporary injunction which delayed final commissioning of the project by more than a year. In July 2011, the Court, while finding in favour of the landowners on many aspects of their claims (including the availability of a claim in nuisance), declined to grant a permanent injunction restraining DSTP and the interim injunction was dissolved. The landowners appealed the decision not to grant a permanent injunction and the defendants (the developer and the State) cross-appealed the findings against them, including the finding that a case in nuisance had been made out. The court's decision on the appeal was handed down in December 2011, with the court rejecting the landowners' appeal and reversing a number of the elements of the first judgment, including the finding that a case in nuisance had been made out.

A spill from the Ramu Nickel plant in 2019 led to increased focus by environmental groups, communities and some political leaders on DSTP at Ramu Nickel and its use in PNG more generally, even though DSTP was unrelated to the spill. DSTP is in operation at the Lihir Operation and is the proposed tailings placement option for the Wafi-Golpu Project.

#### **Social Performance**

Newcrest is known for exploring, developing and operating mines in line with strong environmental, social, and governance practices, developing a diverse workforce, and developing and maintaining strong relationships with Traditional Owners, First Nations, landholders, proximate communities, governments and other stakeholders. Newcrest's diverse range of stakeholders reflects that it operates across many countries and collaborates with a range of partners. Its methods of engagement are tailored accordingly. Both formal and informal methods are used, depending on the nature of the relationship and communication context. Newcrest aligns its approach with ICMM Principle 3 Respect human rights, and the interests, cultures, customs and values of employees and communities affected by our activities.

In April 2020 Newcrest established a A\$20 million Community Support Fund to assist communities in proximity to its operations to face the challenges presented by the COVID-19 pandemic.

Newcrest's Social Performance Management System ("SPMS"), comprised of the Communities Policy and supporting documentation, provides a framework of mandatory engagement actions that build relationships that secure and maintain community support. The SPMS is supported by a social performance and stakeholder engagement software system that assists Newcrest to coordinate its relationship efforts, read sentiment, monitor current issues, track grievances to ensure they are resolved, and effectively allocate and manage social investments. The system is currently going through the implementation process across our global operations.

Newcrest uses a range of mechanisms to communicate and consult with a wide range of stakeholders via its website, social media, market and media releases, its Corporate publications, formal and informal meetings, event presentations and through its Annual General Meeting.

At a site level, each of Newcrest's operations prepares a site-specific stakeholder engagement plan including engagement mechanisms such as community consultation meetings and various activities. Consultation mechanisms can include exchanges with community forums and working groups, newsletters, community surveys, suggestion boxes, hotline or phone-in opportunities, submission invitation, one on one discussions, grievance mechanism, representation on committees and collaboration on the development of community programs. All consultation results are brought back to the community and discussed. Newcrest records, measures and reviews its engagement on a regular basis to ensure it is effective.

Each of Newcrest's operations has a social performance program which includes, where appropriate, site-specific local agreements. All operating sites have a team of social performance specialists reporting to site management and who are supported at the corporate level by the General Manager, External Relations and Social Performance.

In December 2015, Newcrest and the Martu Peoples, who are the Traditional Owners of the land on which the Telfer gold mine and Havieron Project in Western Australia are situated, signed the Newcrest Mining Project Area Indigenous Land Use Agreement ("ILUA"). The ILUA addresses provisions such as practical support to Martu Peoples to improve Martu quality of life, training and employment, contracting and business development, and logistical support. The ILUA also provides for matters such as cultural heritage management planning and ongoing heritage protection for areas of significance. Newcrest has agreed to work with the Western Desert Lands Aboriginal Corporation to review the existing heritage protocol under the ILUA to take into account proposed changes to cultural heritage laws. For more information on the proposed cultural heritage law see "Legal and Regulatory Matters – Indigenous Cultural Heritage Legislation".

The amended and restated IBCA between Newcrest, the Tahltan Central Government, Iskut First Nation and Tahltan Band was signed in August 2019 concurrently with Newcrest acquiring its interest in the Red Chris Operation. The IBCA provides the basis for a life-of-mine partnership and covers a range of matters such as environmental and social performance management, revenue sharing, career opportunities, training and business development. The implementation of the IBCA, based on co-management by Newcrest Red Chris Mining Limited and Tahltan Nation through the Agreement Project Advisory Committee, is progressing well and relations with the Tahltan Nation continue to strengthen. On June 10, 2021 the Province of British Columbia announced the signing of a Shared Prosperity Agreement with the Tahltan Nation as represented by the TCG, Iskut Band and Tahltan Band, which amongst other things, sets the foundation to collaboratively achieve long-term comprehensive reconciliation and land-use predictability. On June 15, 2021, the Province was directed by Order in Council to negotiate an agreement under section 7 of the Declaration on the Rights of Indigenous Peoples Act (2019) with the TCG with respect to the Red Chris mine which would require that decisions under the BC EEA either (a) would be exercised jointly by the Province and TCG; or (b) could only be exercised by the Province if the prior informed consent of the TCG has been obtained. Decisions under the BC Environmental Assessment Act will be required for the construction and operation of a block cave mine at Red Chris.

In Western Australia, Queensland, NSW and the Northern Territory, Newcrest has successfully executed and implemented numerous native title and cultural heritage agreements with Traditional owners and Land Councils over the last decade.

The Cadia Operation has a well-developed social performance strategy and, as a result, enjoys a strong supportive working relationship with its surrounding stakeholders. A Community Consultative Committee ("CCC") is in place and oversees the application and distribution of community development funds for the district. The operation also provides education scholarships for local students. Cadia Operation also enjoys a positive working relationship with the local Aboriginal Land Council, and there are currently no native title issues at the Cadia Operation.

At the Lihir Operation, a comprehensive set of compensation and community development agreements between the local community and LGL was signed in 1995, and later reviewed in 2007. The agreements set out the relationship between the Lihirian landowners, local level, provincial and PNG National government and Newcrest in relation to the payments of mine derived funds and certain benefits and infrastructure projects. Following the 2007 review, PGK 100 million (US\$30 million, indexed for inflation) was committed over the following five years to implement the Lihir Sustainable Development Plan ("LSDP") which incorporated the agreements reached between LGL and the community for community development projects and priorities for the Lihir community. These agreements were replaced in December 2020 when a new the suite of compensation, relocation and benefits sharing agreements (the

"Lihir Agreements") were signed between LGL and the Lihir tenement landholder and relocation family groups. The Lihir Agreements were then registered with the Registrar of Mining Tenements on 10 May 2021, with their implementation starting on 1 July 2021. The Lihir Agreements aim to enhance socio-economic development outcomes for landholders and enable benefits to be distributed directly to their intended beneficiaries.

There is also a Memorandum of Agreement ("MOA") in place between the three levels of government and the local community, which sets out among other things, how the royalties and other government mine derived funds are divided between the site landowners, local level and provincial government. The PNG National Government undertakings to the people of Lihir, and the local level and provincial governments are also incorporated into the MOA.

A compensation agreement covering exploration impacts is in place with the local landowners at the Wafi-Golpu Project. A formal compensation agreement to cover project construction and operational activities will need to be negotiated with the appropriate land owning communities before commencement of construction. Resettlement agreements will also be required with three small villages which are currently located within the proposed Special Mining Lease area.

## Legal Proceedings and Regulatory Actions During FY2021

Newcrest is a party to legal proceedings relating to the Wafi-Golpu Project.

Permitting negotiations for the Wafi-Golpu Project were suspended in May 2019, due to a court stay order in a judicial review application brought by the Governor of Morobe Province against the State of PNG in relation to the MOU between the State of PNG and the WGJV signed in December 2018. In February 2020, those proceedings (and the stay order) were dismissed by the National Court and the Governor of Morobe Province appealed the matter to the Supreme Court. On May 16, 2020, the Prime Minister of PNG and the Governor of Morobe Province announced that they had reached agreement on the future permitting timeframe for the Wafi-Golpu project and that the Governor would withdraw the appeal. However, to date, the appeal has not been formally withdrawn.

An Environment Permit for the Wafi-Golpu Project was granted in December 2020. In March 2021, the Governor of Morobe Province commenced a new judicial review application against the State of PNG challenging the grant of an environmental permit for the Wafi-Golpu Project. The WGJV participants are not parties to this proceeding, which is still to be heard and determined.

If the Governor's appeal or other legal challenges to the permitting process are pursued, the Wafi-Golpu Project permitting process may be adversely impacted See also the reference to the decision by the PNG Government to not renew the SML for the Porgera Mine under the heading "Political, Economic, Social and Security Conditions – PNG".

In addition to the above matter, Newcrest is a recipient of, or a defendant in, certain claims, suits and complaints made, filed, threatened or pending in the ordinary course of business. Newcrest believes these matters are of such a kind, or involve such amounts, that they will not have a material effect on the financial position of Newcrest if disposed of unfavorably, or are at a stage which does not permit a reasonable evaluation of the likely outcome of the matter.

### RISK FACTORS

Investors should carefully consider each of the following risk factors and all of the other information set out in this AIF before making any investment decision. The risks described below are not the only risks that Newcrest faces. Additional risks and uncertainties not presently known to management or that management currently believes to be immaterial may also adversely affect Newcrest's business. Any of these risks may have a material adverse effect on the business, financial condition, results from operations and cash flows of Newcrest.

Newcrest may be materially adversely affected by a substantial or extended decline in gold or copper prices, particularly as Newcrest is predominantly not hedged in respect of commodity prices.

Newcrest's revenue is principally derived from the sale of gold and copper based on prevailing market prices. As a result, revenue will be significantly affected by changes in these prevailing market prices. Fluctuations in gold prices can occur due to numerous factors beyond Newcrest's control, including:

- macroeconomic conditions and geopolitical factors (such as financial and banking stability, global and regional political events and policies including monetary policy easing, inflation and changes in inflationary expectations, interest rates including negative interest rate environments, global economic growth expectations, and actual or expected gold purchases and/or sales by central banks);
- speculative positions taken by investors or traders;
- changes in demand for gold (including gold used in fabrication, such as for design, jewelry and other industrial uses and changes due to product substitution);
- changes in supply for gold from mine production and from scrap recycling; and
- gold hedging and de-hedging by gold producers.

Newcrest is predominantly an unhedged gold producer, although Newcrest has hedges over a portion of Telfer Operation's future planned gold production to FY23. The Telfer Operation is a large-scale, low-grade mine and its profitability and cash flow are both very sensitive to the realised Australian dollar gold price. The Telfer Australian dollar gold forward contracts have been designated as cash flow hedges with a hedge relationship of 1:1. Potential sources of hedge ineffectiveness that may affect the hedging relationship during the term are variations to forecast production timing and volume assumptions and credit risk.

The price of gold is often subject to sharp, short-term changes resulting from speculative activities, fears of major risk events and/or changes in monetary policy. The combination of changes in physical, investment and speculative demand and supply has exacerbated, and may continue to exacerbate, the volatility of gold prices.

Unlike gold, global demand for copper metals is mainly related to industrial activity. Global copper supply comes primarily from mine production, with a significant amount of mine production being in the form of concentrate. Copper-gold concentrate is produced by Newcrest's operations at Cadia, Telfer and Red Chris. Factors tending to affect the price of copper include:

- the worldwide balance of copper demand and supply;
- rates of global economic growth;
- the rate of development of new mines and closure of existing mines;
- trends in industrial production and conditions in the electricity, housing and automotive industries, all of which correlate with demand for copper;
- economic growth and geopolitical conditions worldwide and particularly in China, which has become the largest consumer of refined copper in the world;
- speculative investment positions in copper and copper futures;
- the availability and cost of substitute materials; and
- availability and cost of appropriate smelting and refining arrangements and recovery rate through the smelting and refining processes.

Lower gold and / or copper prices may adversely affect Newcrest's financial condition and performance. Holding all other factors constant, Newcrest estimates that changes in the metal prices would impact its total revenue from operations in FY22 as follows:

- US\$10/oz change in the average realised gold price is estimated to have an impact on total revenue of approximately US\$18 million.
- US\$0.05/lb change in the average realised copper price is estimated to have an impact of approximately US\$12 million.

Depending on the market price of the relevant metal, Newcrest may determine that it is not economically viable to continue commercial production at a particular level, or at all, at some or all of its operations, particularly higher-cost mining operations, which may result in it altering production plans or suspending or closing mining operations. In addition, Newcrest may alter or delay the development of some or all of its current projects, as applicable, which

could have an adverse impact on Newcrest's financial performance and operating results. Newcrest may also curtail or suspend some or all of its exploration activities, with the result that depleted reserves are not replaced. In addition, the market value of Newcrest's gold or copper inventory may be reduced. Existing reserves may be reduced to the extent that ore cannot be mined and processed economically at the prevailing prices.

Changes in assumptions regarding future commodity prices may impact upon the assessment of the carrying values of Newcrest's assets for accounting purposes, which in turn could have a material adverse effect on Newcrest's financial condition and operating results.

## Foreign exchange rate fluctuations could have a material adverse effect on Newcrest's operational results and financial condition.

Given the geographic spread of Newcrest's operations, its earnings, cash flows and balance sheet are exposed to multiple currencies, including a portion of spend at each operation being denominated in the local currency. The relative movement of these currencies (particularly the Australian dollar) against the US dollar may have a significant impact on Newcrest's financial results and cash flows, which are reported in US dollars. For example, an A\$0.01 change in the Australian dollar to US dollar exchange rate at the start of FY22 would have a corresponding impact on EBIT of approximately US\$17 million for the year. Newcrest does not hedge its foreign exchange transaction exposures although it may hedge certain major capital expenditures to the functional currency of the project or operation.

The presentation currency of the Group is the US dollar. Newcrest's parent entity and all Australian entities use the Australian dollar as their functional currency, and the Red Chris Operation uses the Canadian dollar as its functional currency. All other entities, including Lihir, use the US dollar as their functional currency.

# Increased costs, capital and commodity inputs could adversely affect Newcrest's profitability, financial condition and liquidity.

Operating costs are subject to variations due to a number of factors, some of which are specific to a particular mine site, including changing ore characteristics and metallurgy, changes in the ratio of ore to waste as the mine plan follows the sequence of extracting the ore body, surface and underground haulage distances, underground geotechnical conditions and the level of sustaining capital invested to maintain operations.

In addition, operating costs and capital expenditure are, to a significant extent, driven by the cost of commodity inputs consumed in extracting and processing ore (including but not limited to electricity, water, fuel, chemical reagents, explosives, tyres and steel), and labour costs associated with those activities. Such products are subject to volatile price movements, including increases that could make production at certain operations less profitable. Material increases in costs could have a material adverse effect upon the profitability of existing mining operations and could make certain mines or projects uneconomic and could impact the assessment of the carrying value of its assets.

Newcrest anticipates further capital expenditures over the next several years in connection with the development of new projects, expansion of existing projects, including in relation to the Cadia expansion project, and activities to facilitate mining of the Kapit sector of the Lihir open pit, along with sustaining capital expenditure across its operations. Variability in the availability and accessibility of capital and in these capital costs could have a material adverse effect on Newcrest's financial condition and operating results.

Newcrest currently hedges a portion of its expected fuel requirements, but other input costs are generally not hedged. Where it considers appropriate, Newcrest enters into short term, medium term or evergreen contracts at fixed prices or fixed prices subject to price rise and fall mechanisms. The hedges Newcrest uses may not fully protect it from price fluctuations, and adverse movements could have a material adverse effect on its financial condition and operating results.

Newcrest has exploration, development and production activities in jurisdictions that are subject to political, economic, social, regulatory and other risks and uncertainties.

Newcrest has exploration, development and production activities that are subject to political, economic, social, security and other risks and uncertainties. These risks and uncertainties are unpredictable and vary from country to country and include but are not limited to:

- law and order issues (including varying government capacity to respond);
- political instability;
- civil unrest, rebellion and civil society opposition;
- expropriation and/or nationalisation;
- changes in government ownership levels in projects;
- fraud, bribery and corruption;
- restrictions on access to foreign exchange and/repatriation of cash, earnings or capital;
- land ownership disputes and tenement access issues;
- disputes with local communities;
- renegotiation or nullification of existing concessions, licenses, permits and contracts;
- the public health system management of health infections and diseases; and
- the imposition of international sanctions or border closures,

each of which could have a significant adverse effect on Newcrest.

There is also a risk that governments could review laws, legislative decisions (such as the grant of tenements), contractual arrangements or amend government policy, without notice or industry consultation. If, in one or more of Newcrest's countries of operations, Newcrest was not able to obtain or maintain necessary permits, authorisations or agreements to implement planned projects or continue Newcrest's operations under conditions or contracts or within timeframes that make such plans and operations economic, or if legal, ownership, fiscal conditions (including royalties and duties), banking and exchange controls (including controls pertaining to the holding of cash and remittance of profits and capital to the parent company), employment, environmental and social laws and regimes were to unexpectedly change, Newcrest's operating results and financial condition could be materially impacted.

These risks have become more prevalent in recent years, and in particular there has been an increasing social and political focus on:

- the revenue derived by governments and other stakeholders from mining activities, which has resulted in announced reviews of the policy and legislative regimes applicable to mining in a number of the jurisdictions in which Newcrest has interests (including PNG and Chile);
- national control of and benefit from natural resources, with proposed reforms regarding government or landowner participation in mining activities, limits on foreign ownership of mining or exploration interests and/or forced divestiture (with or without adequate compensation), and a broad reform agenda in relation to mining legislation, environmental stewardship, significant royalty increases and local business opportunities and employment; and
- Environmental, Social and Governance ("ESG") credentials for the mining industry in general and particularly for issues relevant to civil society that could create unrest, suspension of mining operations or materially damage reputation.

In PNG, there is a political focus on future policy directions, including in relation to the extractives sector. The Government has stated it wants to increase benefits for PNG from extractive projects as part of its "Take Back PNG" approach. Potential policy changes could include introducing a new production sharing regime for minerals and oil/gas, amending the existing Mining Act and/or changing the level and manner of local equity participation in projects, taxation regimes, banking and foreign exchange controls, and/or controls pertaining to the holding of cash and remittance of profits and capital to the parent company.

On April 24, 2020 the PNG Government announced that the Special Mining Lease for the Porgera mining operation ("SML 1") would not be renewed. It subsequently amended the Mining Act and issued a new Special Mining Lease

11 for Porgera to Kumul Mineral Holdings Limited (a State-owned company). The PNG Government is now negotiating with the Porgera JV participants to establish new arrangements for restarting and operating Porgera. The parties have signed a Framework Agreement and are negotiating final definitive agreements. The PNG Government has stated that the decision not to renew SML 1 related to alleged issues specifically related to environmental damages claims and resettlement at the Porgera mine and has no bearing on any other operations, including Lihir, or advanced exploration projects, including Wafi-Golpu. The PNG Prime Minister stated that Wafi-Golpu remained one of the Government's priority projects for development.

In the second half of 2020, the PNG Government prepared and submitted to Parliament a proposed new organic law to introduce a production sharing regime for the mining sector. The proposed organic law will require the approval of a two thirds majority of Parliament and, if passed in its current proposed form, purports to transfer ownership of minerals from the PNG State to State-owned entities who would then be responsible for negotiating mineral production sharing arrangements. As currently drafted, the bill containing the proposed organic law will not apply to Lihir, but could potentially apply to Wafi-Golpu if a Mining Lease or Mining Development Contract is not in place before the effective date for the proposed organic law, which the PNG Prime Minister has indicated is intended to be 2025. The bill is subject to amendment by Parliament.

On October 29, 2021, the PNG Prime Minister announced proposed legislation which, if enacted, would regulate the export of gold from PNG and require that mining companies operating in PNG refine gold with a new National Mint. At this stage, it is unclear whether this proposed legislation will become law and, if so, when it would take effect. Under the terms of the Lihir MDC, Newcrest may be required to refine a portion of its Lihir gold production if certain quality and security requirements are met and the terms offered are commercially competitive, but is otherwise free to enter into arms' length refining contracts with refineries outside of PNG and currently does so.

The PNG Government has also announced that it is considering replacement of the current Income Tax Act with a new Income Tax Act ("NITA"). The Government has foreshadowed that the NITA will come into force from January 1, 2023, notwithstanding limited consultation undertaken to date. If passed in the current proposed form, the NITA would introduce significant tax uncertainty and potentially adverse tax outcomes for Newcrest. Any adverse changes to income tax laws will affect Lihir as it has no fiscal stability agreement with the PNG Government and may also affect Wafi-Golpu depending on the terms of any fiscal stability agreement negotiated between the WGJV participants and the PNG Government, if any.

There is also the potential for legal challenges to the Wafi-Golpu permitting process as it progresses towards completion, including by provincial governments, landowner groups and civil society organisations. For example, in January 2019 the Governor of Morobe Province commenced a judicial review application against the State of PNG in relation to a Memorandum of Understanding (MOU) between the State of PNG and the Wafi-Golpu Joint Venture (WGJV) signed in December 2018. Those proceedings (and stay order) were dismissed by the National Court in February 2020 and the Governor appealed the matter to the Supreme Court. In March 2021 the Governor of Morobe Province commenced a new judicial review application against the State challenging the grant of an environmental permit for Wafi-Golpu. Any such legal challenges may adversely impact the Wafi-Golpu permitting process. WGJV is currently engaging with the State of PNG to progress permitting of the Wafi-Golpu Project and has commenced discussions in relation to the Special Mining Lease. The timing for completing the discussions is uncertain and there is no assurance of the outcomes.

In Canada, the nature and extent of First Nations rights and title remains the subject of active debate, claims and litigation, particularly in British Columbia where the Red Chris Operation is located. First Nations in British Columbia have made claims in respect of Indigenous rights and title to substantial portions of land and water in the province. Some of these claims are made outside of treaty and other processes. The effect of such claims on any particular area of land will not be determinable until the exact nature of historical use, occupancy and rights to such property have been clarified by a decision of the Canadian courts or definition in a treaty. First Nations in British Columbia are seeking settlements with respect to these claims, including compensation from governments, and are seeking rights to act as regulatory authorities within their traditional territories. The effect of these claims cannot be estimated at this time. The federal and provincial governments in Canada have been seeking to negotiate settlements with Aboriginal groups throughout British Columbia in order to resolve many of these claims. Although none of these claims have impacted the Red Chris Operation, the issues surrounding Indigenous title and rights remain to be resolved. On June 10, 2021 the Province of British Columbia announced the signing of a Shared Prosperity

Agreement with the Tahltan Nation as represented by the TCG, Iskut Band and Tahltan Band, which amongst other things, sets the foundation to collaboratively achieve long-term comprehensive reconciliation and land-use predictability. On June 15, 2021, the Province was directed by Order in Council to negotiate an agreement under section 7 of the *Declaration on the Rights of Indigenous Peoples Act* (2019) with the TCG with respect to the Red Chris mine which would require that decisions under the BC EEA either (a) would be exercised jointly by the Province and TCG; or (b) could only be exercised by the Province if the prior informed consent of the TCG has been obtained. Decisions under the BC EAA will be required for the construction and operation of a block cave mine at Red Chris.

In Western Australia, where Telfer and Havieron are located, the Government has proposed to repeal the existing *Aboriginal Heritage Act 1972* (WA) and replace it with a new regime for the protection of Aboriginal cultural heritage. A bill for the new Aboriginal Cultural Heritage Act was introduced to the Western Australian parliament in November 2021. If enacted as tabled, the Bill would broaden and strengthen the protection of Aboriginal cultural heritage in Western Australia and also introduced new offences and increased penalties.

In Ecuador, a relatively new large-scale mining jurisdiction, policies and regulations are evolving amid a broader debate on the benefits and impacts of mining. Potential future legal challenges around community consent and seeking to restrict mining activities in Ecuador present a risk to the mining industry. The new President and parliament elected in 2021 may consider additional policy and regulation that could impact mining. While the President-elect is largely supportive of business, the country is yet to set a clear policy position on mining. A number of countries within the Latin American region, including Chile, are looking at ways to increase government revenues from mining in response to the COVID-19 pandemic's negative impact on the economy.

The formulation or implementation of government policies in the countries in which Newcrest operates may be unpredictable, including in relation to laws, policies and regulations that impact Newcrest's operations. Any existing and new mining and exploration operations and projects that Newcrest carries out in these countries will continue to be subject to various national and local laws, policies and regulations governing ownership (including government ownership), prospecting, development and mining of mineral deposits, taxation and royalties, exchange controls, import and export duties and restrictions, foreign investment approvals, Indigenous involvement in permitting/approvals processes including Free, Prior and Informed Consent, employee and social community relations, cultural heritage, access, environmental and other matters.

There can be no certainty as to what changes might be made to relevant law or policy in the jurisdictions where the Group has current or future interests, or the impact that any such changes may have on Newcrest's ability to own and operate its mining and related interests and to otherwise conduct its business in those jurisdictions.

### Newcrest's operations are affected by changes in law and regulation and inability to maintain title.

Newcrest's current and future mining operations, development projects and exploration activities are subject to various laws, policies and regulations and to obtaining and maintaining the necessary titles, authorisations, permits and licences, and associated land access and other arrangements with landowners and local communities and various layers of Government, which authorise those activities under the relevant law ("Authorisations"). In addition, Newcrest is subject to law and regulation as a listed entity in Australia, Canada and PNG.

Changes in law, policies or regulations, or to the manner in which they are interpreted or applied to Newcrest may have the potential to materially impact the value of a particular operation, development project, exploration assets or the Group as a whole. Failure to comply with legal requirements may result in Newcrest being subject to enforcement actions with potentially material consequences, such as financial penalties, suspension of operations and forfeiture of assets.

There can be no guarantee that Newcrest will be able to successfully obtain and maintain the necessary Authorisations or obtain and maintain the necessary Authorisations on terms acceptable to Newcrest, that renewal of existing Authorisations. will be granted in a timely manner or on terms acceptable to Newcrest, or that Newcrest will be in a position to comply with all conditions that are imposed. Authorisations held by or granted to Newcrest may also be subject to challenge by third parties which, if successful, could impact on Newcrest's exploration, development and/or mining and/or processing activities.

Although Newcrest believes it has taken reasonable measures to acquire the rights needed to undertake its operations, develop its projects and undertake other activities as currently conducted, some risk exists that some titles and access rights may be defective. No assurance can be given that such claims are not subject to unregistered, undetected or other claims or interests which could be materially adverse to Newcrest or its operations. While Newcrest has used its best efforts to ensure title to all its properties and secured access to surface rights, these titles or rights may be disputed, which could result in costly litigation or disruption of operations. Surface access issues have the potential to result in the delay of planned exploration programs, development projects and/or changes in the nature or scale of existing operations and these delays may be significant. Newcrest expects that it will be able to resolve these issues if and as they arise, however, there can be no assurance that this will be the case and future acquisitions, relocation benefits and legal and related costs may be material, which may impact Newcrest's ability to effectively operate in relevant geographic areas.

In a number of jurisdictions where Newcrest has existing interests, the legal framework is becoming increasingly complex, onerous and subject to change. Changes in laws, policies or regulation, or to the manner in which they are interpreted or applied, may result in material additional expenditure, taxes or costs, restrictions on the movement of funds, or interruption to, or operation of, Newcrest's activities. Disputes arising from the application or interpretation of applicable laws, policies or regulations in the countries where Newcrest operates could also adversely impact Newcrest's operations, development projects, exploration assets, financial performance and/or value

# Newcrest's operations are dependent on it obtaining and maintaining relevant authorisations, including title and access rights to its mineral properties.

Newcrest's production, development and exploration activities are subject to obtaining and maintaining the necessary titles, authorisations, permits and licenses, and associated land access arrangements with landowners and local communities, which authorise those activities under the relevant law. There can be no guarantee that Newcrest will be able to successfully obtain and maintain relevant titles, authorisations, permits and licenses, or obtain and maintain relevant titles, authorisations, permits and licenses on terms acceptable to it, to support Newcrest's activities, or that renewal of existing titles, authorisations, permits and licenses will be granted in a timely manner or on terms acceptable to us. Such authorisations held by or granted to us may also be subject to challenge by third parties which, if successful, could impact on Newcrest's exploration, development and/or mining and/or processing activities.

Although Newcrest believes it has taken reasonable measures to acquire the rights needed to undertake its operations, develop its projects and undertake other activities as currently conducted, some risk exists that some titles and access rights may be defective. No assurance can be given that such claims are not subject to unregistered, undetected or other claims or interests which could be materially adverse to Newcrest or its operations. While Newcrest has used its best efforts to ensure title to all its properties and secured access to surface rights, these titles or rights may be disputed, which could result in costly litigation or disruption of operations. Surface access issues have the potential to result in the delay of planned exploration programs, development projects and/or changes in the nature or scale of existing operations and these delays may be significant. Newcrest expects that it will be able to resolve these issues if and as they arise, however, there can be no assurance that this will be the case and future acquisitions, relocation benefits and legal and related costs may be material, which may impact Newcrest's ability to effectively operate in relevant geographic areas.

In addition, mining and exploration tenure is subject to renewal. There can be no certainty that renewals will be granted, including in a timely manner. Similarly, there can be no assurance that Newcrest will be able to successfully convert exploration tenure into mining tenure to support future mining operations. The failure to secure renewal of mining and/or exploration tenure, or to successfully convert exploration tenure into mining tenure, could have an adverse impact on Newcrest's ability to successfully maintain Newcrest's exploration and mining interests and deliver development projects. Although to date Newcrest has been able to negotiate commercially reasonable and acceptable arrangements with Indigenous title claimants, Indigenous title holders, and land owners where Newcrest operates, there can be no assurance that claims will not be lodged in the future, including upon expiry of current mining leases, which may impact Newcrest's ability to effectively operate in relevant geographic areas.

## Defects in title or loss of any leasehold interests in Newcrest's properties could limit its ability to mine these properties.

Newcrest holds various mining leases and tenements in the relevant regions to conduct its mining operations. Newcrest's right to mine some of its Mineral Reserves may be adversely affected if defects in title or boundaries exist or if a lease expires. Any challenge to its title or leasehold interests could delay the exploration and development of a property and could ultimately result in the loss of some or all of its interest in that property and, accordingly, require Newcrest to reduce its estimated Mineral Reserves. In addition, if Newcrest mines on property that it does not own or lease, it could incur liability for such mining.

In Australia, exploring or mining for minerals is unlawful without a tenement granted by the relevant State government. The grant and renewal of tenements are subject to a regulatory regime and each tenement is subject to certain conditions. There is no certainty that an application for the grant of a new tenement or renewal of the existing tenements at Newcrest's mines will be granted at all or on satisfactory terms or within expected timeframes. The conditions attached to the tenements may also change at the time they are renewed. There is a risk that Newcrest may lose title to any of its granted tenements if it is unable to comply with conditions or if the land that is subject to the title is required for public purposes. Newcrest's tenements have expirations ranging from December 12, 2021 to August 22, 2042 and, where renewal is required, there is a risk that the relevant government may change the terms and conditions of such tenement upon renewal or reject the renewal.

A defect in Newcrest's title or the loss of any lease or tenement on expiration of its term, on a default or otherwise, could adversely affect Newcrest's ability to mine the associated Mineral Reserves and could result in a material adverse effect on its operating results and financial position.

## Newcrest is subject to taxation in multiple jurisdictions and adverse changes to the taxation and royalty laws of such jurisdictions could have a material adverse effect on its profitability.

Newcrest has operations and conducts business in multiple jurisdictions, and it is subject to the taxation and royalty laws and regulations of each such jurisdiction. The tax laws and regulations are complicated and subject to change. Further, international agencies such as the Organization for Economic Cooperation and Development have been coordinating negotiations amongst countries in respect of cross border and global tax initiatives, which if introduced, could impact Newcrest adversely through additional tax costs, increased compliance and litigation risks. Newcrest seeks to mitigate these risks by monitoring tax policy, legislation and regulations and engaging with relevant authorities. Newcrest also participates in tax reform initiatives through industry bodies and supports tax transparency initiatives to highlight Newcrest's fiscal contribution in the various jurisdictions in which it operates. Newcrest may also be subject to review, audit and assessment in the ordinary course of its operations. Changes in taxation and/or royalty laws and regulations or the results of audits and assessments could result in higher taxes and/or royalties being payable, require payment of taxes and/or royalties due from previous years or result in significant penalties on any assessed and unpaid taxes and/or royalties, which could adversely affect Newcrest's profitability. Taxes may also adversely affect Newcrest's ability to effectively repatriate earnings and otherwise deploy its assets.

### Newcrest has exposure to a range of climate change risks.

Newcrest has exposure to a range of climate change risks and opportunities related to the transition to a lower-carbon economy including political, policy and legal developments, technology, reputation, increased capital costs, cost of inputs and raw materials, access to external funding and insurances. Gold and copper mining operations are energy intensive and in the short to medium term, Newcrest expects to continue to rely heavily on fossil fuels as an energy source.

In May 2021 Newcrest set a goal of net zero carbon emissions by 2050, which relates to its operational (Scope 1 and Scope 2) emissions, although Newcrest will also strive to work across its value chain to reduce Scope 3 emissions. This goal is in addition to the announcement by Newcrest in June 2019 of a 30% reduction in greenhouse gas ("GHG") emissions per tonne of ore treated by 2030 against a 2018 baseline. To inform investment decisions, Newcrest has also adopted a protocol for applying shadow carbon prices of US\$25/tonne and US\$50/tonne CO2-e for jurisdictions where there are no regulated carbon prices.

In Financial Year 2021, Newcrest continued to build on the progressive implementation of the Taskforce on Climate-related Financial Disclosures ("TCFD") recommendations by undertaking an assessment of the transition risks and opportunities, and the physical risks, to address the Strategy element of the TCFD recommendations. The selected scenarios, which assess the potential climate change impacts for transition risks and opportunities over the life of the mines, include the Stated Policies Scenario ("STEPS") (which reflects the impact of existing policy frameworks and announced policy intentions) and the Sustainable Development Scenario ("SDS") (which aims to hold global temperature rise to well below 2°C). For physical risks, the selected scenarios comprise the Representative Concentration Pathway 4.5 and 8.5 (otherwise referred to as RCP4.5 and RCP8.5). RCP4.5 is an intermediate-emissions scenario consistent with a future with relatively ambitious emissions reductions but falls short of the 2°C limit/1.5°C aim agreed on in the Paris Agreement. RCP8.5 is the high-emissions scenario, consistent with a future with no policy changes to reduce emissions and characterised by increasing GHG emissions that lead to high atmospheric GHG concentrations.

Under the TCFD framework, Climate Financial Driver Analysis ("CFDA") was used to identify potential financial impacts of the transition risks and opportunities pursuant to the selected scenarios. The results of the CFDA indicate a risk of cost increases in the following areas:

- Carbon pricing
- Increased regulation in response to climate change
- Diesel price
- Oil price
- Uptake of low carbon technologies

However, there is opportunity for these potential risks to be offset by strong demand and prices for copper, together with Newcrest's expected increase in copper production.

Under RCP4.5 and RCP8.5 scenarios, the following intrinsic physical risk areas have been identified for Newcrest's operating sites:

- Cadia water scarcity, flood, extreme heat, heat stress, wildfire and wind.
- Telfer water scarcity, flood, extreme heat, heat stress, wildfire, wind and cyclones.
- Red Chris water scarcity, flood, wildfire, wind and extreme cold.
- Lihir water scarcity, flood, extreme heat, heat stress, wind and sea level rise.

Possible adaptation measures and strategies have been identified for the physical risk areas outlined above.

The output of this work on transition and physical risks and opportunities will continue to be refined and will inform Newcrest's long-term strategic planning towards implementation of Newcrest's commitment to net zero carbon emissions by 2050, in addition to the ongoing implementation of the TCFD framework.

On December 16, 2020, Newcrest announced that it entered into a 15-year renewable Power Purchase Agreement ("PPA") with a wind farm developer in relation to its Cadia mine in New South Wales, Australia. The PPA, together with the forecast decarbonisation of NSW electricity generation, is expected to deliver a ~20% reduction in Newcrest's greenhouse gas emissions intensity as it will provide Newcrest with access to large scale generation certificates which Newcrest intends to surrender to achieve a reduction in its greenhouse gas emissions. This PPA is a significant step towards achieving Newcrest's target of a 30% greenhouse gas emissions intensity reduction by 2030.

Newcrest has also developed GHG Management Plans for each operating site to understand abatement opportunities.

There are no assurances that Newcrest will be able to meet its stated climate change goals, nor that it will be able to address all climate change risks, which may impact Newcrest's competitive position, its operating and financial results, and its financial condition.

# Newcrest's business and operations, and that of its suppliers and customers, may be adversely affected by the COVID-19 pandemic or other similar pandemics.

Newcrest's business and operations, and that of its suppliers and customers, may be adversely affected by the novel coronavirus (COVID-19) pandemic or other pandemics, outbreaks of communicable diseases and/or other adverse public health developments.

COVID-19 was declared a global pandemic in March 2020, causing significant disruption across a number of geographies, industries and markets, including global supply chain disruptions and shortages, which could have an adverse impact on Newcrest's people, communities, suppliers or otherwise on its business, financial condition and results of operations. Actions by Australian and foreign governments to address the pandemic, including travel bans and business closures, may also have a significant adverse effect on the markets in which Newcrest conducts business.

Given the ongoing and dynamic nature of the circumstances, it is difficult to predict the impact of the COVID-19 pandemic on Newcrest's business (or on the operations of other businesses on which it relies), and there is no guarantee that Newcrest's efforts to address the adverse impacts of COVID-19 will be effective. Newcrest's operations have been impacted as a result of the pandemic. For instance, in March 2020, Newcrest announced a temporary suspension to flying personnel to the Lihir Operation as a precaution due to heightened concerns surrounding COVID-19. Any further or prolonged disruptions relating to COVID-19 or any other adverse public health developments could materially and adversely affect Newcrest's supply chains and/or labor force (and that of Newcrest's suppliers).

Newcrest's operations have been impacted as a result of the pandemic, mainly in relation to travel-related restrictions limiting the movement of people to and from sites. Costs associated with managing COVID-19 have also increased, amounting to approximately \$70 million in the 2021 financial year and are estimated to be in the range of \$35 to 45 million in the 2022 financial year.

Any further or prolonged disruptions relating to COVID-19 or any other adverse public health developments could materially and adversely affect Newcrest's supply chains and/or labour force (and that of Newcrest's suppliers). The extent to which COVID-19 will impact Newcrest's business and its financial results will depend on future developments, which remain highly uncertain and cannot be predicted. Such developments may include the geographic spread of the virus, the uptake of vaccinations, viral mutations and the ongoing efficacy of vaccines, the severity of the disease, the duration of the pandemic, the actions that may be taken by various governmental authorities in response to the pandemic, the impact on contracts and agreements to which Newcrest is a party, the impact on the markets in which Newcrest operates and the global economy generally. For example, Newcrest is required to observe COVID-related government controls and to date these have included travel restrictions across national borders and sometimes within countries. Newcrest is actively considering various scenarios up to and including voluntary or mandated full or partial suspension of operations in response to external factors. Newcrest's Business Continuity Planning also considers how to return to normal operations as restrictions ease, or are planned to ease, in some jurisdictions.

In 2020, Lundin Gold, in which Newcrest owns a 32% equity interest, temporarily suspended operations for a period of approximately 3 months at its Fruta del Norte mine in Ecuador amid growing concerns regarding the spread of COVID-19. A further period of suspension, depending on the length, could have an adverse impact on Newcrest's investment in Lundin Gold and the return on Newcrest's investment in the Fruta del Norte finance facilities.

From August 2020, Newcrest experienced positive COVID-19 cases at Lihir and in its March 2021 quarterly report, Newcrest announced that there had been an increase in the number of cases testing positive for COVID-19 at Lihir. At the date of this AIF, the number of cases testing positive for COVID-19 at Lihir remains at levels that are within the capability of the care and treatment and isolation facilities, with the majority of these cases continuing to be asymptomatic. Newcrest continues to strengthen its COVID-19 controls at Lihir, focusing on spread containment through extensive contact tracing and isolation procedures.

Following the travel suspension announced by the Australian Government between Papua New Guinea and Australia in March 2021, charter flights resumed with restricted capacity. As at the date of this AIF the limited

commercial flight availability between Port Moresby and Brisbane continues to be utilised. Newcrest personnel movements are required to fit within government imposed international arrival quotas in Australia. The quotas can be changed without warning. More recently, the PNG Government has implemented measures to restrict travel by unvaccinated persons from provinces deemed high risk for COVID-19 to other parts of PNG, including Lihir.

No material impacts to gold production at Lihir have occurred to date. However, as announced in the March 2021 quarterly report, the ability to attract labour, travel restrictions, contact tracing and associated isolation requirements has resulted in an impact to total material mined. Should these conditions persist or worsen, there is the potential for production to be impacted. Persistence of the pandemic continues to create difficulty in retaining, attracting and recruiting personnel to PNG and could impact future production should adequate skills not be able to be recruited.

No assurance can be given as to the potential impact that COVID-19 may have on Newcrest's business, results of operations, cash flows or financial condition. To the extent the COVID-19 pandemic adversely affects Newcrest's business and financial results, it may also have the effect of heightening many of the other risks described "*Risk Factors*" section, and may have an adverse material impact on Newcrest's operating and financial results, financial condition and liquidity position.

During the COVID-19 pandemic it may be necessary for some of Newcrest's operations to be placed into temporary care and maintenance if workforce safety and/or potential supply constraints are not appropriately managed. Ongoing contingency planning by each site for a variety of COVID-19 scenarios includes potential care and maintenance. Internal and government travel approvals, quarantine measures and testing programs along with the global rollout of COVID19 vaccination programs help to manage the potential risk of temporary health related care and maintenance.

### Changes in rainfall patterns and other climatic effects may adversely impact Newcrest's operations.

The effects of changes in rainfall patterns and intensities, water shortages and changing storm patterns have from time to time adversely impacted, and may in the future adversely impact, the cost, production levels and financial performance of Newcrest's operations. For example, the Cadia Operation (and Lihir Operation historically) have experienced droughts, which resulted in temporary process plant water shortages and lower processed volumes.

The state of NSW was impacted by a severe drought into 2020. Cadia implemented water saving initiatives in the plant and optimisation of onsite bores and other water sources. In addition, rainfall in the region and the purchase of water licences on the water trading market resulted in improved levels of water being captured in on site storage facilities. Newcrest's latest internal modelling indicates that even under a return-to-drought scenario, Cadia has enough water to sustain at least five years of uninterrupted operations. However, beyond that period, if the drought returned, production at Cadia may be impacted.

There is no guarantee that there will be sufficient future rainfall to support Newcrest's future water demands in relation to its sites and operations, which could adversely affect production and/or its ability to develop or expand projects and operations in the future. In addition, there can be no assurance that Newcrest will be able to obtain alternative water sources on commercially reasonable terms or at all in the event of prolonged drought conditions.

Conversely, some of Newcrest's sites and operations have been, and may in the future be, subject from time to time to cyclones, severe storms and/or high rainfall events leading to periodic interruption of operations, flooding and/or associated damage. This has resulted, and may result in, delays to, or loss of production and development of some of Newcrest's sites, projects or operations.

## Newcrest may require additional financing in the future and there can be no assurance that such financing will be available or obtained on favourable terms.

Newcrest has designed its capital structure to seek to have sufficient liquidity available to meet the Group's financial commitments. Newcrest has a range of debt facilities with external financiers including unsecured committed bilateral bank debt facilities and Notes and has structured these facilities to have varying maturities so that its refinancing obligations are staggered.

Newcrest anticipates expenditures over the next several years in connection with the development of new projects, maintenance and expansion of existing projects, activities to facilitate mining of orebodies, along with sustaining capital expenditure across operations, and, potentially, the acquisition of new projects. Newcrest may from time to time draw down under its available debt facilities or seek additional external funding such as through asset divestitures, further equity or debt issues or additional bank debt, or it may need to defer expenditure. Newcrest's ability to service its current funding arrangements and to raise and service any additional funding or to meet conditions applicable to current or future funding arrangements is a function of a number of factors, including (without limitation), macroeconomic conditions, funding market conditions, future gold and copper prices, Newcrest retaining its investment grade credit rating, Newcrest's operational and financial performance, and cash flow and debt position at the time. Newcrest's ability to access external funding on an efficient basis may be constrained by a dislocation in these markets at the time of planned issuance.

If Newcrest is unable to meet its financial obligations or is unable to obtain additional financing on acceptable terms, its business, operating and financial condition and results may be adversely affected.

## Newcrest has recognised asset impairments, write-downs and restructure costs in prior reporting periods, and may recognise asset impairments and further write-downs and restructure costs in the future.

In accordance with Newcrest's accounting policies and processes, the carrying amounts of all non-financial assets are reviewed yearly and half-yearly to determine whether there is an indicator of impairment. Where an indicator of impairment exists, a formal estimate of the recoverable amount is made. Impairment is recognised when the carrying amount exceeds the recoverable amount. The recoverable amount of each cash generating unit ("CGU") is estimated using its fair value less costs of disposal.

Significant judgments and assumptions are required in making estimates of fair value. This is particularly relevant in the assessment of long life assets. The CGU valuations are subject to variability in key assumptions including, but not limited to, long-term gold and copper prices, currency exchange rates, discount rates, production profiles and operating and capital costs. An adverse change in one of more of the assumptions used to estimate fair value could result in a reduction in a CGU's fair value. LOM production and operating and capital cost assumptions are based on Newcrest's latest budget, quarterly forecast and/or longer-term LOM plans. The projections include sensitivities on carbon price scenarios ranging between \$25 and \$50 a tonne of CO2-e for jurisdictions where there is no regulated carbon price. The projections also include expected cost improvements, reflecting Newcrest's objectives to maximise free cash flow, optimise and reduce activity, apply technology, improve capital and labor productivity and remove high cost gold ounces from the production profile.

No assurance can be given as to the absence of significant impairment charges in future periods, including as a result of further operational reviews, a change in any of the underlying valuation assumptions, or a deterioration in market or operating conditions. If future impairment losses are incurred, Newcrest's earnings and fiscal position in the period in which it records the loss could be materially adversely impacted.

## The occurrence of events for which Newcrest is not insured or for which its insurance is inadequate may adversely affect its cash flows and overall profitability.

Newcrest maintains a range of insurance policies to assist in mitigating the impact of events which could have a significant adverse effect on its operations and profitability. Newcrest's insurance policies carry deductibles and limits which will lead to Newcrest not recovering the full monetary impact of an insured event. Newcrest's insurance policies do not cover all actual or potential risks associated with its business. Newcrest may elect not to insure or to self-insure against certain risks, such as where insurance is not available, where the premium associated with insuring against the risk is considered excessive, or if the risk is considered to have a low likelihood of eventuating. The occurrence of events for which Newcrest is not insured may adversely affect its cash flows and overall profitability.

The occurrence of events for which Newcrest is not insured may adversely affect Newcrest's cash flows and overall profitability. For instance, following the settlement of the Cadia Operation seismic event claim in FY17, insurers have reduced the coverage available for seismic events at the Cadia Operation. In the event of further seismic events

at the Cadia Operation, losses Newcrest incurs may therefore not be covered by, or fully covered by, its insurance, which could adversely impact its financial condition.

# Newcrest faces uncertainty and risk in its exploration, feasibility studies and other project evaluation activities and it may be unable to replace reserves as they become depleted.

Newcrest's ability to sustain or increase its current level of production in the longer term is in part dependent on the success of its exploration activities in replacing gold and copper reserves depleted by production, the development of new projects and the expansion of existing mining operations. The risks associated with sustaining or increasing production through acquisition are increased by the level of competition over these development opportunities. In the absence of exploration success or additions to its Mineral Reserves and Mineral Resources to support future operations through development activities, expansions or acquisitions, it will be unable to replace Mineral Reserves depleted by operations. In addition, if it significantly reduces its expenditure on exploration, feasibility study and other project evaluation activities (including in relation to the Red Chris Operation, the Wafi-Golpu Project, the Havieron Project or any of its exploration projects), its exploration and development success and ability to replenish its reserves could be adversely impacted.

Exploration activities are speculative in nature and often require substantial expenditure on exploration drilling and sampling as a basis on which to establish the presence, extent and estimated grade (metal content) of mineralised material. If mineralisation is discovered, it may take additional time and further financial investment to determine whether a mineral reserve exists and to commission a feasibility study for the project. Our decision to develop a mineral property is typically based, in the case of an extension or in the case of a new development, on the results of a feasibility study, which estimates anticipated economic returns from the project. These estimates are based on assumptions regarding, among other things:

- future prices of gold, copper and, to a lesser extent, silver;
- future currency exchange rates;
- grades and metallurgical characteristics of ore to be mined and processed;
- the tonnage of ore to be mined and processed;
- the strip ratio;
- anticipated recovery rates of gold, copper and, to a lesser extent, silver, extracted from the ore;
- anticipated capital expenditure and cash operating costs;
- anticipated taxes and royalties; and
- the required return on investment and Newcrest's cost and availability of capital.

Even if significant mineralisation is discovered, it may take several years to determine whether adequate Mineral Resources and/or Mineral Reserves exist to support a development decision and to obtain necessary deposit knowledge to assess the technical and economic viability of mining projects. During that time the economic viability of the project may change due to fluctuations in factors that affect both revenue and costs, including those factors described above.

Feasibility studies also include activities to estimate anticipated:

- grades and metallurgical characteristics of the ore to be mined and processed;
- recovery rates of gold and copper from the ore; and
- capital expenditure and cash operating costs.

These estimates depend on assumptions made on the basis of available data which are usually limited. Mineral Reserve estimates are not precise calculations and depend on the interpretation of limited information on the location, shape, continuity and metal concentration of the mineral occurrence and on the available sampling results. Further exploration and feasibility studies can result in new data becoming available that may change previous Mineral Reserve estimates that can impact the technical and economic viability of production from the project. Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may change the economic status of Mineral Reserves resulting in revisions to previous Mineral Reserve estimates. These Mineral Reserve estimate revisions could impact depreciation and amortisation rates, asset-carrying values, provisions for

closure, rehabilitation and environmental clean-up costs. In addition, Newcrest may need to acquire expertise in areas of extraction that it currently does not have, which may be costly and take time to acquire.

As a result of these uncertainties, Newcrest's exploration activities may not result in it being able to maintain or increase its Mineral Reserves, which could negatively impact its operating results, as well as its prospects.

## Newcrest may experience problems in managing new acquisitions and integrating them with its existing operations.

Newcrest's ability to make successful acquisitions and any difficulties or time delays in achieving successful integration of any such acquisitions could have an adverse effect on its business, operating results and financial condition. Business combinations and acquisitions entail a number of risks including:

- the ability to identify and secure appropriate assets for acquisition or to negotiate acquisitions on favorable terms:
- obtaining the financing necessary to complete future acquisitions;
- difficulties in assimilating the operations of the acquired business;
- difficulties in maintaining financial and strategic focus while integrating the acquired business;
- adequately identifying or addressing any pre-existing liabilities or claims involving the acquired businesses notwithstanding due diligence conducted;
- significant one-time write-offs or restructuring charges, unanticipated costs and liabilities and unforeseen plant and equipment reliability issues;
- historical underinvestment in sustaining capital expenditure;
- local requirements regarding the acquisition of mining interests (including foreign investment controls);
- the ability to successfully integrate the acquired business, including by implementing uniform standards, controls, procedures and policies; and
- the ability to realise other expected benefits of an acquisition.

Newcrest may also be liable for the acts or omissions of predecessors, or otherwise be exposed to liabilities that are unforeseen or greater than anticipated.

On August 15, 2019, Newcrest acquired a 70% beneficial interest in, and became the operator of, the Red Chris Operation and surrounding tenements in British Columbia, Canada, from Imperial, and entered into a joint venture agreement with Imperial. Red Chris is currently an open pit operation, which produces a copper-gold concentrate. Newcrest is evaluating the development of an underground operation to exploit mineralisation at depth. Newcrest's ability to obtain the anticipated benefits from the Red Chris acquisition is dependent on its ability to successfully apply its two-stage transformation approach, including process plant optimisation, mine optimisation, supply chain cost reduction, and an extensional resource and exploration drilling program, and to apply its innovative technology, including in relation to block caving, coarse ore flotation, mass sensing and sorting, and deep underground brownfield and greenfield exploration, in the potential further development of the mine. Newcrest's near-term and long-term assumptions underlying the expected benefits of the acquisition, as well as its capital expenditure assumptions to develop the operations, may be inaccurate, and there can be no assurance that Newcrest will realise them. The success of the Red Chris Operation is also subject to the exploration and development risks discussed above.

On November 9, 2021, Newcrest announced that it had entered into an Arrangement Agreement to acquire all of the issued and outstanding common shares of Pretivm. that it does not already own by way of a Canadian Plan of Arrangement. Pretivm is the owner of the Brucejack operation in the highly prospective Golden Triangle region of British Columbia. The transaction requires approval by 66 <sup>2/3</sup> % of Pretivm shareholders, the Supreme Court of British Columbia and regulatory approvals including under the Investment Canada Act. There is a risk these approvals will not be obtained. Pretivm may also terminate the Arrangement Agreement in the event of a superior proposal, subject to payment to Newcrest of a C\$125 million termination fee. Newcrest's near-term and long-term assumptions underlying the expected benefits of the acquisition, including in relation to production and costs, may be inaccurate, and there can be no assurance that Newcrest will realise them.

### Newcrest competes with other mining companies for projects to replace Mineral Reserves.

The increased demand for gold and other commodities, combined with a declining rate of discovery of new gold deposits has, in recent years, resulted in accelerated depletion of existing Mineral Reserves across the global gold sector. Newcrest therefore faces intense competition for the acquisition of attractive mining properties to replace its Mineral Reserves. As part of its efforts to replace such Mineral Reserves, Newcrest evaluates potential acquisition and development opportunities for mineral deposits, exploration or development properties and operating mines. Newcrest's decision to acquire or develop these properties is based on a variety of factors, including historical operating results, estimates and assumptions regarding the extent and quality of mineralisation, Mineral Resource and Mineral Reserve estimates, assessment of the potential for further discoveries or growth in Mineral Resource and Mineral Reserve estimates, development and capital costs, cash and other operating costs, expected future commodity prices, projected economic returns, fiscal and regulatory frameworks, evaluations of existing or potential liabilities associated with the relevant assets and how these factors may change in future. Other than historical operating results (if applicable), these factors are uncertain and could have an impact on revenue, cash and other operating results, as well as the process used to estimate Mineral Resources and Mineral Reserves. As a result, any acquisitions Newcrest undertakes may not result in it being able to maintain or increase its Mineral Resources or Mineral Reserves, which could negatively impact its operating and financial results, prospects and financial condition.

## The estimated amount of Newcrest's Mineral Reserves may not be recoverable in full, and the volume and grade of ore actually recovered may vary from the estimates.

Mineral Reserve and Mineral Resource estimates are necessarily imprecise and involve subjective judgements regarding the grade distribution of mineralisation, the ability to economically extract and process the mineralisation, including regulatory permission, future commodity prices, exchange rates, operating costs, transport costs, capital expenditures and other costs. Such estimates, including our estimates in this AIF, relate to matters outside Newcrest's control and also depend to some extent on geological interpretation and statistical analysis which may subsequently prove unreliable or incorrect. Should Newcrest encounter mineralisation, geological or mining conditions at any of its mines or development projects materially different from those estimated or predicted from historical drilling, sampling and similar examinations, mining plans may have to be altered. If this eventuates, gold or copper recovered from Mineral Reserves areas, and revenues and expenditures with respect to Newcrest's Mineral Reserves, may vary materially from estimates in each case in a way that might adversely affect Newcrest's operations and reduce its Mineral Reserves. Similarly, if gold or copper prices were to materially decline, Newcrest may be required to revise its Mineral Reserve estimates, which could impact its ability to economically extract and process the mineralisation and result in a change to its mining plans, and may result in material write-downs of its investment in mining properties.

Newcrest undertakes annual updates to its Mineral Reserves and Mineral Resources estimates based upon a number of factors, including (without limitation), actual resource exploration drilling and production results, depletion, new information on geology and historical production performance, mining dilution and mining losses, metallurgical recovery, geological and grade interpretations, economic assumptions (such as future commodity prices and exchange rates) and operating and other costs. Variability in these factors may result in reductions in Newcrest's Mineral Resource and Mineral Reserve estimates, which could adversely affect the life-of-mine plans and consequently, the total value of Newcrest's Mineral Resources and Mineral Reserves and/or the carrying value of one or more of Newcrest's assets. Mineral Resources and Mineral Reserves restatements could negatively affect Newcrest's operating and financial results, as well as Newcrest's prospects.

No assurance can be given that the Mineral Reserves or Mineral Resources presented in this AIF will be recovered at the quality or yield presented or that downgrades of Mineral Reserves and Mineral Resources will not occur. There is no assurance that Measured and Indicated Mineral Resource estimates not included in Mineral Reserves, are capable of being converted to Ore Reserves under the JORC Code or Mineral Reserves under the CIM Definition Standards. The inclusion of Mineral Resource estimates not included in Mineral Reserves should not be regarded as a representation that these amounts can be converted to Minerals Reserves or economically exploited. Investors are cautioned not to place reliance on Mineral Resource estimates, particularly Inferred Mineral Resource estimates. For a further discussion of these considerations, see the section titled "Mineral Reserves and Mineral Resources". Except as set out in this document, there are no material differences between the definitions of Measured, Indicated

and Inferred Mineral Resources and Proven and Probable Mineral Reserves under the CIM Definition Standards and the equivalent definitions in the JORC Code.

Newcrest has significant joint venture arrangements and investments and may experience disputes or difficulties with its joint venture partners or with other shareholders in investments.

Newcrest has joint venture interests, including its interests in the Wafi-Golpu Project in PNG, the Red Chris Operation in Canada, the Havieron Project in Western Australia and the Namosi Joint Venture – Waisoi Project in Fiji. These projects and operations are subject to the risks normally associated with the conduct of joint ventures which include (but are not limited to) disagreement with joint venture partners on how to develop and operate the mines or projects efficiently, the possibility of changes in joint venture partners, the inability of joint venture partners to meet their financial and other joint venture commitments and particular risks associated with entities where a sovereign state holds an interest, including the extent to which the state intends to engage in project decision making and the ability of the state to fund its share of project costs. The existence or occurrence of one or more of these circumstances or events may have a negative impact on Newcrest's future business, operating and financial performance and results, and/or value of the underlying asset.

Newcrest also holds equity positions in several mining companies with prospective projects throughout the world. These include the investment in Lundin Gold, the investment in SolGold and the investment in Azucar. These investments are subject to the risks normally associated with the investments in other entities which include (but are not limited to) an inability to control the conduct of business by the entities, inability to ensure that the entities can meet their financial and other commitments and inability to increase or decrease the investments. The existence or occurrence of one or more of these circumstances or events may have a negative impact on Newcrest's future business, operating and financial performance and results, and/or value of the underlying asset.

## Newcrest is exposed to a number of operating risks and hazards inherent in the mining industry.

Newcrest is susceptible to events that may adversely impact a mining company's ability to produce gold and other metals and meet production targets. These events include, but are not limited to:

- geotechnical, geothermal and hydrogeological challenges;
- unanticipated ground conditions, including unexpected geological formations;
- fall-of-ground events in underground operations (such as through seismicity) or significant movements or failure of pit walls in open pit mining operations, and other industrial incidents;
- failure of, or issues in connection with, infrastructure and equipment, including water dams, waste storage, tailings storage facilities, roads, bridges and power sources;
- landslide risks, and potential geotechnical incidents related to the safety and stability of waste rock dumps and tailings dams;
- geological uncertainty and poor reconciliation;
- fire and water ingress;
- process interruptions due to asset integrity issues, power interruptions, process water shortages and information technology ("IT") and data security breaches or cyber-attacks;
- tax, legal and regulatory restrictions or changes;
- shortages of principal supplies needed for mining operations, including power, explosives, fuels, chemical reagents, water, equipment parts and lubricants, plant and equipment failure;
- the inability to process certain types of ores, or inability to produce concentrate at a specification that allows us to find a buyer at suitable commercial terms;
- labor disputes;
- safety-related stoppages;
- interruptions and delays due to community issues, environmental incidents or safety or health related incidents;
- transportation and aviation issues:
- mining related environmental incidents, including discharge of metals, chemicals and pollutants;
- natural phenomena, such as seismic activity, floods, droughts, tsunamis, wildfires or inclement weather conditions;

- climate change factors such as limits on emission levels and increase in power costs; and
- diseases and epidemics/pandemics, such as COVID-19, malaria, HIV and Ebola.

An increase in worldwide or regional demand for critical resources such as drilling equipment, processing equipment, key consumables and skilled labor may cause unanticipated cost increases and delays in delivery times, thereby impacting Newcrest's operating costs, capital expenditures and production schedules.

A key operational risk for Newcrest is the availability and price of fuel, power and water to support mining and mineral processing activities. Large amounts of power and large volumes of water are used in the extraction and processing of minerals and metals. Apart from the Cadia Operation, Newcrest's properties are located in remote, undeveloped areas and the availability of infrastructure and key inputs, such as water and power, at a reasonable cost, cannot be assured. Power and water are integral requirements for exploration, development and production facilities on mineral properties. Even a temporary interruption of power or water supply could materially affect an operation. There is no guarantee that Newcrest will secure power, water and access rights to land going forward or on reasonable terms.

The storage of tailings and other by-products from mining at Newcrest's operations poses a risk to the safety of employees and surrounding communities and environment if the integrity of those structures is affected. Tailings storage facilities are progressively permitted and constructed throughout the life of an operation and remain in place after mine closure. Should there be a failure in the integrity of a tailings facility, there is a risk that tailings material may release from the facility and cause material harm to people and the environment. Such an occurrence could severely damage Newcrest's reputation and standing. It may also subject Newcrest to material regulatory action, penalties and claims, and may lead to the suspension or disruption of Newcrest's operations and projects. The progressive permitting and construction of tailings storage facilities gives rise to the risk that any delays in permitting or construction may lead to the disruption or suspension of processing operations.

During the current period Newcrest issued its new group standard on Tailings and Water Storage which is aligned to the International Council on Mining & Metals ("ICMM") Preventing Catastrophic Failure of Tailings Storage Facilities position statement and sets the controls for Newcrest to meet its obligations under the Global Industry Standard on Tailings Management ("GISTM"). As a member of the ICMM, Newcrest is committed to conforming with the GISTM by August 2025.

Naturally occurring events, such as earthquakes, volcanic eruptions, storms, cyclones and tsunamis, are difficult to predict, and no assurance can be given that Newcrest's operations will not be adversely affected by seismic activity (including resulting tidal surge and tsunamis). Seismic activity can impact Newcrest's operations which are located in areas that are seismically active and subject to risks of earthquakes and in the case of the Lihir Operation, the related risks of tidal surge and tsunamis. For instance, a large seismic event in April 2017 impacting the Cadia Operation resulted in a temporary suspension of operations.

Some of Newcrest's operations may also experience other operating challenges, such as those relating to elevated temperatures (including management and discharge of hot water encountered in the underground workings) and ground conditions. These risks could result in damage to, or destruction of, mineral properties, production facilities, equipment or other properties, personal injury or death of employees or third parties, environmental damage, community outrage, delays in mining, increased production costs, monetary losses and possible legal liability.

Any of these outcomes could have a material adverse effect on our financial and operating results.

# Newcrest faces geotechnical, geothermal and hydrogeological challenges, which could adversely impact Newcrest's production and profitability.

Newcrest faces particular geotechnical, geothermal and hydrogeological challenges, in particular due to the trend toward more complex deposits, deeper and larger pits, and the use of deep, bulk underground mining techniques. This leads to higher pit walls, more complex underground environments and increased exposure to geotechnical, geothermal and hydrogeological impacts.

There are a number of risks and uncertainties associated with the block cave mining methods applied by Newcrest at the Cadia Operation and elsewhere. Risks include that a cave may not propagate as anticipated, excessive air gaps may form during the cave propagation, unplanned ground movement may occur due to changes in stresses released in the surrounding rock, or mining induced seismicity is larger or more frequent than anticipated. Excessive water ingress, disturbance and the presence of fine materials may also give rise to unplanned release of material of varying properties and/or water through drawbells.

In addition, the success of Newcrest at some of its operations depends, in part, upon the implementation of Newcrest's engineering solutions to particular geotechnical, hydrogeological and geothermal conditions. At the Lihir Operation, for example, significant removal of both groundwater and sea water inflow and geothermal control is required before and during mining.

A failure to safely resolve any unexpected problems relating to these conditions at a commercially reasonable cost may result in damage to infrastructure or equipment and/or injury to personnel and may adversely impact upon continuing operations, project development decisions, exploration investment decisions, Mineral Resource and Mineral Reserve estimates and the assessment of the recoverable amount of Newcrest's assets.

No assurances can be given that unanticipated adverse geotechnical, geothermal and hydrogeological conditions will not occur in the future or that such events will be detected in advance. Geotechnical failures could result in limited or restricted access to mine sites, suspension of operations, injury or death of employees or third parties, government investigations, increased monitoring costs, remediation costs, loss of ore and other impacts, which could cause one or more of Newcrest's projects or operations to be less profitable than currently anticipated and could result in a material adverse effect on its operating results and financial position.

#### Newcrest relies on information technology systems which are critical to its business.

Newcrest's operations are supported by and dependent on IT systems, consisting of infrastructure, networks, applications, and service providers. Newcrest could be subject to network and systems interference or disruptions from a number of sources, including (without limitation) security breaches, cyber attacks and system defects. The impact of IT systems interference or disruption could include production downtime, operational delays, destruction or corruption of data, disclosure of personal or commercially sensitive information and data breaches. Although security measures and disaster recovery plans are in place for all of Newcrest's major sites and critical IT systems, any such interference or disruption could have a material impact on Newcrest's business, operations or financial condition and performance.

In addition, Newcrest is dependent on its IT systems for the conduct of its business processes. Newcrest relies on the accuracy, capacity and security of its IT systems for the operation of many of its business processes and to comply with regulatory, legal and tax requirements. A disruption in, or failure of, Newcrest's IT systems could adversely affect its business processes.

While Newcrest maintains some of its critical IT systems, it is also dependent on third-parties to provide certain IT services. Despite the security measures that Newcrest has implemented, including those related to cybersecurity, its systems could be breached or damaged by computer viruses.

Cybersecurity risk is increasingly difficult to identify and quantify and cannot be fully mitigated because of the rapidly evolving nature of the threats, targets and consequences. Unauthorised parties may attempt to gain access to these systems or Newcrest's information through fraud or other means of deceiving its third-party service providers, employees or vendors. Newcrest may be required to incur significant costs to protect against and remediate the damage caused by such disruptions or system failures in the future.

## Newcrest competes with mining and other companies for key human resources.

Newcrest seeks to attract and retain employees and third-party contractors with the appropriate skills and experience necessary to continue to operate its business. A loss of key personnel or a failure to attract appropriately skilled and experienced personnel could affect its operations and financial condition. There can be no assurance that Newcrest

will be able to attract and retain suitably qualified and experienced local or national personnel, or that persons trained by Newcrest will be retained in the future. Newcrest values its people and has policies, procedures and frameworks in place to mitigate this risk. Newcrest focuses on diversity and inclusion in the workplace and developing its people at all levels. Newcrest also seeks to build a future supply of industry labour by actively promoting mining and the resources industry as a compelling and attractive career proposition.

### Newcrest's operations are subject to industrial relations risks.

In a number of jurisdictions where Newcrest has mining and related interests, there are also local requirements, contractual obligations and expectations regarding the extent to which local and national persons and businesses are directly engaged in the mining and related activities which may result in disruptions to Newcrest's activities where relevant requirements, obligations and/or expectations are not met. There can be no assurance that these disruptions will not occur in the future which may have an adverse effect on Newcrest's business.

Unions are present and have a legal right to represent eligible employees at the Cadia, Telfer, and Red Chris Operations. Legal proceedings involving the certification of the United Steel Workers' Union ("USW") at the Red Chris Operation concluded on 29 September 2021, resulting in the certification of the USW as the bargaining agent for eligible Red Chris employees for the negotiation of a collective bargaining agreement.

Newcrest may be impacted by industrial relations issues in connection with its employees and the employees of Newcrest's contractors and suppliers, including strikes, work stoppages, work slowdowns, grievances, complaints, claims of unfair practices or other industrial activity. Any such activity, which could occur at any of Newcrest's sites in any location, could cause production delays, increased labour costs, adversely impact Newcrest's ability to deliver on production forecasts and have a material impact on Newcrest's business operations or financial condition and performance. As a result, operating results may be materially adversely affected.

Newcrest has existing employee enterprise bargaining agreements in place across its Australian operations. In the event that new agreements cannot be reached prior to the nominal expiry of the existing arrangements, under Australian legislation, employees may seek to take protected industrial action. If protected industrial action is taken, Newcrest's business and operating results could be adversely affected.

## Newcrest relies on contractors to conduct aspects of our operations and projects and is exposed to risks related to their activities.

Some aspects of Newcrest's production, development and exploration activities are conducted by contractors. As a result, Newcrest's operations are subject to a number of risks, some of which are outside its control, including:

- negotiating agreements with contractors on acceptable terms;
- reduced control over those aspects of operations which are the responsibility of contractors;
- the availability and financial strength of contractors;
- failure of contractors to perform under their agreements, including failure to comply with safety systems and standards;
- failure of contractors to comply with applicable legal and regulatory requirements; and
- problems with contractors in connection with management of their workforce, labor unrest or other employment issues.

In addition, Newcrest may incur liability to third parties as a result of the actions of its contractors. The occurrence of one or more of these risks could adversely affect Newcrest's operating and financial results and financial condition.

## Newcrest is subject to risks relating to the transportation, processing and marketing of gold doré and mineral concentrates.

Newcrest produces gold doré which is currently delivered to gold refineries in Australia with associated risks including penalties from producing doré outside of the contractual specifications, theft and fluctuating transportation charges.

Transportation of the doré is also subject to numerous risks including delays in delivery of shipments, terrorism and weather conditions. Sales of gold dore may also be adversely impacted by delays and disruption at Newcrest's operations or the operations of one or more of the receiving refineries and consequent declarations of force majeure at Newcrest's or its buyer's operations.

In addition to gold doré, Newcrest produces mineral concentrates which are exported by ocean vessels to smelters, located predominantly in Asia, with associated risks including fluctuating smelter charges, marine transportation charges and inland freight charges. Transportation of the concentrate is also subject to numerous risks including delays in delivery of shipments, terrorism, loss of or reduced access to export ports, weather conditions and environmental liabilities in the event of an accident or spill. Sales of concentrate may also be adversely impacted by disruption at Newcrest's operations or the operations of one or more of the receiving smelters and consequent declarations of force majeure at Newcrest's or buyer's operations. Additionally, the quality of mineral concentrates, including the presence of impurities and deleterious substances, is subject to restrictions on import which vary across jurisdictions and may impact upon the saleability or price realised for the mineral concentrate.

All sales of concentrate and doré are subject to analytical specifications contained in Newcrest's sales and refining agreements. The production of concentrate and doré is subject to variability in grades due to a number of factors including ore feed variability. From time to time, the actual specification may not meet the contractual specification and a process must be followed to vary commercial arrangements with the customer (in the case of concentrate) or refinery (in the case of doré). Failure to meet such specifications may result in adjustments to treatment and refining charges with respect to an affected shipment or delivery. Although these adjustments generally do not have a material adverse effect on Newcrest's operating results and financial condition, there is no assurance that they will not impact Newcrest in the future.

#### Newcrest is exposed to counterparty and credit risk.

Newcrest is exposed to counterparties defaulting on their payment obligations which may adversely affect Newcrest's financial condition and performance. Newcrest limits its counterparty credit risk in a variety of ways.

Credit risk on cash and cash equivalents is reduced through maximum investment limits being applied to banks and financial institutions based on their credit ratings. Where possible, Newcrest holds funds with banks or financial institutions with credit ratings of at least A- (S&P) equivalent. Due to banking and foreign exchange regulations in some of the countries in which Newcrest operates, funds may be held with banks or financial institutions with lower credit ratings. Newcrest only enters into derivative financial instruments with banks or financial institutions with credit ratings of at least BBB (S&P) equivalent.

All concentrate customers who wish to trade on open account credit terms are subject to credit risk analysis. Bullion is largely sold to our lending banks on a spot price basis to minimise credit exposure.

Newcrest is exposed to counterparty risk arising from a potential failure of an insurer on Newcrest's panel in the event of a valid claim. Newcrest limits its insurer counterparty risk by diversification of insurers across the Newcrest portfolio and insures with insurance companies with a credit rating of at least A- (S&P) equivalent where possible.

Newcrest is also exposed to counterparty default and credit risk through two strategic transactions undertaken in 2020. In April 2020, Newcrest acquired for \$460 million the gold prepay and stream facilities and an offtake agreement in respect of Lundin Gold's Fruta del Norte mine (the "Facilities"), details of which are provided in the *General Development of the Business – Three Year Corporate History*. In January 2020, Newcrest announced the divestment of its interest in Gosowong to PT Indotan Halmahera Bangkit ("Indotan"), for a total consideration of

\$90 million, of which \$30 million has been deferred in accordance with the terms of the sale agreement. There can be no certainty that Lundin Gold will be able to service the Facilities, nor that Indotan will make payment for the remaining consideration for Gosowong.

## Newcrest's business is dependent on its reputation and social licence to operate.

Newcrest's reputation and licence to operate is dependent upon ongoing responsible, lawful and ethical business conduct. Failure to do so can result in serious consequences, ranging from public allegations of misbehaviour and reputational damage through to fines, regulatory intervention or investigation, temporary or permanent loss of licences, litigation and/or loss of business. Newcrest's Management, standards, policies, controls and training instil and reinforce a culture across the organisation whereby employees are required to act lawfully and encouraged to act respectfully and ethically, in a socially responsible manner. Mandatory Code of Conduct training is provided to all employees, officers, embedded contractors and consultants and training and communications in relation to key policies including, but not limited to anti-bribery, fraud and sanctions, continuous disclosure and insider trading prohibitions is provided to personnel in high risk roles to promote an understanding of Newcrest's legal obligations and acceptable business conduct.

Newcrest has implemented a group-wide framework and compliance programs to ensure that adequate controls and procedures are in place to mitigate against potential risks in relation to key risk areas, including anti-bribery and corruption, fraud, conflicts of interest, privacy and sanctions. However, there is a risk that Newcrest employees or contractors will fail to adhere to group policies, standards, and procedures that provide guidance on ethical and responsible business conduct and drive legal compliance, which could have a material adverse impact on financial performance, financial condition and prospects, as well as Newcrest's reputation. Reputational loss may lead to increased challenges in developing and maintaining community and landowner relations, decreased investor confidence and negative impacts on Newcrest's ability to operate and advance its projects, which also may adversely impact Newcrest's financial performance, financial condition and prospects.

Achievement of strategic goals is dependent on the right company culture. As such Newcrest has established aspirations, standards and expectations for its workforce and is consciously looking to improve and shape the organisation's culture by focusing on leadership behaviours, organisational systems and workforce engagement. This is a commitment made by the Executive Management team, is the responsibility of all senior leaders and is the expectation of the workforce. Delivering on this commitment to employees is critical for retention of key talent and for creating the target High-Performing, Inclusive Culture that drives collaboration, creativity and an owner's mindset. Newcrest is conducting training on inclusive leadership skills for all leaders across the organization. Policies and processes reinforce the values and behaviours expected in the workplace.

# Legal proceedings, investigations and disputes could expose Newcrest to significant liabilities and negatively affect its financial condition and financial and operating results.

Legal proceedings, investigations and disputes (including tax audits and disputes) could have a material adverse effect on Newcrest's financial condition and its financial and operating results. Newcrest engages in activities that can result in substantial injury or damage, which may expose it to legal proceedings, investigations and disputes in the ordinary course of its business regarding personal injury and wrongful death claims, labor and landowner disputes, as well as commercial disputes with customers, suppliers, and service providers. Also, the tax authorities in the jurisdictions in which Newcrest operates could dispute tax positions held by it based on changes in law, jurisprudence, policy or interpretation. Newcrest may also be found liable for the wrongful acts or omissions of its contractors or service providers.

Legal proceedings, investigations and disputes (including tax audits and disputes) have the potential to negatively impact upon Newcrest's business, operating and financial performance and results. Regardless of the ultimate outcome of such proceedings, investigations and disputes, and whether involving regulatory action or civil or criminal claims, there may be a material adverse impact on Newcrest as a result of the associated costs (some of which may not be recoverable) and management time.

Newcrest evaluates the litigation claims and legal proceedings to which it or its businesses are a party to assess the likelihood of unfavorable outcomes and to estimate, if possible, the amount of potential losses. Based on these

assessments and estimates, if any, Newcrest establishes provisions and discloses the relevant litigation claims or legal proceedings as appropriate, including in the Notes to the Full Year Financial Statements. These assessments and estimates are based on the information available to management at the time and involve significant management judgment. Adverse outcomes in such legal proceedings in excess of the amounts that Newcrest has provided for, or changes in management's evaluations or predictions about the proceedings, could have a material adverse effect on Newcrest's financial condition and operating results.

### There are numerous occupational health and safety risks associated with mining and metallurgical processes.

There are numerous occupational health and safety risks associated with mining and metallurgical processes such as travel to and from operations, the operation of heavy and complex machinery in challenging geographic locations and exposure to hazardous substances. These hazards may cause personal injury and/or loss of life to Newcrest's personnel, suppliers, customers or other third parties, damage to property and contamination of the environment, which may result in the suspension of operations and the imposition of civil or criminal penalties, including fines, expenses for remediation and claims brought by governmental entities or third parties.

Newcrest has in place a full health, safety and environment management system with associated standards, tools and governance processes to ensure hazards are identified, effectively managed and that controls are effective.

Newcrest's Safety Transformation Plan has been designed to manage the fatality risks in the business by improving safety culture, increasing the effectiveness of critical controls and improving process safety by designing, building and maintaining Newcrest's operations to a higher standard.

Health and hygiene reviews are conducted with a view to identifying the risks to people. These include, but are not limited to, musculoskeletal disorders, fatigue, mental health illnesses and exposure to noise, diesel particulate matter, silica and acid mist. Unforeseen or past workplace exposures may lead to long-term health issues and potential compensation liabilities.

Newcrest has also established a program to review its approach to psychological safety risks associated with sexual harassment in the workplace, consistent with the recommendations of the Respect@Work: Sexual Harassment National Inquiry Report (2020) by the Australian Human Rights Commission.

The global nature of Newcrest's operation means that employees may be affected by mosquito borne diseases such as malaria, dengue fever or zika virus. Other potential health impacts include tuberculosis, and viral outbreaks causing respiratory disease such as the COVID-19 pandemic. The outbreak of communicable diseases and other adverse public health developments could adversely affect Newcrest's business operations and/or the businesses of its customers and suppliers which consequently could have a material adverse effect on Newcrest's business, financial condition and results of operations, particularly if such outbreaks and developments are inadequately controlled.

### Gold and copper mining companies are subject to extensive environmental laws and regulations.

Mining and processing operations and development activities have inherent risks and liabilities associated with potential harm to the environment and the management of waste products. Newcrest's activities are therefore subject to extensive environmental law and regulation in the various jurisdictions in which it operates. Compliance with these laws requires significant expenditure and non-compliance may potentially result in fines or requests for improvement actions from the regulator or could result in reputational harm.

Newcrest monitors its regulatory obligations on an ongoing basis and has systems in place to track and report against these requirements and commitments. This extends to voluntary commitments such as the Cyanide Code, the ICMM 10 Principles for Sustainable Development and the World Gold Council Responsible Gold Mining Principles.

Newcrest's operations may create a risk of exposure to hazardous materials. Newcrest uses hazardous material (for example, cyanide at some operations) and generates waste products that must be disposed of either through offsite facilities or onsite permitted landfills and waste management areas.

Mining and ore refining processes at Newcrest sites also generate waste by-products such as tailings to be managed (by the use of tailings storage facilities or, in the case of Lihir and as proposed at Wafi-Golpu, deep sea tailings placement) and waste rock (to be managed in waste rock dumps or in the case of Lihir, permitted barge dumping locations). Geochemical reactions within long-term waste rock dumps or low-grade ore stockpiles may also lead to the generation of acid and metalliferous drainage that needs to be managed. Appropriate management of waste is a key consideration in Newcrest's operations. There is still a risk that such hazardous materials and waste products may cause harm to the environment, which may subject Newcrest to regulatory action and financial penalties and may lead to disruptions of its operations and projects and cause it reputational harm.

Mining operations can also impact flows and water quality in surface and ground water bodies and remedial measures may be required to prevent or minimise such impacts. Impacts to biodiversity and air quality can also occur from these activities and requires active management and planning to minimise their adverse effects. The management of run-off water and the potential impacts of acid mine drainage is an important part of developing and operating mines, so as to mitigate the risk of entrained contaminants and sediment being dispersed into the receiving environment including rivers and ground water reservoirs.

The occurrence of an environmental incident has the potential to cause significant adverse reactions in the local community, which may impact Newcrest's reputation, result in additional costs, lead to disruptions of Newcrest's operations and projects or lead to regulatory action, which may include financial penalties.

In addition, environmental laws and regulations are continually changing. A number of governments or governmental bodies have introduced or are contemplating regulatory change in response to the potential impacts of climate change, including mandatory renewable energy targets or potential carbon trading or carbon price regimes. If Newcrest's environmental compliance obligations were to change as a result of changes in the laws and regulations, or if unanticipated environmental conditions were to arise at any of Newcrest's projects or developments, its expenses and provisions may increase, and its production may decrease, to reflect these changes. If material, Newcrest's operating and financial results and financial condition could be negatively impacted.

# Newcrest may be exposed to significant or unanticipated closure costs or rehabilitation liabilities associated with its projects.

Newcrest is required to close its operations and rehabilitate the lands that it disturbs during the exploration and operating phases in accordance with applicable mining and environmental laws and regulations. A closure plan and an estimate of closure and rehabilitation liabilities is prepared for each Newcrest operation. The closure and rehabilitation liability estimates are based on current knowledge and assumptions, however actual costs at the time of closure and rehabilitation may vary materially. In addition, adverse or deteriorating external economic conditions may bring forward mine closure and associated closure and rehabilitation costs.

## Newcrest's operations are dependent on maintaining good landowner and local community relations.

Newcrest's relationship with the communities in proximity to its operations and on whose land it operates is an essential part of ensuring success of its existing operations, exploration and the construction and development of its projects. A failure to manage relationships with the communities may lead to local dissatisfaction, which, in turn, may lead to interruptions to Newcrest's operations, development projects and exploration activities. Specific challenges in community relations include community concerns over management of social, environmental, and cultural heritage impacts, increasing expectations regarding the level of benefits that communities receive, concerns focused on the level of transparency regarding the payment of compensation, and the provision of other benefits to affected landholders and the wider community. These expectations have gained momentum with an increasing focus on ESG and the degree to which companies undertake responsible community investment, respect the rights of Traditional Owners and First Nations Peoples, ensure responsible management of human rights risks, and deliver humanitarian support during natural disasters and health crises.

Typically, where Newcrest has exploration activities, development projects or operations, it enters into agreements with Indigenous communities, local landholders and the wider local community. These agreements may include (but are not limited to) compensation, co-management and other benefits and may be subject to periodic review. The negotiation and/or review of agreements, including components such as business development, participation,

co-management, and compensation and other benefits involves complicated and sensitive issues, associated expectations and often competing interests, which Newcrest seeks to manage respectfully. The nature and subject matter of these negotiations may result in community unrest which, in some instances, results in interruptions to Newcrest's exploration programs, operational activities or delays to project implementation. Confidentiality clauses in agreements negotiated with Indigenous organisations may limit the ability of the parties including Indigenous communities to speak out on issues of concern. Newcrest proactively encourages parties to come together to better understand and work through issues collaboratively. This includes people speaking freely with each other about their concerns to reach a mutually acceptable resolution.

For example, the community agreements in place with customary landowners in relation to Newcrest's Lihir operation in Papua New Guinea have been the subject of several drawn out reviews. The duration of each review process is a result of the important and complex issues covered by the agreements and the competing interests of different landowner groups. During prior reviews, Lihir has experienced intermittent disruptions as a result of community unrest regarding the progress of the review negotiations and intra-community issues. Although community issues are generally resolved within a short period, there can be no assurance that further disputes will not arise with the customary landowners and other communities from time to time which, if prolonged, could lead to disruptions to Newcrest's operations and development projects.

In addition, there is a level of public concern relating to the perceived impact of mining activities on the environment and on the communities located near, and impacted by, such activities. Certain non-government and community-based organisations ("NGO") are vocal critics of the mining industry and its practices, including in relation to cultural heritage management, due diligence processes associated with human rights including modern slavery risk management, the use of hazardous substances in processing activities, and the use of deep sea tailings placement. Adverse publicity generated by NGOs relating to extractive industries generally, or Newcrest specifically, could have an adverse impact on Newcrest's reputation or financial condition and may impact Newcrest's relationships with communities in proximity to its operations. No assurance can be given that incidents will not arise that generate community grievances associated with Newcrest's activities and potentially cause operational disruptions or delays to project development until resolved.

To the extent that Newcrest's operations are affected by adverse publicity generating community grievances or disputes with landowners or local communities, its operations may be disrupted which could significantly reduce Newcrest's revenue and profits and could have a material adverse effect on its financial condition and operating results.

The development of new projects and mine expansions is uncertain, and it is possible that actual capital and operating costs and economic returns will differ significantly from those estimated for a project or expansion prior to production.

Newcrest's current and future business, operating and financial performance and results are impacted by the discovery of new mineral prospects and actual performance of developing and operating mines and process plants. Results may differ significantly from estimates determined at the time the relevant project was approved for development. Newcrest's current or future development activities may not result in expansion or replacement of current production, or one or more new production sites or facilities may be less profitable than anticipated or may not be profitable at all. Newcrest's ability to sustain or increase its current level of production in the future is in part dependent on the success of its exploration and acquisition activities in replacing Mineral Reserves depleted by production, the development of new projects and the expansion of existing operations. The challenge of sustaining and replacing projects for production is increased by the level of competition over these development opportunities. In the last decade, the time from discovery to production has increased significantly as a result of a variety of factors, including increases in capital requirements, social and environmental considerations, cultural heritage requirements, economic conditions, remote locations, and the complexity and depth of ore bodies.

Newcrest has a number of development projects or project expansions, or possible expansions. Mine development or expansion projects require significant expenditures during the development phase before production is possible. Projects are subject to the completion of successful feasibility studies and environmental assessments, issuance of necessary governmental permits and availability of adequate financing. The economic feasibility of development projects is based on many factors such as: estimation of Mineral Resources and Mineral Reserves, anticipated

metallurgical recoveries, environmental considerations and permitting, social considerations and permitting, future commodity prices, and anticipated capital and operating costs of these projects.

Newcrest's development projects have no operating history upon which to base estimates of future production and cash operating costs. Expansion projects may rely on the operating history at the existing operation to estimate production and operating costs but there cannot be certainty that results will be the same for the expansion. Particularly for development projects, estimates of Proven and Probable Mineral Reserves and cash operating costs are, to a large extent, based upon the interpretation of geological data obtained from drill holes and other sampling techniques, and pre-feasibility and feasibility studies that derive estimates of production and cash operating costs based upon anticipated tonnage and grades of material to be mined and processed, the deposit configuration, expected mining and process recovery rates, estimated operating costs, and other modifying factors. As a result, it is possible that actual capital and operating costs and economic returns will differ significantly from those currently estimated for a project prior to production.

There are a number of uncertainties inherent in the development and construction of a new mine or the expansion of an existing mine. In addition to those discussed above, these uncertainties include:

- timing and cost of construction of mining and processing facilities, which can be considerable;
- availability and cost of infrastructure, including power, water, transportation and other infrastructure, which Newcrest may have to acquire from third parties or construct itself;
- government legislation and regulation and changes to them (including as to prices, cost of consumables, royalties, duties, taxes, carbon price, foreign exchange restrictions, expatriation and restrictions on production or quotas for exportation);
- supply chain disruptions;
- Indigenous title and land claims;
- local community relations;
- natural events and environmental incidents, including weather, wildfire, bushfire, earthquakes, tsunami, floods, volcanic and seismic activity;
- political, social, cultural heritage and economic conditions;
- obtaining the necessary mining permits, leases and licences, and necessary government approvals and permits;
- availability and cost of skilled labor and equipment;
- accuracy of project assumptions;
- realisation of forecast capital costs; and
- availability of funds to finance construction and development activities, including the availability of financing for Newcrest's joint venture partners (including government interests) to fund their proportionate share of construction and development costs.

The remote location of mineral deposits, delays in obtaining mining permits, leases or licences, and social or political opposition to mining may also increase the cost, timing and complexity of mine development and construction. New mining operations could experience unexpected challenges and delays during development, construction, commissioning, leading to delays to commencement of production. The global demand for mining and processing equipment may result in shortages or long lead times for the supply of such equipment. In addition, operating cost and capital expenditure estimates could fluctuate considerably over time, including as a result of changes in the prices of commodities consumed and mining equipment used in the construction and operation of mining projects.

It is not unusual in new or expanded mining operations to experience unexpected problems during the start-up phase, and delays can often occur at the start of production. It is likely that actual results for Newcrest's projects will differ from current estimates and assumptions, and these differences may be material. In addition, experience from actual mining or processing operations may identify new or unexpected conditions that could reduce production below, or increase capital or operating costs above, current estimates. If actual results are less favourable than currently estimated, Newcrest's business, financial condition and liquidity could be materially adversely affected.

In addition, in certain jurisdictions in which Newcrest operates, it may enter into fiscal stability arrangements with the relevant government or a government authority of the jurisdiction. While the terms of such fiscal stability arrangements are aimed at reducing fiscal uncertainty for its operations, a change in relevant laws, regulations, government or other factors can impact on Newcrest's ability to enforce the terms of such agreements, which may provide uncertainty in relation to its operations.

These factors may have an adverse impact on Newcrest's ability to successfully deliver development projects or other new mines and/or the timing and success of such developments. Newcrest's future development activities may not result in the expansion or replacement of current production, or one or more new production sites or facilities may be less profitable than currently anticipated or may not be profitable at all. Newcrest's operating results and financial conditions are directly related to the success of its development projects. If Newcrest fails to develop or operate mining projects in accordance with expectations, its operating results, financial condition and prospects could be negatively affected.

# Newcrest's projects may be subject to risks related to Newcrest's relationships and/or agreements with Indigenous peoples.

There is heightened public scrutiny of agreements between mining companies and Indigenous communities, how industry engages with Indigenous communities, and how companies management cultural heritage with Indigenous communities.

Various international and national, state and provincial laws, regulations, codes, resolutions, conventions, guidelines, treaties, and other principles and considerations relate to the rights of Indigenous peoples, including the requirement to secure the Free, Prior and Informed Consent of these communities for Newcrest's activities. Some of these jurisdictions impose obligations on government with respect to the statutory rights of Indigenous people and/or impose non-statutory obligations that derive from these rights. Some mandate consultation with Indigenous people regarding actions which may affect Indigenous peoples, including actions to approve or grant mining rights or permits.

The obligations of government and Indigenous parties under the various international and national requirements, principles and considerations pertaining to Indigenous people continue to evolve and be defined. This is the case in British Columbia, where the Red Chris Operation is located, Western Australia, where the Telfer Operation and Havieron Project are located, in PNG, where the Lihir Operation and the Wafi-Golpu Project are located, and in Fiji where the Namosi Joint Venture – Waisoi Project is located. In some countries, governments have, for example, introduced, or are contemplating, regulatory change to ensure the spirit and intent of the United Nations Declaration on the Rights of Indigenous People is enshrined in legislation.

Newcrest's current and future operations are subject to a risk that one or more groups of Indigenous people may oppose continued operation, further development, or new development of its projects or operations. Opposition by Indigenous people to Newcrest's activities may require modification of, or preclude operation or development of, its projects or may require the entering into of additional agreements with Indigenous people, beyond those to which Newcrest has previously entered into, which may result in additional costs. Claims and protests of Indigenous peoples may disrupt or delay activities, including permitting, at Newcrest's operations.

## Newcrest's operations are subject to emerging legislation and scrutiny regarding human rights issues.

There is emerging legislation in multiple jurisdictions which is intensifying investor, shareholder and public scrutiny concerning human rights issues that include forced labour, child labour and other slavery-like practices; displacement of local communities, discrimination by race, age, gender, sexuality and other protected attributes, and underpayment for labour or services provided. Failure to identify and respond to human rights issues can lead to costly and disruptive legal action, investor divestment, negative publicity, reputational damage and significant financial loss.

Respect for human rights is considered a fundamental business responsibility under the UN Guiding Principles on Business and Human Rights ("UNGPs") and is a reflected commitment in Newcrest's Human Rights Policy. In addition to the UNGPs, the recent *Modern Slavery Act 2018* (Cth) has introduced a statutory reporting requirement on the risk of modern slavery in the operations and supply chain of a reporting entity (and its owned and controlled

entities). Under the *Modern Slavery Act 2018*, companies such as Newcrest must possess a clear policy on human rights management supported by best practices for responsible global conduct. This includes a focus on due diligence and the requirement to assess real and potential human rights issues, act on findings, track responses, and communicate how issues are being managed. Newcrest released its inaugural Modern Slavery Statement in December 2020.

Human rights groups are increasingly scrutinising the extractive industry, particularly where the industry operates in more complex socioeconomic and socio-political jurisdictions. The extractive industry in these regions is particularly prone to complaints and/or legal disputes in connection with human rights risks associated with large scale land acquisition and resettlement of people; adverse environmental impacts; livelihoods and health; the use of migrant labour, child labour and forced labour; the use of private security firms; indigenous peoples; and risks arising from operations in areas that are conflict affected areas and/or that host artisanal mining activities.

#### Bribery and corruption may impact our operations.

Newcrest may be subject to potential fraud, bribery, corruption and money laundering risks associated with the business in jurisdictions where it operates. Australian, Canadian, Papua New Guinean, United States and other antifraud, anti-bribery, anti-corruption and anti-money laundering laws, conventions, regulations, and enforcement procedures, and corresponding compliance obligations, have become more stringent in recent years. Failure to comply with applicable legal and regulatory requirements and to maintain appropriate management and internal control frameworks to address such compliance risks often carry substantial penalties and impose obligations and controls to prevent bribery by others on Newcrest's behalf. There can be no assurances that Newcrest's internal controls will always protect it from reckless or other inappropriate acts committed by its intermediaries, associates, directors, officers, employees or agents. Violations of these laws, or allegations of such violations, could expose it to potential fines, penalties and other civil and/or criminal litigation and have a material adverse effect on its business, financial position and performance and reputation.

#### Newcrest's securities are subject to price volatility.

Securities markets have a high level of price and volume volatility, and the market price of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. Factors unrelated to the financial performance or prospects of Newcrest include macroeconomic developments in Australia and globally, and market perceptions of the attractiveness of particular industries or asset classes. Fluctuations in the price of gold and copper may have impacts on the market prices of gold mining issuers that are not commensurate with the impact of such spot pricing changes on the value or prospects of Newcrest. There can be no assurance that continued fluctuations in mineral prices will not occur. As a result of these factors, the market price of Newcrest's securities at any given time may not accurately reflect the long-term value of Newcrest.

#### Service of process, enforcement of judgments and bringing of original actions in Canada may be difficult.

Newcrest's directors reside outside of Canada and a majority of the assets of these persons are located outside of Canada. It may not be possible for investors to effect service of process within Canada upon the directors, officers and experts named in this AIF. It may also not be possible to enforce against certain of Newcrest's directors and officers, and certain experts named in this document, judgments obtained in Canadian courts predicated upon the civil liability provisions of applicable securities laws in Canada.

#### DIVIDEND RECORD AND POLICY

In determining dividends, Newcrest seeks to balance financial performance and capital commitments with a prudent leverage and gearing level for the Company. Newcrest looks to pay ordinary dividends that are sustainable over time having regards to its financial policy metrics, profitability, balance sheet strength and reinvestment options in the business. In February 2021, Newcrest's board approved a dividend policy which targets a total dividend payout of 30% to 60% of free cash flow generated for that financial year (increased from the previous policy target of at

least 10% to 30% of annual free cash flow), with the dividend being no less than US 15 cents per share on a full year basis.

Dividends and interim dividends are determined based on review of the Company's results at each half year and full year. The Board of Directors is of the view that Newcrest's shareholders should receive a direct cash benefit from the strong gold price where the Company's position allows, having regard to future project and cash commitments.

For the financial year ending June 30, 2019, Newcrest paid an interim dividend of US\$0.075 per ordinary share in respect of the six months ended December 31, 2018 and a final dividend of US\$0.145 per ordinary share, for a total annual dividend of US\$0.22 per ordinary share. For the financial year ending June 30, 2020, Newcrest paid an interim dividend of US\$0.075 per ordinary share in respect of the six months ended December 31, 2019 and a final dividend of US\$0.175 per ordinary share, for a total annual dividend of US\$0.25 per ordinary share. For the financial year ending June 30, 2021, Newcrest paid an interim dividend of US\$0.15 per ordinary share and a final dividend of US\$0.40 per ordinary share, for a total annual dividend of US\$0.55 per ordinary share.

Newcrest has a Dividend Reinvestment Plan in place which is offered at market price and is open to all holders of ordinary shares in the capital of Newcrest except for those shareholders whose addresses (as they appear in the share register of Newcrest) are in countries where regulations make it unlawful or impractical in the opinion of the Directors for them to participate. Currently, shareholders with registered addresses in the United States of America, Canada or Japan or their respective territories or possessions may not participate. Details of the Dividend Reinvestment Plan can be found on the Company's website at <a href="https://www.newcrest.com">www.newcrest.com</a>.

#### CAPITAL STRUCTURE

#### **Description of Ordinary Shares**

Under the Australian Corporations Act and its constitution, the Company may issue an unlimited number of ordinary shares. The ability to issue an unlimited number of shares is restricted by provisions of the ASX Listing Rules, in particular the requirement under ASX Listing Rule 7.1 that, broadly, the Company may not issue in any 12 month period new securities amounting to more than 15% of the ordinary securities on issue at the beginning of that 12 month period without the approval of holders of ordinary securities. As at November 30, 2021, Newcrest has an aggregate of 817,958,171 fully paid ordinary shares issued and outstanding. No other shares in the capital of Newcrest of any other classes are issued or outstanding.

The holders of Newcrest's ordinary shares are entitled:

- to vote at all meetings of shareholders of Newcrest;
- to receive, subject to the rights, privileges, restrictions and conditions attaching to any other class of shares of Newcrest, any dividends declared by Newcrest; and
- to receive, subject to the rights, privileges, restrictions and conditions attaching to any other class of shares of Newcrest, and subject to the discretion and direction of the liquidator, the remaining property of Newcrest upon the liquidation, dissolution or winding-up of Newcrest, whether voluntary or involuntary.

The shares do not carry any exchange, exercise pre-emptive, redemption, conversion or retraction rights.

#### **Description of Corporate Unsecured Senior Notes**

Newcrest has the following outstanding Notes, which were issued in accordance with Rule 144A and Regulation S of the United States *Securities Act of 1933*.

Maturity	Coupon Rate	As at June 30, 2021	As at June 30, 2020	As at June 30, 2019
		US\$M	US\$M	US\$M
November 15, 2021	4.45%	-	•	750
October 1, 2022	4.20%	-	380	750
May 13, 2030	3.25%	650	650	-
November 15, 2041	5.75%	500	500	500
May 13, 2050	4.20%	500	500	=

The Notes were issued by Newcrest Finance Pty Limited, a wholly-owned subsidiary of Newcrest, and are guaranteed by Newcrest and certain of its subsidiaries.

#### **Credit Ratings**

Newcrest's access to financing depends on, among other things, suitable market conditions and the maintenance of suitable long-term credit ratings. Newcrest's credit ratings may be adversely affected by various factors, including increased debt levels, decreased earnings, a deterioration in gold or copper prices, decreased earnings, portfolio concentration, and exposure to jurisdiction risk. Newcrest's long-term credit ratings from each of S&P and Moody's are BBB and Baa2 respectively.

Ratings are intended to provide investors with an independent view of credit quality. They are not a recommendation to buy, sell or hold securities and do not address the market price or suitability of a specific security for a particular investor. Credit ratings may not reflect the potential impact of all risks on the value of securities. In addition, real or anticipated changes in the rating assigned to a security will generally affect the market value of that security. Investors cannot be assured that a rating will remain in effect for any given period of time or that a rating will not be revised or withdrawn entirely by a rating agency in the future. Each rating should be evaluated independently of any other rating.

Moody's long-term credit ratings are on a rating scale that ranges from Aaa to C, which represents the range from highest to lowest quality of such securities rated. Moody's "Baa" rating is the fourth highest rating of nine rating categories. Obligations rated "Baa" are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics. Moody's appends numerical modifiers from 1 to 3 to its long-term ratings, which indicate where the obligation ranks within its generic rating category, with 1 being the highest.

S&P's long-term credit ratings are on a rating scale that ranges from AAA to D, which represents the range from highest to lowest quality of such securities rated. S&P's "BBB" rating assigned is the fourth highest rating of 10 major rating categories. A "BBB" rating indicates that the obligor has adequate capacity to meet its financial commitments, but is more subject to adverse economic conditions. S&P uses "+" or "-" designations to indicate the relative standing of securities within a particular rating category.

#### MARKET FOR SECURITIES

The Ordinary Shares are currently listed on the ASX, TSX and PNGX under the trading symbol "NCM". The greatest volume of trading occurs on the ASX.

## **Trading Price and Volume**

The following table sets out the reported high and low sale prices and the trading volume for the Newcrest ordinary shares on the ASX on a monthly basis for the year ended June 30, 2021.

Date	High	Low	Volume
	(A\$)	(A\$)	(No.)
July 2020	38.15	31.88	82,971,565
August 2020	37.26	30.88	92,931,737
September 2020.	33.32	30.49	77,921,202
October 2020.		28.88	61,714,662
November 2020.	31.14	26.10	84,329,480
December 2020	28.28	25.52	85,594,278
January 2021	28.18	25.02	64,795,971
February 2021	26.72	23.30	84,174,939
March 2021		23.09	80,021,926
April 2021	. 28.81	24.98	65,824,313
May 2021	29.27	26.11	68,608,112
June 2021	28.49	25.16	65,138,079

The following table sets out the reported high and low sale prices and the trading volume for the Newcrest ordinary shares on the TSX (listed as of October 13, 2020) on a monthly basis for the year ended June 30, 2021.

Date	High	Low	Volume
	(C\$)	(C\$)	(No.)
October 13-31,	31.25	28.00	13,029
2020 <sup>17</sup>			
November 2020.	29.00	25.02	6,495
December 2020	27.25	25.50	5,283
January 2021	30.25	24.75	13,456
February 2021	27.21	23.11	20,163
March 2021		22.40	13,206
April 2021	27.61	24.25	10,715
May 2021		23.24	13,928
June 2021	27.42	23.82	21,763

## PRINCIPAL SHAREHOLDERS

To the best of the knowledge of the Directors and Executive Officers of the Company, as at October 29, 2021, Allan Gray Australia Pty Ltd and its related bodies corporate (as that term is defined in the Australian Corporations Act) held approximately 10.78% of the outstanding Newcrest ordinary shares. To the best of the knowledge of the Directors and Executive Officers of the Company, there are no other persons who, as of the date of this document, are the direct or indirect beneficial owners of, or exercise control or direction over 10% or more of the outstanding Newcrest ordinary shares.

 $<sup>^{17}</sup>$  Newcrest's ordinary shares began trading on the TSX at market open on October 13, 2020. This row reflects a partial trading month.

## **DIRECTORS AND OFFICERS**

## Name, Occupation and Security Holding

The name of each current Director and Executive Officer of Newcrest and his or her province or state and country of residence, offices and positions held with the Company, principal occupations during the five preceding years and period in which each has served as a Director of the Company, as of the date of this AIF, are as follows.

Name and Residence	Position(s) with Newcrest	Principal Occupation During Past Five Years (other than Current Position with Company)	Director Since <sup>(1)</sup>
PETER TOMSETT <sup>(1)</sup> New South Wales, Australia	Non-Executive Chairman	Mr Tomsett was formerly a Non-Executive Director of OZ Minerals Ltd, Acacia Mining plc and Chairman and Director of Silver Standard Resources Inc (now known as SSR Mining Inc).	2018
SANDEEP BISWAS Queensland, Australia	Managing Director and Chief Executive Officer	In addition to being the Managing Director and Chief Executive Officer, Mr Biswas is Vice Chairman of the Minerals Council of Australia, Vice Chairman of the World Gold Council and a Member of the ICMM Council.	2014
GERARD BOND <sup>(5)</sup> Victoria, Australia	Finance Director and Chief Financial Officer	In addition to being the Finance Director and Chief Financial Officer, Mr Bond is an Alternate Director of the World Gold Council.	2012
PHILIP AIKEN <sup>(1)(2)(3)</sup> London, United Kingdom	Non-Executive Director	Mr Aiken is the Chairman of Aveva Group plc. He was formerly the Chairman of Balfour Beatty plc and a Non-Executive Director of Gammon China Limited.	2013
ROGER HIGGINS <sup>(2)(3)</sup> South Australia, Australia	Non-Executive Director	Mr Higgins is Chairman of Minotaur Exploration Limited and a Non-Executive Director of Worley Limited and Ok Tedi Mining Limited. He was formerly a Non- Executive Director of Metminco Limited.	2015
VICKKI MCFADDEN (1)(3)(4) New South Wales, Australia	Non-Executive Director	Ms McFadden is Chairman of The GPT Group Limited and a Non-Executive Director of Allianz Australia Ltd. She was formerly a Chairman and Non-Executive Director of eftpos Payments Australia Limited and a Non-Executive Director of Tabcorp Holdings Limited and The Myer Family Investments Pty Ltd.	2016
SALLY-ANNE LAYMAN <sup>(2)(4)</sup> Western Australia, Australia	Non-Executive Director	Ms Layman is a Non-Executive Director of Beach Energy Limited, Pilbara Minerals Limited and Imdex Limited. She is also a Director of RL Advisory Pty Ltd, providing financial consulting services to miners and explorers.  She was formerly a Non-Executive Director of Perseus Mining Limited and Gascoyne Resources Limited and Division Director and Joint Head of the Perth office for the Metals,	2020

Name and Residence	Position(s) with Newcrest	Principal Occupation During Past Five Years (other than Current Position with Company)	Director Since <sup>(1)</sup>
		Mining & Agriculture Division of Macquarie Bank Limited.	
JANE MCALOON <sup>(3)(4)</sup> Victoria, Australia	Non-Executive Director	Mc McAloon is a Non-Executive Director of United Malt Group Limited, Home Consortium, Energy Australia, and Allianz Australia Limited. She was formerly a Non- Executive Director of Healthscope, Cogstate and Viva Energy Group Limited.	2021
CRAIG JONES Queensland, Australia	Chief Operating Officer (PNG)	Mr Jones is currently a Newcrest nominee director on the Board of Directors of Lundin Gold. Prior to his current position, in the last five years, he has held the following positions at Newcrest: EGM – Wafi Golpu, EGM – Cadia & MMJV, and EGM – Australian Operations & Projects.	n/a
LISA ALI <sup>(6)</sup> Victoria, Australia	Chief People and Sustainability Officer	Ms Ali is currently Newcrest's nominee Director of the Australian Mines & Metals Association. Prior to joining Newcrest in February 2020, Ms Ali was the Head of Transformation of the Petroleum Company of Trinidad and Tobago and Interim CEO of Paria Fuel Trading Company. Prior to that, Ms Ali held a number of senior roles at BP across a 12-year period, including Vice President of Human Resources.	n/a
MARIA SANZ PEREZ Victoria, Australia	Chief Legal Risk and Compliance Officer and Company Secretary	Prior to commencing at Newcrest in July 2020, Ms Sanz Perez was EVP, Group Counsel, Commercial and Company Secretary at AngloGold Ashanti Ltd.	n/a
SEIL SONG Victoria, Australia	Chief Development Officer	Prior to joining Newcrest in 2017, Mr Song worked in mining private equity and investment banking. Prior to his current position, he was the General Manager – Business Development at Newcrest.	n/a
PHILIP STEPHENSON Western Australia, Australia	Chief Operating Officer (Australia & Americas)	Prior to his current position, in the last five years, Mr Stephenson has held the following positions at Newcrest: Chief Operating Officer – Australia, Indonesia & Americas, EGM – Gosowong, Telfer & HSES, EGM – Gosowong, Telfer & Bonikro and EGM – Gosowong & Telfer	n/a
SURESH VADNAGRA Victoria, Australia	Chief Technical & Projects Officer	Prior to joining Newcrest in May 2020, Mr Vadnagra was at MMG in the role of Executive General Manager Operations – Americas from January 2018 to December 2019 and Executive General Manager – Africa and Australia until he ceased at MMG.	n/a

#### **Notes:**

- (1) Member of the Nominations Committee.
- (2) Member of the Safety and Sustainability Committee.
- (3) Member of the Human Resources and Remuneration Committee.
- (4) Member of the Audit and Risk Committee.
- (5) On May 5, 2021, Newcrest announced that Mr Bond would leave Newcrest in early 2022, after 10 years in the role of Finance Director and Chief Financial Officer. On November 16, 2021, Newcrest announced that Ms Sherry Duhe had been appointed Chief Financial Officer commencing early in calendar year 2022. Current Group Treasurer Ms Kim Kerr will be Acting Chief Financial Officer from December 9, 2021 to coincide with planned leave being taken by Mr Bond.
- (6) In its September 2021 quarterly report Newcrest announced that Ms Ali had decided to leave Newcrest and that a process to select her successor had commenced. Ms Ali will finish with Newcrest on April 1, 2022.

Each of the Directors must submit themselves for re-election every three years and at least one Director must stand for election each year at the Annual General Meeting.

## **Shareholdings of Directors and Executive Officers**

As at June 30, 2021, the directors and executive officers of Newcrest, as a group, beneficially owned, controlled or directed, directly or indirectly, 1,033,829 ordinary shares representing approximately 0.126% of the issued and outstanding ordinary shares, and held rights to acquire an additional 975,170 ordinary shares, representing approximately 0.119% of the ordinary shares on a fully-diluted basis.

#### **Corporate Cease Trade Orders or Bankruptcies**

No director or executive officer of the Company is, as at the date hereof or has been within the ten years prior to the date hereof, a director, chief executive officer or chief financial officer of any company (including Newcrest) that was the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days issued: (1) while that person was acting as director, chief executive officer or chief financial officer; or (2) after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in that capacity.

Except as described below, no director or executive officer of Newcrest nor, to the knowledge of Newcrest, any shareholder holding a sufficient number of securities of Newcrest to affect materially the control of Newcrest (a) is, as at the date hereof, or has been within the 10 years before the date hereof, a director or executive officer of any company (including Newcrest) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, or (b) has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of such director, executive officer or shareholder.

Sally-Anne Layman was a director of Gascoyne Resources Limited from June 2017 to May 2019 and Chair from October 2018 until May 2019. Gascoyne was placed into administration in June 2019.

#### **Penalties or Sanctions**

No director or executive officer of the Company or, to the Company's knowledge, a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities authority, or has had any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

#### **Conflicts of Interest**

The directors and officers of Newcrest are, or may become, directors or officers of other companies with businesses which may conflict with the business of the Company. Directors are required to act honestly and in good faith with a view to the best interests of the Company and to abstain from voting in connection with the matter. To the best of the Company's knowledge, there are no known existing or potential conflicts of interest between the Company and any director or officer of the Company as a result of their outside business interest at the date of this document. However, certain of the directors and officers of the Company serve as directors and/or officers of other companies. Accordingly, conflicts of interest may arise which would influence these persons in evaluating possible acquisitions or in generally acting on behalf of the Company.

#### **Indebtedness of Directors and Senior Officers**

None of the Company's directors or executive officers, nor any associate of such director or executive officer is indebted to Newcrest or has been the subject of a guarantee, support agreement, letter of credit or similar arrangement or understanding provided by Newcrest or any of its subsidiaries.

#### AUDIT AND RISK COMMITTEE

#### **Audit and Risk Committee Charter**

The full text of the charter of Newcrest's Audit and Risk Committee is attached to this AIF as Appendix "A".

## Composition of the Audit and Risk Committee

The Audit and Risk Committee members are Ms. McFadden, Ms. Layman and Ms. McAloon, each of whom is financially literate and independent within the meaning of National Instrument 52-110 — "Audit Committees" ("NI 52-110").

## **Relevant Education and Experience**

The education and experience of each of Ms. McFadden, Ms. Layman and Ms. McAloon that is relevant to the performance of her responsibilities as a member of the Audit and Risk Committee is set out below.

#### Vickki McFadden

Ms McFadden has a Bachelor of Commerce and a Bachelor of Laws. Ms McFadden has an extensive background in finance and law and is a former investment banker with considerable expertise in corporate finance transactions, having served as Managing Director of Investment Banking at Merrill Lynch in Australia and as a Director of Centaurus Corporate Finance and a former President of the Australian Takeovers Panel. Ms McFadden is Chairman of the GPT Group and a Non-Executive Director of Allianz Australia Ltd and was formerly a Non-Executive Director of Tabcorp Holdings Limited and Myer Family Investments Pty Ltd. She is a member of Audit Committees at GPT and Allianz. She was formerly Chairman of Audit Committees at Tabcorp Holdings, Myer Family Investments and Skilled Group and a member of Audit Committees at eftpos Australia Payments and Leighton Holdings.

## Sally-Anne Layman

Ms Layman has a Bachelor of Commerce and is a Certified Practising Accountant and a member of CPA Australia Ltd. She also holds a Bachelor of Engineering (Mining) with Honours and a First Class Mine Managers Certificate of Competency. Ms Layman spent 14 years with Macquarie Group in a range of senior positions, including as Division Director and Joint Head of the Perth office of the Metals, Mining & Agriculture Division. Prior to that, Ms Layman held various positions with resource companies including Mount Isa Mines, Great Central Mines and Normandy Yandal. She is also a Non-Executive Director of Beach Energy Limited, Pilbara Minerals Limited and Imdex Limited and Was formerly a Non-Executive Director of Perseus Mining Limited and Gascoyne Resources

Limited. She has had experience in several roles as a member or chairman of audit committees. She is Chairman of Audit and Risk Committees at Beach Energy and Imdex and a member of the Audit and Risk Committee at Pilbara Minerals. She was formerly the Chairman of Audit and Risk Committees at Perseus Mining and Gascoyne Resources.

#### Jane McAloon

Ms McAloon has a Bachelor of Economics with Honours and a Bachelor of Laws. She also holds a Graduate Diploma of Applied Corporate Governance. Ms McAloon has extensive experience in the resources, energy, infrastructure and utilities industries. She spent 9 years as Group Company Secretary at BHP, including 2 years on the Group Management Committee as President Governance. Prior to that, Ms McAloon was Group Manager, Corporate & External Services & Company Secretary at AGL, had leadership roles with the NSW Government and worked in a private legal practice. She is a Non-Executive Director of United Malt Group Limited, Home Consortium, Energy Australia and Allianz Australia Limited. She was formerly a Non-Executive Director of Healthscope, Cogstate and Viva Energy Group Limited. She is Chairman of the Audit and Risk Committee at Home Consortium and was formerly a member of Audit and Risk Committees at Healthscope and Cogstate.

#### **External Auditor Service Fees**

The following table provides detail in respect of audit, audit related, tax and other fees paid or payable by Newcrest to Ernst & Young, as external auditor:

	<b>Audit Fees</b>	Audit Related Fees	Tax Fees	All Other Fees
•	(US\$'000s)	(US\$'000s)	(US \$'000s)	(US \$'000s)
Year ended June 30, 2021	3,050	206	4	31
Year ended June 30, 2020	1,876	783	74	13

With respect to the table above, "Audit Fees" were paid for professional services rendered by Ernst & Young for the audit and review of Newcrest's annual and half yearly financial statements respectively. During the course of 2021, the Company requested that the external auditor adopt an enhanced control approach to the audit which resulted in an increase in audit fees. The Company does not anticipate that this will be a recurring cost but may periodically enhance the audit scope above the required level of auditing standards to test the rigour of the control environment by the external auditor.

"Audit Related Fees" were for assurance services in respect of acquisitions, divestment, information technology systems development, sustainability and other assurance related services.

"Tax Fees" were for transaction accounting and tax due diligence services and other tax services.

All "Other Fees" related to due diligence and advisory services and input to training programs developed for non-financial departments.

The provision of non-audit related services and other assurance services must be approved in accordance with Newcrest's External Auditor Non-Audit Services Procedure.

## INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No director or executive officer of the Company or a person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the issued and outstanding shares of the Company or any associate or affiliate of any of the foregoing persons or companies has any material interest, direct or indirect, in any transaction within the three most recently completed fiscal years of the Company or during the current fiscal year, that has materially affected or is reasonably expected to materially affect the Company.

#### **AUDITOR**

The auditor of Newcrest is Ernst & Young, located at Ernst & Young Building, 8 Exhibition Street, Melbourne, Victoria 3000, Australia. Ernst & Young was appointed the Auditor of the Company in May, 2002 and is independent within the meaning of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants and the Australian Corporations Act.

#### TRANSFER AGENT AND REGISTRAR

The Company's transfer agent and registrar for the Company's ordinary shares in Australia is Link Market Services Limited at its principal offices in Melbourne, Australia. The Company's transfer agent and registrar for the Company's ordinary shares in Canada is TSX Trust Company at its offices in Montreal, Quebec.

#### INTERESTS OF EXPERTS

Unless otherwise stated, information of a scientific or technical nature regarding (i) the Cadia Operation included in this AIF is based upon the Cadia Report, (ii) the Lihir Operation included in this AIF is based upon the Lihir Report, (iii) the Wafi-Golpu Project included in this AIF is based upon the Wafi-Golpu Report and (iv) the Red Chris Operations included in this AIF is based upon the Red Chris Report. As at the date hereof, each of the authors of the aforementioned reports. beneficially own, directly or indirectly, less than one percent of the outstanding securities of Newcrest.

#### ADDITIONAL INFORMATION

Additional information relating to Newcrest can be found on SEDAR at www.sedar.com. Additional financial information is available in the Company's audited financial statements for the financial period ended June 30, 2021, a copy of which has been filed on SEDAR at www.sedar.com. Additional information relating to Newcrest's executive compensation for the financial period ended June 30, 2021 is available in the Company's Statement of Executive and Director Compensation (which is based on the Company's remuneration report), which is attached to this AIF as Appendix "B". For copies of documents, please contact the Company at 8<sup>th</sup> Floor, 600 St. Kilda Road, Melbourne, Victoria 3004, Australia.

## GLOSSARY OF TECHNICAL TERMS

assay	analysis of a sample of material to determine the concentration of metal or minerals within that sample.
bullion	gold or silver in bars or ingots.
CIM Definition Standards	definitions adopted by the Canadian Institute of Mining, Metallurgy and Petroleum in 2014.
concentrate	material that has been processed to increase the content of contained metal or mineral relative to the contained waste.
cut-off grade	the lowest grade of mineralised material that can be economically extracted.
epithermal	a term applied to deposits formed at shallow depths from ascending solutions of moderate temperatures.
feasibility study	a technical and financial study of a project at sufficient level of accuracy and detail to allow a decision as to whether the project should proceed.
geothermal	pertaining to the heat of the earth's interior.
gold doré	a mixture of gold and other metals, mostly silver. It is usually the raw metal produced from a precious metal mine.
grade	the metal (or mineral) content per unit of rock.
Indicated Mineral Resource	defined in the CIM Definition Standards as that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.
Inferred Mineral Resource	defined in the CIM Definition Standards as that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.
JORC	Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 Edition defined by JORC.
Measured Mineral Resources	as defined in the CIM Definition Standards, that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Mineral Reserve	as defined in the CIM Definition Standards, a Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.
Mineral Resource	defined in the CIM Definition Standards, a Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.
ore	material that contains one or more minerals, at least one of which has commercial value and which can be recovered at a profit.
ore grade	the average amount of the valuable metal or mineral contained in a specific mass of ore; for gold, this is usually expressed as troy ounces per short ton (2,000 pounds avoirdupois) or grams per tonne.
Ore Reserves	defined in the JORC Code as the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.
orogenic	deformation in the earth's crust resulting in faults and folds that help localise gold mineralisation.
porphyry	a variety of igneous rock consisting of large-grained crystals, such as feldspar or quartz, dispersed in a fine-grained feldspathic matrix or groundmass.
pre-feasibility study	a technical and financial study to identify and investigate a range of project options at sufficient level of accuracy and detail to identify a preferred option (or options) and to allow a decision as to whether the project should proceed to a feasibility study.
Probable Mineral Reserves	as defined by the CIM Definition Standards, the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.
Proven Mineral Reserves	as defined by the CIM Definition Standards, the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

refining ..... the final stage of metal production in which final impurities are removed from the molten metal by introducing air and fluxes. The impurities are removed as gases or slag. refractory ..... resources not amenable to standard processing techniques. sampling ..... taking small pieces of rock at intervals along exposed mineralisation for assay (to determine the mineral content). slurry ..... a fluid comprising fine solids suspended in a solution (generally water containing additives). tailings ..... the finely-ground waste product from ore processing. tailings storage facility ..... an engineered structure for the storage of tailings. a fracture or crack in the earth's crust that is geologically distinct vein..... from the host rock and filled with minerals precipitated from hot saline fluids.

#### Units of Measure

AHD..... Australian height datum A\$/t..... Australian dollars per tonne C..... Celsius g..... grams km ..... kilometre km<sup>2</sup>..... square kilometre koz..... thousand ounces kt ..... thousand tonnes kV..... kilovolt L/S..... Litres per second lb ...... pound m ..... metre M ..... Million  $m^3/s$ ..... cubic metres per second masl..... metres above sea level ML/a ..... million litres per annum ML/day ..... million litres per day mm ..... millimetre million ounces Moz ..... mRL..... metres relative level Mt..... million tonnes Mt/a..... million tonnes per annum

MVA	megavolt amperes
MW	megawatt
MW/a	megawatts per annum
MW <sub>AC</sub>	megawatts air cooling
0Z	troy ounce (31.10348 grams)
t	tonnes
t/h	tonnes per hour
t/m <sup>3</sup>	tonnes per cubic metre
US\$	U.S. dollars
US\$m	millions of U.S. dollars
US\$/t	U.S. dollars per tonne
/t	per tonne
0/0	percent
0	degrees

#### APPENDIX A

#### NEWCREST MINING LIMITED AUDIT AND RISK COMMITTEE CHARTER

## **Objective**

To assist the Board in its overseeing, monitoring and review of the Company's practices and governance in the following areas (the **ARC Areas**):

- financial reporting principles and policies, controls and procedures;
- integrity of the Company's financial statements;
- · internal control processes and effectiveness;
- internal audit:
- compliance with applicable legal and regulatory requirements;
- external audit; and
- · cybersecurity and information loss risks,

and the overall Group risk management framework and processes (including processes for the identification of new and emerging risks), and the management of risks relating to the ARC Areas.

## **Duties and Responsibilities**

To review and report to, and where appropriate recommend for approval by, the Board in relation to:

- the published half year and full year financial statements of the Newcrest Group and disclosures which accompany such statements to determine whether they provide a true and fair view of the financial position and performance of the Newcrest Group;
- the certification provided by the Chief Executive Officer and Chief Financial Officer in relation to the half year and full year financial statements.

- the Company's material formal accounting policies and any material change to such policies and the appropriateness of the material accounting judgements or choices exercised by management in preparing the Newcrest Group's financial statements:
- the effectiveness of the Company's corporate reporting processes and management's internal controls over the Company's business processes;
- the scope and adequacy of the annual audit plan of the external auditors;
- the independence of the external auditors and their performance, considered at least on an annual basis:
- the procedures of the external auditors and rotation of audit partners;
- the provision of non-audit services by the external auditor;
- the appointment or dismissal of the external auditor and the terms of their engagement;
- the scope, programme, objectivity, performance and resourcing of the internal audit function, considered at least on an annual basis;
- the reports of the external and internal auditors and any material issues arising from their audits;
- the appointment or dismissal of the Head of Risk, Assurance and Compliance and the Manager Internal Audit;
- the overall adequacy and effectiveness of the risk framework, risk identification and assessment process and methodology and risk culture of the Company, having regard to the fact that responsibility for some of these matters may be allocated to other Board Committees from time to time;
- overseeing identification, management and mitigation of risks relating to the ARC Areas;

- the Company's disclosures in the annual report in relation to material business risks;
- the Company's compliance with applicable financial laws and regulations (including in relation to taxation) and accounting standards to the extent that it may impact on the Company's financial position;
- the overall adequacy and effectiveness of the compliance framework, the culture of compliance within the Company and the Group's compliance with relevant regulatory requirements, considered at least on an annual basis;
- any material claims or issues in relation to taxation;
- the Company's policies, practices and systems for detecting, reporting and preventing fraud, serious breaches of conduct and whistleblowing procedures; and
- any material incident which has occurred involving fraud or other breakdown of the Company's internal controls.

#### Reviews

- The overall performance of the Committee is to be reviewed at least every two years by:
  - obtaining feedback from the Board, Managing Director & Chief Executive
     Officer, Finance Director & Chief Financial
     Officer and the General Counsel &
     Company Secretary, internal auditor and external auditor; and
  - the Chairman assessing the contribution and performance of individual Committee members.
- The Committee's Charter will be reviewed at least every two years.

## **Authority**

In carrying out its duties the Committee shall have the authority to discuss directly with management, internal auditors or the external auditors any issue within its remit and to request reports, explanations and information of any of

the activities, procedures or accounts of the Newcrest Group.

The Committee is authorised by the Board to obtain outside legal or other professional advice if it considers this necessary.

The Committee will meet with the Head of Risk, Assurance and Compliance and/or the Manager Internal Audit, with or without other members of Management present as considered appropriate by the Committee, and at times desired by the Committee or requested by the Head of Risk, Assurance and Compliance and/or the Manager Internal Audit.

## **Membership**

The Committee is comprised of at least three non-executive directors one of whom acts as Chairman of the Committee. The Board of Directors will appoint and remove the members of the Committee and the Committee's Chairman. The Chairman of the Board is not to be the Chairman of the Committee.

The Committee's activities are to be fully supported by the Managing Director & Chief Executive Officer, Finance Director & Chief Financial Officer and the General Counsel & Company Secretary. This executive group is responsible for ensuring that adequate information is provided to enable the Committee to make assessments and judgments consistent with the purpose stated above.

## Meetings

The Committee is to meet at least four times per year. Special meetings may be called by the Chairman of the Committee or the General Counsel & Company Secretary. Other Committee members may request a special meeting through the Chairman. The Chairman of the Committee may call a meeting with internal or external auditors independent of management.

A quorum may be formed by any two Committee members.

The Finance Director & Chief Financial Officer and representatives of the external auditor are required to attend Committee meetings. As needed, other members of management will be invited to attend meetings for appropriate agenda items.

The Managing Director & Chief Executive Officer is required to attend Committee meetings that

consider the half year and full year financial statements.

All Directors receive Committee papers and have a standing invitation to attend Committee meetings.

The Committee is a review and advice Committee and has no decision making authority and holds no delegated authorities from the Board.

Approved by the Board: 12 February 2020

#### APPENDIX B

#### STATEMENT OF EXECUTIVE AND DIRECTOR COMPENSATION

#### Dear Shareholder

On behalf of the Board of Newcrest, we are pleased to provide our Statement of Executive and Director Compensation for the year ended 30 June 2021.

This report explains the links between Newcrest's Executive and Director remuneration framework and outcomes and Newcrest's strategy and performance.

#### Year in review

During the 2021 financial year, Newcrest delivered a record free cash flow and increased dividends for the sixth consecutive year.

From an operating perspective, Newcrest's gold production was 4% lower than the prior period, with lower production reflecting the divestment of Gosowong in the prior period (March 2020), the expected decline in grade at Cadia, lower mill throughput at Lihir, and lower recoveries at Telfer. This decrease in gold production was partially offset by record annual ore tonnes mined and record mill throughput at Cadia, the inclusion of gold production attributable to Newcrest's 32% equity interest in Lundin Gold Inc. (the owner of the Fruta del Norte mine), twelve months of Red Chris production compared to ten and a half months in the prior period and higher mill throughput at Telfer.

Record copper production was 4% higher than the prior period, primarily driven by record annual mill throughput at Cadia, partially offset by lower grade and recovery at Telfer and Red Chris.

Newcrest's AISC was 6% higher than the prior period. Notwithstanding a higher AISC per ounce, Newcrest's AISC margin per ounce increased 31% from the prior period as a result of a higher realised gold price. Newcrest's record free cash flow of \$1,104 million was \$1,725 million higher than the prior period.

In line with Newcrest's purpose of creating a brighter future for people through safe and responsible mining, Newcrest delivered another twelve-month period free of fatalities or life-changing injuries and a low Total Recordable Injury Frequency Rate (**TRIFR**) per million hours worked.

Our survey of Organisational Health has shown a decline over the last two years. We recognise that there are several contributing factors and these will be areas of significant focus in the upcoming year as we continue to build an inclusive culture.

Newcrest's interim dividend of US15 cents, combined with the final dividend of US40 cents (paid on 30 September 2021), reflects a 120% increase on the prior year dividends.

#### **KMP** changes

On 1 October 2020, Sally-Anne Layman joined the Board as a Non-Executive Director to replace Xiaoling Liu who retired as a Non-Executive Director with effect from 11 November 2020. On 1 July 2021, Jane McAloon also joined the Board as a Non-Executive Director.

At the end of the Annual General Meeting on 10 November 2021, Peter Hay retired as the Chairman and a Non-Executive Director and Peter Tomsett became the Chairman of the Board.

On 5 May 2021 it was announced that Gerard Bond, Finance Director and Chief Financial Officer, would leave Newcrest shortly after his tenth year in the role in early 2022. Sherry Duhe has been appointed to join as Chief Financial Officer effective early 2022.

#### **Remuneration framework**

The Board remains committed to ensuring that Newcrest's remuneration framework is aligned to the Company's strategy and performance and that it is effective in attracting, rewarding and retaining high calibre people and driving strong individual and Group performance in the interests of both the Company and its shareholders and in accordance with the Company's values and risk profile.

To this end, the structure of, and the performance conditions for, both the Short Term Incentives (**STIs**) and Long Term Incentives (**LTIs**) have been reviewed. Minor changes were made to the structure and performance conditions for the STIs for the 2021 financial year and the 2022 financial year, particularly in relation to the safety and sustainability performance conditions.

#### **Remuneration outcomes**

Despite the COVID-19 pandemic presenting many challenges in the 2021 financial year, the pandemic has not caused the Company to reduce workforce numbers and the incentive programs continued to operate as normal throughout the Company. The Company has adapted to the situation and with considerable effort by Management has ensured continued safe, profitable operation throughout the 2021 financial year, whilst implementing control measures to minimise the risk of infection to the workforce, their families and surrounding communities. Costs of around \$70 million were incurred to manage through the pandemic, exceeding budget by \$32 million, but these costs were not adjusted out of the results for incentive calculation purposes.

Given the performance of the business relative to expectations and the performance of the executive team in the face of considerable pandemic related challenges, the Board considered above-target remuneration outcomes to be appropriate for the Executives (as listed in section 1).

FY21 STI outcomes for Executives ranged from 66.7% to 70.7% of the maximum possible award, driven in part by strong operational and financial performance that scored 149% of Target against a scorecard of business performance metrics (including particularly strong cashflow and progress against sustainability targets). In arriving at this result, and consistent with standard processes, the Board adjusted the score downwards by making a number of standard exclusions, including a significant portion of the favourable metal price movements. The Board also used discretion to make relatively minor adjustments to reverse the impacts of a seismic event at Telfer and one-off costs resulting from early extinguishment of debt.

65.7% of the 2017 LTIs vested during the 2021 financial year, representing performance for the three years to 30 June 2020. While Newcrest delivered a Total Shareholder Return of 35.4% over the period, this did not result in vesting under the relative Total Shareholder Return component of the LTI.

Following benchmarking undertaken by the Board's independent remuneration adviser against the ASX 11 - 40 companies, an ASX Custom Peer Group and major Global Gold comparators, as described at section 4.1 of this Report, no Executives received increases in total fixed remuneration (**TFR**) in the 2021 financial year. The 2022 remuneration review was completed after the end of the 2021 financial year review. On the basis of a similar benchmarking review, no fixed remuneration increase will be made for Sandeep Biswas or Gerard Bond, but other Executives received fixed pay increases of 2.9%.

Board fees were also reviewed in light of benchmarking, and an increase of 5% came into effect on 1 January 2021, the first increase in base Board fees since 2011 (other than adjustments to reflect increases in the superannuation contribution). A further review was undertaken at the end of FY21 and it was determined that NED fees would remain unchanged for the 2022 financial year.

We continue to welcome shareholder feedback and thank you for your support.

Philip Aiken AM-

Chairman, Human Resources and Remuneration Committee

This Statement of Executive and Director Compensation details the remuneration arrangements in place for key management personnel (**KMP**), comprising certain executives specified in section 1 (the **Executives**) and the Non-Executive Directors (**NEDs**) of Newcrest.

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## 1. KEY MANAGEMENT PERSONNEL (KMP)

The following table sets out certain of the Company's KMP during the 2021 financial year. Each of the KMP was KMP for all of the 2021 financial year, unless stated otherwise. The Executives disclosed in this report are the Company's named executive officers (**NEOs**) as required pursuant to Form 51-102F6 – *Statement of Executive Compensation* (**Form 51-102F6**).

Name	Role	
Executives		
Executive Directors		
Sandeep Biswas Gerard Bond <sup>(1)</sup>	Managing Director and Chief Executive Officer (CEO) Finance Director and Chief Financial Officer (CFO)	
Other Executives		
Craig Jones Philip Stephenson Suresh Vadnagra	Chief Operating Officer ( <b>COO</b> ) – Papua New Guinea Chief Operating Officer ( <b>COO</b> ) – Australia & Americas Chief Technical & Projects Officer ( <b>CTPO</b> )	
Non-Executive Director	s	
Peter Hay <sup>(2)</sup> Philip Aiken AM Roger Higgins Vickki McFadden Peter Tomsett <sup>(2)</sup> Sally-Anne Layman	Non-Executive Chairman Non-Executive Director Non-Executive Director Non-Executive Director Non-Executive Director Non-Executive Director	1 Oct 20 – 30 Jun 21
Former Non-Executive Directors		
Xiaoling Liu	Non-Executive Director	1 Jul 20 – 11 Nov 20

<sup>(1)</sup> On 5 May 2021, it was announced that Gerard Bond would leave Newcrest in early 2022.

#### 2. REMUNERATION SNAPSHOT

## 2.1. Key remuneration outcomes for the 2021 financial year

<b>Executive Remuneration</b>	STI Outcomes	LTI Outcomes	NED Remuneration
There was no change to TFR of any Executive as part of the 2020 annual salary review process.	The average STI outcome for the 2021 financial year for Executives was 68.8% of the maximum opportunity, based on the assessment of business and personal measures.	During the 2021 financial year, 65.7% of the 2017 LTIs vested reflecting the Company's performance over the three year performance period to 30 June 2020.  Subsequent to the end of the 2021 financial year, 66.67% of 2018 LTIs (which were granted in the 2019 financial year) vested on 22 November 2021.	Following a benchmarking review of NED fees, base Board fees were increased by 5%, effective 1 January 2021.  No change was made to Committee fees.

<sup>(2)</sup> Subsequent to the end of the 2021 financial year, Jane McAloon joined the Board as a Non-Executive Director with effect from 1 July 2021, and Peter Hay retired as Chairman and Peter Tomsett was appointed as Chairman with effect from the end of the Annual General Meeting on 10 November 2021.

#### 2.2. Actual Remuneration

The table below details the cash and value of other benefits actually received by the Executives in the 2021 financial year in their capacity as KMP. This disclosure provides shareholders with increased clarity and transparency in relation to Executive remuneration. It includes the value of LTI Rights and STI Shares that vested during their period as KMP during the year. See section 9.1 for the summary compensation table that has been prepared in accordance with Form 51-102F6.

#### Actual Executive Remuneration for the 2021 financial year

Executive	TFR <sup>(1)</sup> US\$'000	STI Paid as cash <sup>(2)</sup> US\$'000	Other Benefits <sup>(3)</sup> US\$'000	LTI Rights Vested <sup>(4)</sup> US\$'000	Restricted STI Shares Vested <sup>(5)</sup> US\$'000	Sign-on Rights Vested <sup>(6)</sup> US\$'000	Total US\$'000
Sandeep Biswas	1,792	752	20	2,392	1,137	-	6,093
Gerard Bond	747	253	3	563	371	-	1,937
Craig Jones	635	119	2	358	202	-	1,316
Philip Stephenson	635	160	34	358	212	-	1,399
Suresh Vadnagra	635	-	282	-	-	78	995

#### Notes to Actual Executive Remuneration

- (1) TFR (Total Fixed Remuneration) comprises base salary and superannuation contributions.
- (2) Represents amounts paid for STIs relating to performance for the 2020 financial year. The cash component for the 2020 financial year was paid in October 2020.
- (3) Comprises cash payments for travel costs, relocation assistance, non-monetary benefits such as parking, insurance and applicable fringe benefits tax paid on benefits.
  - For Suresh Vadnagra, the total of US\$282,000 includes payments totalling US\$280,000 (A\$375,000) as a sign-on bonus paid (which was granted on his commencement in May 2020 in compensation for benefits forfeited on leaving his previous employer, and paid in the current financial year). The remaining US\$2,000 relates to payments for non-monetary benefits.
- (4) Represents 2017 LTIs that vested on 23 November 2020. The Shares issued on vesting were subject to a one year holding lock (i.e. they are included in this column, but were not available for trading until 22 November 2021). The value of the Rights has been determined based on the share price at the close of business on the vesting date of A\$28.33 (US\$20.67).
- (5) On 12 March 2021, ordinary Newcrest shares were released by Pacific Custodians Pty Ltd as trustee for the Newcrest Employee Share Trust to:
  - Sandeep Biswas (39,094), Gerard Bond (12,816), Craig Jones (7,042) and Philip Stephenson (7,473) on vesting
    of restricted STIs awarded for the 2018 financial year.
  - Sandeep Biswas (22,019), Gerard Bond (7,139), Craig Jones (3,809) and Phillip Stephenson (3,940) on vesting
    of restricted STIs awarded for the 2019 financial year.

The value of the restricted STI Shares which vested has been determined based on the share price at the close of business on the vesting date of A\$24.02 (US\$18.61).

(6) Represents the Sign-On Rights issued to Suresh Vadnagra that vested on the 18 May 2021. The value of the Rights has been determined based on the share price at the close of business on the vesting date of A\$28.66 (US\$22.21).

TFR and Other Benefits have been translated from Australian dollars to US dollars using an average exchange rate of 0.7467. STI paid as cash, LTI Rights vested, Restricted STI Shares vested and Sign-On Rights vested have been translated at the rate applicable on the date of the event. For restricted STI Shares, the vesting date is the date the trading restriction is lifted.

## 2.3. Changes planned for the 2022 financial year

Executive Total Fixed Remuneration	STI	LTI	NED Remuneration
No fixed remuneration increase will be made for Sandeep Biswas or Gerard Bond. Other Executives received fixed pay increases of 2.9%, following a benchmarking review.	Minor changes have been made to the STI Business measures for the 2022 financial year. These changes have been made to increase focus on key safety and sustainability metrics. Weightings remain broadly similar.	No material changes are proposed at this stage.	NED fees will remain unchanged for the 2022 financial year.

## 2.4. Currency

Unless otherwise indicated, the currency used in this Report is US dollars which represents Newcrest's reporting (presentation) currency.

Executive remuneration and NED fees, which are paid in Australian dollars, are translated into US dollars for reporting purposes at a rate of A\$1.00:US\$0.7467.

#### 3. REMUNERATION GOVERNANCE

#### **Board**

Takes an active role in the governance and oversight of Newcrest's remuneration policies and has overall responsibility for ensuring that the Company's remuneration strategy aligns with Newcrest's short and long term business objectives and risk profile. The Board approves the remuneration arrangements for the CEO, upon recommendation from the Human Resources and Remuneration (HRR) Committee. No Executive is involved in deciding his or her own remuneration.

#### HRR Committee

Established by the Board to review, formulate and make recommendations to the Board in relation to matters within its Charter, including the remuneration arrangements of the CEO, Executives and the NEDs, and oversee the major components of the Board's approved remuneration strategy.

The Charter for the HRR Committee is available on the Company's website: www.newcrest.com.au/about-us/corporate-governance.

## HRR Committee members

Current members of the HRR Committee are Phillip Aiken AM (Chairman), Vickki McFadden, Roger Higgins and Jane McAloon, who are each independent NEDs. All Directors are invited to attend HRR Committee meetings.

Set out below is a summary of the skills and experience of each of the members that are relevant to their responsibilities in executive remuneration and which enable them to make decisions on the suitability of the Company's remuneration policies and practices. All members of the HRR Committee have served on remuneration committees of other companies or associations and all members have provided leadership in business organisations and have participated in remuneration planning sessions and made remuneration decisions.

	Phillip Aiken AM	Vickki McFadden	Roger Higgins	Jane McAloon
Member of HRR Committee	Since April 2013 Chairman since November 2018	Since November 2017	Since November 2018	Since July 2021
Experience	Former member of Remuneration Committees at Balfour Beatty, Kazakhmys plc, Essar Oil Ltd and Aveva.	Ex officio Member of Human Resources and Remuneration Committee at GPT.  Member of HR and Remuneration Committee at Allianz Australia. Former Member of Remuneration Committees at eftpos Australia Payments Pty Ltd, Leighton Holdings Limited and SKILLED Group.	Former member of Remuneration Committee at International Copper Association	Chairman of Human Resources and Remuneration Committee at Allianz Australia. Chairman of Nomination and Remuneration Committee at United Malt Group.

## External Remuneration Consultants

External remuneration consultants are on occasion engaged by the HRR Committee to provide advice on remuneration related issues.

Since 2013, KPMG has provided advice to the HRR Committee, including:

- benchmarking data for CEO, Executive and NED remuneration; and
- information and insights with respect to market practices and trends in remuneration within ASX listed and global gold companies.

During the 2021 financial year, KPMG did not provide a remuneration recommendation as defined by the Corporations Act 2001.

The aggregate fees billed by KPMG for providing advice on remuneration related issues is set out below (excluding goods and services tax):

	FY2021 US\$'000	FY2020 US\$'000
Executive compensation related fees	52	96
Other fees	-	-
Total fees	52	96

KPMG does not provide any services to Newcrest or any affiliates or to Directors or members of Management of Newcrest regarding the determination of compensation for any of the Company's executives and directors, other than or in addition to the services referred to above.

No other remuneration consultants or advisors have been retained by the Company, the HRR Committee or any Directors at any time since the end of the 2021 financial year.

The Company's External Remuneration Consultants Policy sets out protocols governing the engagement of external remuneration consultants.

# Risks relating to remuneration

The Board is responsible for ensuring that systems are in place to facilitate the effective identification, management and mitigation of any significant financial and non-financial risks to which the Company is exposed. These risks include, but are not limited to, those arising from the Company's compensation policies and practices, such as the risk that an officer or employee is incentivised to take inappropriate or excessive risks. The Board and the HRR Committee are advised of potential risks relating to human capital, such as recruitment and retention, redundancy, resourcing and succession. The HRR Committee is involved in the design of the remuneration framework and is required to approve the LTI measures, STI business measures and the CEO's STI personal measures and considers the risks relating to such matters.

The Company uses the following practices to discourage or mitigate inappropriate or excessive risk-taking by Executives:

- the structure of incentive compensation is designed not to focus on a single metric, which could be distortive, but instead a combination of both corporate and personal objectives;
- the Company has an appropriate compensation mix, including fixed and performance-based compensation with short- and long-term performance conditions and multiple forms of compensation; and
- the Board has discretion in assessing the annual incentive awards paid to Executives based on both individual and corporate performance.

No risks have been identified as arising from the Company's compensation policies and practices which are considered reasonably likely to have a material adverse effect on the Company.

## 4. EXECUTIVE REMUNERATION FRAMEWORK

#### 4.1. Remuneration Strategy and Guiding Principles

Our remuneration strategy is to provide market-competitive remuneration, having regard to the size and complexity of the Company, the scope of each role, and the impact the Executive can have on Company performance.

The guiding principles of our remuneration strategy are as set out below.

Strategy and Purpose	Values and culture	Shareholders	Performance	Market
Drive execution of key objectives, which align with the Company's strategy and short, medium and longer term performance objectives, and will deliver long term growth in shareholder value and is consistent with the Company's risk appetite. This includes our commitment to safety and sustainability.	Incorporate framework and processes that reinforce our values and culture.	Align interests of Executives with those of shareholders.	Provide appropriate levels of "at risk" performance pay to encourage, recognise and reward high performance.	Attract and retain talented, high performing Executives by reference to comparable roles.

Executive remuneration packages are benchmarked against comparable roles in:

- ASX listed companies with market capitalisations ranked between 11 40;
- a customised peer group of ASX listed companies comprising largely industrial, materials, energy and
  utilities companies of comparable scale and international complexity, i.e.: Woodside Petroleum Ltd,
  Transurban Group, South32 Ltd, Brambles Ltd, Amcor Ltd, Fortescue Metals Group Ltd, Origin Energy
  Ltd Santos Ltd, Oil Search Ltd, Aurizon Holdings Ltd, James Hardie Industries PLC, BlueScope Steel
  Ltd, Orica Ltd, Incitec Pivot Ltd; and
- the following global gold mining companies: Yamana Gold Inc, Freeport-McMoran Copper & Gold, Agnico Eagle Mines Limited, AngloGold Ashanti Ltd, Barrick Gold Corporation, Gold Fields Ltd, Kinross Gold Corporation, Newmont Corporation, Kirkland Lake Gold Limited, Evolution Mining Limited and Northern Star Resources Limited.

There were no changes in the benchmarking groups referred to above since the 2020 financial year, other than with respect to the ASX 11-40 group.

TFR is targeted at the 50th percentile for comparable roles and experience/skills, while the total remuneration package for each Executive (inclusive of both fixed and variable remuneration) is targeted at up to the 75th percentile for comparable roles and experience/skills.

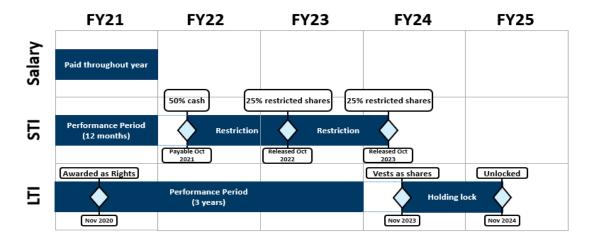
## 4.2. Components of the Executive Remuneration Framework

The table below outlines the remuneration components for the 2021 financial year for all Executives. Further details regarding each of the remuneration components are provided in sections 4.3 to 4.5.

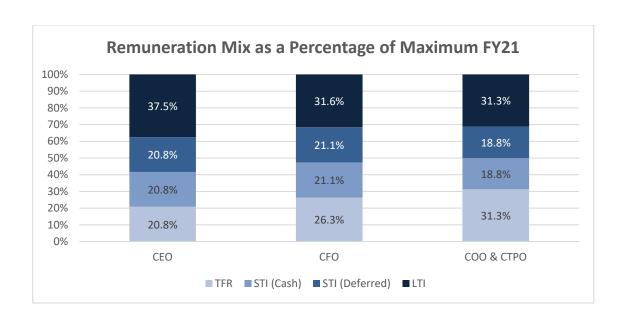
Remuneration Type	Fixed Remuneration	Variable / At-Risk Remuneration		
Component	Total Fixed Remuneration ( <b>TFR</b> )	Short Term Incentive ( <b>STI</b> )		Long Term Incentive (LTI)
Delivery	C	ash	E	Equity
Composition  Base salary plus superannuation contributions in line with statutory obligations, and any salary packaged amounts.	50% of STI award paid in cash after the financial year.	aid in cash after the as shares, with one		
	amounts.	Outcomes based on a combination of business performance and personal measures.		ROCE, comparative cost position and relative TSR.
		Subject to clawback and overarching Board discretion.		Subject to clawback and overarching Board discretion.

Remuneration Type	Fixed Remuneration	Designed to:  align interests of shareholders and  Designed to:  align interests of				
Link with strategic objectives	Set to attract, retain, motivate and reward high quality executive talent to deliver on the Company's strategy.					

The diagram below illustrates how the different components of Executive remuneration provided in respect of the 2021 financial year are delivered over a four year period.



Newcrest's mix of remuneration components, expressed as a percentage of "maximum" earning opportunity, for current Executives for the 2021 financial year is illustrated in the following graphs. Although the components of TFR, STI and LTI are described separately, they should be viewed as part of an integrated package.



The "at risk" components are subject to deliberately challenging financial and non-financial performance conditions. The potential "maximum" earning opportunity shown above is not expected to be achieved each year, but is designed to only be achieved in respect of exceptional performance. There is no STI awarded unless a threshold level of performance is achieved.

## 4.3. Total Fixed Remuneration (TFR)

Feature	Description			
Composition	TFR comprises base salary, superannuation contributions in line with statutory obligations, and any salary packaged amounts (for example, novated lease vehicles). TFR is paid in Australian dollars.			
Relevant Considerations	TFR is determined on an individual basis, considering the scope of the role, the individual's skills and expertise, individual and group performance, market movements and competitiveness.			
Review	TFR is reviewed annually. There was no change to TFR of any Executive as part of the 2020 annual salary review process.			
	After the end of the 2021 financial year, a benchmarking review of TFR took place and Executives, other than Sandeep Biswas and Gerard Bond, received increases in fixed pay of 2.9% on 1 October 2021.			

#### 4.4. Short Term Incentive

## 4.4.1. Key features of the STI award for the 2021 financial year

Feature	Description
Participation	All Executives are eligible to participate.
Opportunity	For "at target" performance, the CEO has the opportunity to receive 100% of TFR; the CFO has the opportunity to receive 80% of TFR; and the other Executives have the opportunity to receive 60% of TFR. Each Executive has the opportunity to receive double the "at target" percentage for exceptional performance ('maximum' STI opportunity).

#### Feature Description

#### Rules

The STIs for the 2021 financial year are governed by the Equity Incentive Plan Rules.

#### **Performance Period**

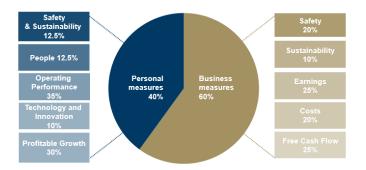
The performance period is the financial year preceding the payment date of the STI. For the 2021 financial year, the performance period was 1 July 2020 to 30 June 2021.

#### Performance Conditions

Performance conditions are a mix of personal and business measures. Robust threshold, target and maximum targets are established for all measures to drive high levels of business and individual performance. The specific personal measures applicable to each Executive may change from year to year to reflect business priorities. The relative weightings of these categories may also change from year to year to best reflect each Executive's priorities. The annual budget generally forms the basis for the "target" performance set by the Board.

Further details in relation to the personal STI measures and the outcomes are described in section 5.3.1 and the business measures, are described in section 4.4.2.

The diagram below illustrates the indicative weighting of the performance conditions, using the CEO's FY21 personal conditions as an example.



#### Calculation of STI Award to Executives

STI Amount (\$) = ((40% x personal outcome) + (60% x business outcome)) x "At Target" STI% x TFR

Business and personal measures are scored out of 200%, with 50% for threshold performance, 100% for target performance and 200% for maximum performance. Business or personal measures that fail to meet the threshold target score 0%. If the overall average of the five personal measures is below 50%, the CEO (in the case of an award to the other Executives) or the Board (in the case of an award to the CEO) has the discretion not to make an STI award to that participant. Accordingly, the minimum value of the STI Award is nil.

## Payment, Delivery and Deferral

For Executives, the STI for the 2021 financial year was delivered 50% in cash and 50% in restricted shares in October 2021, following finalisation of the audited annual Company results and the approval of all personal outcomes. Of the restricted component, half of the restricted shares are to be released after 12 months after the allocation date (in October 2022) and the remainder after two years after the allocation date (in October 2023). Restricted shares continue subject to existing restrictions, if the Executive resigns before the shares are released from the restriction, unless the Board determines otherwise. During the restriction period, the Executives are entitled to dividends and voting rights attaching to their restricted shares.

For allocation purposes, the value of each STI restricted share will be calculated using the five trading day volume weighted average price (VWAP) of Newcrest's share price immediately preceding the date of payment of the cash portion of the STI Award, unless such price is assessed as not being fairly representative of the market price, in which case an alternative and representative VWAP will be agreed by the HRR Committee.

#### Cessation of Employment

Except at the discretion of the Board:

if a participant resigns or is dismissed for cause during the Performance Period, the
participant may not be eligible to receive an STI award for that financial year;

Feature	Description	
	<ul> <li>if a participant ceases employment for any other reason during the Performance Period, the STI award will be reduced on a pro rata basis, but will remain payable in the ordinary course;</li> </ul>	
	<ul> <li>if a participant is dismissed for cause while the restricted shares are subject to restrictions, the restricted shares will be forfeited;</li> </ul>	
	<ul> <li>if the participant resigns while the restricted shares are subject to restrictions, the participant will be entitled to retain their restricted shares and the shares will be released after the restriction period. The Board will have the discretion to increase the STI restriction period for some or all of the existing STI restricted shares, from 1 year to 2 years; and</li> </ul>	
	<ul> <li>if the participant ceases employment for any other reason while the restricted shares are subject to restrictions, the participant will be entitled to retain their restricted shares and the shares will be released after the restriction period.</li> </ul>	
Clawback	In general, the Board has the discretion to reduce or forfeit an STI award, or to seek recovery from a participant, if an event or circumstance has occurred which has resulted in ar inappropriate benefit being conferred on a participant (including in the case of fraud dishonesty, gross misconduct by the Executive or if the outcomes are the result of materia error or misstatement of the financial accounts). The discretion may be exercised for a period of two years from the vesting or award date.	
Overriding Board Discretion	The Board retains overriding discretion to adjust the final STI outcome. This is an important measure to ensure any STI award is appropriate in the circumstances.	

## 4.4.2. STI performance conditions for the 2021 financial year in detail

## Business measures for the 2021 financial year

Business Measure	Weighting	Reason the Performance Measure Was Adopted
Safety	1 ,	The Company is committed to reinforcing a strong safety
TRIFR <sup>(1)</sup> (5%)		culture and improving safety leadership. As such, the measures and targets are reviewed annually to meet the
Quality of Serious Incident Investigations (5%) <sup>(2)</sup>		aspirations of the Safety Transformation Plan. The combined measures maintain a focus on safety performance, as measured by TRIFR, drive critical actions and ensure effective
Critical Control Management ( <b>CCM</b> ) <sup>(3)</sup> Action Close Out on time (5%)		controls are in place to help prevent fatalities and/or serious injuries.
Process Safety incident reviews (5%) <sup>(4)</sup>		
Sustainability	10%	These measures were introduced to increase the focus on
Greenhouse gas emissions ( <b>GHG</b> ) (5%)	eenhouse gas emissions ( <b>GHG</b> ) deve	sustainability. They are intended to incentivise site development and implementation of emission reduction plans and water efficiency plans.
Improved water efficiency (5%)		They were chosen as methods of assessing sustainability performance because they are, as far as practicable, objective, measurable and an appropriate way to assess key components that contribute to the overall sustainability goals of the Company.

Business Measure	Weighting	Reason the Performance Measure Was Adopted
Earnings Adjusted Net Profit/(Loss) After Tax and Before Significant Items	25%	The earnings target is a direct financial measurement of the Company's performance, providing a strong alignment to the interests of shareholders. The results are based on the statutory profit of the Group adjusted for the effect of commodity prices, foreign exchange rates and other significant items determined by the Board which are considered to be outside the control of Management. It provides a strong reflection of production delivery, operational efficiency and cost management.
Costs AISC per ounce <sup>(5)</sup>	20%	This measure is a highly relevant short and long term measure which is consistent with the Company's strategy of focussing on sustainable cash generation and profitability. It is the primary unit cost measure in the gold industry, and is visible and readily understood. It is based on publicly disclosed and reconciled results and is therefore a reliable measure for use by the Company, adjusted for the effect of commodity prices and foreign exchange rates and other significant items determined by the Board which are considered to be outside the control of Management.
Free Cash Flow (FCF)	25%	FCF is a highly relevant short and long term measure. It reflects cost and capital management and production efficiencies. FCF is necessary to fund growth opportunities, repay debt and ultimately pay dividends to shareholders. It is based on publicly disclosed and reconciled results and is adjusted for the effect of commodity prices and foreign exchange rates and other significant items determined by the Board which are considered to be outside the control of Management.

<sup>(1)</sup> TRIFR is the total number of recordable injuries per million hours worked. It is a lagging indicator of safety performance.

- (2) Quality of Serious Incident Investigations focuses on assessing the quality of investigations and ensuring that actions arising as an outcome of an SPI investigation have been implemented.
- (3) CCM action close out focuses on the timely completion of all actions identified following a Systems Verification (SV) or Field Critical Control Check (FCCC). CCM is the second pillar of Newcrest's Safety Transformation Plan and is focussed on verifying that effective controls are in place and working for every high risk task.
- (4) Process Safety Improvement focuses on the completion rate of all actions detailed in each site's Process Safety Improvement Plan and targets wider system risks, such as operating plant designs, and chemical and energy hazards.
- (5) All-In Sustaining Cost metrics as per World Gold Council Guidance Note on Non-GAAP metrics. Refer to section 6 of the Operating and Financial Review in the Company's Annual Financial Report for the year ended 30 June 2021 (Operating and Financial Review).

## Personal measures for the 2021 financial year

For the 2021 financial year, the key elements of the personal performance measures for Sandeep Biswas were set by the Board to align with the Company's strategic goals and taking into account the Company's key material risks. The personal performance measures were selected to recognise the important role that the CEO plays in personally advancing the Company's strategic objectives of improving the safety, people and sustainability performance of the Company, its operating performance, profitable growth and technology and innovation.

The personal performance measures for other Executives for the 2021 financial year focussed on their areas of responsibility which, in the case of the operational Executives, included safety, people, production, operating performance and business improvement, material risk management, technology and innovation, sustainability and profitable growth. Non-financial targets are generally aligned to core values, including safety, organisational health and key strategic and growth objectives. If there is a fatality within the area of

accountability of an Executive, the Board may exercise discretion to adjust the assessment of the personal safety measure, including a zero award, where appropriate.

Further detail as to the personal measures for the CEO, CFO and other Executives, and outcomes with respect to such measures is set out in section 5.3.1.

#### 4.4.3. STIs for the 2020 financial year

The terms that applied to the 2020 financial year STI award in respect of the performance period from 1 July 2019 to 30 June 2020, were described in detail in the Company's Annual Financial Report for the year ended 30 June 2020 (2020 Remuneration Report).

## 4.4.4. STIs for the 2022 financial year

Minor changes have been made to the STI Business measures for the 2022 financial year. These changes have been made to increase focus on key safety and sustainability metrics, specifically TRIFR, SPI Action Verification and Investigation Quality, and the timely completion of actions related to the abatement of Greenhouse Gases and Water Intensity. The overall weightings of the five categories (Safety, Sustainability, Earnings, Cost and Free Cash Flow) remain unchanged.

#### 4.5. Long Term Incentive

#### 4.5.1. Key features of the 2020 LTIs (under which Rights were issued during the 2021 financial year)

Feature	Description
Equity type	Allocations are in the form of rights to shares in the Company ( <b>Rights</b> ). Upon vesting, each Right is automatically exercised at a nil exercise price and the Executive receives one fully paid ordinary share for each Right (subject to a 12 month holding lock). As the Rights represent a participant's 'at risk' long term incentive component of their remuneration package, the Rights are granted at no cost to the participant. Rights are automatically exercised and do not have an expiry date.
Rules	The 2020 LTIs are governed by the Equity Incentive Plan Rules.
Maximum LTI Opportunity	The maximum LTI opportunity is 180% of TFR for the CEO, 120% of TFR for the CFO, 100% of TFR for the other Executives. Section 4.2 indicates the value of the grants expressed as a percentage of the total remuneration package.
Grant Date	The grant date was 18 November 2020 and Rights will vest, subject to the satisfaction of the performance conditions, on 18 November 2023. The total number of Rights issued to, and held by, each Executive is summarised in section 9.4.
LTI Grant Value	For allocation purposes, the value of each Right was calculated based on the face value of the underlying security, using the five day VWAP of Newcrest's share price immediately preceding the grant date (A\$29.2146).
Performance period	The performance period is the three financial years commencing on 1 July 2020.

Feature	Description
Performance Conditions	2020 LTI Rights issued are subject to the Performance Conditions shown below:  Comparative cost position 33%  Relative total shareholder return
	ROCE 33%
	The Performance Conditions have been set to align with the long-term goals and performance of Newcrest and the generation of shareholder returns. Further details in relation to the Performance Conditions are detailed in section 4.5.2.
Vesting	Rights vest three years from the grant date subject to the Performance Conditions being met. Rights are automatically exercised on vesting. On vesting of the Rights, the Board has the discretion, subject to the Equity Incentive Plan Rules, to satisfy the vesting obligations by the issue of new shares, transfer of existing shares purchased on-market or by paying a cash equivalent amount. The practice in recent years has been to satisfy the vesting obligations by allocating shares purchased on-market.
Holding lock	For Executives, shares received on the vesting and automatic exercise of Rights are subject to a 12 month holding lock.
Dividends	No dividends are paid on unvested Rights. Shares allocated on the vesting and automatic exercise of Rights and subject to the holding lock have the right to receive dividends (when applicable).
Clawback	In general, the Board has the discretion to reduce, forfeit or lapse an LTI award for a participant if an event or circumstance has occurred which has resulted in an inappropriate benefit being conferred on a participant (including in the case of fraud, dishonesty, gross misconduct by the Executive or if the outcomes are the result of material error or misstatement of the financial accounts). The discretion may be exercised for a period of two years from the vesting or grant date.
Cessation of employment	Except at the discretion of the Board:
	<ul> <li>if a participant gives a notice of resignation or is dismissed for cause, unvested Rights will lapse on cessation of employment; and</li> </ul>
	<ul> <li>if a participant ceases employment for any other reason, a pro-rata number of unvested Rights will vest in the usual course, subject to satisfaction of the applicable performance conditions and any holding lock in the terms of grant.</li> </ul>
	For all leavers, any restricted shares will be released after expiration of the holding lock period (subject to the Board exercising a discretion under the clawback policy).
Change of control	The Board may exercise its discretion to allow all or some unvested Rights to vest if a change of control event occurs. Where there is an actual change in control of the Company then, unless the Board determines otherwise, unvested Rights will immediately vest or cease to be subject to restrictions on a pro rata basis having regard to the portion of the vesting period that has elapsed and any remaining unvested Rights will lapse.
Retesting	There is no retesting. Rights that do not vest based on performance over the three year performance period will lapse.
Overriding Board discretion	The Board retains overriding discretion to adjust the final LTI outcome. This is an important measure to ensure any LTI award is appropriate in the circumstances.

#### Component

#### **Assessment**

#### Reason for adoption of the Performance Measure

#### **Comparative Cost Position**

The Company's measure for the Comparative Cost Position performance condition is the AISC per ounce, adopted by the Company in relation to costs reporting.

The AISC per ounce incorporates costs related to sustaining production.

Performance over the three year performance period, is compared against other entities based on data sourced from an independent provider selected by the Board. The entities that are included in the independent provider's database can change from year to year (such as where additional companies begin to report AISC, or where there are mergers and demergers). Cost performance for each of the three years of the performance period is averaged to determine the number of Rights that may be exercised in relation to this performance measure.

The vesting scale for this measure is as follows:

- 0% vests if Comparative Costs are at or above the 50th percentile;
- 40% vests if Comparative Costs are less than the 50th percentile;
- 100% vests if Comparative Costs are below the 25th percentile.

Straight line vesting occurs between these thresholds.

The Comparative Costs measure will be assessed using peer data for the period from 1 July 2020 until 30 June 2023.

This measure is closely aligned to Newcrest's strategic objective to be a low cost producer and aligned to our relative value proposition for gold equity investors.

The AISC per ounce result is a sound basis for the Company to use in assessing comparative cost as it is based on publicly disclosed results

#### Return on Capital Employed (ROCE)

ROCE is an absolute measure, defined as underlying earnings before interest and tax (**EBIT**), divided by average capital employed, being shareholders' equity plus net debt.

For each of the three years of the performance period ROCE is averaged to determine the number of Rights that may be exercised in relation to this performance measure.

Average capital employed is calculated as a simple average of opening and closing balances. If material equity transactions (for example, significant equity issuances or asset impairments) occur such that the simple average is not representative of actual performance, the average capital employed for the year is adjusted for the effect of these transactions. Average capital employed for the purpose of this calculation excludes approved capital invested in long-dated projects until commercial production is achieved, so as not to discourage Management's pursuit of long-dated growth options.

The vesting scale for this measure is as follows:

- 0% vests if ROCE is less than 6%:
- 30% vests if ROCE is 6%;
- 100% vests if ROCE is 13% or more.

Straight line vesting occurs between these thresholds.

These targets. including the threshold of 6% ROCE, have been reviewed by the Board during the year and, on the basis that they remain appropriate, have been left unchanged. The targets are designed to exceed Newcrest's Weighted Average Cost of Capital whilst also incentivising returns that are higher than comparable industries in the prevailing economic conditions.

ROCE aligns Management action and company outcomes closely with long term shareholder value. ROCE provides a balance to the other LTI metrics as it serves as a counter to "buying" success.

ROCE is also based on publicly disclosed and reconciled results and is therefore a sound basis for the Company to use in assessing value.

Impairments are excluded from the capital base in the year in which they occur, such that the return is on a pre-impairment basis and LTI participants do not benefit from the impairment. However, the post impairment capital base is used in the calculation of returns in subsequent years so as to not deincentivise current or new management.

#### Total Relative Shareholder Return (TSR)

Relative TSR is a measure of performance over time that combines share price appreciation and dividends paid to show the total return to the shareholder, expressed as an annualised percentage. Relative TSR is a measure of the Company's TSR performance against that of other gold companies.

Relative TSR will be measured by comparing Newcrest's AUD share

Assessment

price performance against the S&P TSX Global Gold Index over three

Rather than rely on spot price, the performance calculations reference the six month period immediately prior to the start (1 January 2020 - 30 June 2020) and the end (1 January 2023 - 30 June 2023) of the performance period.

The treatment of dividend and capital adjustments will be in accordance with the adjustments made by the data provider.

The vesting schedule for this measure is detailed below.

- 0% vests if Relative TSR is below the Index:
- 50% vests if Relative TSR is equal to the Index;
- 100% vests if Relative TSR exceeds the Index by 18 percentage points or more.

Straight line vesting occurs between these thresholds.

Relative TSR measure provides alignment between the outcomes of vesting of the 2020 LTIs and the returns experienced by shareholders, in order to specifically encourage outperformance against other gold mining companies.

The S&P TSX Global Gold Index the most appropriate comparison point for Newcrest to use for the Relative TSR measure

- As a gold mining company, Newcrest's share price performance is significantly impacted by fluctuations in the gold price. Accordingly, it is appropriate to compare Newcrest's performance to that of other gold mining companies.
- There are few ASX-listed gold mining companies which act as a directly relevant comparison given Newcrest the differences in scale, and it is therefore considered that a comparison with international peers is more appropriate.
- Rather than hand-pick a selection of peer gold mining companies from various stock exchanges globally, the Board considers that Newcrest's performance should be compared to the S&P TSX Global Gold Index as each of Newcrest's major peers are constituents in the S&P TSX Global Gold Index.

#### 4.5.3. Outlook for 2021 LTI Performance Conditions (2022 financial year)

LTI Performance Conditions for the 2021 LTIs will be structurally identical to those which apply to the 2020

#### 4.5.4. LTIs for past financial years

The terms that apply to the 2017, 2018, and 2019 LTIs, which vested or will vest in the 2021, 2022 and 2023 financial years respectively, are described in detail in the 2018, 2019 and 2020 Remuneration Reports that can be found in the Company's Annual Financial Reports in respect of such years.

# 4.6. Sign-On Arrangements

No Sign-On arrangements for Executives were granted during the 2021 financial year.

As set out in the 2020 Remuneration Report 7,000 Sign-On Rights were granted to Suresh Vadnagra in the 2020 financial year, in compensation for benefits forfeited on leaving his previous employer. Of these, 3,500 vested in the 2021 financial year. The remaining 3,500 Sign-On Rights granted to Suresh are due to vest on 18 May 2022 (or as soon as possible afterwards in accordance with Newcrest's Securities Dealing Policy), subject to adequate performance and continuing employment (other than in limited circumstances). The cash component of Suresh's Sign-On arrangements is noted in section 9.1.

#### 5. REMUNERATION OUTCOMES

# 5.1. Total Fixed Remuneration (TFR) for the 2021 financial year

Set out below is the TFR for the Executives as at 30 June 2021, shown in Australian dollars, which is the currency in which they are paid. TFR comprises base salary and superannuation contributions and any salary packaged amounts (for example, novated lease vehicles). This information is provided in Australian dollars to enable comparisons to be made in future years, without the impact of changes in exchange rates.

Name	TFR A\$ 30 June 2021	TFR A\$ 30 June 2020	% Increase
Sandeep Biswas	2,400,000	2,400,000	0.0%
Gerard Bond	1,000,000	1,000,000	0.0%
Craig Jones	850,000	850,000	0.0%
Philip Stephenson	850,000	850,000	0.0%
Suresh Vadnagra	850,000	850,000	0.0%

Set out below is the TFR for the Executives as at 30 June 2021, shown in US dollars. The amounts for 2021 have been translated using the average exchange rate for 2021 of 0.7467. The amounts for 2020 have been converted to US dollars using the average exchange rate for 2020 of 0.6715. The difference between the TFR for the Executives as at 30 June 2021 and as at 30 June 2020 are on account of fluctuations in the exchange rate.

Name	TFR US\$ 30 June 2021	TFR US\$ 30 June 2020
Sandeep Biswas	1,792,080	1,611,600
Gerard Bond	746,700	671,500
Craig Jones	634,695	570,775
Philip Stephenson	634,695	570,775
Suresh Vadnagra	634,695	570,775

# 5.2. Newcrest's Financial Performance for the past five financial years

The following table provides a summary of the key financial results for Newcrest over the past five financial years.

Year Ended 30 June	Measure	2021	2020	2019	2018	2017
Statutory profit	US\$ million	1,164	647	561	202	308
Underlying profit <sup>(1)</sup>	US\$ million	1,164	750	561	459	394
Cash flows from operating						
activities	US\$ million	2,302	1,471	1,487	1,434	1,467
Free cash flow <sup>(2)</sup>	US\$ million	1,104	(621)	804	601	739
Free cash flow (before M&A						
activity) <sup>(2)</sup>	US\$ million	1,125	670	878	828	829
EBITDA Margin	%	53.4	46.8	44.6	43.9	40.5
EBIT Margin	%	38.7	30.4	24.7	21.7	20.7
Net Debt to EBITDA(3)	Times	(0.1)	0.3	0.2	0.7	1.1
ROCE	%	18.5	13.8	11.2	8.8	7.9
Gearing <sup>(4)</sup>	%	(1.8)	6.8	4.9	12.2	16.6
Share price at 30 June (5)	A\$	25.28	31.53	31.95	21.80	20.16
Earnings per share <sup>(6)</sup>						
Basic	US cents/share	142.5	83.4	73.0	26.3	40.2
Underlying	US cents/share	142.1	83.1	72.8	59.8	51.4
Dividends <sup>(7)</sup>	US cents/share	55.0	25.0	22.0	18.5	15.0
Gold produced	000's ounces	2,093	2,171	2,488	2,346	2,381
All-in sustaining cost <sup>(8)</sup>	US\$/oz sold	911	862	738	835	787
Average realised gold price	US\$/oz	1,796	1,530	1,269	1,308	1,263

This table includes non-IFRS financial information. Refer to section 6 of the Operating and Financial Review in the audited consolidated financial statements of the Company for the year ended 30 June 2021 for an explanation and reconciliation of non-IFRS terms.

<sup>(1)</sup> Underlying profit is profit after tax before significant items attributable to owners of the parent.

<sup>(2)</sup> Free cash flow is calculated as cash flow from operating activities less cash flow related to investing activities. Free cash flow (before M&A activity) is calculated as free cash flow excluding investing activities relating to M&A investments and business divestments.

<sup>(3)</sup> Net debt to EBITDA is calculated as net debt at the end of the reporting period divided by the rolling 12 month EBITDA.

<sup>(4)</sup> Gearing ratio is calculated as net debt at the end of the reporting period divided by net debt plus equity.

<sup>(5)</sup> Opening share price on 1 July 2016 was A\$23.00.

<sup>(6)</sup> Basic EPS is calculated as net profit after tax and non-controlling interests (statutory profit) divided by the weighted average number of ordinary shares. Underlying earnings per share is calculated as net profit after tax and non-controlling interests and before significant items (underlying profit) divided by the weighted average number of ordinary shares.

<sup>(7)</sup> Represents dividends determined in respect of the financial year.

<sup>(8)</sup> AISC metrics as per World Gold Council Guidance Note on Non-GAAP Metrics. See section 4.4.2 for further detail. Newcrest's AISC will vary from period to period as a result of various factors including production performance, timing of sales, the level of sustaining capital and the relative contribution of each asset.

The graphs below show Newcrest's performance over the last five years for metrics used for multiple years to determine the business component of STI awards, before any adjustments as a result of the exercise of Board discretion. Where no values are shown in the graphs for particular years, they represent years where it was not a business performance measure for STI purposes.

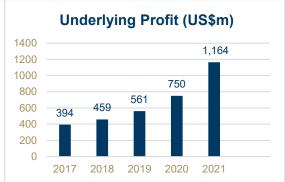


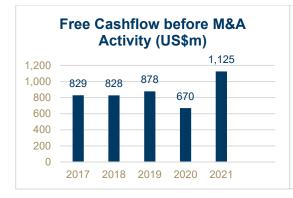














# 5.3. STI Outcomes for 2021 financial year

# 5.3.1. Performance against STI objectives

STI outcomes are determined based on business and personal performance. When assessing personal performance, as well as considering the outcomes, consideration is given to whether the outcomes have been achieved in a manner that is consistent with the Company's values and standards and risk management processes.

Element	Weight	Performance <sup>(</sup>	1)		Description
		Threshold	Target	Maximum	
Business Measures	60%				
Safety (1) – TRIFR	3%				• TRIFR of 2.26 was below the target of 2.4.
Safety (2) - Quality of SPI Incident Investigations	3%		•		88% investigation quality and 98% action verification exceeded Target.
Safety (3) - Critical Control Management Action Close Out on time	3%			•	99% completion of CCM Action close outs on time, which was above the Maximum level.
Safety (4) – Process Safety incident reviews	3%		•		96% of Process Safety incident review actions were completed on time, which was above the Target.
Sustainability (1) – Greenhouse gas emissions	3%			•	Abatement plans were developed ahead of schedule and more actions were closed on time than was required to achieve Maximum.
Sustainability (2) – Improved water efficiency	3%			•	Efficiency plans were developed ahead of schedule and more actions were closed on time than was required to achieve Maximum.
Earnings - NPAT before significant items (US\$m)	15%		•		Outcome of \$752m (above Target), inclusive of adjustments <sup>(1)</sup> (which reduced the outcome from Maximum as per the reconciliation on the next page).
Cost - AISC/oz (US\$)	12%	•			Outcome of \$993/oz (below Target), inclusive of adjustments <sup>(1)</sup> (which reduced the outcome from above Target).
Cash flow: FCF (US\$m)	15%			•	<ul> <li>Outcome of \$848m, inclusive of adjustments<sup>(1)</sup> (which reduced the outcome but still achieved Maximum).</li> </ul>
Total Business outcome			•		The total business outcome was 149%.

Element	Weight	Performance <sup>(1)</sup>	Description
		Threshold Target	Maximum
Personal Measures (Sandeep Biswas – CEO)	40%		
Safety and Sustainability	5%		Excellent progress on     Process Safety roadmap,     actions and incidents, and     good progress on embedding     protocols for delivering on     industry commitments.
People	5%	•	Organisational Health was below minimum.     Gender diversity and organisational capability improved.
Operating Performance	14%	•	Achieved Maximum for Free Cash Flow and Edge L4 cash delivery. Gold production was around Target and Risk Culture demonstrably matured.
Technology & Innovation	4%	•	Exceeded Targets for probability weighted NPV for innovation portfolio and for progress of and towards breakthroughs, e.g. high temperature explosives, automated mining, selective steep wall pits, in-mine sensing and hive mining.
Profitable Growth	12%	•	Excellent exploration results at Red Chris and Havieron, and development well progressed. Most aspects of Cadia expansion on or ahead of Target.
Personal Measures (Gerard Bond – CFO)	40%		
Safety and Sustainability	3%	•	Significantly exceeded targets on majority of Modern Slavery priorities.
People	5%	•	Excellent talent management     Missed Minimum for     Organisational Health.
Operating Performance	16%	•	Achieved Maximum for Free Cash Flow and Edge L4 cash delivery. Group site costs missed Minimum but Group capex was on scope and on budget.
Technology & Innovation	2%	•	Significantly exceeded Target on Cadia's Power Purchase Agreement.

Element	Weight	ht Performance <sup>(1)</sup>			Description		
		Threshold	Target	Maximum			
Profitable Growth	14%		•		Exceeded Target on Business Development projects. Successful TSX listing and implementation.		
Personal Measures (other Executives)	40%						
Individual measures based on initiatives and key project deliverables linked to company strategy and performance					Outcomes against individual measures for the remaining Executives ranged from 0% to 200%.		

<sup>(1)</sup> As described in section 4.4.2, adjustments are for the effect of commodity prices, foreign exchange rates, transactions related to M&A activity and other items determined by the Board which are considered to be outside the control of Management and/or in the interests of shareholders. The Board uses guiding principles to apply adjustments consistently each year, where the Board considers it appropriate to do so. In FY21 the Board used discretion to make minor adjustments to the financial metrics to reverse the costs of a seismic event at Telfer and one-off costs resulting from early extinguishment of debt. COVID-19 led to additional unbudgeted costs (primarily related to labour, medical and accommodation) of \$32 million (pre-tax) and had further productivity impacts. The Board determined that no adjustment would be made to reflect these additional COVID-19 related costs. The unadjusted values for financial business metrics are NPAT (\$1,164m), FCF (\$1,104m) and AISC (\$911/oz).

# Reconciliation of Earnings and Free Cash Flow measures for the 2021 financial year

A reconciliation of the Earnings measure outcome to statutory profit is detailed below:

	2021 US\$m	2020 US\$m
Statutory profit	1,164	647
Add back: Significant items after tax <sup>(1)</sup>	-	103
Underlying profit	1,164	750
Adjust: Board agreed adjustments(2)	(412)	(285)
Earnings measure	752	465

<sup>(1)</sup> Refer to section 2.7 of the Operating and Financial Review for details of significant items.

A reconciliation of the Free Cash Flow measure outcome to the statutory cashflow is detailed below:

	2021 US\$m	2020 US\$m
Cash flows from operating activities	2,302	1,471
Cash flows from investment activities	(1,198)	(2,092)
Free cash flow	1,104	(621)
Add back: M&A activity <sup>(1)</sup>	21	1,291
Free cash flow (before M&A activity)	1,125	670
Adjust: Board agreed adjustments <sup>(2)</sup>	(277)	(256)
Free Cash Flow measure	848	414

<sup>(1)</sup> Refer to section 3 of the Operating and Financial Review for details.

<sup>(2)</sup> Represents adjustments for the effect of commodity prices, foreign exchange rates and other significant items determined by the Board which are considered to be outside the control of Management.

<sup>(2)</sup> Represents adjustments for the effect of commodity prices, foreign exchange rates and other significant items determined by the Board which are considered to be outside the control of Management.

# 5.3.2. STI outcomes for all Executives for the 2021 financial year

The table below summarises achievement against the performance conditions and final STI outcomes for all Executives for the 2021 financial year.

Executive	% of STI Target Awarded <sup>(1)</sup>	Total STI Awarded <sup>(2)</sup> US\$'000	Proportion of Total STI Restricted (%) <sup>(3)</sup>	% of Max STI Opportunity Forgone
Sandeep Biswas	139.8	2,505	50	30.1
Gerard Bond	139.8	835	50	30.1
Craig Jones	133.4	508	50	33.3
Philip Stephenson	141.4	538	50	29.3
Suresh Vadnagra	133.8	510	50	33.1

<sup>(1)</sup> The assessment against personal measures for the Executives (which represent 40% of the award) ranged from 55% to 65% of maximum.

# 5.4. Vesting Outcomes for 2017 LTIs

Following the completion of the performance period from 1 July 2017 to 30 June 2020, the 2017 LTI Rights vested on 23 November 2020 at 65.66% of maximum based on the assessment of performance against the applicable measures.

Element Weighting Performance Achieved		Percentage of Total LTI Award Vesting		
Comparative Cost	33.3%	24 <sup>th</sup> percentile (3-yr avg)	33.3%	
ROCE	33.3%	12.7% (3-yr avg) <sup>(1)</sup>	32.3%	
Relative Total Shareholder Return (TSR)	33.3%	NCM share price underperformed the S&P/TSX Global Gold Total Return Index by 6.5 percentage points over the period	0.00%	
Total Vesting			<b>65.66%</b> (34.34% lapsed)	

<sup>(1)</sup> The 3-year ROCE average includes adjustments to FY18 consistent with adjustments that applied for the purposes of the STI for the 2018 financial year. This reflected adjustments for non-controllable items such as the 2017 Cadia seismic event. In addition, adjustments have been made to allow for Development Projects that are not yet in commercial production. This amounted to an average reduction in the Capital Employed of \$980m, representing approximately 12% of the pre-adjusted Capital Employed.

#### 5.5. Estimated Vesting of LTI Rights in the 2022 financial year (2018 LTIs)

The 2018 LTI Rights vested on 22 November 2021. The vesting outcome was 66.67%. The performance conditions which applied to the 2018 LTIs were the same as for the 2017 LTIs detailed above, i.e.: Comparative Cost (33.3%), ROCE (33.3%) and Relative TSR (33.3%). Additional details on the performance standards attached to each performance condition were disclosed in the 2019 Remuneration Report that can be found in the Company's Annual Financial Report for the year ended 30 June 2019.

<sup>(2)</sup> Amounts have been translated from Australian dollars to US dollars using the average exchange rate for the financial year.

<sup>(3)</sup> Proportion of the Total STI awarded which will comprise restricted shares.

# 6. EXECUTIVE SERVICE AGREEMENTS AND TERMINATION AND CHANGE OF CONTROL BENEFITS FOR KMP

Remuneration and other terms of employment for the Executives are formalised in Executive Service Agreements (ESAs). Each of the ESAs provides for the payment of fixed remuneration, an opportunity to participate in incentive plans (performance based at risk remuneration), employer superannuation contributions, other benefits such as, death and disablement insurance cover via the Newcrest Superannuation Plan, and salary continuance cover. The ESAs do not have a fixed end date. The remuneration for each Executive during the 2021 financial year is detailed in sections 2.2 and 9.1, and positions held are detailed in section 1.

Set out below is a summary of the minimum notice periods for termination set out in the ESAs. The difference in notice period for the Executives arose due to a general change in policy.

	Executive notice	Newcrest notice	Newcrest notice for
			cause
Sandeep Biswas	3 months	12 months	Immediate
Gerard Bond	3 months	12 months	Immediate
Craig Jones	6 months	12 months	Immediate
Philip Stephenson	6 months	12 months	Immediate
Suresh Vadnagra	6 months	12 months	Immediate

The table below sets out the amounts and benefits payable if an Executive experienced a termination event or Newcrest underwent a change of control, in each case, on the last day of the 2021 financial year (being 30 June 2021). The amounts and benefits payable are conditional on the Executive authorising Newcrest to deduct any amounts required to pay or discharge any debt or liability the Executive may owe to Newcrest.

**Termination without** 

	cause or termination for fundamental change <sup>(2)</sup>		Retirement <sup>(3)</sup>		Change of Control <sup>(4)(5)(6)</sup>	
Executive	A\$'000	US\$'000	A\$'000	US\$'000	A\$'000	US\$'000
Sandeep Biswas						
Payment in lieu of notice <sup>(1)</sup>	2,400	1,804	600	451	-	-
Non-Equity STI Awards	-	-	-	-	-	-
Equity Awards (STI and LTI)	-	-	-	-	7,864	5,912
Gerard Bond						
Payment in lieu of notice(1)	1,000	752	250	188	-	-
Non-Equity STI Awards	-	-	-	-	-	-
Equity Awards (STI and LTI)	-	-	-	-	1,996	1,501
Craig Jones						
Payment in lieu of notice <sup>(1)</sup>	850	639	425	320	-	-
Non-Equity STI Awards	-	-	-	-	-	-
Equity Awards (STI and LTI)	-	-	-	-	1,296	974
Philip Stephenson						
Payment in lieu of notice <sup>(1)</sup>	850	639	425	320	-	-
Non-Equity STI Awards	-	-	-	-	-	-
Equity Awards (STI and LTI)	-	-	-	-	1,299	977
Suresh Vadnagra						
Payment in lieu of notice <sup>(1)</sup>	850	639	425	320	-	-
Non-Equity STI Awards	-	-	-	-	-	-
Equity Awards (STI and LTI)	-	-	-	-	240	180

The amounts above are payable in Australian dollars and have been translated to US dollars using the exchange rate as at 30 June 2021 of 0.7518.

<sup>(1)</sup> Payment of base salary and superannuation in lieu of notice is not guaranteed. Executives are often required to work all or a portion of notice periods.

- (2) Executives who terminate without cause or for fundamental change are treated as good leavers and receive no incremental STI or LTI benefit. Instead, STIs and LTIs are pro-rated based on the period of time that has elapsed, and then are paid in accordance with the original terms and conditions (including performance conditions and vesting/payment schedule).
- Retirement is effectively resignation for the purposes of determining the notice period. Generally, the notice period is worked for retirement, but the values shown here assume that the notice period has been paid in lieu.
- (4) On a change of control, STIs are not accelerated and remain payable under the normal timeframes and subject to the agreed performance conditions. 50% of STIs would ordinarily be deferred for 1 and 2 years. At the discretion of the acquiring company, this deferred component may be paid at the same time as the cash component, or it could remain deferred and delivered in accordance with the agreed vesting schedule.
- (5) The Board has broad discretion to determine vesting of LTIs on a change of control. The calculations presented in this table are based on vesting of LTIs at 100%, prorated based on the period of time that has elapsed prior to the change of control, and waiver of performance conditions. FY19 deferred STIs are also included in the calculations, as they would otherwise be forfeitable on resignation but vest on a change of control. For Suresh Vadnagra, a further A\$88k is included for unvested Sign-On Rights that would likely convert to shares. Restricted STI shares for FY20 onwards, and LTI shares in holding locks, are not included because they are not generally forfeitable and do not therefore represent an incremental benefit on change of control.
- (6) Valuations are based on the Newcrest share price on 30 June 2021, being \$25.28.

On cessation of employment, STI or LTI awards vest, lapse or are forfeited in accordance with the relevant plan rules as highlighted in the table above. Refer to sections 4.4 and 4.5 for further details.

On termination of employment, the Executives continue to be bound by confidentiality and protection of intellectual property obligations and restrictive covenants. In the case of each Executive, the restricted covenants include a non-competition and non-solicitation obligation.

During the 2021 financial year, it was announced that Gerard Bond would leave Newcrest in early 2022. On cessation of employment, Gerard Bond is entitled to receive payment in lieu of notice (where applicable) and his statutory entitlements (including accrued annual and long service leave), and retain a portion of his equity incentives (which will continue to be treated in accordance with the applicable terms of grant and plan rules). Details of Gerard Bond's arrangements will be disclosed in Newcrest's 2022 Statement of Executive and Director Compensation.

# 7. NON-EXECUTIVE DIRECTORS' REMUNERATION

# 7.1. Remuneration Policy

The Non-Executive Director (**NED**) fees and other terms of appointment are set by the Board. NEDs are paid by way of a fixed Director's fee and Committee fees commensurate with their respective time commitments and responsibilities. The level and structure of the fees is based upon the need for the Company to attract and retain NEDs of suitable calibre, the demands of the role and prevailing market conditions.

In order to maintain impartiality and independence, NEDs do not receive any performance-related remuneration and are not entitled to participate in the Company's short and long term incentive schemes. NEDs are not provided with any retirement benefits, other than statutory superannuation contributions.

#### 7.2. Fee Pool

The maximum amount of fees (including superannuation contributions) that can be paid to NEDs is capped by a pool approved by shareholders. At the Annual General Meeting held on 28 October 2010, shareholders approved the current aggregate fee pool of A\$2,700,000 per annum (US\$2,016,090).

#### 7.3. Fee Structure

In reviewing the level of fees, the Board obtains independent market data from its remuneration adviser, KPMG, primarily (but not exclusively) in relation to ASX listed companies with market capitalisations ranked between 11-40. Base Board fees were increased by 5% with effect from 1 January 2021 as a result of the 2020 review. No change was made to Committee fees. No change is intended to be made to base Board or Committee fees during the 2022 financial year. The aggregate fees are currently 28% below the aggregate fee pool approved by shareholders.

The table below outlines the main Board and Committee fees as at 30 June 2021.

Fees (per annum) <sup>(1)</sup>	Chairmar	า	Member		
. ,	A\$'000	US\$'000	A\$'000	US\$'000	
Board <sup>(2)</sup>	630	470	210	157	
Audit & Risk Committee	55	41	28	21	
Safety & Sustainability Committee	44	33	22	16	
HRR Committee	44	33	22	16	

<sup>(1)</sup> Board and Committee fees have been translated from Australian dollars to US dollars using the average exchange rate for the 2021 financial year.

Under the Company's Constitution, NEDs may be reimbursed for reasonable travel, accommodation and other expenses incurred while engaged on the business of the Company. NEDs may also be remunerated for additional services, for example, if they undertake specialist or consulting work on behalf of the Company outside the scope of their normal Director's duties. No fees for additional services were paid to NEDs for the 2020 or 2021 financial years.

#### 8. SHAREHOLDINGS

# 8.1. Minimum Shareholding Policy

The Company has a Minimum Shareholding Requirement Policy which requires that KMP hold at least the following value of Newcrest shares. The intent of the policy is to align the interests of KMP with those of our shareholders. Progress is monitored on a regular basis. As at 30 June 2021, each current KMP who has been KMP for at least the period set out below has met this requirement.

	Minimum requirement	Deadline for achieving shareholding (from the later of appointment or 1 July 2015)
CEO	100% of TFR in shares	5 years
Executives	50% of TFR in shares	5 years
NEDs	One year's total annual fees in shares	3 years

<sup>(2)</sup> The Chairman of the Board does not receive any additional payments for his role as Chairman or Member of any Committee.

# 8.2. Executive Shareholdings

A summary of shareholdings of Executives, including their closely related parties, as at 30 June 2021 are set out below.

		Grant remune		Net other		Value based on	Percentage
Executive	Opening balance <sup>(1)</sup>	STIs(2)	LTIs <sup>(3)</sup>	move- ments <sup>(4)</sup>	Closing balance <sup>(5)</sup>	VWAP <sup>(6)</sup> A\$'000	of TFR %
Sandeep Biswas	524,482	33,852	115,747	(93,027)	581,054	16,795	700
Gerard Bond	155,541	11,386	27,259	(58,620)	135,566	3,918	392
Craig Jones	72,942	5,350	17,334	(48,911)	46,715	1,350	159
Philip Stephenson	103,221	7,192	17,334	· -	127,747	3,692	434
Suresh Vadnagra	-	-	-	3,500	3,500	101	12

<sup>(1)</sup> Opening balance is as at 1 July 2020 for all Executives.

#### 8.3. Non-Executive Directors' Shareholdings

A summary of shareholdings of NEDs, including their closely related parties, as at 30 June 2021 is set out below.

	Opening balance <sup>(1)</sup>	Net other Movements <sup>(2)</sup>	Closing balance <sup>(3)</sup>	Value based on VWAP <sup>(4)</sup> A\$'000	Percentage of ongoing annual fees%
Non-Executive Directors					
Peter Hay	56,318	873	57,191	1,653	262
Philip Aiken AM	18,411	285	18.696	540	196
Roger Higgins	13,675	-	13,675	395	143
Sally-Anne Layman	-	4,150	4,150	120	46
Vickki McFadden	11,272	174	11,446	331	115
Peter Tomsett	21,172	328	21,500	621	239
Former Non-Executive Directors					
Xiaoling Liu	14,172	-	14,172	n/a	n/a

<sup>(1)</sup> Opening balance is as at 1 July 2020.

# 8.4. Securities Dealing Policy

The Company has a Securities Dealing Policy which prohibits the use by Directors, Executives and employees of hedging and derivatives such as caps, collars, warrants or similar products in relation to Newcrest securities, including shares acquired under the Company's equity incentive schemes, whether or not they are vested. The Policy also prohibits entry into transactions in associated products that operate to limit the economic risk of their security or interest holdings in the Company. Employees are not permitted to enter into margin loans in relation to Newcrest securities at any time without prior approval from the Chairman or Company Secretary. The Policy is available on the Company's website as follows: https://www.newcrest.com/about-newcrest/corporate-governance.

<sup>(2)</sup> Remuneration granted in FY21 includes shares allocated on 14 October 2020 in respect of 50% of an Executive's STI award for the STIs for the 2020 financial year. The number of shares granted was determined using the 5 day VWAP of A\$30.9806, calculated over the period 7 to 13 October 2020, being the five trading days prior to the date the cash STI payment was made.

<sup>(3)</sup> Represents the shares acquired on vesting and automatic exercise of 2017 LTI Rights.

<sup>(4)</sup> Net other movements represents the sale or purchase of shares.

<sup>(5)</sup> The closing balance is as at 30 June 2021 for current Executives, and as at the date of cessation of employment for former Executives.

<sup>(6)</sup> Based on VWAP for the period 1 July 2020 to 30 June 2021 of A\$28.9046.

<sup>(2)</sup> Net other movements represents the sale or purchase of shares or the acquisition of shares through the dividend reinvestment plan by Non-Executive Directors.

<sup>(3)</sup> For current Non-Executive Directors, the closing balance is as at 30 June 2021.

<sup>(4)</sup> Based on VWAP for the period 1 July 2020 to 30 June 2021 of A\$28.9046.

# 9. STATUTORY TABLES

# 9.1. Summary Compensation Table

Executives	Salary US\$'000	Super- annuation US\$'000	Short Term Incentive US\$'000	STI Restricted Shares US\$'000	LTI Rights US\$'000	All Other Compen- sation US\$'000	Total US\$'000
	(A)	(B)	(C)	(D)	(E)	(F)	
Sandeep Biswas	1,776	16	1,253	1,252	2,380	20	6,697
Gerard Bond	731	16	418	417	661	3	2,246
Craig Jones	618	16	254	254	468	2	1,612
Philip Stephenson	618	16	269	269	468	34	1,674
Suresh Vadnagra	618	16	255	255	468	70	1,682

The table above details the remuneration disclosures in respect of the 2021 financial year as calculated with reference to NI 51-102F6 and relevant accounting standards (where applicable). All Executives are compensated in Australian dollars. Remuneration has been presented in US dollars, consistent with Newcrest's presentation currency. All remuneration components have been translated from Australian dollars to US dollars using an average rate of 0.7467 (2020: 0.6715) except where otherwise stated in the associated footnotes below.

An explanation of the relevant remuneration items included in the table is provided in the associated footnotes. The figures provided in relation to share based payments are calculated in accordance with NI 51-102F6 and represent the fair value of equity instruments granted to Executives.

#### Notes to Executive Remuneration

- (A) Salaries comprise cash salary and available salary package options grossed up by related fringe benefits tax, where applicable, net of superannuation commitments, paid during the financial year. For former and new Executives, this balance is pro-rated for time served as KMP during the financial year. Refer to section 1 of this Report for further information as to the period for which each of the Executives was KMP during the 2021 financial year.
- (B) Represents Company contributions to superannuation under the Australian Superannuation Guarantee legislation (SGC). The Australian superannuation payment is required by legislation. It is made to a superannuation fund of the employee's choice. Employees can make additional contributions over and above those required to be paid by the Company.
- (C) Short Term Incentive refers to cash amounts earned as STIs. This represents 50% of the total STI awarded as detailed in section 5.3.2. The remaining 50% is awarded as restricted shares. Refer to item (D) below. The cash amount is paid in the following financial year.
- (D) Represents the 50% of the total STI earned in respect of the 2021 financial year awarded in the form of restricted shares (refer to section 4.4). The remaining 50% is payable in cash. Refer to item (C) above.
- (E) Represents the fair value of LTI Rights over unissued shares granted on 18 November 2020 pursuant to the 2020 LTI plan. The number of LTI rights awarded to each Executive is disclosed in section 9.4. The fair market value at the grant date has been calculated in accordance with IFRS 2 Share-based Payments. The Rights have been valued using a combination of the Monte Carlo simulation and Black-Scholes models. Valuations are as at the Grant Date.

The valuation model inputs included:

Grant date	18 Nov 2020
Share price at grant date	A\$28.95
Expected life of right	3 years
Exercise price	Nil
Risk-free interest rate	0.1%
Annualised volatility	30.0%
Expected dividend yield	1.2%
Fair value – A\$	A\$21.98
Exchange rate	0.7322
Fair value – US\$	US\$16.09

<sup>(</sup>F) All Other Compensation comprises travel costs, parking, insurance and applicable fringe benefits tax payable on these benefits.

#### 9.2. Executives – Incentive Plan Awards – Value Vested or Earned during the 2021 financial year

# **Number of Rights**

Executives	Opening balance <sup>(1)</sup>	2020 LTIs	Other Grants	Rights Lapsed/ Forfeited <sup>(2)</sup>	Vested and/or Exercised <sup>3)</sup>	Closing balance <sup>(4)(5)</sup>
Sandeep Biswas	527.150	147.871 <sup>(6)</sup>	_	(60,536)	(115,747)	498,738
Gerard Bond	129.220	41.075 <sup>(6)</sup>	_	(14,257)	(27,259)	128,779
Craig Jones	84,604	29,095	-	(9,066)	(17,334)	87,299
Philip Stephenson	84,604	29,095	-	(9,066)	(17,334)	87,299
Suresh Vadnagra	7,000	29,095	-	-	$(3,500)^{(7)}$	32,595

<sup>&</sup>lt;sup>(1)</sup> The opening balance is as at 1 July 2020.

Represents 2017 LTI Rights which lapsed or were forfeited (which were granted in the 2018 financial year).

<sup>(3)</sup> Represents 2017 LTI Rights that vested (which were granted in the 2018 financial year).

<sup>(4)</sup> The closing balance is assessed on 30 June 2021.

<sup>(5)</sup> These Rights are 'at risk' and will lapse or be forfeited in the event that the minimum prescribed conditions are not met by the Company or individual Executives, as applicable.

<sup>(6)</sup> Approval from Newcrest shareholders for the issuance of these Rights to Sandeep Biswas and Gerard Bond was obtained for the purpose of ASX Listing Rule 10.14 at the 2020 AGM.

Suresh Vadnagra was granted 7,000 Sign-On Rights in the 2020 financial year, 3,500 of which vested in the 2021 financial year as detailed in section 4.6. The remaining 3,500 Sign-On Rights granted to Suresh are due to vest on 18 May 2022 (or as soon as possible afterwards in accordance with Newcrest's Securities Dealing Policy), subject to adequate performance and continuing employment (other than in limited circumstances).

Non-equity incentive plan compensation – Value earned during

Executives	Share-bas	Share-based awards – Value vested during the year			
	LTI <sup>(1)</sup> US\$'000	STI <sup>(2)</sup> US\$'000	Sign-On <sup>(3)</sup> US\$'000	Total US\$'000	Total <sup>(4)</sup> US\$'000
Sandeep Biswas	2,392	1,137	-	3,529	1,253
Gerard Bond	563	371	-	934	418
Craig Jones	358	202	-	560	254
Philip Stephenson	358	212	-	570	269
Suresh Vadnagra	-	-	78	78	255

Represents 2017 LTI Rights that vested on 23 November 2020. The value of the shares has been determined based on the share price at the close of business on the vesting date of A\$28.33 (US\$20.67). These shares remain subject to a one year holding lock (i.e. they are not available for trading until 23 November 2021).

- (2) Represents the vesting of restricted STI shares. On 12 March 2021, ordinary Newcrest shares vested to:
  - Sandeep Biswas (39,094), Gerard Bond (12,816), Craig Jones (7,042) and Philip Stephenson (7,473) on vesting of restricted STIs awarded for the 2018 financial year.
  - Sandeep Biswas (22,019), Gerard Bond (7,139), Craig Jones (3,809) and Philip Stephenson (3,940) on vesting of restricted STIs awarded for the 2019 financial year.

The value of the restricted STI Shares which vested has been determined based on the share price at the close of business on the vesting date of A\$24.02 (US\$18.61).

- (3) Represents Sign-On Rights issued to Suresh Vadnagra that vested on the 18 May 2021. The value of the shares has been determined based on the share price at the close of business on the vesting date of A\$28.66 (US\$22.21).
- <sup>(4)</sup> This represents 50% of the total STI awarded as detailed in section 5.3.2.

#### 9.3. Executives – Total Value of Rights Granted and Exercised during the 2021 financial year

Executives	Accounting Fair Value of Rights Granted	Value of Rights Exercised
	US\$'000	US\$'000
	(A)	(B)
Sandeep Biswas	2,380	2,392
Gerard Bond	661	563
Craig Jones	468	358
Philip Stephenson	468	358
Suresh Vadnagra	468	78

The following assumptions have been applied to the table:

- (A) The accounting value of the 2020 LTI Rights reflects the fair value of a Right on the Grant Date, being US\$16.09 multiplied by the number of Rights granted during the year. This amount represents the maximum value which will be expensed over the performance period. The minimum value is nil if the performance and/or service conditions are not met.
- (B) The 2021 Rights which were exercised were 2017 LTIs and Sign-On Bonus. The value at the exercise date has been determined by the Company's share price at the close of business on the exercise date multiplied by the number of Rights exercised during the year ended 30 June 2021 (nil exercise price).

# 9.4. Executives – Outstanding Share-based Awards Held as at 30 June 2021

Financial Year	FY19	FY20	FY20	FY21	FY21	Balance at 30 June 2021
Туре	2018 LTI	2019 LTI	Other	2020 LTI	Other	
<b>Grant Date</b>	21 Nov 18	19 Nov 19	29 May 20	18 Nov 2020	27 July 2020	
VWAP for grant <sup>(1)</sup>	A\$20.49	A\$30.84	A\$28.57	A\$29.21	A\$31.27	
Future financial years in which rights may vest	FY22	FY23	FY22	FY24	FY22	
Sandeep Biswas	210,793	140,074	-	147,871	-	498,738
Gerard Bond	48,795	38,909	-	41,075	-	128,779
Craig Jones	30,643	27,561	-	29,095	-	87,299
Philip Stephenson	30,643	27,561	-	29,095	-	87,299
Suresh Vadnagra <sup>(2)</sup>			3,500	29,095		32,595

<sup>(1)</sup> Five day VWAP of Newcrest's share price prior to the Grant Date is used to determine the number of Rights offered under the 2018 LTI, 2019 LTI and 2020 LTI.

7,000 sign-on rights were granted to Suresh Vadnagra in part compensation for forgone equity awards with his previous employer. 3,500 sign-on rights vested as shares during FY21. The remaining 3,500 sign-on rights will vest during FY22.

Executives	Number of shares or units of shares that have not vested	Market or payout value of share-based awards that have not vested (1)	Market or payout value of vested share-based awards not paid or distributed	
		US\$'000	US\$'000	
Sandeep Biswas	498,738	9,481	-	
Gerard Bond	128,779	2,448	-	
Craig Jones	87,299	1,660	-	
Philip Stephenson	87,299	1,660	-	
Suresh Vadnagra	32,595	620	-	

<sup>(1)</sup> The value of the shares has been determined based on the share price at the close of business on 30 June 2021 of A\$25.28 (US\$19.01).

# 9.5. Non-Executive Directors Compensation Table

		Shor	t Term	Post Employmen		
	FY	Board Fees US\$'000	Committee Fees US\$'000	Super- annuation <sup>(1)</sup> US\$'000	Total <sup>(2)</sup> US\$'000	
Non-Executive Directors						
Peter Hay	2021 2020	443 389	:	16 14	459 403	
Philip Aiken AM	2021	151	49	2	202	
	2020	131	44	4	179	
Roger Higgins	2021	137	49	16	202	
	2020	120	44	14	178	
Sally-Anne Layman	2021	104	22	13	139	
	2020	-	-	-	-	
Vickki McFadden	2021	137	57	16	210	
	2020	120	52	14	186	
Peter Tomsett	2021	137	37	16	190	
	2020	120	33	14	167	
Former Non-Executive Directors						
Xiaoling Liu	2021 2020	54 127	13 33	7	67 167	
Total	2021	<b>1,163</b>	<b>227</b>	<b>79</b>	<b>1,469</b>	
	2020	1,007	206	67	1,280	

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# 9.6. Other Transactions with KMP

There were no loans made, guaranteed or secured, directly or indirectly, by the Company and any of its subsidiaries to KMP or their related parties during the year. There were no other transactions between the Company or any of its subsidiaries and any KMP or their related parties during the year.

<sup>(1)</sup> Represents Company contributions to superannuation under the SGC and insurance payments. The Australian superannuation payment is required by legislation. It is made to a superannuation fund of the employee's choice. Employees can make additional contributions over and above those required to be paid by Newcrest.

<sup>(2)</sup> Non-Executive Directors are compensated in Australian dollars. All remuneration components have been translated from Australian dollars to US dollars using an average rate of 0.7467 (2020: 0.6715).