Market Release

14 October 2020

Newcrest releases Annual Information Form

Newcrest Mining Limited (ASX, TSX, PNGX: NCM) has overnight released the attached Annual Information Form (AIF) dated 13 October 2020, for the financial year ended 30 June 2020, 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 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 edition (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 Reserves is based on and fairly represents information compiled by Mr Kevin Gleeson. Mr Gleeson is Newcrest's Head of Mineral Resource Management and a full-time employee of Newcrest Mining Limited. He is a shareholder in Newcrest and is entitled to participate in Newcrest's executive equity long term incentive plan, details of which are included in Newcrest's 2020 Remuneration Report. He is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Gleeson 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 AIF of the matters based on his information 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 2020 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.

Authorised by the Newcrest Disclosure Committee

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This information is available on our website at www.newcrest.com

ANNUAL INFORMATION FORM

of

NEWCREST MINING LIMITED

FOR THE YEAR ENDED JUNE 30, 2020

Dated as of October 13, 2020

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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, 2020, unless otherwise indicated. More current information may be available on Newcrest's public website at www.newcrest.com or on Newcrest's profile at the System for Electronic Document Analysis and Retrieval ("**SEDAR**") at www.sedar.com.

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," "objectives," "outlook", "guidance," or other similar words and include, without limitation, statements regarding estimated reserves and resources, certain plans, strategies and objectives of management, anticipated production or construction commencement dates, expected costs 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; (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) the outbreak of the novel coronavirus or similar outbreaks; (10) climate change; (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 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 local community relations; (34) 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 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**"); 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**").

The Cadia Report, Lihir 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. 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 Mr Kevin Gleeson, 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 the 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 after tax before significant items attributable to owners of the parent company), 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 Margin (realised gold price less AISC per ounce sold (where expressed as US$), or realised gold price less AISC per ounce sold divided by realised gold price (where expressed as a %)), Interest Coverage Ratio (earnings before interest, taxes, depreciation and amortisation ("**EBITDA**")/Interest payable for the relevant period), Free Cash Flow (cash flow from operating activities less cash flow related to investing activities), EBITDA margin (EBITDA expressed as a percentage of revenue) and earnings before interest and taxes ("**EBIT**") margin (EBIT expressed as a percentage of revenue). 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 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, 2020.

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, 2020, 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$			
Year Ended	**High**	**Low**	**Average Rate**	**End Rate**
June 30, 2020	1.45	1.30	1.34	1.36
June 30, 2019	1.36	1.28	1.32	1.31
June 30, 2018	1.33	1.21	1.27	1.31

On September 30, 2020, the exchange rate provided by the Bank of Canada was C$1.3339 = 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**	**End Rate**
June 30, 2020	1.20	1.06	1.11	1.07
June 30, 2019	1.10	1.02	1.06	1.09
June 30, 2018	1.04	0.98	1.02	1.03

On September 30, 2020, the exchange rate provided by the Bank of Canada was C$0.9545 = 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

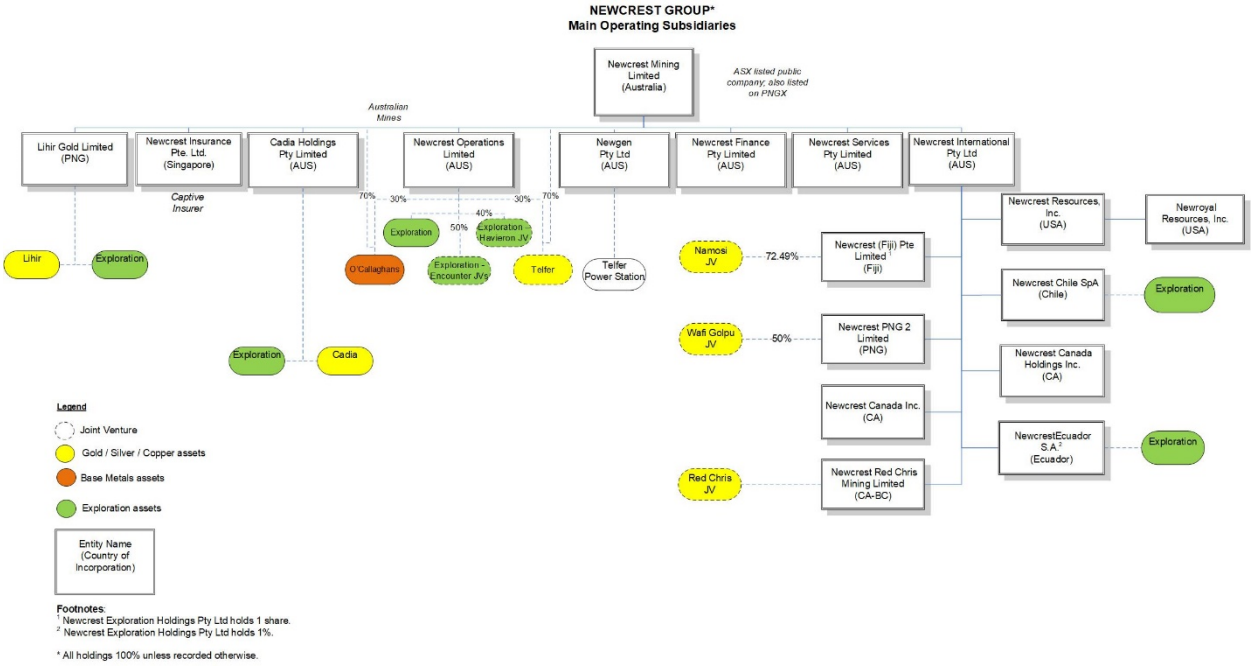
Newcrest is a corporation governed by the *Australian Corporations Act 2001 (Cth)* ("**Australian Corporations Act**"). The Company's ordinary shares are listed on ASX, the Toronto Stock Exchange ("**TSX**") and the PNG Exchange Market ("**PNGX**"). Newcrest also has American Depositary Receipts issued 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%
Newcrest Canada Inc.	Canada	100%
Newcrest Canada Holdings Inc.	Canada	100%
Newcrest Red Chris Mining Limited	Canada (British Columbia)	100%
Newcrest Chile SpA	Chile	100%
NewcrestEcuador S.A.	Ecuador	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 the largest gold producer listed on the ASX and 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, an interest in a potential development project in PNG, an equity holding in an operation in Ecuador, and exploration activities presently focused within Canada, Australia, Chile, the United States of America and Ecuador. As at September 30, 2020, Newcrest had a market capitalisation of A$25.5 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.

Three Year Corporate History

Application for a Special Mining Lease for Wafi-Golpu and Entry into Memorandum of Understanding

On August 25, 2016, the Wafi-Golpu Joint Venture ("**WGJV**") submitted an application for a Special Mining Lease ("**SML**") for the Wafi-Golpu Project with the Mineral Resources Authority of PNG. WGJV is a 50-50 joint venture between subsidiaries of Newcrest and Harmony Gold Mining Company Limited ("**Harmony**"). In December 2018, Newcrest and Harmony (the "**WGJV Participants**") entered into a Memorandum of Understanding ("**MOU**") with the State of Papua New Guinea, to affirm the parties' intention to proceed with the Wafi-Golpu Project, subject to finalisation of the permitting process and approvals of the Board of Directors of each of Newcrest and Harmony.

The validity of the MOU was challenged by the Governor of Morobe Province in the National Court in Lae, PNG, and a stay order granted. On February 11, 2020, the National Court dismissed the proceeding and the stay order. This followed the PNG Minister for Mining advising the WGJV Participants that the State of PNG had withdrawn its support for the MOU. In late April 2020, the PNG Prime Minister stated that the Wafi-Golpu Project remained one of the PNG Government's priority projects for development. The Governor of the Morobe Province appealed to the Supreme Court of Papua New Guinea against the dismissal of the proceeding. 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. 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.

Occurrence of Seismic Event near the Cadia Operation

On April 14, 2017, a seismic event occurred in the region of Newcrest's Cadia Operation. No injuries were sustained in the event. Following the event, underground operations at the Cadia East mine ("**Cadia East**") were suspended and surface operations continued uninterrupted. Remediation and upgrade work began shortly after the event and production at both panel caves had recommenced by September 2017. In June 2018 Newcrest received an insurance payment of US$155 million in respect of impacts arising from the seismic event. The long-term operation of Cadia East was not negatively affected by this seismic event, but note that seismicity is included in the "Risk Factors" section of this AIF under the heading "*Newcrest's mineral assets face geotechnical, geothermal and hydrogeological challenges, which could adversely impact Newcrest's production and profitability*."

Divestment of Bonikro Mine

On December 13, 2017, Newcrest signed an agreement to sell its 89.89% interest in the Bonikro Operation to a consortium consisting of F&M Gold Resources Ltd. and Africa Finance Corporation, for aggregate consideration of approximately US$81 million, comprising US$72 million in cash, and a net smelter royalty with an estimated value of US$9 million. The economic effective date of the sale was October 1, 2017.

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.

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 and Environment 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 the concept study for the repair of the NTSF, which was completed in the December 2019 quarter. The concept study identified three alternative plans for repairing the NTSF embankment slump, and the estimated costs for each of the options are below A$100 million and have preliminary completion dates in FY22. A pre-feasibility study is underway to select a single go-forward option, with study completion expected in the first quarter of FY21.

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 June 2020, the regulatory process commenced with the Department of Planning, Industry and Environment 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 centreline lift design. The statement of environmental effects in connection with the modification is expected to be submitted to the Department before the end of December 2020.

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.

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 at least 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 the remaining US$30 million payable in 18 months from completion.

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 have been disclosed on six occasions, with the most recent being in the Exploration Update released on ASX and PNGX on September 10, 2020. 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 is currently underway evaluating the development of an underground mine to exploit mineralisation at depth. Newcrest is preparing for its early works program which includes the commencement of exploration/geotechnical decline work, expected to occur by the end of calendar year 2020 or early 2021. Permitting activities for the exploration decline are underway.

Farm-in Agreement with Respect to Havieron Tenement

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. In April 2020, Newcrest announced its Stage 2 farm-in milestone at the Havieron Project. In accordance with the terms of the farm-in agreement, Newcrest earned a 40% interest in the project and provided notice to Greatland Gold that it was proceeding to Stage 3. Newcrest has the potential to earn up to a 70% joint venture interest through total expenditure of US$65 million and completion of a series of exploration and development milestones across a four-stage farm-in, over a six year period. Newcrest may also acquire an additional 5% interest at the end of the farm-in period at fair market value. Drilling results have been disclosed on ten occasions, with the most recent being in the Exploration Update released on ASX and PNGX on September 10, 2020. Drilling results continue to expand and demonstrate the continuity of high-grade mineralisation over a length of 450m, and to vertical depths of 600m. Drilling has also identified mineralised breccias proximal to high grade mineralisation.

Approval of Stage 1 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[1] (US$685 million for the first stage and US$175 million for the second stage, based on an exchange rate of A$/US$ 0.75) 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.

In June 2020, Newcrest commenced the process with the Department of Planning, Industry and Environment for a modification to increase the permitted processing capacity of the Cadia Operation from 32 Mt/a to 35 Mt/a. Development of the next panel cave, PC2-3, does not require further permitting as it is generally in accordance with the existing approval.

Inclusion in the ASX20

In December 2019, Newcrest Mining Limited was added to the S&P/ASX 20 Index.

Impact of COVID-19

Consistent with support and guidance from the World Health Organisation, advice from health experts, and in consultation with local and national governments and local and First Nation communities, Newcrest has implemented a range of precautionary measures to help prevent a spread of COVID-19 at its sites and its nearby communities, including changes to rosters and travel arrangements, health screening, social distancing procedures, increased cleaning, working from home arrangements, special leave arrangements, self-quarantine procedures, and communications and education programs to highlight safe and hygienic practices.

On April 7, 2020, Newcrest launched a A$20 million Community Support Fund to support host communities meet the challenges associated with the COVID-19 pandemic. A number of initiatives ranging from immediate health assistance to livelihoods and economic recovery have been funded to date in Papua New Guinea, Australia, British Columbia and Ecuador. Initiatives include a partnership with the University of Queensland to support vaccine research, contributing to the production of a new low-cost ventilator, and partnering with international organisations to deliver medical supplies, equipment, infrastructure and services in Papua New Guinea. Newcrest continues to work with its partners, host governments, communities and Indigenous Peoples to prioritise and deliver programs under the Fund in the most effective manner.

On August 10, 2020, Newcrest announced that it was managing a COVID-19 case in its isolation and treatment facility at Lihir Island. The individual, a PNG national, flew into Lihir from Port Moresby on July 30, 2020 and as per Newcrest's protocol was isolated along with the other arrivals in a designated isolation camp while testing was conducted and the 14 day isolation period completed. The person has since returned home, after completing their isolation period and testing negative. All people who travelled with the individual were subject to repeated testing and after completing their isolation period and testing negative on each occasion, commenced work.

[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 ±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.

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 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.

Lihir Front End Recovery Project[2]

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.

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 an interest in a potential development project in PNG, 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. These technologies are also being considered at the Red Chris Operation.

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.

[2] The Lihir Front End Recovery Project has been prepared with the objective that its findings are subject to an accuracy range of ±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.

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 is evaluating the development of an underground operation to exploit mineralisation at depth.

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**") (13.6%), 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.

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, 2020, 2019 and 2018, respectively.

Gold production and sales by site[1]

Site	Year ended June 30, 2020		Year ended June 30, 2019		Year ended June 30, 2018	
	Production (oz)	Sales (oz)	Production (oz)	Sales (oz)	Production (oz)	Sales (oz)
Cadia Operation	843,338	848,959	912,777	914,017	599,717	585,686
Lihir Operation	775,978	760,724	932,784	964,553	955,156	930,394
Telfer Operation	393,164	391,339	451,991	450,791	425,536	422,241
Gosowong Operation[2]	103,282	104,449	190,186	199,285	251,390	265,442
Bonikro Operation[3]	–	–	–	–	114,555	104,057
Red Chris Operation[4]	38,933	37,271	–	–	–	–
Fruta del Norte[5]	16,422	–	–	–	–	–
Total	**2,171,118**	**2,142,741**	**2,487,739**	**2,528,646**	**2,346,354**	**2,307,820**

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 represents Newcrest's 32% attributable share of production.
(2) As at December 31, 2019, Newcrest owned 75% of the Gosowong Operation through its holding in PTNHM. On January 31, 2020, Newcrest announced the divestment of its interest in the Gosowong Operation for total consideration of US$90 million. Economic ownership was transferred on December 31, 2019 with completion of the sale occurring on March 4, 2020. Production and financial outcomes for the current period represent Newcrest's period of ownership to the divestment date.
(3) Production from the Bonikro Operation includes production up to the divestment date of March 28, 2018.
(4) Production from the Red Chris Operation is from August 15, 2019, the date Newcrest acquired its 70% beneficial interest in the Red Chris Operation and surrounding tenements.
(5) Represents Newcrest's 32% attributable share of Fruta del Norte's production for the March 2020 quarter, as disclosed on 7 May 2020. Due to the COVID-19 pandemic, the Fruta del Norte mine was placed into temporary suspension on 22 March 2020 and was reopened on 5 July 2020. Accordingly, there was no production from the mine in the June 2020 quarter.

Newcrest's gold production during FY2020 was 13% lower than the prior year with lower production reflecting lower gold head grade milled at the Cadia Operation and the Lihir Operation, lower mill throughput at the Telfer Operation with the change to the 1.4 train strategy, and the divestment of the Gosowong Operation.

Copper production and sales by site[1]

Site	Year ended June 30, 2020		Year ended June 30, 2019		Year ended June 30, 2018	
	Production (t)	Sales (t)	Production (t)	Sales (t)	Production (t)	Sales (t)
Cadia Operation	96,042	96,437	90,841	91,010	61,764	60,927
Telfer Operation	16,278	16,283	15,025	15,047	16,212	16,390
Red Chris Operation[2]	25,302	24,432	–	–	–	–
Total	**137,623**	**137,152**	**105,867**	**106,057**	**77,975**	**77,317**

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 from the Red Chris Operation is from August 15, 2019, the date Newcrest acquired its 70% beneficial interest in the Red Chris Operation and surrounding tenements.

Copper production during FY2020 was 30% higher than the prior year, reflecting the new contribution of the Red Chris Operation as well as additional copper production from the Cadia Operation and the Telfer Operation.

Silver production and sales by site[1]

Site	Year ended June 30, 2020		Year ended June 30, 2019		Year ended June 30, 2018	
	Production (oz)	Sales (oz)	Production (oz)	Sales (oz)	Production (oz)	Sales (oz)
Cadia Operation	574,594	577,650	553,764	553,707	359,378	357,263
Lihir Operation	29,520	29,520	32,017	32,017	56,770	56,770
Telfer Operation	163,500	163,500	211,869	211,869	207,099	207,099
Gosowong Operation[2]	105,874	111,788	206,857	210,587	298,459	369,733
Bonikro Operation[3]	–	–	–	–	14,149	12,719
Red Chris Operation[4]	109,943	75,727	–	–	–	–
Total	**983,431**	**958,186**	**1,004,507**	**1,008,180**	**935,856**	**1,003,585**

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) As at December 31, 2019, Newcrest owned 75% of the Gosowong Operation through its holding in PTNHM. On January 31, 2020, Newcrest announced the divestment of its interest in the Gosowong Operation for total consideration of US$90 million. Economic ownership was transferred on December 31, 2019 with completion of the sale occurring on March 4, 2020. Production and financial outcomes for the current period represent Newcrest's period of ownership to the divestment date.
(3) Production from the Bonikro Operation includes production up to the divestment date of March 28, 2018.
(4) Production from the Red Chris Operation is from August 15, 2019, the date Newcrest acquired its 70% beneficial interest in the Red Chris Operation and surrounding tenements.

Production Guidance

Newcrest's guidance for the 2021 financial year, is as follows:

- gold production: 1,950-2,150 koz;
- copper production: 135-155 kt; and
- AISC spend: $1,800- $1,950 million.

Newcrest's guidance is subject to market and operating conditions and the production guidance numbers for FY21 assume no COVID-19 related interruptions. However, the AISC expenditure guidance for FY21 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 $30-40 million. This compares with the estimate of an additional ~$20 million of AISC spend to have been incurred on COVID-19 related matters in the 2020 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 late April 2020, the PNG Prime Minister stated that the Wafi-Golpu Project remained one of the PNG Government's priority projects for development. 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. 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 pre-feasibility study is underway applying Newcrest's technical capabilities in block caving to the Red Chris deposit. Newcrest has also initiated selected processing studies which will include coarse flotation and other forms of low-energy beneficiation. The studies, in combination with the optimisation work streams underway, will focus on determining the appropriate size of the open pit, and optimal timing to potentially move to underground block cave mining. Newcrest expects that the first block cave will target the high-grade mineralisation located beneath the current East Zone pit.

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[3] (US$685 million for the first stage and US$175 million for the second stage, based on an exchange rate of A$/US$ 0.75) and collectively look to pursue the development of the next panel cave, PC2-3, and expansion of plant capacity up to 35 Mt/a.

In June 2020, Newcrest commenced the process with the Department of Planning, Industry and Environment for a modification to increase the permitted processing capacity of the Cadia Operation from 32-33 Mt/a to 35 Mt/a. Development of the next panel cave, PC2-3, does not require further permitting as it is generally in accordance with the existing approval.

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 24 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 six key exploration provinces – the Golden Triangle in British Columbia (Canada), the Paterson Province (Western Australia) including the Havieron Project, the Tanami Province (Northern Territory and Western Australia), the Miocene Belt (Chile), the Great Basin (Nevada, United States of America) and Ecuador.

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 400m of post mineral cover. Newcrest commenced drilling during the June 2019 quarter and has increased drilling activity such that nine drill rigs are now operational. High-grade gold-copper mineralisation has been outlined within a folded sub-vertical arcuate sulphide zone over 450 m in extent, and in excess of 600 m vertically. Drilling has also identified mineralised breccias proximal to high grade mineralisation. Drilling results have been disclosed on ten occasions, with the most recent being released on ASX and PNGX on September 10, 2020.

In April 2020, Newcrest announced its Stage 2 farm-in milestone at the Havieron Project. In accordance with the terms of the farm-in agreement, Newcrest acquired a 40% interest in the project and informed Greatland Gold that it is proceeding to Stage 3. Stage 3 requires Newcrest to spend an additional US$25 million in relation to the Havieron Project and deliver a pre-feasibility study for the project within 24 months from the date of completion of the Stage 2 farm-in milestone. If Newcrest is able to meet these Stage 3 requirements, it will earn an additional 20% farm-in interest in the project. If Newcrest is also able to meet the Stage 4 requirements, it will earn an additional 10% interest in the project by spending an additional US$20 million within 24 months of completion of Stage 3. Newcrest can extend Stages 3 and 4 by up to 12 months each. 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. Newcrest will continue infill drilling to support the objective of delivery of an initial mineral resource estimate in the December 2020 quarter. Studies are underway to investigate the potential of starting an exploration decline by the end of calendar year 2020 or early 2021, selective and bulk underground mining options and the potential to achieve commercial production within two to three years from the commencement of the decline.

[3] 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 ±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.

Newcrest has recently obtained the mining lease for the project, which is one of the approvals necessary to progress the development of Havieron.

Since acquiring a 70% interest in, and operatorship of, the Red Chris Operation and surrounding tenements in British Columbia, Canada, Newcrest has commenced two drilling programs. The first is the East Zone Resource Definition program which is designed to obtain geological, geotechnical and metallurgical data to support future studies for underground block cave mining. The second is the Brownfields Exploration program which is focused on searching for higher grade mineralisation within the Red Chris porphyry corridor. In the East Zone, infill resource drilling results since acquisition have confirmed the presence of multiple discrete higher grade 'pods' of mineralisation. Drilling results returned to date continue to confirm the potential of finding additional discrete high grade 'pods' of mineralisation in the porphyry corridor. Drilling results have been disclosed on six occasions, with the most recent being on September 10, 2020. A prefeasibility study is currently underway evaluating the development of an underground mine to exploit mineralisation at depth. Newcrest is preparing for its early works program which includes the commencement of exploration/geotechnical decline work, expected to occur by the end of calendar year 2020 or early 2021. Permitting activities for the exploration decline are underway.

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 km^2 surrounding the Telfer operation and is also in close proximity to Havieron. The initial work program, which commenced in the first quarter of FY21, included an Airborne Electro-Magnetic ("**AEM**") survey aimed at prioritising drill targets. Subsequent work programs following the receipt and interpretation of the AEM data will be prepared by Newcrest and considered by a technical committee comprised of Newcrest and Antipa representatives.

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 have commenced which are aimed at generating drill targets.

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

Relative cost position. Newcrest believes that its cost profile compares favorably to the industry. Newcrest's first quartile AISC for FY2020 was US$862 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 24 years ("reserve life" is indicative and calculated as reported total Proven and Probable Gold Mineral Reserves (contained metal) as at December 31, 2019, divided by reported production on a gold basis only for the 12 months ended June 30, 2020. 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 Hill, 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 wholly-owned 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.

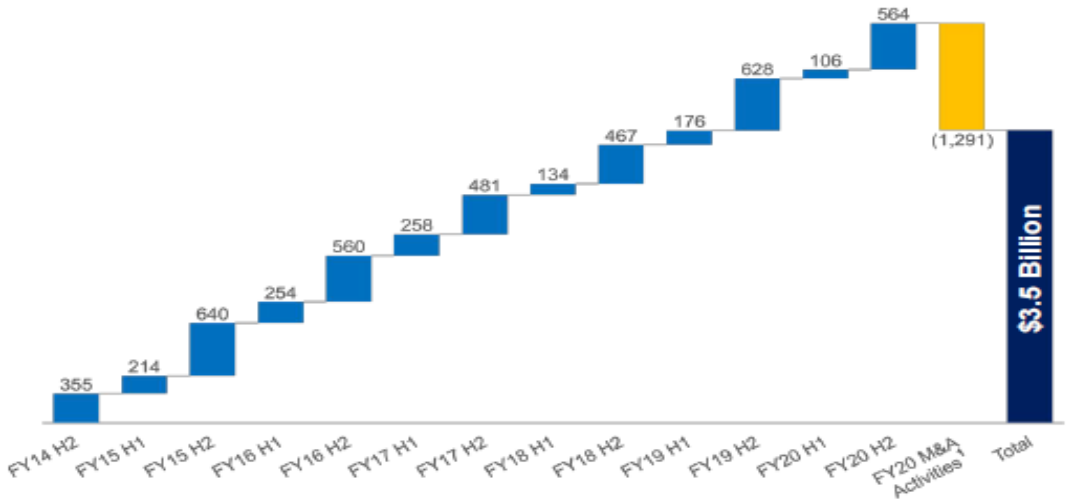
Investment grade credit rating. Newcrest's long-term credit ratings from each of Standard & Poor's Rating Services ("**S&P**") and Moody's Investors Service, Inc. ("**Moody's**") are BBB and Baa2 respectively.

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. Our key financial policy metrics and targets, along with recent results, are as follows:

Element	Targets	Actual: as at June 30, 2018	Actual: as at June 30, 2019	Actual: as at June 30, 2020
Leverage ratio (Net Debt / EBITDA).....	Less than 2.0x (for trailing 12 months)	0.7x	0.2x	0.3x
Gearing Ratio (Net debt / Net debt + Equity).....	Less than 25%	12.2%	4.9%	6.8%
Credit rating.....	Investment grade	Investment grade	Investment grade	Investment grade
Coverage (cash and committed undrawn bank facilities).....	At least US$1.5 billion, ~1/3 in cash	US$3.0 billion (US$953 million cash)	US$3.6 billion (US$1,600 million cash)	US$3.5 billion (US$1,451 million cash)

As of June 30, 2020, Newcrest had total assets of US$13,242 million. In FY2020, Newcrest generated EBITDA of US$1,835 million, and Underlying Profit of US$750 million, and had cash flow from operations of US$1,471 million. Newcrest had net debt (debt less cash) of US$624 million as at June 30, 2020.

Cumulative free cash flow (US$ million)



Note 1: Cash investment in "FY2020 M&A activities" comprises 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 the 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

Newcrest's vision is to be the Miner of Choice for its people, shareholders, host communities, partners and suppliers. Newcrest's mission is to deliver superior returns from finding, developing and operating gold-copper mines, and Newcrest believes that its edge is being agile, bold and having an owner's mindset. Newcrest's company strategy focuses on five key pillars:

Safety and Sustainability. 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. 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.

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.

Operating performance. 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.

Technology & Innovation. 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.

Profitable Growth. 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 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 FY2020, sales of gold represented 82.6% of Newcrest's total net sales revenue. Sales of copper represented 17.1% of Newcrest's total net sales revenue. Newcrest is, and intends to remain, a largely unhedged gold producer.

Recent Developments

The COVID-19 Pandemic

Newcrest is continuing to closely monitor the COVID-19 situation and its potential impact on its operations and activities. Newcrest's primary focus is on minimising the risk of the virus reaching its sites and on developing and implementing plans to manage the implications of COVID-19 on its business. 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:

- passenger screening and health checks for persons travelling to and from Newcrest's fly-in-fly-out ("**FIFO**") operations including Rapid Diagnostic Testing ("**RDT"**) before entry to Telfer and Polymerase Chain Reaction ("**PCR**") testing before entry to Lihir;
- health screening for people entering Newcrest's drive-in drive-out operations, including PCR testing for contractors travelling from outside the region;
- health screening for people entering Newcrest's offices;
- physical distancing requirements throughout Newcrest's operations;
- working from home arrangements where personnel are not required to work on site;
- special leave arrangements for employees directly or indirectly impacted by COVID-19;
- self-quarantine requirements for those who have travelled internationally for business or personal purposes in the past 14 days, and any travellers who have been in contact with a person diagnosed with or suspected of having COVID-19;

- identification of those in Newcrest's workforce who may be immuno-compromised, or undergoing any medical treatment that may make them more susceptible to contracting COVID-19, and encouragement not to come to work;
- regular engagement with local communities on Newcrest's site practices in relation to COVID-19;
- active engagement with all key suppliers to enable continuity of supply of goods and services, including identifying alternative sources should the supply chain be disrupted;
- active engagement with customers and Newcrest's refineries to help protect against reductions in demand for, or the ability to receive and process, Newcrest's copper-gold concentrate and doré; and
- a communications and education program with the workforce at all sites highlighting safe and hygienic practices to minimise the spread of infection at work and home.

Newcrest mines have remained operational throughout the COVID-19 pandemic. 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. Currently, the transport of copper-gold concentrate through Blayney and Port Kembla remains open.
- Lihir Operation. In March 2020, Newcrest announced a temporary suspension of flying personnel to Aniolam Island as a precaution due to heightened concerns surrounding COVID-19. This suspension was lifted on 14 June 2020. Throughout the suspension, the Lihir port remained open to allow the receipt of key supplies and doré continues to be able to be transported to the Perth Mint. On August 10, 2020 Newcrest announced that it was managing a COVID-19 case in its isolation and treatment facility at Lihir Island. The individual, a PNG national, flew into Lihir from Port Moresby on July 30, 2020 and as per Newcrest's protocol was isolated along with the other arrivals in a designated isolation camp while testing was conducted and the 14 day isolation period completed. The person has since returned home, after completing their isolation period and testing negative. All people who travelled with the individual were subject to repeated testing and after completing their isolation period and testing negative on each occasion, commenced work. Newcrest continues to work with local government and communities to implement measures that reduce the risk of transmission of COVID-19.
- Telfer Operation and Havieron Project. Newcrest altered employee rosters to minimise travel and group interaction. In March 2020, Newcrest also suspended drive-in drive-out activities and in person engagement with surrounding communities to minimise the risk of community transmission of COVID-19. Newcrest is continuing to work with local stakeholders to identify and support COVID-19 related issues.
- Red Chris Operation. The mining and processing operations of Red Chris are exempt from certain COVID-19 related restrictions in British Columbia as the COVID-19 related measures Newcrest implemented in this province meet or exceed those mandated by law. Newcrest has implemented additional 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.

On March 22, 2020, Lundin Gold, in which Newcrest owns an equity interest, 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 in Ecuador amid growing concerns regarding the spread of COVID-19. Operations at Fruta del Norte restarted on July 5, 2020.

Mineral Reserves and Mineral Resources

The Mineral Reserve estimates reported in this AIF have been approved by Mr Kevin Gleeson, 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 Mr Kevin Gleeson, 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, 2020 are shown below.

Long Term Metal Price Assumptions	Newcrest and WGJV
Mineral Resource Estimates	
Gold – US$/oz	1,300.00
Copper – US$/lb	3.40
Silver – US$/oz	21.00
Molybdenum – US$/lb	10.00
Mineral Reserve Estimates	
Gold – US$/oz	1,200.00
Copper – US$/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 of 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, 2020, 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, 2020

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

Gold Mineral Reserves	Proven Mineral Reserves		Probable Mineral Reserves		Total Proven and Probable Mineral Reserves[(1)]		
	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	–	–	1,400	0.44	1,400	0.44	19
Ridgeway Underground	–	–	80	0.54	80	0.54	1.4
Total Cadia Operation							**21**
Main Dome Open Pit (incl. stockpiles)	6.7	0.40	1.9	0.44	8.6	0.41	0.11
West Dome Open Pit	–	–	38	0.79	38	0.79	0.96
Telfer Underground	–	–	0.63	3.2	0.63	3.2	0.065
Total Telfer Operation							**1.1**
Lihir Operation	81	1.9	230	2.4	310	2.3	23
Total Operational Provinces							**45**
Non-Operational Provinces							
WGJV – Golpu (50%)[(2)]	–	–	200	0.86	200	0.86	5.5
Total Non-Operational Provinces							**5.5**
Total Gold Mineral Reserves							**50**

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) 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.

Copper Mineral Reserves	Proven Mineral Reserves		Probable Mineral Reserves		Total Proven and Probable Mineral Reserves[1]		
	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	–	–	1,400	0.29	1,400	0.29	4.0
Ridgeway Underground	–	–	80	0.28	80	0.28	0.23
Total Cadia Operation							**4.2**
Main Dome Open Pit (incl. stockpiles)	6.7	0.082	1.9	0.082	8.6	0.082	0.0071
West Dome Open Pit	–	–	38	0.078	38	0.078	0.029
Telfer Underground	–	–	0.63	0.42	0.63	0.42	0.0026
O'Callaghans	–	–	44	0.29	44	0.29	0.13
Total Telfer Operation							**0.17**
Total Operational Provinces							**4.4**
Non-Operational Provinces							
WGJV – Golpu (50%)[2]	–	–	200	1.2	200	1.2	2.5
Total Non-Operational Provinces							**2.5**
Total Copper Mineral Reserves							**6.8**

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) 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.

Silver Mineral Reserves	Proven Mineral Reserves		Probable Mineral Reserves		Total Proven and Probable Mineral Reserves[1]		
	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 Operation	–	–	1,400	0.77	1,400	0.77	36
Total Operational Provinces							**36**
Total Silver Mineral Reserves							**36**

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.

Molybdenum Mineral Reserves[1]	Proven Mineral Reserves		Probable Mineral Reserves[2]		Total Proven and Probable Mineral Reserves		
	Dry Tonnes (Mt)	Molybdenum Grade (ppm Mo)	Dry Tonnes (Mt)	Molybdenum Grade (ppm Mo)	Dry Tonnes (Mt)	Molybdenum Grade (ppm Mo)	Insitu Molybdenum (Mt)
Operational Provinces							
Cadia Operation	–	–	1,300	88	1,300	88	0.12
Total Operational Provinces.....							**0.12**
Total Molybdenum Mineral Reserves.....							**0.12**

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 after July 1, 2021.

Polymetallic Mineral Reserves[1]	Tonnes	Grade			Contained Metal		
	Dry Tonnes (Mt)	Tungsten Trioxide Grade (% WO_3)	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.....	**44**	**0.36**	**0.65**	**0.32**	**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, 2020

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 (inclusive of Gold Mineral Reserves)	**Measured Mineral Resources**		**Indicated Mineral Resources**		**Total Measured and Indicated Mineral Resources[1]**		
	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	–	–	2,900	0.35	2,900	0.35	33
Ridgeway Underground	–	–	110	0.57	110	0.57	1.9
Other	32	0.30	80	0.35	110	0.33	1.2
Total Cadia Operation.....							**36**
Main Dome Open Pit (incl. stockpiles)	6.7	0.40	16	0.65	23	0.58	0.42
West Dome Open Pit.....	–	–	110	0.66	110	0.66	2.2
Telfer Underground.....	–	–	32	1.7	32	1.7	1.7
Other	–	–	0.44	2.9	0.44	2.9	0.040
Total Telfer Operation.....							**4.4**
Lihir Operation.....	81	1.9	520	2.3	600	2.2	44
Total Operational Provinces							**84**
Non-Operational Provinces							
WGJV – Golpu, Wafi, and Nambonga (50%)[2]	–	–	400	0.84	400	0.84	11
Namosi JV (72.49%)[3].....	–	–	1,300	0.11	1,300	0.11	4.6
Total Non-Operational Provinces.....							**15**
Total Gold Measured and Indicated Mineral Resources[4]							**99**

Gold Inferred Mineral Resources	Inferred Mineral Resources[1]		
	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (Moz)
Operational Provinces			
Ridgeway Underground	41	0.38	0.50
Other	11	0.70	0.25
Total Cadia Operation			**0.75**
Main Dome Open Pit (incl. stockpiles)	0.35	0.23	0.0026
West Dome Open Pit	0.02	0.66	0.00048
Telfer Underground	11	1.4	0.52
Other	4.4	1.1	0.16
Total Telfer Operation			**0.69**
Lihir Operation	67	2.3	4.9
Total Operational Provinces			**6.4**
Non-Operational Provinces			
WGJV – Golpu, Wafi, and Nambonga (50%)[2]	110	0.77	2.7
Namosi JV (72.49%)[3]	120	0.08	0.32
Total Non-Operational Provinces			**3.1**
Total Gold Inferred Mineral Resources			**9.4**

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) 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 Resource.

(3) 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.

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

Copper Measured and Indicated Mineral Resources (inclusive of Copper Mineral Reserves)	Measured Mineral Resources		Indicated Mineral Resources		Total Measured and Indicated Mineral Resources[1]		
	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	–	–	2,900	0.26	2,900	0.26	7.4
Ridgeway Underground	–	–	110	0.30	110	0.30	0.31
Other	32	0.13	80	0.19	110	0.17	0.19
Total Cadia Operation							**7.9**
Main Dome Open Pit (incl. stockpiles)	6.7	0.082	16	0.094	23	0.090	0.021
West Dome Open Pit	–	–	110	0.059	110	0.059	0.062
Telfer Underground	–	–	32	0.40	32	0.40	0.13
Others	–	–	–	–	–	–	-
O'Callaghans	–	–	69	0.29	69	0.29	0.20
Total Telfer Operation							**0.41**
Total Operational Provinces							**8.4**
Non-Operational Provinces							
WGJV – Golpu, Wafi, and Nambonga (50%)[2]	–	–	340	1.1	340	1.1	3.7
Namosi JV (72.49%)[3]	–	–	1,300	0.35	1,300	0.35	4.6
Total Non-Operational Provinces							**8.3**
Total Copper Measured and Indicated Mineral Resources[4]							**17**

Copper Inferred Mineral Resources	Inferred Mineral Resources[1]		
	Dry Tonnes (Mt)	Copper Grade (% Cu)	Insitu Copper (Mt)
Operational Provinces			
Ridgeway Underground	41	0.40	0.17
Other	11	0.52	0.058
Total Cadia Operation			**0.22**
Main Dome Open Pit (incl. stockpiles)	0.35	0.012	0.000041
West Dome Open Pit	0.02	0.058	0.000013
Telfer Underground	11	0.43	0.048
Others	14	0.37	0.052
O'Callaghans	9.0	0.24	0.022
Total Telfer Operation			**0.12**
Total Operational Provinces			**0.35**
Non-Operational Provinces			
WGJV – Golpu, Wafi, and Nambonga (50%)[2]	92	0.68	0.62
Namosi JV (72.49%)[3]	330	0.37	1.2
Total Non-Operational Provinces			**1.85**
Total Copper Inferred Mineral Resources			**2.2**

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

Silver Measured and Indicated Mineral Resources (inclusive of Silver Mineral Reserves)	Measured Mineral Resources		Indicated Mineral Resources		Total Measured and Indicated Mineral Resources[1]		
	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 Operation	–	–	3,000	0.68	3,000	0.68	65
Total Operational Provinces							**65**
Non-Operational Provinces							
WGJV – Golpu, Wafi (50%)[3]	–	–	400	1.7	400	1.7	22
Total Non-Operational Provinces							**22**
Total Silver Measured and Indicated Mineral Resources[4]							**87**

Silver Inferred Mineral Resources	Inferred Mineral Resources[1]		
	Dry Tonnes (million)	Silver Grade (g/t Ag)	Insitu Silver (Moz)
Operational Provinces			
Cadia Operation	41	0.43	0.56
Total Operational Provinces.....			**0.56**
Non-Operational Provinces			
WGJV – Golpu, Wafi (50%)[2].....	87	1.7	4.8
Total Non-Operational Provinces			**4.8**
Total Silver Inferred Mineral Resources.			**5.4**

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

Molybdenum Measured and Indicated Mineral Resources (inclusive of Molybdenum Mineral Reserves)	Measured Mineral Resources		Indicated Mineral Resources		Total Measured and Indicated Mineral Resources[1]		
	Dry Tonnes (Mt)	Molybdenum Grade (ppm Mo)	Dry Tonnes (Mt)	Molybdenum Grade (ppm Mo)	Insitu Molybdenum (Mt)	Molybdenum Grade (ppm Mo)	Dry Tonnes (M)
Operational Provinces							
Cadia Operation	–	–	2,900	64	2,900	64	0.19
Total Operational Provinces.....							**0.19**
Total Molybdenum Measured and Indicated Mineral Resources[2].....							**0.19**

|
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) Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Polymetallic Measured and Indicated Mineral Resources (inclusive of Polymetallic Mineral Reserves)	Tonnes	Grade			Contained Metal		
	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

Polymetallic Inferred Mineral Resources	Tonnes	Grade			Contained Metal		
	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(1, 2)	9.0	0.25	0.19	0.11	0.023	0.017	0.0097

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

Note regarding Red Chris Mineral Reserves and Mineral Resources

Newcrest completed the acquisition of a 70% interest in the Red Chris Operation and surrounding tenements from Imperial on August 15, 2019. Imperial had reported estimates of Mineral Reserves and Mineral Resources for the Red Chris deposit in accordance with NI 43-101 prior to the acquisition. These estimates were reported by Imperial in an amended and restated technical report dated September 30, 2015 and were re-stated by Imperial in its July 2017 Mineral Resource and Mineral Reserve statement, but have not been updated since September 30, 2015 and have not been revised to account for depletion to date.

Neither Competent Persons under the JORC Code, nor Qualified Persons under NI 43-101, have done sufficient work to classify the Mineral Resource estimates reported by Imperial as Mineral Resources in accordance with the JORC Code or to adopt the Mineral Resource estimates reported by Imperial as a Mineral Resource of Newcrest in accordance with NI 43-101 and Canadian securities law. Where Newcrest has previously disclosed the estimates of Mineral Resources for the Red Chris deposit reported by Imperial, this has solely been disclosed as a qualifying foreign estimate under the ASX Listing Rules and does not indicate that Newcrest is reporting or classifying these estimates as Mineral Resources in accordance with the JORC Code or treating these estimates as current Mineral Resources in accordance with NI 43-101. It is uncertain that, following evaluation and further exploration, the estimates will be able to be reported as Mineral Resources in accordance with the JORC Code or in accordance with NI 43-101. Newcrest has commenced a work program, which includes additional exploration and resource definition drilling and optimisation for both open-pit and underground mining scenarios, and is conducting pre-feasibility level studies for the valuation of the qualifying foreign estimates reported by Imperial in relation to the Red Chris Operation and reporting any Mineral Resources and Ore Reserves for the Red Chris Operation in accordance with the JORC Code. This work is expected to be completed within three years of the acquisition of the 70% interest in the Red Chris Operation, and will be funded using internal cash reserves.

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.

Across FY2020 the price of gold increased steadily from a low of $1,389/oz on July 5, 2019 to end the year at the high of US$1,768/oz on June 30, 2020. The gold price rise was initially driven by economic uncertainty resulting in falling interest rates, as well as strong flows into gold Exchange Traded Funds and robust central bank demand. The gold price rally continued into 2020 driven by the COVID-19 pandemic and the ensuing economic lockdowns and global economic uncertainty. 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 FY2020 the copper price reached a high of US$6,300/t and recorded a low of US$4,617/t. The copper price experienced a sharp decline in 2020 to a low of US$4,617/t on March 23, 2020, due to declining demand as a consequence of the COVID-19 pandemic and the ensuing economic lockdowns, since recovering to end the year at US$6,038/t on June 30, 2020.

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 2021, Newcrest has frame contracts for the copper-gold concentrate with two smelters and three 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 Cadia, Lihir and Telfer Operations. Newcrest is currently in the tender process to assess all the refining options for the three sites.

Credit exposure to the Perth Mint is limited to one business day. The Perth Mint is wholly owned by the Western Australian Government (rated AA+/Aa1).

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 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 2020 financial year represented 43% of its revenue. Newcrest's gold bullion was sold to customers in Australia and China (specifically, Hong Kong).

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, 2020, the Company had 4,299 full time equivalent employees and 5,471 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 2017 and 2016 respectively, each with a four-year term. The Telfer ECA is currently being re-negotiated. 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.

There are ongoing proceedings involving the Red Chris Operation regarding Union certification of the Red Chris site. If the certification is granted, it would require Newcrest to negotiate a collective bargaining agreement with the United Steelworkers Union in respect of eligible Red Chris Operation employees. The Lihir Operation has a combined workforce of up to 5,400 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 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, which is available under Newcrest's profile on SEDAR at www.sedar.com.

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; 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; EL4620, expiry date 18/11/2019 (renewal pending); EL5609, expiry date 22/08/2024), with a total approximate area of 215 km^2. 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, 2020.

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, and copper 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 2020, approximately 4.3 Moz of gold and 417,000 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 2020 financial year. The three 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

Newcrest has completed rock chip, soil, and stream sediment geochemical sampling, down-hole (transient electromagnetics), ground (magnetic, dipole-dipole induced polarisation ("**IP**"), two-dimensional Mount Isa Mines distributed acquisition system ("**MIMDAS**") IP and magneto-tellurics, gravity) and airborne (heli-magnetic and radiometric, Falcon) geophysical surveys, and technical studies. Geochemical sampling was used as a first-pass tool to define areas of gold and copper anomalism. Geophysical data were used to develop the broad lithological and structural framework for the Cadia Operation area. Exploration activities are focused on a number of deposit models, including porphyry gold–copper; gold–base metal quartz–carbonate veins and breccias; gold–copper breccia pipes; replacement style magnetite/hematite-copper-gold skarns; and distal reduced gold skarns. 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 June 30, 2020 comprises a total of 5,656 drill holes (1,487,206 m). A total of 593 drill holes (about 418,123 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 13,664 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.

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 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 80% gold recovery, 85% copper recovery, and molybdenum recovery rates (relative to plant feed) of approximately 72%. 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 or Inferred Mineral Resources estimated for Cadia East. All Mineral Resources were classified as Indicated. 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$18.71/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$18.71/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, 2020, 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

Resource Classification	Tonnes Mt	Grade				Contained Metal			
		Au g/t	Cu %	Ag g/t	Mo (ppm)	Au Moz	Cu Mt	Ag Moz	Mo Mt
Measured	—	—	—	—	—	—	—	—	—
Indicated	2,900	0.35	0.26	0.68	64	33	7.4	63	0.19
Total Measured and Indicated	***2,900***	***0.35***	***0.26***	***0.68***	***64***	***33***	***7.4***	***63***	***0.19***

Notes to Accompany Cadia East Mineral Resource Table:

1. Mineral Resources are reported with an effective date of June 30, 2020 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, FAusIMM, whose job title with Newcrest is Head of Mineral Resource Management, 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 80% gold recovery; 85% copper recovery; estimate reported within a NSR constraint of A$18.71/t that includes 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 general and administration ("**G&A**") cost of A$2.67/t. Commodity price assumptions are US$1,300/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$ 1:0.80.
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

Resource Classification	Tonnes Mt	Grade			Contained Metal		
		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

Resource Classification	Tonnes Mt	Grade			Contained Metal		
		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:

1. Mineral Resources are reported with an effective date of June 30, 2020 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, FAusIMM, whose job title with Newcrest is Head of Mineral Resource Management, 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$1,300/oz, exchange rate for metal price conversion of A$:US$ 1:0.80; 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 Classification	Tonnes Mt	Grade		Contained Metal	
		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, 2020 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, FAusIMM, whose job title with Newcrest is Head of Mineral Resource Management, 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$1,300/oz, exchange rate for metal price conversion of A$:US$ 1:0.80; 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.
3. 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

Resource Classification	Tonnes Mt	Grade		Contained Metal	
		Au g/t	Cu %	Au Moz	Cu Mt
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, 2020 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, FAusIMM, whose job title with Newcrest is Head of Mineral Resource Management, 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$1,300/oz Au; copper price: US$3.40/lb Cu; exchange rate for metal price conversion of A$:US$ 1:0.80; 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.
3. 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

Resource Classification	Tonnes Mt	Grade		Contained Metal	
		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, 2020 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, FAusIMM, Head of Mineral Resource Management, 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$1,300/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.
3. 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

Probable Mineral Reserve	Tonnage (Mt)	Grade			Contained Metal		
		Gold (g/t Au)	Copper (% Cu)	Silver (g/t Ag)	Gold (Moz)	Copper (Mt)	Silver (Moz)
Cadia East Underground	1,400	0.44	0.29	0.78	19	4.0	34
Ridgeway Underground	80	0.54	0.28	0.66	1.4	0.23	1.7
Total	***1,400***	***0.45***	***0.29***	***0.77***	***21***	***4.2***	***36***

Probable Mineral Reserve	Tonnage (Mt)	Grade Molybdenum (ppm Mo)	Contained Metal Molybdenum (Mt)
Cadia East Underground	1,300	88	0.12
Total	***1,300***	***88***	***0.12***

Notes to Accompany Mineral Reserves Table:

1. Mineral Reserves are reported with an effective date of June 30, 2020, using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Geoffrey Newcombe, FAusIMM, whose job title at Newcrest is PC1-2 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$1,200/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$18.71/t. The molybdenum tonnage estimate assumes that the molybdenum plant is not operational until 1 July 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 46-year operating life (2020–2065) 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, PC1–4, 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 4,600 t/h, with work underway to upgrade this to 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 33–35 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 23 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 to 33 Mt/a, and 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 construction); 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 dedicated high voltage transmission line with a transfer capacity limit of 284 MVA. The site power consumption is approximately 150 MW with 40 MW used for underground mining and 110 MW for the process plants. With a plant throughput upgrade to 32 Mt/a, the electrical demand will peak at around 190 MVA. 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 300 MVA, and the connection agreement between Essential Energy and Newcrest has a contractual limit of 175 MVA.

The preliminary 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. Formal negotiations are being undertaken with Essential Energy to increase the maximum transfer capacity limits defined within the connection agreement from 175 MVA to 200 MVA. In addition, negotiations are continuing with TransGrid and Essential Energy to identify long-term augmentation works 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 the submission of the proposed Cadia expansion project permitting application. 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 Southern TSF ("**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.

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, Upper Rodds Creek 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. Newcrest's latest internal modelling indicates that Cadia should have enough water to avoid any water-related production interruption for at least the next two years. The LOM plan assumes that 65–70% of all 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$122 M.

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.

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	4,653
Ridgeway mine	587
Processing	504
Infrastructure	619
Capitalised revenue	(345)
Sub-total growth	***6,017***
Sustaining capital	
Site	4,462
Sub-total sustaining	***4,462***
Total Capital	***10,480***

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 2019 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$/t	5.10
Processing	A$/t	8.41
G&A	A$/t	3.00
Total Operating Costs	***A$/t***	***16.51***

Exploration, Development and Production

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 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 FY21, the Cadia Operation is expected to produce between 680 and 760 kozs of gold at an AISC spend of between US$50 million and US$130 million.[4]

In FY21, exploration is expected to see expenditures of US$1.3 million.[4] Newcrest plans to undertake de-risking drilling for next panel cave PC1–2 as part of the current studies and undertake regional exploration geophysics programs as part of broader regional targeting assessment.

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, which is available under Newcrest's profile on SEDAR at www.sedar.com.

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 km^2.

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.

[4] 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.

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.

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 3º 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, 2020, approximately 16.2 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

Newcrest has continued mining activities and completed plant expansions to the current nominal 15 Mt/a. Exploration activities include geological mapping, soil and rock chip sampling and ground geophysical surveys. Marine surveys in support of planned development of the Kapit sector of the open pit were conducted. 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, 2020 comprises core drilling. Drilling has been completed for exploration, resource delineation, geotechnical, pit cooling, and geothermal purposes, and totals 3,703 holes (721,105 m). 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 µm. 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^3 in fresh rock to 1.01 t/m^3 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 SRK.

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, RC (blast hole), 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, 2020 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	81	1.9	5.0
Indicated	520	2.3	39
Total Measured and Indicated	***600***	***2.2***	***44***

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, 2020 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, FAusIMM, whose job title at Newcrest is Head of Mineral Resource Management, 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$1,300/oz, variable pit slope angles that range from 10–55°; metallurgical recovery from Whittle optimisation of 83.8%; mining costs of US$4.31/t, and processing and G&A costs of $40.46/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$1,200/oz Au; treatment charges/refining charges of US$2.12/oz; 2% royalty and Production Levy of 0.5%; mining costs of US$4.31/t mined ex-pit; processing costs of US$25.57/t milled; sustaining capital costs of US$5.02/t milled; G&A costs of US$9.87/t milled, an average metallurgical recovery of 83.8%, 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 seven cutbacks was 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, 2020. 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	81	1.9	5.0
Probable	230	2.4	18
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, 2020. The Qualified Person for the estimate is Mr Steven Butt, FAusIMM, whose job title at Newcrest is Group Manager – Mine Design, Planning and Operational Excellence, 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$1,200/oz, open pit mining method, 2% royalty, 0.5% Production Levy, treatment and refining charges of US$2.12/oz; variable pit slope angles (inter-ramp) that range from 10º to 55º; metallurgical recovery from Whittle optimisation of 83.8%, and output life-of-mine average modelled metallurgical recovery of 80.7%; dilution and mining recovery of 0 and 100% respectively; average stripping ratio of 1.9:1 (waste:ore); mining costs of US$4.31/t mined; processing costs of US$25.57/t milled, sustaining capital costs of US$5.02/t milled, and G&A costs of US$9.87/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.

Newcrest is currently undertaking a range of studies (collectively referred to internally by Newcrest as the "Lihir mine optimisation study") that are reviewing mining rates, waste disposal options, stockpile feed sequences, processing assumptions including material blend constraints, and the relationship to the planned ex-pit mining sequence. This could include an upper mill feed limit or additional penalties on argillic and or stockpile feed that may impact on mine schedule and or recovery assumptions. The current Mineral Reserve estimate does not include a mill feed constraint based on proportions of argillic and or stockpile feed. As with all forward study work there is risk that the future outcomes of these studies could result in changes to costs, schedule, mining rate, equipment requirements, reclassification of the confidence category assigned to some or all of the stockpiled material, and ultimately the Mineral Reserve estimate. The studies are partly dependent on the outcomes of the major studies projects included in the capital cost estimates.

Mining Operations

The forecast completion date for the mining operation is FY38 based on the Mineral Reserves, and the forecast completion date for the processing operation is FY41, giving a mine life of 18 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. 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 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 100ºC. 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 150ºC 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 130ºC, after which the explosive initiation system required for production blasting becomes a constraint. 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; pre-stripping/development of >200 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 in ROM stockpiles 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 80–90 Mt of low-grade material will be stockpiled, to be fed to the plant after the end of the active mining operation. Only 40–50 Mt of stockpiling capacity is available outside the ultimate pit footprint at the Kapit North stockpile. In-pit stockpiling is therefore undertaken to accommodate the balance, and 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 1.9:1 (waste:ore).

Newcrest is currently undertaking a range of studies (collectively referred to internally by Newcrest as the “Lihir mine optimisation study”) that are reviewing mining rate, waste disposal options, stockpile feed sequence, processing assumptions including material blend constraints and the relationship to the planned ex-pit mining sequence. This could include an upper mill feed limit or additional penalties on argillic and or stockpile feed that may impact on mine schedule and or recovery assumptions. The current mine schedule does not include a mill feed constraint based on proportions of argillic and or stockpile feed. As with all forward study work there is risk that the future outcomes of these studies could result in changes to the production schedule, mining rate, and/or equipment requirements. The other key drivers of the LOM schedule include the lead time on construction of the Kapit seepage barrier, the removal and concurrent feeding of the existing Kapit Flat stockpiles, the effectiveness of pit cooling and hot ground mining techniques, and ultimately the throughput capacity of the process plant.

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 plant currently has a nameplate capacity of 15 Mt/a, and has undergone a number of alterations and expansions since first commissioning in 1997.

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 Put, 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 Put 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 Put 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.

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 is used to manage and monitor the predicted environmental impacts, 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 stockpiles, except Kapit North, are within the planned final pit boundary, and will need to be consumed or relocated to allow final pit development. Stockpiles other than Kapit North are all scheduled to be reclaimed over the next eight years. It is planned to use the Phase 9 pit void 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 DSTP methodology. The 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 the DSTP. The process tailings consist of a dilute mixture of treated mineralised material and seawater from the cooling water systems and discharged through the DSTP system at a depth of approximately 125 m within the boundaries of the SML. 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 Environmental Management and Monitoring Plan ("**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.

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.

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 M 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 30 June 2020 is US$177M. 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.

Additional permits will be required for the seepage barrier (requires sign off by the Chief Inspector of Mines), the HFO power generation infrastructure to replace geothermal ramp down (permitting through CEPA and MRA), and installation of any additional processing tertiary grinding and flotation capacity. The process to obtain the additional permits has commenced for these projects. Based on current studies into AMD management and alternate waste rock deposition strategies, future permit changes will also be required to effectively manage water quality impacts for existing and future mining activities.

Social Considerations

Newcrest's ongoing commitment to sustainable development on Aniolam Island is encapsulated in its 2019 Community and Environment Policy. The Lihir Sustainable Development Plan is the overall implementation plan and provides a framework for future development initiatives to be aligned and focused over the operational life.

Commitments to the local community around compensation and community development are embodied in an Integrated Benefits Package Revised Agreement signed in 2007, which incorporates the Lihir Sustainable Development Plan. The terms of the suite of agreements (the "**Lihir Agreements**") that are to replace the 2007 Integrated Benefits Package Revised Agreement have been agreed and the final draft agreements have been reviewed by the affected landholder groups and submitted to the Mineral Resources Authority for confirmation of regulatory compliance. On receipt of confirmation of regulatory compliance the agreements will be executed and form the basis of future compensation and community development activities of LGL.

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 FY2020 LOM plan 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 $1,834 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 $1,172 million. Capital costs will total US$3,006 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	28	530	29
Processing	42	877	48
Infrastructure (power and utilities)	11	237	13
General and administrative	9	191	10
Totals	***90***	***1,834***	***100***

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 2019 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	US$/t ore milled	9.76
Ore treatment	US$/t ore milled	23.48
G&A	US$/t ore milled	9.59
Site costs	***US$/t ore milled***	***42.83***

Exploration, Development and Production

In FY21, the Lihir Operation is expected to produce between 720 and 820 kozs of gold at an AISC spend of between US$940 million and US$990 million[5].

In FY21, exploration is expected to see expenditures of US$1.3 million.[5] Newcrest plans to continue exploration activities, comprising soil and rock chip sampling, across the exploration tenure subject to community access negotiations and COVID-19 restrictions.

[5] 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.

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 www.sedar.com.

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 km^2, registered in the names of Wafi Mining and Newcrest PNG2. The Golpu deposit is located within Exploration Licence 440 (EL440; expiry date 10/03/2020 (renewal pending)), 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 25/01/2021). The Wafi and Nambonga deposits are also within EL440. Both tenements were in good standing as at June 30, 2020. EL440 is in the renewal process. Newcrest expects that the renewal will be granted as all tenement conditions for the previous term were complied with.

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 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/m^3 in oxidised material to 2.77 t/m^3 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 µm. Protocols from the Harmony/WGJV campaigns saw samples crushed to minimum 90% passing 2 mm, and pulverising to minimum 95% passing 106 µm.

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, 2020. 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)**	**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

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

Notes to accompany Golpu Deposit Mineral Resource tables:

1. Mineral Resources are reported with an effective date of June 30, 2020 using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, 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 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$1,300/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

Confidence Category	Tonnage (Mt)	Grade		Contained Metal	
		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

Confidence Category	Tonnage (Mt)	Grade		Contained Metal	
		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:

1. Mineral Resources are reported with an effective date of June 30, 2020, using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, 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 33º in oxidised material to 65º 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 (Mt)	Grade		Contained Metal	
		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, 2020, using the 2014 CIM Definition Standards. The Qualified Person responsible for the estimate is Mr Kevin Gleeson, 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$1,300/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.
4. 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, 2020.

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, 2020 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%.
4. 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_{AC} as compared to the anticipated peak requirements of 35.0 MW_{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 make-up 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-in-concentrate 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, socio-economic 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.

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.

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 preferred 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 re-use 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, ramp-up 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, 2020, 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 is being 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. 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 (±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. Cost estimates were reviewed as at June 30, 2020, and remain current.

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
Capitalised revenue	(200)	—	(200)	NA
Total LOM capital cost (excluding sustaining capital)	2,825	1,864	4,689	100
Sustaining capital	—	693	693	NA
Total LOM capital cost	2,825	2,557	5,382	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.

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. Cost estimates were reviewed as at June 30, 2020, and remain current.

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
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 Metrics[6], [7]

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*[6],[8]**

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.

In FY21, exploration is expected to see expenditures of less than US$0.1 million. Newcrest plans to undertake only minor exploration targeting assessments during the year.

[6] Subject to market and operating conditions and all necessary permits, regulatory requirements and Board of Director approvals and further works.

[7] 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.

[8] 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 leasee 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 and taxes 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 and taxes 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.

In Western Australia, the royalty rate is 2.5% of the spot prices computed as per Western Australian mining regulations for gold bullion, 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 October 22, 2021 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.

A draft *Aboriginal Cultural Heritage Bill 2020* (WA) was released for public consultation on 2 September 2020. If introduced to Parliament and passed in its current form, the Bill would significantly change the regulation of the protection of sites of cultural significance to Aboriginal people in Western Australia, including by expanding the range of tangible and intangible elements the subject of cultural heritage protection and introducing a new tiered assessment and approval system requiring greater notification, consultation and agreement making with Aboriginal people

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.

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, 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.

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, 2020. 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 Western Australian and Victorian governments - 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 Western Australian State government intends to implement harmonised work health and safety laws in Western Australia and it introduced a draft Work Health and Safety Bill into State Parliament on November 27, 2019. On 20 February 2020, the Work Health and Safety Bill was passed by the Legislative Assembly and presented to the Legislative Council for its concurrence. If passed, 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 will be 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" will be defined broadly to include, for example, employees, contractors and labour hire workers;
- a positive duty will also be 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.

Two new offences of industrial manslaughter are also included in the Bill. The first 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. The second offence (industrial manslaughter – simple offence) attracts a maximum penalty of 10 years' imprisonment and a fine of A$2.5 million for an individual PCBU, or A$5 million for a body corporate, and has a lower standard of proof. 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.

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.298 (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 Petroleum Resources (the "**MEMPR**"). 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 *Environmental Assessment Act*, SBC 2002 c.43, 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, MMEPR 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_2e**"), starting April 1, 2018 and increasing by C$5/t of CO_2e per year until reaching C$50/t of CO_2e. Due to the COVID-19 pandemic, the annual increase for 2020 was delayed until further notice, and the tax rate is currently $40/t of CO_2e.

Newcrest's Health and Safety 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

- Safety and Health;
- Sustainability;
- Environment;
- Climate Change;
- Human Rights;
- Water Stewardship;
- Communities;
- Indigenous Relations;
- Biodiversity Policy; and
- Diversity and Inclusion.

Standards

- Health and Safety Management System standards;
- Major Hazard Standards for Safety;
- Occupational Health and Hygiene Standard;
- Social Performance Standard and associated Guidelines;
- 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 environmental 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;
- Global Industry Standard on Tailings Management;
- International Finance Corporation Guidelines;
- International Cyanide Management Institute's International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold; 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 legitimacy of James Marape's election as Prime Minister is now the subject of a court challenge being mounted by the Opposition Leader, Belden Namah, which carries some risk of further instability in PNG politics.

Acting on its stated intentions of anti-corruption and nationalism, the Government recently passed the Whistle Blowers Act and tabled the Independent Commission Against Corruption ("**ICAC**") Bill.

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 permitted 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 SML for the Porgera mining operation, which Newcrest is not involved in, would not be renewed. In response, Barrick (Niugini) Limited, the 47.5% owner and operator of the Porgera mine announced its intention to challenge the decision through relevant legal avenues. The PNG Government has stated that the decision relates to alleged issues specifically related to environmental damages claims and resettlement at the Porgera mine and has no bearing on any other operations, including the Lihir Operation, or advanced exploration projects, including the Wafi-Golpu Project. Although the PNG Prime Minister stated that the Wafi-Golpu Project remained one of the Government's priority projects for development, no assurance can be given that other developments will not arise that may impact Newcrest's operations and projects.

There is a continuing focus on the transfer of benefits from resources (both oil and gas and minerals) to 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 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 inter-government disputes could adversely affect our 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 social, environmental and governance practices, developing a diverse workforce, and developing and maintaining strong relationships with Traditional Owners, First Nations, landholders, communities, governments and other stakeholder communities. 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*.

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.

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 expected to further strengthen relations with the Tahltan Nation.

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 community relations 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, PGK100 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 payments have been made since 2007 and remain ongoing. The terms of the suite of agreements that are to replace the 2007 Integrated Benefits Package Revised Agreement have been agreed and the final draft agreements have been reviewed by the affected landholder groups and submitted to the Mineral Resources Authority for confirmation of regulatory compliance. On receipt of confirmation of regulatory compliance the agreements will be executed and form the basis of future compensation and community development activities of LGL.

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 FY2020

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 late April 2020, the PNG Prime Minister stated that the Wafi-Golpu Project remained one of the PNG Government's priority projects for development. 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. 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 production, divestment and scrap; and
- gold hedging and de-hedging by gold producers.

The price of gold has been relatively volatile in the last ten years, ranging from a LBMA closing price low of US$1,049/oz on December 17, 2015 to achieving an all-time LBMA closing price high of US$2,067/oz on August 6, 2020. The US dollar LBMA closing gold price steadily increased since December 20, 2016 from US$1,126/oz to US$2,067/oz on August 6, 2020, since falling to US$1,860/oz as of September 25, 2020. Notwithstanding these increases, the price of gold remains volatile and is subject to a number of factors beyond Newcrest's control, and therefore may decline in the future. Newcrest's average realised gold price in U.S. dollars per ounce for FY2017, FY2018, FY2019 and FY2020 was US$1,263, US$1,308, US$1,269 and US$1,530, respectively.

In addition, while Newcrest is predominantly an unhedged gold producer, it has hedges over a portion of Telfer Operation's future planned gold production for FY2021 to FY2023. 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;
- trends in industrial production and conditions in the electricity, housing and automotive industries, all of which correlate with demand for copper;
- economic growth and political conditions in China, which has become the largest consumer of refined copper in the world, and other major developing economies;
- speculative investment positions in copper and copper futures;
- the availability and cost of substitute materials;
- currency exchange rate fluctuations; 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 FY2021 as follows:

- US$10/oz change in the average realised gold price is estimated to have an impact on total revenue of approximately US$20 million.
- US$0.05/lb change in the average realised copper price is estimated to have an impact of approximately US$14 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, earnings and cash flows 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 FY2020 would have a corresponding impact on EBIT of approximately US$17 million for the year.

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.

Newcrest does not hedge its foreign exchange revenue or operating expenses to the US dollar (although it may hedge certain major capital expenditures to the functional currency of the project or operation) and it maintains its debt in US dollar denominated loans.

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 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. Oil-based products, fuels and consumables (including chemicals, explosives, lubricants, heavy fuel oil and diesel) constitute large operating costs for Newcrest. 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 does enter 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 production, development and exploration operations in PNG and Fiji, and exploration activities and investments in Ecuador, Chile and Mexico, which are countries 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:

- civil unrest, rebellion and civil society opposition, armed conflict, terrorist or illegal activities;
- political and economic instability;
- expropriation and/or nationalisation;
- increases in equity interests in projects, held by local governments, and associated risks and uncertainty regarding the ability of government interests to fund their proportionate share of project costs;
- requests from governments and other stakeholders for direct participation in mining projects and increased benefits derived from mining projects;
- fraud, bribery and corruption;
- land ownership disputes;
- tenement access issues or tenement disputes;
- disputes with local communities;
- tribal, local or regional disputes (including demonstrations) and damage to property;
- Indigenous disputes with state and/or national governments;
- renegotiation or nullification of existing concessions, licenses, permits and contracts;
- restrictions on foreign exchange and repatriation of cash, earnings or capital;
- the occurrence of health infections and diseases, such as COVID-19, malaria, HIV and Ebola;
- unpredictable government actions concerning the economy, taxation, royalties or the operation and regulation of mining and exploration activities (including law reforms from time to time); 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 (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 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 regimes applicable to mining in a number of the jurisdictions in which Newcrest has interests (including PNG); and
- 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 broad reform agenda in relation to mining legislation, environmental stewardship 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. Potential policy changes could include further changes to the existing PNG Mining Act, the introduction of a production sharing regime, the level and manner of local equity participation in projects, taxation regimes, changes to banking and foreign exchange controls, and/or changes in 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 SML for the Porgera mining operation would not be renewed. The PNG Government has stated that the decision relates 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 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, permitting negotiations for Wafi-Golpu 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. These proceedings (and stay order) were dismissed by the National Court in February 2020 and the Governor appealed the matter to the Supreme Court. On May 16, 2020 the PNG Prime Minister and the Governor 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. If the Governor's appeal or other legal challenges to the permitting process are pursued the Wafi-Golpu permitting process may be adversely impacted.

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 the effect of these claims cannot be estimated at this time. The federal and provincial governments have been seeking to negotiate settlements with Indigenous groups throughout British Columbia in order to resolve many of these claims. Although none of these claims have impacted the Red Chris Operation area, the issues surrounding Indigenous title and rights are not likely to be resolved in the near future**.**

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 relating to community consent and seeking to restrict mining activities in Ecuador present a risk to the mining industry. A recent Constitutional Court ruling has granted an application to hold a referendum on large scale mining projects in Cuenca, Ecuador. The city of Cuenca will vote on whether or not large scale mining projects should be permitted in certain areas near Cuenca. The court has clarified that if the outcome of the consultation is a vote to prohibit large scale mining projects in these areas, this prohibition shall not operate retroactively and shall not impact on existing large scale and medium scale mining projects and concessions. There is a risk that this decision may encourage further mining opposition, lead to more widespread applications of this nature and for the outcome of referendums to impact the grant of future mining rights. There is also a risk that Government positions on these matters may change adversely for the mining industry following the Presidential and parliamentary elections scheduled for 2021.

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 law and regulation.

Existing and new mining operations, development projects and exploration that Newcrest carries out in the various jurisdictions in which Newcrest operates are subject to various national and local laws, policies and regulations governing the prospecting, developing and mining of mineral deposits, taxation and royalties, import and export duties and restrictions, exchange controls, foreign investment approvals, employee and social community relations, cultural heritage, environmental and other matters, and the manner in which these laws are applied or interpreted. In addition, Newcrest is subject to law and regulation as a listed entity in Australia and PNG.

A failure to comply with legal requirements or practices may result in enforcement action being taken against Newcrest or its joint venture partners with potentially material consequences, including financial penalties, suspension of operations and forfeiture of permits and authorisations. In a number of jurisdictions where Newcrest has existing operations or interests, the legal and regulatory framework is increasingly complex, subject to change and becoming more onerous. In addition, changes in law, policies or regulations, or in the manner in which they are interpreted or applied to Newcrest, may materially impact the value of Newcrest's operations, development projects and exploration assets.

If Newcrest is not able to undertake exploration, implement planned projects or continue its operations under conditions or within timeframes that make such plans and operations economic, or if legal or fiscal regimes or the governing political authorities change materially, Newcrest's operating results or financial position could be adversely affected.

No guarantee can be given that the necessary permits, authorisations, agreements or licenses will be issued or, if they are issued, that they will be renewed, or that Newcrest will be in a position to comply with all conditions that are imposed. In addition, nearly all mining projects require government approval, and there can be no certainty that these approvals will be granted to Newcrest in a timely manner, or at all.

Newcrest is subject to the laws of several jurisdictions. Any changes to legislation, regulations or government policies or practices in any of those jurisdictions (including at both the federal and state level, if applicable) may have an adverse impact on Newcrest's results, operations or financial position. For example, the PNG Government has taken preliminary steps to introduce a production sharing regime for the mining sector by publishing a proposed new organic law in the National Gazette on July 16, 2020. The proposed organic law requires the approval of a two thirds majority of Parliament and, if passed in its current 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 drafted, 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 a proposed "mining effective date", which the PNG Prime Minister has indicated could be 2025.

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 Newcrest's operations, develop Newcrest's projects and undertake other activities as currently conducted, it cannot be certain that some titles and access rights may not 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 Newcrest's 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. Although Newcrest expects that it will be able to resolve these issues if and as they arise, 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 Aboriginal title claimants, Aboriginal 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 November 22, 2020 to October 5, 2038 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. These laws and regulations are complicated and subject to change. The Company 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 the Company's profitability. Taxes may also adversely affect Newcrest's ability to effectively repatriate earnings and otherwise deploy its assets.

Newcrest's business and operations, and that of its suppliers and customers, may be adversely affected by the outbreak of novel coronavirus (2019-nCoV) pandemic or other similar pandemics.

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.

COVID-19 has spread globally and has become a global pandemic (declared March 11, 2020), causing significant disruption across a number of geographies, industries and markets, including global supply chain disruptions and shortages.

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 upon which Newcrest relies), and there is no guarantee that Newcrest's efforts to address the adverse impacts of COVID-19 will be effective. The impact to date has included periods of significant volatility in financial, commodities and other markets. This volatility, if it continues, could have an adverse impact on Newcrest's people, communities, suppliers or otherwise on Newcrest's 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.

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).

The extent to which COVID-19 will impact Newcrest's business and Newcrest's financial results will depend on future developments, which are highly uncertain and cannot be predicted. Such developments may include the geographic spread of the virus, 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.

On March 22, 2020, Lundin Gold, in which Newcrest owns a 32% equity interest, 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 in Ecuador amid growing concerns regarding the spread of COVID-19. Operations recommenced at Fruta del Norte on 5 July 2020. An extended period of another suspension, depending on the length, could have an adverse impact on Newcrest's investment in Lundin Gold and the return on Newcrest' investment in the Fruta del Norte financing facilities.

Payments made by the Lundin Gold borrower to Newcrest pursuant to the Facilities may not occur as anticipated due to the suspension of the operations at Fruta del Norte. There is a risk that Lundin Gold delays operations at Fruta del Norte for a significant period of time. Should this occur, an event of default could occur under the US$350 million of project finance funding for Fruta del Norte, as well as each of the Gold Prepay Credit Agreement and SCFA, in which case the Lundin Gold's borrower payment obligations under the project finance funding, Gold Prepay Credit Agreement and SCFA could be accelerated and/or termination payments could apply. There is a risk that the Lundin Gold borrower would not be able to satisfy such accelerated or termination payment obligations, and that Newcrest as a subordinated lender would not be able to effectively enforce the accelerated or termination payment obligations owed to it under the Gold Prepay Credit Agreement and SCFA or effectively realise upon the security in respect of such obligations. If a delay in operations for a signification period of time does not result in an event of default and accelerated or termination payment obligations, the Lundin Gold borrower could nonetheless have insufficient funds to make payments under the Facilities when due and/or anticipated payments or deliveries under the facilities that are based on Fruta del Norte production could be delayed. Accordingly, the value of the facilities could be lower than the consideration paid by Newcrest and the expected financial returns from this investment may not eventuate or may be lower than projected and lead to an event of default under the terms of the facilities.

On August 10, 2020 Newcrest announced that it was managing a COVID-19 case in its isolation and treatment facility at Lihir Island. The individual, a PNG national, flew into Lihir from Port Moresby on July 30, 2020 and as per Newcrest's protocol was isolated along with the other arrivals in a designated isolation camp while testing was conducted and the 14 day isolation period completed. The person has since returned home, after completing their isolation period and testing negative. All people who travelled with the individual were subject to repeated testing and after completing their isolation period and testing negative on each occasion, commenced work.

Newcrest's FY21 production guidance assumes no COVID-19 related interruptions. However, Newcrest's AISC expenditure guidance for FY21 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 $30-40 million. This compares with the estimate of an additional ~$20 million of AISC spend to have been incurred on COVID-19 related matters in the 2020 financial year.

As a result, at the time of this AIF, 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 in this ''*Risk Factors*'' section, and may have an adverse material impact on Newcrest's operating and financial results, financial condition and liquidity position.

Newcrest has exposure to a range of climate change risks.

Newcrest has exposure to a range of climate change risks related to the transition to a lower-carbon economy including political, policy and legal developments; technology; reputation; and 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 term, Newcrest expects to continue to rely heavily on fossil fuels. However Newcrest is seeking opportunities to improve its energy efficiency to reduce direct mining and processing costs and is assessing options to use renewable power generation and low emission technologies to reduce its greenhouse gas emissions intensity.

In 2019, the Board approved Newcrest's climate change policy and the progressive implementation of the Taskforce on Climate-Related Financial Disclosure ("**TCFD**") framework for reporting on climate related aspects in its Sustainability Report. Newcrest continues to take steps to manage its risks and build resilience to climate change, as well as to position itself for new opportunities.

In order to manage risks associated with policy and legal developments and to inform its investments, Newcrest has adopted a protocol for applying shadow carbon prices of US$25/tonne and US$50/tonne CO2-e in the period until 2030 for jurisdictions where there are no regulated carbon prices. Using the two carbon prices will enable a range of sensitivities to be considered for future investments. Newcrest has also set a 2030 target to reduce its operational greenhouse gas emissions intensity by 30% against the 2018 baseline.

Newcrest's operating sites are vulnerable to potential physical climate impacts. As part of its risk management framework, Newcrest considers potential risks that may be caused by changes in climate, mainly at an operating site level. For example, extreme weather events have the potential to damage infrastructure, disrupt operations and delay production and delivery of products to market. Newcrest is working with experts to better understand physical threats from climate change at its current and planned operating sites and to put in place adaptation plans to ensure that these risk factors are considered in the design criteria for site operations and infrastructure. Newcrest is also undertaking regional climate modelling to support risk assessments by sites related to the physical impacts of climate change.

There are no assurances that Newcrest will be able to reduce its costs or to identify such technologies that will suit its purposes. In addition, the use of renewable power generation and low emission technologies may impact its competitive position, operating and financial results, and financial condition.

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 drought conditions experienced in the region over the past two years. Cadia implemented significant water saving efficiency measures and continues to pursue further water saving initiatives in the plant and optimisation of onsite bores and other water sources. Recent 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 Cadia should have enough water to avoid any water-related production interruption for at least the next two years.

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 be unable to generate sufficient operating earnings or raise additional capital to meet ongoing operating or capital expenditure requirements.

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's 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 items, including asset impairments, asset write-downs and restructure costs, of US$257 million (after tax and non-controlling interests), were recognised in FY2018, principally relating to Newcrest's operations at Telfer due to production underperformance to plan in that period and the updated mine plan which forecast a shorter mine life, lower gold recoveries from processing and higher operating costs.

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 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 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 designed to protect it against events which could have a significant adverse effect on its operations and profitability. Newcrest's insurance policies carry deductibles and limits which will apply in the event of a claim which may lead to Newcrest not recovering the full monetary impact of an insured event and include terms and conditions (including exclusions) which may impact on the extent to which a relevant policy covers a claim. In addition, Newcrest's insurance policies do not cover all 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 Newcrest's cash flows and overall profitability. For instance, following the settlement of the Cadia Operation seismic event claim in FY2017, 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 any anticipated synergies or 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.

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.

Imperial had reported estimates of Mineral Reserves and Mineral Resources for the Red Chris deposit in accordance with NI 43-101 prior to Newcrest's acquisition of a 70% beneficial interest in Red Chris. Such estimates were reported by Imperial in an amended and restated technical report dated September 30, 2015 and were restated by Imperial in its July 2017 Mineral Resource and Mineral Reserve Statement but have not been updated since September 30, 2015 and have not been revised to account for depletion to date. Neither Competent Persons under the JORC Code, nor Qualified Persons under NI 43-101, have done sufficient work to classify the Mineral Resource estimates reported by Imperial as Mineral Resources in accordance with the JORC Code or to adopt the Mineral Resource estimates reported by Imperial as a Mineral Resource of Newcrest in accordance with NI 43-101 and Canadian securities law. Where Newcrest has previously disclosed the estimates of Mineral Resources for the Red Chris deposit disclosed by Imperial, this has solely been disclosed as a qualifying foreign estimate under the ASX Listing Rules and does not indicate that Newcrest is reporting or classifying these estimates as Mineral Resources in accordance with the JORC Code or treating these estimates as current Mineral Resources in accordance with NI 43-101. It is uncertain that, following evaluation and further exploration, the estimates will be able to be reported as Mineral Resources in accordance with the JORC Code or in accordance with NI 43-101.

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 and 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, and 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 Waisoi (Namosi) project in Fiji. These 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 state of NSW was impacted by drought conditions experienced in the region over the past two years. Cadia implemented significant water saving efficiency measures and continues to pursue further water saving initiatives in the plant and optimisation of onsite bores and other water sources. Recent 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 Cadia should have enough water to avoid any water-related production interruption for at least the next two years.

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 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.

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 being 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 personnel private or commercially sensitive information and data breaches, and although disaster recovery plans are in place for all of Newcrest's major sites and critical IT systems, any such disruptions could have a material impact on Newcrest's business, operations or financial condition and performance.

In addition, Newcrest is dependent on its IT systems in the conduct of its operations. Newcrest relies on the accuracy, capacity and security of its IT systems for the operations 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 operations.

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, natural or man made incidents or disasters or unauthorised physical or electronic access. Though Newcrest has controls in place, it cannot provide assurance that a cyber attack will not occur. Newcrest may have little or no oversight with respect to security measures employed by third party service providers, which may ultimately prove to be ineffective at countering threats. 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 competes with mining and other companies to attract and retain key executives and other employees and third-party contractors with appropriate technical skills and managerial experience necessary to operate its business. As many of Newcrest's operations are in remote areas, the ability to attract and retain an appropriately skilled workforce can be particularly challenging. 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 skilled and experienced personnel**.** 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's operations are subject to industrial relations risks.

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.

Unions are present and have a legal right to represent eligible employees at the Cadia and Telfer Operations. There are ongoing proceedings involving the Red Chris Operation regarding Union certification of the Red Chris site. If the certification is granted, it would require Newcrest to negotiate a collective bargaining agreement with the United Steelworkers Union in respect of eligible Red Chris Operation employees.

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. Similarly, there can be no assurance that Newcrest will be able to engage competent and suitably experienced local businesses, or attract and retain suitably qualified and experienced local or national personnel, or that persons trained by Newcrest will be retained in the future.

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 a gold refinery in Australia with associated risks including penalties from producing doré outside of the contractual specifications, theft and fluctuating transportation charges. 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.

Transportation of the doré is subject to numerous risks including delays in delivery of shipments, terrorism and weather conditions. Sales of gold doré 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 buyers' 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. 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.

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.

Bank credit risk on funds held for investment is reduced through maximum investment limits being applied to banks and financial institutions based on their credit ratings. Where possible, Newcrest holds funds for investment with banks or financial institutions with credit ratings of at least A- (S&P) equivalent and in countries rated 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 in countries or 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 credit terms are subject to credit risk analysis. Bullion is largely sold on a spot price basis to minimise credit exposure. Gold bullion customers are usually our lending banks and are currently rated by S&P at A+ or better.

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 insuring 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 of its recent strategic transactions. In April 2020, Newcrest acquired for US$460 million the gold prepay and stream facilities and an offtake agreement in respect of Lundin Gold Inc.'s Fruta del Norte mine (the "**Facilities**"), details of which are located on Newcrest's website. In January 2020, Newcrest announced the divestment of its interest in Gosowong to PT Indotan Halmahera Bangkit ("**Indotan**"), for total consideration of US$90 million, of which US$30 million becomes payable in 18 months from the date of completion (being March 4, 2020). There can be no certainty that Lundin Gold Inc. 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.

While Newcrest has sought to instil and reinforce a culture across the organisation whereby employees are encouraged to act lawfully and ethically, in a socially-responsible manner there is a risk that Newcrest employees or contractors will fail to adhere to Group policies, standards, and procedures, which could have a material adverse impact on Newcrest's financial performance, financial condition and prospects, as well as on 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.

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.

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 risks include, but are not limited to, musculoskeletal disorders, fatigue, mental health illnesses and exposure to noise, diesel particulate matter, silica, acid mist and heavy metals such as arsenic, lead and mercury. Unforeseen or past workplace exposures may lead to long-term health issues and potential compensation liabilities.

The global nature of Newcrest's operations also 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 occurrence of these health impacts and the potential need for Newcrest to compensate those affected may result in disruptions to Newcrest's operations and may adversely affect Newcrest's financial condition.

Gold and copper mining companies are subject to extensive environmental laws and regulations.

Mining operations and development activities have inherent risks and liabilities associated with potential harm to the environment and management of waste products, and Newcrest's operations are subject to extensive environmental laws and regulations in the various jurisdictions in which it operates.

Environmental laws and regulations require significant expenditures for environmental protection equipment, compliance and land rehabilitation requirements. A key consideration in Newcrest's operations is the management of waste. 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. Newcrest maintains a company-wide "closure standard" that is responsive to regional regulatory requirements and Newcrest periodically reviews and updates the closure plans for each mine. In addition, certain countries where Newcrest operates also periodically update or introduce new regulations that could influence the scope and cost of planned closure activities (for example, PNG released new Mining Project Rehabilitation and Closure Guidelines in 2019 and has released a draft Biodiversity Policy and Climate Change Policy in the past two years). Newcrest prepares estimates of closure and rehabilitation liabilities for each of its operations and these estimates are based principally on current legal and regulatory requirements and actual costs may vary materially. Increasingly, regulators are seeking security in the form of cash collateral or bank guarantees in respect of environmental obligations, which could have an adverse effect on Newcrest's financial condition. In addition, adverse or deteriorating external economic conditions may bring forward mine closure and associated closure and rehabilitation costs.

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 the Lihir Operation, DSTP) and waste rock (to be managed in waste rock facilities or in the case of the Lihir Operation, permitted barge dumping locations). Geochemical reactions within long-term waste rock facilities 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 Newcrest's 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 disbursed into the receiving environment including rivers and groundwater reservoirs. This is particularly relevant in areas where high rainfall and high levels of groundwater are present, such as is the case in the Morobe Province of PNG, where the Wafi-Golpu Project is located.

Most mining licensing and permitting regimes typically require the preparation of an environmental impact statement or environmental impact assessment prior to the granting of a mining tenement that describes the nature and extent of physical, social, cultural heritage and environmental impacts which are likely to result from the development of a proposed project, including with respect to alienation of land and/or water used by local communities due to the construction and development of a project, air emissions, wastewater storage, discharges to land and water, and the generation, handling, treatment and disposal of waste materials (including tailings and hazardous or toxic materials). 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 to Newcrest, 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 our projects or developments, Newcrest's 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.

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. In March 2020 the PNG government required each operational mine in PNG to provide care and maintenance plans based on potential COVID-19 business continuity risks.

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 of Newcrest's operations. These estimates of closure and rehabilitation liabilities are based on current knowledge and assumptions, however actual costs at the time of closure and rehabilitation may vary materially. 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 the success of its existing operations, exploration and the construction and development of its projects. The location of existing and proposed mining operations and infrastructure often coincides with the location of existing towns and villages, natural water courses, other infrastructure and culturally sensitive areas leading to significant social impact issues such as cultural heritage management and resettlement. A failure to manage relationships with the communities in which Newcrest operates may lead to community outrage, which, in turn, may lead to interruptions to our operations, exploration activities and development projects. Particular challenges in community relations include increasing expectations regarding the level of benefits that communities receive, the level of transparency regarding the payment of compensation, the provision of other benefits to affected landholders and the wider community and involvement in permitting and approvals processes.

Typically, where Newcrest has operations, exploration activities, or development projects, it enters into agreements with local landowners and the wider local community. These agreements include compensation, co-management and other benefits and may be subject to periodic review. The negotiation and/or review of community agreements, including compensation and other benefits, involves complicated and sensitive issues, associated expectations and often competing interests. The nature and subject matter of these negotiations may result in community unrest which, in some instances, results in interruptions to our exploration program, operational activities or delays to project implementation. For example, the compensation agreements in place with customary landowners in relation to Newcrest's PNG operations are subject to periodic review. During prior reviews, the Lihir Operation has experienced intermittent disruptions as a result of unrest within the community regarding the progress of, or issues connected with, 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 projects and operations. We do not have any such issues at present.

In addition, there is a level of public concern relating to the perceived impact of mining activities on the environment and on communities located near, and impacted by, such activities which may result in unfavorable community standing and have an adverse reputational impact on us. Certain non-government organisations ("**NGOs**"), including some international NGO and ethical investment advisory bodies and other similar institutions, are vocal critics of the mining industry and its practices, including in relation to the use of cyanide (which is used in gold processing at some of Newcrest's operating sites), and other hazardous substances in processing activities, and the use of DSTP (which is used at the Lihir Operation and is being considered for the Wafi-Golpu Project). Adverse publicity relating to extractive industries generally, or Newcrest's operations specifically, could have an adverse effect on Newcrest's reputation and impact on its relationship with the communities in proximity to its operations. No assurance can be provided that incidents will not arise that generate community grievances, which may cause operational disruptions and/or delays until they are 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, which 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, including weather, wildfire, earthquakes, 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.

Various international, national, state and provincial laws, codes, resolutions, conventions, guidelines, treaties, and other principles and considerations relate to the rights of Indigenous peoples. Newcrest has projects located in areas presently or previously inhabited by or used by Indigenous peoples. 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 is located, and in PNG, where the Lihir Operation and the Wafi-Golpu Project are 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. Such opposition may be directed through legal or administrative proceedings or protests, roadblocks or other forms of public expression against its activities and may be influenced by perceptions of the mining industry generally driven by recent newsworthy events. Opposition by Indigenous people to Newcrest's activities may require modification of, or preclude, operation or development of its projects so may require the entering into of additional agreements with Indigenous people beyond those to which we have 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 new 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.

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. Anti-fraud, anti-bribery, anti-corruption and anti-money laundering laws, conventions, regulations, and enforcement procedures, and corresponding compliance obligations, in Australia, Canada, Papua New Guinea, the United States of America and other jurisdictions 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 Newcrest 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. Newcrest's dividend policy targets a total dividend payout of at least 10 to 30% of free cash flow generated for that financial year, 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.

In respect of the financial year ended June 30, 2017, Newcrest paid an interim dividend of US$0.075 per ordinary share in respect of the six months ended December 31, 2016, and a final dividend of US$0.075 per ordinary share for a total annual dividend of US$0.15 per ordinary share. For the financial year ending June 30, 2018, Newcrest paid an interim dividend of US$0.075 per ordinary share in respect of the six months ended December 31, 2017 and a final dividend of US$0.11 per ordinary share, for a total annual dividend of US$0.185 per ordinary share. 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.

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 www.newcrest.com.

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. At the date of this AIF, Newcrest has an aggregate of 816,556,534 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, 2020 US$M	As at June 30, 2019 US$M	As at June 30, 2018 US$M
November 15, 2021	4.45%	-	750	750
October 1, 2022	4.20%	380	750	750
May 13, 2030	3.25%	650	-	-
November 15, 2041	5.75%	500	500	500
May 13, 2050	4.20%	500	-	-

The Notes are issued by Newcrest Finance Pty Limited, a wholly-owned subsidiary of Newcrest, and are guaranteed by Newcrest and certain of its subsidiaries as outlined in each Note.

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, increased competition, and a deterioration in general economic and business conditions. 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 subject to moderate credit risk. They are considered medium-grade and as such may possess certain speculative characteristics. Moody's appends numerical modifiers from 1 to 3 to its long-term debt 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. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment. 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 (as of October 13, 2020) 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, 2020.

Date	High	Low	Volume
	(A$)	(A$)	(No.)
July 2019	35.22	30.94	67,891,659
August 2019	38.48	33.85	87,726,461
September 2019	38.81	33.38	69,879,198
October 2019	36.16	30.99	61,905,794
November 2019	32.13	29.86	60,573,281
December 2019	30.13	27.94	82,161,357
January 2020	32.38	29.41	66,662,137
February 2020	30.17	26.30	78,530,358
March 2020	29.82	21.71	149,259,003
April 2020	29.34	23.40	70,444,844
May 2020	32.26	25.15	110,637,727
June 2020	31.56	28.39	82,308,364

PRINCIPAL SHAREHOLDERS

To the best of the knowledge of the Directors and Executive Officers of the Company, there are no 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.

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[(1)]	Directors' Interests[(5)]
PETER HAY[(1)] Victoria, Australia	Non-Executive Chairman	Mr Hay is Chairman of Australia Pacific Airports Corporation, Chairman of Mutual Trust Pty Ltd and a Director of the Cormack Foundation. He was formerly Chairman of Vicinity Centres and a Non-Executive Director of Novion Limited and GUD Holdings Limited.	2013	56,318 ordinary shares

Name and Residence	Position(s) with Newcrest	Principal Occupation During Past Five Years (other than Current Position with Company)	Director Since[1]	Directors' Interests[5]
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, Director of the World Gold Council and a Member of the ICMM Council.	2014	524,482 ordinary shares and 527,150 performance rights
GERARD BOND 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	155,541 ordinary shares and 129,220 performance rights
PHILIP AIKEN[1][2][3] London, United Kingdom	Non-Executive Director	Mr Aiken is the Chairman of Aveva Group plc, the Chairman of Balfour Beatty plc and a Non-Executive Director of Gammon China Limited and was formerly director of National Grid plc.	2013	18,411 ordinary shares
XIAOLING LIU[3][4][6] Victoria, Australia	Non-Executive Director	Dr Liu is currently a Non-Executive Director of Incitec Pivot Limited and South32 Limited and Chancellor of the Queensland University of Technology. Dr Liu was formerly a Non-Executive Director of Iluka Resources Limited.	2015	14,172 ordinary shares
ROGER HIGGINS[2][3] 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	13,675 ordinary shares
VICKKI MCFADDEN[3][4] New South Wales, Australia	Non-Executive Director	Ms McFadden is Chairman of The GPT Group Limited and a Non-Executive Director of Tabcorp Holdings Limited, Allianz Australia Ltd and The Myer Family Investments Pty Ltd. She was formerly a Chairman and Non-Executive Director of Skilled Group Limited and eftpos Payments Australia Limited.	2016	11,272 ordinary shares
PETER TOMSETT[1][2][4] New South Wales, Australia	Non-Executive Director	Mr Tomsett was formerly a Non-Executive Director of OZ Minerals Ltd, Acacia Mining plc and Talisman Energy and Chairman and Director of Silver Standard Resources Inc (now known as SSR Mining Inc).	2018	21,172 ordinary shares
SALLY-ANNE LAYMAN[4] 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	2020	0 ordinary shares

Name and Residence	Position(s) with Newcrest	Principal Occupation During Past Five Years (other than Current Position with Company)	Director Since[1]	Directors' Interests[5]
		Gascoyne Resources Limited and Division Director and Joint Head of the Perth office for the Metals, Mining & Agriculture Division of Macquarie Bank Limited.		
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	n/a
LISA ALI 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	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.		
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	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	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	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) Includes interests held by associates.
(6) Dr Liu has resigned as a Non-Executive Director of Newcrest, effective immediately after Newcrest's Annual General Meeting on 11 November 2020.

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, 2020, the directors and executive officers of Newcrest, as a group, beneficially owned, controlled or directed, directly or indirectly, 1,070,101 ordinary shares representing approximately 0.13% of the issued and outstanding ordinary shares, and held rights to acquire an additional 957,628 ordinary shares, representing approximately 0.12% 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 Dr Liu, Ms McFadden, Mr Tomsett and Ms Layman, 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 Dr Liu, Ms McFadden, Mr Tomsett and Ms Layman that is relevant to the performance of his or her responsibilities as a member of the Audit and Risk Committee is set out below.

Xiaoling Liu

Dr Liu has a Doctor of Philosophy, Metallurgical Engineering and a Bachelor of Engineering in Metallurgical Engineering. Dr Liu was President and Chief Executive Officer of Rio Tinto Minerals and is a Director of South32 Limited and Incitec Pivot Limited. She was formerly a director of Iluka Resources Limited. She has had experience as a member of audit committees in several roles. Dr Liu has resigned as a Non-Executive Director of Newcrest, effective immediately after Newcrest's Annual General Meeting on 11 November 2020.

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 Tabcorp Holdings Limited, Allianz Australia Ltd and Myer Family Investments Pty Ltd and has had broad experience in several roles as a member or chairman of audit committees.

Peter Tomsett

Mr Tomsett has a Bachelor of Mining Engineering (Hons) and a Masters of Science in Mineral Production Management. Mr Tomsett was President and Chief Executive Officer of global gold and copper company, Placer Dome Inc. He has been the Chairman and Managing Director of Kidston Gold Mines Ltd and the Non-Executive Chairman of Equinox Minerals Ltd and Silver Standard Resources Inc (now known as SSR Mining Inc.). He has also been a Director of OZ Minerals Ltd, Acacia Mining plc, Talisman Energy Inc, North American Energy Partners Inc and Africo Resources Ltd. He has had experience in several roles as a member of audit committees.

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.

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:

	Audit Fees	**Audit Related Fees**	**Tax Fees**	**All Other Fees**
	(US$'000s)	(US$'000s)	(US $'000s)	(US $'000s)
Year ended June 30, 2020	1,876	783	74	13
Year ended June 30, 2019	1,480	374	93	789

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.

"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" for the current period 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, dated February 2020.

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 AST Trust Company (Canada) at its principal offices in Toronto, Ontario.

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, and (iii) the Wafi-Golpu Project included in this AIF is based upon the Wafi-Golpu 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, 2020, a copy of which has been filed on SEDAR at www.sedar.com. For copies of documents, please contact the Company at 8th 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.
vein.....	a fracture or crack in the earth's crust that is geologically distinct 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
km²	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
Moz	million ounces
mRL	metres relative level
Mt	million tonnes
Mt/a	million tonnes per annum
MVA	megavolt amperes
MW	megawatt
MW/a	megawatts per annum
MW_{AC}	megawatts air cooling
oz	troy ounce (31.10348 grams)
t	tonnes
t/h	tonnes per hour
t/m^3	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
%	percent
º	degrees

APPENDIX A

NEWCREST MINING LIMITED AUDIT AND RISK COMMITTEE CHARTER

Audit & Risk Committee Charter

February 2020

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 whistle-blowing 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