

# 2019 Sustainability Report



# To be the Miner of Choice for our people, shareholders, host communities, partners and suppliers.

NOISSIM YOU

To safely deliver superior returns to our stakeholders from finding, developing and operating gold/copper mines.

UR WALUES



Caring about people



Integrity and honesty



Innovation and problem solving



High performance



Working together

Cover image: Footballers at the Punmu Festival, sponsored by Telfer Credit: Ngurra Kujungka





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# Welcome to

# **Newcrest**

Newcrest is one of the world's largest gold mining companies. We are among the top 50 companies listed on the Australian Securities Exchange, and we are also listed on PNGX Market, Papua New Guinea's national stock exchange.

Our headquarters are in Melbourne, Australia, and we have operating mines in Australia, Canada, Papua New Guinea (PNG) and Indonesia. We also have a number of development projects and we are exploring around the globe. Refer to our asset overview and map on page 78 at the back of this report for details. As at 30 June 2019, Newcrest had a market capitalisation of A\$24.6 billion and a workforce of nearly 12,000 people.

At Newcrest we're known for our strong technical capabilities in exploration, deep underground block caving and metallurgical processing skills. We are committed to creating a work environment where everyone can go home safe and healthy every day, and where everyone actively contributes to this outcome; operating and developing mines in line with strong environmental, social and governance practices; developing a diverse workforce; and developing and maintaining strong relationships with our communities and governments.



To achieve Newcrest's full potential for our stakeholders, our company strategy focuses on five key pillars, each with associated 2020 aspirations.

# **DUR FIVE PILLARS**

**OUR ASPIRATIONS** 











# People



FIRST QUARTILE ORGANISATIONAL HEALTH BY END OF CY20



# Operating performance







**Technology** 

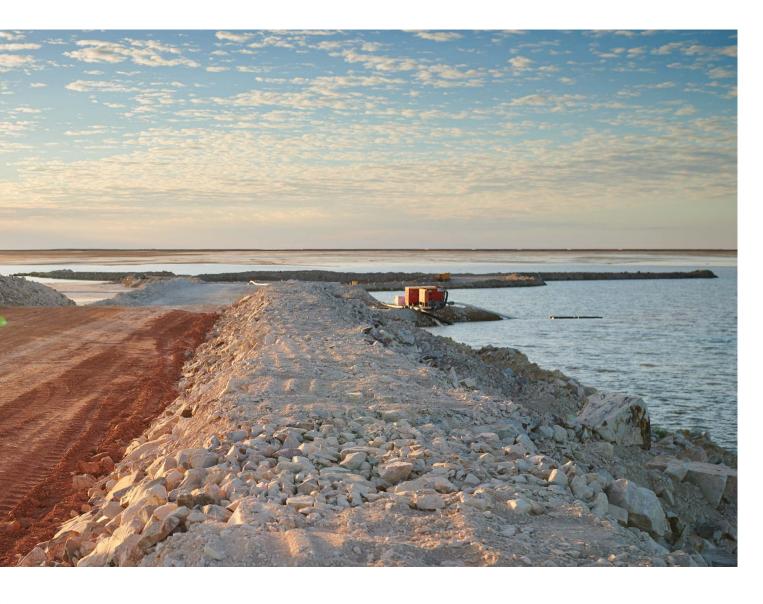
& innovation



# Profitable growth



EXPOSURE TO FIVE TIER ONE DREBODIES BY END OF CY20 OPERATIONS, DEVELOPMENT PROJECTS, DR EQUITY NVESTMENTS)



# About

this report

Newcrest bases its reporting approach on guidance provided by the Global Reporting Initiative (GRI) Standards and AA1000 AccountAbility Principles Standard, as well as ICMM's broader member reporting requirements.

### Report boundary and scope

The boundary of Newcrest's reported performance includes all operations (sites) which Newcrest owned in FY19 excluding projects, corporate offices and exploration sites, unless stated otherwise. Therefore, the focus of this report covers sustainability matters related to the locations of:

- Telfer, Australia
- Cadia, Australia
- Lihir, Papua New Guinea
- Gosowong, Indonesia

The scope of this report includes data for 1 July 2018 to 30 June 2019, which corresponds to our fiscal year. Where noted, references are made to historical results as needed. All financial data is presented in USD unless noted otherwise. References to 'Newcrest,' the Company,' the Group,' 'we' and 'our' are to Newcrest Mining Ltd and/or where explicitly stated may include joint ventures and subsidiaries.

There are a number of restatements of previous years' data reporting in this report. These are specified on relevant pages of the report and in a summary table on page 75.

The readership for this report includes shareholders, investment analysts, financiers and credit agencies, government and non-government organisations, employees (existing and potential), business partners, students and general readers with an interest in the mining industry and/or sustainability performance of corporations.

Newcrest's Annual Report, available on Newcrest's website, is also relevant to this readership.

Refer to the 2019 GRI Content Index (online) for a detailed breakdown by page of our reporting information.

We welcome feedback, and invite readers to send any comments or enquiries about this report to us at sustainabilityfeedback@newcrest.com.

# In conversation

# with our sustainability leaders



# **Roger Higgins**

Chairman, Board Safety and Sustainability Committee

# How would you describe Newcrest's year from a sustainability perspective?

Newcrest has made good progress in strengthening the sustainability elements of our strategy, supporting our vision to be Miner of Choice for all our stakeholders. We are proud to be part of the fundamental role metals and mining play in the sustainable development of society, whether that is through meeting the increasing demand for the components of today's advanced digital and renewable energy technology or in contributing to the livelihoods of the communities where Newcrest operates. There are many opportunities for gold and copper to contribute to our everyday lives.

Newcrest's admission as a member of the International Council on Mining and Metals (ICMM) in November 2017 included a public commitment to the ICMM 10 Principles and position statements. These address core sustainability development challenges in the mining industry. Newcrest has continued to focus on specific actions to align our business to these principles and position statements.

Safety and sustainability are fundamental to Newcrest's organisational and business strategy. During the year a corporate sustainability framework was developed. Under the framework, the Board endorsed the release of a new Sustainability Policy, Water Stewardship Policy and Biodiversity Policy, and related performance objectives, targets and metrics. We also released a number of related policies and standards, demonstrating our commitment to aligning our practices with our vision.

# What is the role of the Newcrest Board Safety and Sustainability Committee?

The committee assists the Board with governance of Newcrest's sustainability

policies and practices, particularly in the areas of safety and health, environmental management, human rights and relationships with communities. We review Newcrest's work to mitigate risks in these important sustainability areas. Monitoring performance and compliance to our policies and legal requirements is central to that process. The committee also reviews Newcrest's response on issues of concern or non-compliance and monitors industry trends and standards.

The committee considers opportunities that have been identified for improving Newcrest's sustainability performance, assessing the positive outcomes alongside potential business risks. The committee's role also includes oversight of Newcrest's annual Sustainability Report, which summarises management of our significant risks and opportunities.

# What are the notable sustainability challenges and achievements for the year?

We had further improvement in our safety performance this year. Newcrest continues to focus on the health and safety of our workforce and broader communities as a core value. This aligns with our commitment to developing strong, long-term relationships with our host countries and local communities.

During the year we formalised our position on climate change. Newcrest released a new policy and set a GHG intensity target of a 30% reduction in GHG emissions per tonne of ore treated by 2030, compared to a baseline of FY18 emissions.

Challenges also arose during the year, ranging from advancing the Wafi-Golpu project under our broader growth agenda, to addressing the divestment requirement for Gosowong.

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"In focusing on growing the business, we are compelled to do so in a sustainable manner."

Sound tailings management is of great importance to Newcrest, the industry, and all our stakeholders. We received and published the Independent Technical Review Board (ITRB) findings on the Northern Tailings Storage Facility embankment slump that occurred at Cadia in early 2018. Through engagement with the ICMM we continued our close involvement in industry- wide improvements to tailings management.

What is your key message to the broader stakeholder community – the workforce, shareholders and communities – in which Newcrest operates?

Newcrest is always seeking opportunities to add value to the business, while

managing our impacts in a responsible and collaborative way. This Sustainability Report prioritises communicating our sustainability performance and accountability against our stakeholders' expectations. It is important that we measure and monitor our activities to effectively manage the impacts of our growth. It is from these processes that we continue to be a strong corporate citizen. As we focus on growing the business, we do so in a sustainable manner.

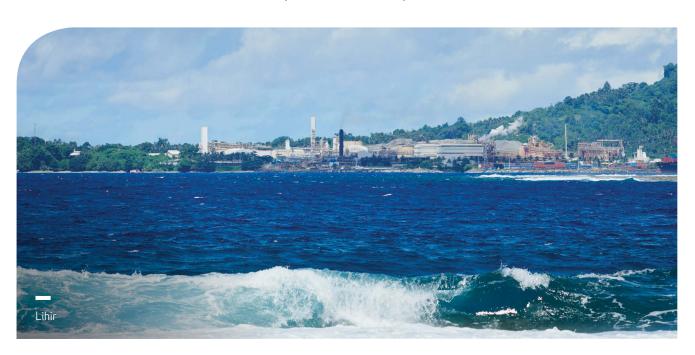
I want to thank the other committee members and my Board colleagues for their valuable inputs and insights during the year. On behalf of my fellow directors, I also thank and congratulate Sandeep and the leadership team for delivering another year of successful development

and transformation, one that has reinforced Newcrest's platform for sustainable growth.

**ROGER HIGGINS** 

CHAIRMAN

NEWCREST BOARD SAFETY
AND SUSTAINABILITY COMMITTEE





# Sandeep Biswas

Newcrest Managing Director and Chief Executive Officer

# What are some of the proudest moments from the last year for Newcrest?

Our greatest priority is making sure our people go home safe and healthy from work every day. It is essential to our ongoing success and is an enduring focus for our business. We have finished another year with no fatalities or life-changing injuries. Our total recordable injury frequency rate (TRIFR) has reduced further over the year and is now 2.3 per million hours worked. This marks four consecutive years of TRIFR reduction and four years of being fatality-free.

Our continued commitment to Newcrest's Safety Transformation Plan underpins this sustained improvement. During the year we continued to embed and renew the three pillars of the plan: working to strengthen our safety culture, ensuring we have critical controls in place for high-risk tasks, and applying robust process safety management. We empower our people to make the best decisions, to speak up, and to take the action they need to work safely. We are unwavering in our long-term commitment to our Safety Transformation Plan and can never become complacent about safety.

Our business has the opportunity, and the responsibility, to make a significant difference to the lives of people in our local communities. For example, in PNG we are creating an impact on a national level through the contributions of Lihir and, potentially, Wafi-Golpu. In addition to the significant direct benefits that flow from our mining and local workforce contributions, our PNG National Engagement Strategy supports socio-economic development initiatives under five priority themes: women, youth, health, administrative capability, and environment. Newcrest's partnership with

the Australia Awards programme is a great example of just one of these initiatives. Through nursing and midwifery training scholarships our business is helping to save the lives of mothers and babies in remote areas.

During the year, we made progress in completing sustainability actions under our commitment to our ICMM membership. We also contributed to the development of the World Gold Council (WGC) Responsible Gold Mining Principles, which were released in September. Another highlight of the year was releasing our overarching Sustainability Framework, setting us up for a longer-term approach to sustainability across the business.

I am proud of our people's willingness to change, to embrace new technology and innovation, and to try new ways of doing things. There is a huge appetite here at Newcrest to be the best we can be, and our people bring a high level of commitment to the job every day. A key factor in being our best is in embracing our differences. A practical example of this is our Diversity and Inclusion Strategy, which has helped us increase our representation of women, Indigenous people, and local employees, both in number and types of roles. In our 2019 annual employee Organisational Health Survey we achieved top-quartile health for the first time since we commenced our survey in 2014. This clearly demonstrates our business is stronger and greater diversity is playing its part.

# How would you sum up Newcrest's approach to sustainability?

Sustainability is about how our actions can make our operations safer, our decision-making more transparent, and our communities increasingly resilient, while managing and reducing our environmental

"We are unwavering in our long-term commitment to our Safety Transformation Plan and can never become complacent about safety."

impacts. In short, how we can make our business better.

Our new targets include a target of 30% reduction in greenhouse gas (GHG) emissions intensity per tonne of ore treated by 2030 against the 2018 baseline, a shadow carbon price, and public support for the Task Force on Climate-related Financial Disclosures (TCFD) framework. We have also issued new policies on sustainability, climate change, biodiversity, and water stewardship. The new policies will be embedded into our assets and operational planning cycles, along with our new metrics and targets.

The business imperative for introducing these new targets and policies is simple. Sustainable outcomes drive positive operational outcomes.

For me, sustainability is about doing the right thing. The right thing for our shareholders, our people, our communities, and our environment. Sustainability isn't an add-on to our operations; it is central to our operations. This year has been one of real progress in setting up our policies and systems to better align with the ICMM 10 Principles. That work continues and I expect to see more progress over the next year.

# What do you see as the key sustainability challenges for Newcrest?

One key sustainability challenge is our approach to energy supply and emissions reduction. Mining is an energy-intensive business. Being more innovative in the way we mine can reduce the amount of energy we use and also reduce our emissions footprint. Like many companies, we can also look at the sources of our energy supply and opportunities to use more renewable energy. For example, at Cadia, we are in the initial stages of planning for a small solar power trial. We are also looking at gas and further geothermal power opportunities at Lihir. Our new asset, Red Chris, is predominantly run on hydro power. So over time, increasing our use of renewable energy is a priority.

Tailings management is also a key issue for us and the communities in which we operate. Newcrest is a working group member of the ICMM Tailings Review and, together with other industry leaders, we are committed to the ICMM approach to the governance of tailings storage facilities.

Our strong relationships with our local communities cannot be taken for granted. Continuing to hear and act on what really matters to the people around our mines remains a priority.

# How is the industry changing and what is the impact and opportunity for Newcrest?

As ore bodies become deeper and more scarce we need new skills and talent to use technology to explore and mine. Developing new skills and diversity in the mining industry is an opportunity for us to make our business more sustainable for the future.

We are also exploring renewable power generation and other low-emission technologies to use energy more efficiently, with the aim of ultimately delivering reductions in both emissions and cost. Finding new ways to process ore more innovatively is another opportunity for Newcrest and our sector.

Across the industry we are seeing an increased focus on transparency and the public sharing of corporate information. Investors, governments, communities and customers are seeking increased detail about more aspects of our performance. By openly sharing information – from how diverse our workforce is, to how we manage tailings dams, to what our target is for emissions reduction – we have the opportunity to build increased trust with our communities. Strengthening and maintaining that trust over the long term is key to building a sustainable, resilient and profitable business.

# What lies ahead for Newcrest?

As we pursue our aspirations we are strengthening our commitment to building sustainable futures for the communities in which we operate.

Our engagement and community development work aims to better enable our local communities to meet their own long-term needs and aspirations. Collaborative relationships are essential, and we are working openly with our local communities and governments.

A critical part of building these lasting relationships with our local communities is our ongoing investment in people and systems to support that collaboration.

### What would you say to your team at Newcrest about the sustainability approach?

The industry in which we operate presents us with unexpected challenges from time to time, and this year has been no exception. It's the way that we're able to tackle those challenges that sets us apart from other companies. It is key to our success as an organisation.

I thank everyone at Newcrest for their continued efforts and achievements throughout the past year. Our people exemplify high performance, integrity and honesty on a daily basis and I am consistently impressed with the innovative approach to problem-solving at Newcrest. I thank the Board of Directors for their support and commitment to our sustainability objectives. We look forward to progressing these further and embracing our transformation opportunities in the year ahead.

SANDEEP BISWAS

NEWCREST MANAGING DIRECTOR AND CHIEF EXECUTIVE OFFICER

FATALITIES

2.3
TRIFR PER MILLIO HOURS WORKED

30%

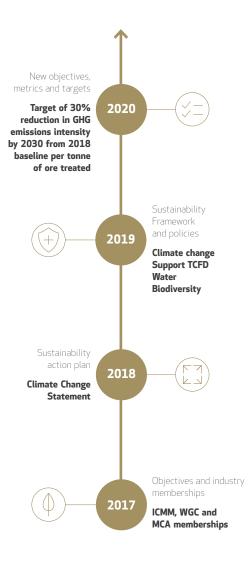
REDUCTION IN GHG EMISSIONS INTENSITY PER TONNE OF ORE TREATED BY 2030

# Our sustainability

# vision and approach

"Sustainable mining means engaging and respecting local communities, assessing and managing safety, social and environmental impacts, and making ethical and transparent strategic business decisions. This approach delivers safe and profitable operations".

SANDEEP BISWAS
MANAGING DIRECTOR AND
CHIEF EXECUTIVE OFFICER



# Sustainability **vision**

Sustainability is integral to our Forging a Stronger Newcrest strategy. The Safety and Sustainability pillar of our strategy demonstrates that Newcrest prioritises and integrates sustainability in our decision-making.

In late 2017, Newcrest's admission into the ICMM outlined the need for full alignment with the ICMM 10 Principles and position statements. Through our membership, we have continued to build on our sustainability foundations. In addition, as members of the WGC, we support the Responsible Gold Mining Principles outlined on page 63.

In 2018, we developed a sustainability action plan, which included articulating our sustainability vision and reviewing our objectives, as well as strengthening our alignment with the ICMM 10 Principles. In FY19, we took the next step, developing a sustainability framework comprising our Board-endorsed Sustainability Policy, supported by a set of objectives, metrics and targets for FY20, to measure and monitor our progress.

### We aspire to be an industry leader, a company that...

Strives to ensure **everybody** goes home safe and healthy every day

Cares for the **environment** and responds to our climate

Listens, develops, maintains **strong community** and stakeholder relationships

Acts **ethically** and transparently

# Formalising our **approach**

Newcrest recognises that having a policy which clearly articulates our commitments on sustainability and is aligned to our industry principles, is critical to achieving our aspiration of being a leader in sustainable mining.

# Newcrest **Sustainability Policy**

Newcrest aspires to be the Miner of Choice for our stakeholders. Our sustainability vision focuses on four key areas: everybody going home safe and healthy every day, caring for the environment, developing and maintaining strong relationships with our communities and governments, and acting ethically and transparently.

### To achieve this, we will strive to:

- create a work environment where everyone can go home safe and healthy every day and where everyone actively contributes to this outcome;
- create a diverse and inclusive environment where everyone feels safe, valued and supported to bring their whole unique self to work;
- build a workforce that represents the communities in which we operate, and attract and retain the right people;
- establish processes to identify and manage risks and opportunities for efficient use of energy and water, to manage emissions linked with climate change and reduce or prevent waste generation;
- contribute to the conservation of biodiversity by implementing integrated approaches to land use planning and environmental management in areas affected by our operations;
- deliver sustainable and long-term benefits in a manner that supports and respects the rights and aspirations of the communities in which we operate;
- respect and strive to protect the human rights of our host community members in all our own dealings with them, and seek honest and open relationships built on mutual trust;
- honour the cultural heritage, customs and traditions of all Indigenous peoples touched by our activities and build cultural awareness across all of our operations;
- build relationships with our suppliers to optimise value through safe, efficient, continuous improvement and innovation;
- engage openly, honestly and regularly with our host governments and people affected by our operations and consider their views in our decision-making;
- uphold ethical business practices and comply with all legal requirements in all jurisdictions where we operate; and
- monitor, measure, report and assure our sustainability performance against public objectives and targets on a regular basis.

We will apply our Risk Management Framework to manage our sustainability risks. By delivering on these commitments, we will maintain and enhance our licence to operate as we strive to become an industry leader in sustainable mining. This policy is to be read in conjunction with all other Newcrest policies available on our website.

All Newcrest employees, contractors and suppliers are required to comply with these commitments.

# Our

In FY19 we improved our sustainability performance as well as our operational and financial performance, whilst also growing the business.

We increased our focus on improving our sustainability reporting systems, in particular data collection and verification processes across our business. This supports our reporting against the GRI sustainability and mining industry-specific indicators.

In FY20 Newcrest will continue to work towards an evolved set of sustainability objectives, in line with our Sustainability Policy and our commitments to ICMM, the WGC Responsible Gold Mining Principles and the GRI. Our FY19 objectives and progress tracking are set out to the right.

Objective	Status
Zero fatalities and life-changing injuries	✓ See page 17
10% annual reduction in TRIFR	O See page 17. TRIFR decreased from 2.4 per million hours worked to 2.3 (3%) <sup>(1)</sup> , which did not meet target. As our TRIFR performance improves, this annual target becomes more challenging each year.
Year-on-year improvement in local workforce participation and increase in female representation in line with set targets	✓ See page 48
Further improve our Organisational Health to top quartile	✓ See page 15
Implement environmental database tool (EQuIS) at at least three operations to support water and environmental data reporting	✓ See page 27
Develop a Climate Change Policy and associated greenhouse gas emissions reduction targets	✓ See page 21
100% of security employees and contractors trained in the Security Code of Conduct	✓ See page 46
All sites to implement a standardised community grievance management system that includes close-out reporting of grievances	✓ See page 47
Social performance and human rights reviews to be conducted annually for all sites	✓ See page 44
Implementation of a Social Performance management system at Australian operations and Corporate headquarters	✓ See page 37
All sites to have cultural heritage management systems in place and functioning	O In progress – see page 47. Telfer's is achieved. Lihir and Gosowong are yet to implement their systems. Cadia's is being refined.
(1) % represents rounding from two decimal pl	aces

(1) % represents rounding from two decimal places.

✓-Met O-Not met

# Our targets to the end of FY20

Safety

Safety

Environment

Water

Zero fatalities or Catchment-based risk assessments life-changing injuries and a further reduction and updated in injury rates water balances (where required)

**GHG** emissions

30% reduction in GHG emissions intensity per tonne of ore treated by 2030 against the 2018 baseline. Deliver Climate Change Policy implementation plan

**Diversity and** inclusion

Increase % females and nationals in the workforce and leadership roles

Community

**Community** 

Group community expenditure contributions ≥1% of Group total revenue

## Health

Occupational exposure control plans at each operation for top three exposures

# **Biodiversity**

Review operations' biodiversity risks and update management plans into ICMMaligned Biodiversity **Action Plans** 

## Reporting

Phased introduction of TCFD reporting

## **Anti-bribery and** corruption risk

Identify high-risk roles; 85% training compliance; seek high-risk supplier compliance

## Stakeholder engagement

Stakeholder engagement plans, cultural heritage management plans and digital grievance management system in place at operations

# What matters most

# - our material topics

Each year, in the production of our Sustainability Report, we undertake a materiality assessment to determine the information and performance measures that matter most to both our key stakeholders and our business This process helps us to identify current and emerging material sustainability topics and to ensure we focus our performance information on the appropriate GRI aspects in our Sustainability Report. The assessment ranks the topics according to their priority to both our stakeholders and Newcrest. Further detail about our materiality process is provided in the Appendix on page 62.

The FY19 material sustainability topics rated as 'high' according to the materiality process are listed below. In line with the GRI reporting approach, we have elected to focus our report on the corresponding GRI aspects rated as high. Although not rated as high, we have also included updates on our performance relating to water stewardship, biodiversity, land management and waste rock.

1

# Improving safety and health

Maintaining our commitment to providing a safe and healthy workplace for employees and contractors through effective systems, culture and secure operations. Managing health impacts from malaria, mental health, pandemic and epidemic risks, diesel particulate matter (DPM) and other air pollutants.

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# Our climate change response

Managing Newcrest's approach to climate change mitigation and adaptation, and the implications fo our operations, including physical risks from climate change as well as transitional and market risks.

# **Growing our business**

Driving growth through expansion of operational sites and exploration activities, including our approach to water stewardship.

4

## Managing mine closure

Managing the environmental and social considerations of mine closure including land management and biodiversity.

5

## Working with our communities

Maintaining our social licence to operate by managing community expectations and relations, delivering on mutually beneficial agreements, and investing in the development of the local communities in which Newcrest operates.

## Respecting human rights

Managing and protecting the human rights of Newcrest's workers, local communities and other stakeholders

# Managing our waste

Managing the hazardous and non-hazardous waste materials generated through Newcrest's mining operations, including waste rock

# Ethical and transparent behaviour

Delivering on Newcrest's commitmen to high-quality governance, transparency and ethical business practices across the organisation.

 $\subset$ 

# Financial sustainability and local economies

Managing our financial performance, productivity and economic sustainability.

# performance overview highlights and challenges

# 1. Improving safety and health

TRIFR per million hours worked



# 2. Our climate change response



# 3. Growing our business



## 4. Managing mine closure





## 5. Working with our communities



## 6. Respecting human rights



# 7. Managing our waste





# 8. Ethical and transparent behaviour

## 9. Financial sustainability and local economies

**\$561**m

# Our **stakeholders**

Newcrest is a culturally diverse company operating across many countries and sites.

# **OUR STAKEHOLDERS**



Newcrest's diverse range of stakeholders reflects that we operate across many countries and collaborate with a range of partners. Our methods of engaging our stakeholders are tailored to suit their needs. Newcrest's approach is to responsively build and maintain open and constructive relationships by understanding and respecting feedback and others' points of view.

Specific Newcrest teams and roles are accountable for developing and managing particular stakeholder relationships; and both formal and informal methods are employed, depending on the nature of the relationship and communication context. Details regarding the engagement methods we use with each stakeholder group are provided in the Appendix on page 64.

The objective is both to keep stakeholders informed and to collaboratively explore, record and respond to our stakeholders' issues and concerns. We respect that stakeholders have different opinions and expectations of our business, and we aim to achieve outcomes through creating genuine understanding.

We work closely with our employees, local communities, governments and regulators, investors, business partners and the broader mining industry. We also engage with non-government organisations, education and research bodies, the media and general public.

In addition to our regular local communications and outreach with our stakeholders, we publicly disclose our performance and aspirations through Newcrest's corporate reporting process.

Stakeholder	Engagement activities	
Employees and contractors	Employee briefings, intranet, social media, email, newsletters, social events, notice boards, departmental site and toolbox meetings, performance reviews, site general manager town hall meetings, direct engagement between people leaders and their teams, and annual Organisational Health Survey participation.	
Shareholders and investors	Annual reports, quarterly production reports, half-yearly financial reporting, website, email, investor briefings, one-one-one discussions, investor days, conference calls, market announcements, annual general meeting, industry conferences, and social media.	
Local communities	Community Relations team visits, resident and community meetings, site visits, communication and feedback forums with leaders and communities, complaints and grievance mechanisms, sponsorships and partnerships, collaborative agreements, media engagement on local initiatives, community newsletters, factsheets, websites and social media.	
Government and regulators	Face-to-face meetings, regular briefings, and direct engagement.	
Suppliers	Collaborative guidelines, out-to-market approaches, face-to-face discussions, performance meetings, and contractual agreements.	
Customers	Market tenders, meetings, reports, face-to-face discussions and site visits.	

# Our

# people

Our first and greatest responsibility is ensuring that our people go home safe and healthy from work every day. The wellbeing and capability of our employees are fundamental to Newcrest's business success.

Our long-term commitment to safety continues through our Safety Transformation Plan and, in particular, through the strengthening of our safety culture via NewSafe. In FY19, a second level of NewSafe, 'NextGen', was delivered throughout Newcrest as described on page 18.

In conducting our business, including liaising with external stakeholders, our employees comply with relevant laws, regulations and Newcrest policies, and our senior leaders are informed when significant stakeholder concerns arise.

The local communities in which we work comprise Newcrest's employees, contractors, suppliers and their families. It is at the local level that we can have the greatest impacts. Details of how we work with our communities are provided on page 36.

## The importance of diversity

Our approach to diversity and inclusion is an essential component of our People pillar. It is a fundamental part of our vision, values and culture.

To help create a workplace where everyone feels comfortable bringing their 'whole unique self' to work, we have a dedicated diversity and inclusion strategy and a supporting policy. We know having a diverse and inclusive work environment goes beyond gender – diversity is not just about employing females and setting gender targets – it is about having a culture that values and respects people's differences, as well as supporting one another to achieve great things, together.

This aligns with Newcrest's strategy and business transformation aspirations, including our culture change objectives. We are working closely with all teams across Newcrest to build an increasingly diverse and inclusive business.

To ensure we attract and retain the right people, our hiring decisions and promotions are merit-based and align with our responsibility to have a workforce that best represents the communities in which we operate, while delivering on business requirements.

We offer our high-potential employees a robust mentoring programme, prioritise them for leadership development programmes, and provide relevant leadership experiences. Further detail and workforce data on our efforts to improve diversity and inclusion are on page 48, in the context of human rights.

# **Developing strength and expertise**

In FY19, Newcrest continued to use three distinct programmes to develop the leadership and management skills of our people.

The aim of TransformationMatters is to create connection among leaders from across our business in order to foster a collaborative approach to leading Newcrest. TransformationMatters involves periodic workshops delivered to the Transformation Leadership Team (TLT). The TLT includes the Executive Committee and approximately 22 leaders from across the company whose combined portfolio significantly impacts the performance of the business. The programme has also been run for leadership teams and superintendents at Cadia, Lihir and Telfer.

LeadingMatters is focused on building leaders' self-awareness and personal development to foster values-based leadership and grow high-performing teams. More than 400 of our leaders, including members of our Executive Committee, have participated in LeadingMatters since it launched in 2018.

Finally, ManagingMatters helps our people leaders acquire targeted management skills, such as delegation, giving and receiving feedback, and coaching others. In FY19, more than 1,400 supervisor-level employees attended ManagingMatters across all our sites.

At Lihir, the LeadingMatters and ManagingMatters programmes were integrated with NewSafe, our safety culture programme, and Management Operating System (MOS) training to form the locally titled 'Trupla Lida' programme, attended by more than 700 supervisors, superintendents and managers. Lihir managers and superintendents helped lead the sessions for supervisors, providing an excellent example of the 'leader as teacher' approach.



### Speak Out

Speaking up about concerns is a critical element of both safety and ethical behaviour. The Speak Out service, which has been a global service at Newcrest since 2011, is a confidential and anonymous way for all current or former Newcrest employees, officers, contractors, consultants, suppliers or relatives of those people, to report misconduct, anything believed to be illegal or unethical, safety issues, or breaches of our Code of Conduct, through an independent third party.

Australian laws which came into effect on 1 July 2019 further protect people who speak out about misconduct in companies such as ours. To support these laws, we updated our global Speak Out Policy, which applies to all our operations and activities. An updated Speak Out Standard and new Speak Out Procedure guides people through the process.

### **Organisational Health**

In FY19, we continued to measure Newcrest's Organisational Health through our annual survey, enabling us to benchmark the business against other organisations. The survey measures employees' views of management systems and the practices we employ. In the fifth year of the survey, we increased two points to 73, from 71 in FY18, achieving our aspiration to be a top-quartile company in relation to organisational health.

Newcrest has identified seven management practices as our priority for improvement. During 2019, we achieved top quartile measures for three of those priority practices – operational discipline, personal ownership, and bottom-up innovation. All 37 practices measured within the survey were above second quartile level.

To sustain our top-quartile performance in the coming year, Newcrest will focus on the practices of establishing an open and trusting environment, involving employees, and enhancing our talent development efforts. In addition, we will ensure we continue to engage all employees, especially those working in front-line roles.

Average training hours per year by employee category (company-wide)

Senior Executive	12.95	
General Manager	19.93	
Manager		40.22
Supervisor		36.92
Operator		49.19



# Our leadership

Public affairs and social performance are standing agenda items at all regular board meetings.

Sustainable development considerations are integrated into Newcrest's decision-making processes, and the Newcrest Board is ultimately accountable for ensuring we execute our sustainability approach. Public affairs and social performance are standing agenda items at all regular Board meetings.

The Safety and Sustainability
Committee considers sustainable
development matters and assists
the Board by overseeing, monitoring
and reviewing Newcrest's practices
and governance in sustainability,
environment, safety, occupational
health, and social performance, including
the human rights and security of
communities, employees and operations.

The scope includes our annual sustainability reporting process.

Our Sustainability Policy was introduced in June 2019 and supports the obligations of the Executive Committee to exercise due diligence in decisions relating to sustainability risks and to disclose such risks to the Safety and Sustainability Committee. Newcrest's Communities Policy, Environmental Policy, and Safety and Health Policy also enhance the sustainable development of our operations and are supported by performance standards.

In addition, Newcrest has a range of policies supporting ethical business principles and practices. These include

the Code of Conduct, the Director Independence Policy, the Director Conflicts of Interests Policy, the Anti-Bribery and Corruption Policy, the Market Disclosure Policy, the Market Releases and Investor Relations Policy, the Media and External Communications Policy, and the Securities Dealing Policy.

All relevant employees undertake regular training to ensure they understand their obligations under Newcrest's Code of Conduct. Some employees undertake training in relation to other policies referred to above. Training on our new sustainability policies will be rolled out in FY20.

# Board

# Safety and Sustainability Committee



ROGER HIGGINS
Independent
Non-Executive Director,
Chairman, Safety and
Sustainability Committee



PHILIP AIKEN AM Independent Non-Executive Director



PETER TOMSETT
Independent
Non-Executive Director

### Roard

## of Directors

### **PETER HAY**

Independent Non-Executive Chairman

## **SANDEEP BISWAS**

Managing Director and Chief Executive Officer

# **GERARD BOND**

Finance Director and Chief Financial Officer

# **PHILIP AIKEN AM**

Independent Non-Executive

# XIAOLING LIU

Independent Non-Executive Director

# **ROGER HIGGINS**

Independent Non-Executive

### **VICKKI MCFADDEN**

Independent Non-Executive
Director

### PETER TOMSETT

Independent Non-Executive

# Our

# material topics

# 1 Improving safety and health

## Material

# sustainability topic

We believe that a strong and enduring commitment to the health and safety of our workforce best reflects our values and underpins and sustains optimal business performance. This includes mitigating potential occupational health risks and impacts.

### Our

# approach

Caring about people is one of our values, ultimately contributing to a culture where health and safety are at the forefront of everything we do. The most important measure of our success is that we create a work environment where everyone can go home safe and healthy every day and where everyone can actively contribute to this outcome.

Our Safety Transformation Plan continues to direct our efforts and deliver results. This is supported by the broader Forging a Stronger Newcrest strategy and our alignment with ICMM Principle 5 – Pursue continual improvement in health and safety performance with the ultimate goal of zero harm.

# **Performance**

# in FY19

Consistent with our safety vision, our objectives and key performance measures under safety are zero fatalities and life-changing injuries and a 10% year-on-year reduction in our TRIFR. Our zero fatality and life-changing injury target was achieved in FY19 and, along with further reduction in our lost time injury frequency rate (LTIFR) from 0.5 to 0.4 per million hours worked, our TRIFR decreased from 2.4 per million hours worked to 2.3 (3%)<sup>(1)</sup>.

The industry average for TRIFR for ICMM member companies was 3.4 per million hours worked. While Newcrest's reduction in TRIFR in FY19 was a pleasing result, we did not meet our target of a 10% decrease year-on-year. As our TRIFR performance improves, this annual target becomes more challenging. As such we have reviewed our safety target setting as part of our new sustainability objectives and metrics. Into FY20 and beyond our safety target is now a year-on-year improvement in TRIFR, with zero fatalities or life-changing injuries.

# Newcrest TRIFR FY17-FY19 per million hours worked (#) $^{(2)}$



## Newcrest LTIFR FY17-FY19 per million hours worked (#)(2)



- (1) % represents rounding from two decimal places.
- (2) In line with ICMM guidelines, the calculation of company-wide TRIFR and LTIFR only includes operational sites and joint ventures in which Newcrest has a controlling interest.

# Our Safety Transformation Plan

Our Safety Transformation Plan focuses on three key pillars to achieve our safety vision of 'everybody going home safe and healthy every day'.

# **PILLARS**

Safety is strongest when the three elements of culture, controls and systems are aligned. Our safety culture, behaviours and actions are led by NewSafe. Our Critical Control Management programme puts in place the review, approval and verification steps for high-risk tasks. Process Safety Management targets wider system risks, such as operating plant designs and chemical and energy hazards.

A stronger safety culture through NewSafe;

Critical Control Management; and

Robust Process Safety Management.

**EWSAFE** 

### NewSafe

Newcrest initiated the NewSafe safety culture change programme in 2015 and has deployed it to all sites.

To ensure that it continues to be effective and relevant, during FY19 we developed a follow-on programme to NewSafe called 'NextGen'.

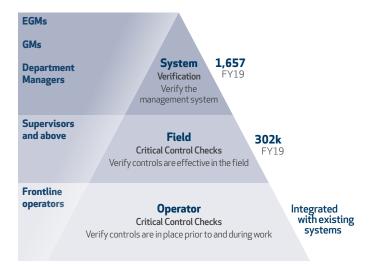
NewSafe NextGen builds on the material covered in the original NewSafe Leadership course and incorporates feedback, information and data gathered since it was initially launched. NextGen reinforces key messages relating to safety leadership and continues to encourage people to identify and speak up when unsafe behaviours and conditions are encountered. To date, approximately 90% of our workforce have attended NewSafe NextGen sessions.



# CAL CONTROL MANAGEMENT

### Critical Control Management (CCM)

Since its inception in 2016, we have completed more than 6,000 System Verifications and 700,000 Field Critical Control Checks under the CCM programme. During FY19 the programme continued to be strong in terms of verifications and business application at all levels. New tools enabled improved reporting and analytical capability for the CCM data. We continue to see an improvement in the percentage of CCM verifications conducted using our mobile device app. In FY19 we conducted over 1,650 System Verifications and 300,000 Field Critical Control Checks as well as our front-line Operator Critical Control Checks which are integrated into existing systems.



The third pillar of our Safety Transformation Plan, robust Process Safety Management, aims to systematically and comprehensively manage the integrity and containment of high-energy and toxic processes to protect our people and the environment. To provide further focus and direction, Newcrest sourced additional resources during FY19 with an immediate priority to address the findings of process safety audits conducted across its operations.

All three pillars of our Safety Transformation Plan are supported by a foundation of the right systems and tools. In FY19, some key activities included:

- The second round of audits at all sites of the Newcrest Health Safety and Environment Management System (HSEMS), Health and Hygiene Standards and Environment Standards.
- A comprehensive review of the existing Major Hazard Standards, with a focus to improve and better align with CCM content. An update of the standards is planned to be released in FY20.
- The streamlining of the Newcrest
   Management of Change system to
   improve functionality and efficiency at
   all levels of the business and functions.

# Health and hygiene

Some of the key health and hygiene issues for Newcrest are:

- fatigue;
- monitoring and controlling potential exposures, most specifically to DPM and respirable dust; and
- mental and physical health and wellbeing.

We continue to implement and improve programmes to monitor, maintain and improve the health of our people throughout the business. Programmes look at occupational health risks, as well as lifestyle health risks.

## **Fatigue**

To reduce the risk of fatigue-related workplace incidents, operational sites use fatigue management plans. These focus on areas that may cause workplace fatigue such as work design, including shift rostering and camp facilities, as well as factors related to lifestyle and health.

We have developed a Company-wide Fatigue Management Standard that provides consistent minimum standards to mitigate fatigue risks across the organisation. In FY19, we developed and delivered fatigue management training across the business, with training materials translated into Indonesian, Tok Pisin (PNG) and Spanish, as well as including site-specific information such as managing fatigue during Ramadan for our teams in Indonesia.

# Potential exposures

Reducing workplace exposures continues to be a key part of our health and hygiene programme with all sites undertaking activities to identify and reduce exposures. Gosowong purchased DPM emissions monitoring equipment to supplement the existing exhaust gas testing equipment used onsite. This equipment allows the site maintenance team to undertake comprehensive emissions testing of onsite diesel-powered vehicles to identify when a vehicle is running poorly and generating higher levels of DPM or hazardous exhaust

gases. This information assists with repairs and also allows the site ventilation teams to better design ventilation systems throughout the mine to control workforce exposures to DPM.

During the reporting period, Telfer and Cadia worked with occupational physicians to review and update health surveillance programmes to better monitor workers for potential health effects from workplace exposures. Cadia partnered with Insurance and Care NSW (iCare) to deliver health surveillance for the workforce, which includes onsite screening using the 'iCare Lung Bus'. This was followed up with additional screening with specialist medical personnel for anyone identified during the initial screening as requiring more comprehensive health surveillance.

Telfer implemented a respiratory protection programme, which involved health surveillance checks of any personnel required to wear respiratory protective equipment. The process included:

- fit testing to ensure the respiratory protective equipment fitted correctly;
- and enforcing the requirement for workers using respiratory protective equipment to be clean shaven.

During the year Lihir, Cadia and Telfer all completed surveys to identify noise exposure risks and develop risk control plans. Gosowong is scheduled to complete a survey in FY20.

### Physical and mental health

All sites are working to improve their wellbeing programmes with a strong focus on mental wellness. The Melbourne office delivered a series of mental health first-aid training courses in FY19 to ensure that the office is suitably resourced with personnel who can respond to both physical and psychosocial health issues within the workplace.

Several of our sites implemented wellbeing programmes designed to help employees and contractors to maintain and improve their physical and mental health.

# Speaking up for safety

Safety remains front and centre of everything we do as we strive to remain free of fatalities and life-changing injuries and continue to reduce our recordable injury rate.

In FY19, we continued the rollout of our Safety Transformation Plan, with NewSafe NextGen building on the strengths of previous NewSafe training.

NewSafe NextGen focuses on courage and addressing fear, creating a culture where we foster courage among our workforce and eliminate the fear of speaking up. It also introduces tools to help people make the safest decisions, reinforcing our message that everyone is a safety leader.

During FY19, we held NewSafe NextGen workshops at all sites and the Melbourne office, with 4,500 employees and permanent contractors completing training by May 2019.

Our safety transformation work is reaping rewards with Pulse Check surveys recording improvements at sites. For example, the 2019 Pulse Check at Cadia found consistent, gradual improvement in site-wide results for supervisors' safety leadership during the past three years.

Our long-term commitment to our Safety Transformation plan will continue in FY20.



# Safety projects are hotting up

Our Lihir operation is located on an island in a volcanic caldera which retains remnant heat within its rock. In the open pit, rock temperatures can reach up to 150 degrees Celsius. The presence of the geothermal conditions presents a unique challenge to our teams to maintain safe and efficient operations.

Lihir's historic open pit mining practices require our drill and blast personnel to work in conditions where geothermal factors and elevated temperatures pose two potential risks:

- geyser events where steam and water is ejected from drilled holes; and
- geothermal outbursts where trapped pockets of steam can vent through the rock.

An innovative programme of engineering works, 'Safe Mining to 150 degrees Celsius' is underway to enable us to safely mine in areas of higher temperatures.

The programme covers each component of the open pit mining system with innovative mechanised and robotic solutions:

- 'Nil on foot' aims to keep our operators safe by developing and implementing robotic technology that lets personnel undertake their work from the safety of a vehicle. This requires prototyping and deploying robotic solutions for hole temperature and depth measurement, high explosive assembly loading, emulsion product loading and blasthole geology sampling.
- 'Nil on bench' targets the removal of our operators from the pit floor to protect them from geothermal outbursts. Current projects include the deployment of tele-remote technology on dozers, shovels and blasthole drilling rigs.

We continue to work closely with key technology providers to rapidly build Newcrest's capability to mine safely at rock temperatures of up to 150 degrees Celsius. This new capability may help offset the extent to which artificial pit cooling is required and may support the continued geothermal power programme at Lihir.

# 2 Establishing a response to climate change

# Material

# sustainability topic

Stakeholders are increasingly seeking our views on how climate change has the potential to impact our business. The material sustainability aspect for us in relation to climate change is our approach to mitigation and adaptation and the implications for our operations. This includes physical risks from climate change as well as transitional risks and market risks.

# Our

# approach

Newcrest recognises climate change is one of the most significant challenges facing the world today. We acknowledge the climate change science and support the Paris Agreement goals. The mining sector has a role to play in reducing greenhouse gas emissions.

We are taking action to manage our climate change risks and opportunities, consistent with our objective to sustainably deliver superior returns to our stakeholders.

We are working to align our approach with ICMM Principle 6 – Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change, as well as Principles 1, 2, 4 and 10 (see page 63).



# **Performance**

# in FY19

In FY18, Newcrest released a Climate Change Statement, including an action to increase the transparency of our climate change reporting to meet the needs of our investors, governments, communities and customers. We also committed to assessing the TCFD guidelines for reporting climate change risks and opportunities and to develop a GHG emissions intensity target.

In FY19, Newcrest released a Climate Change Policy, which outlines our specific commitments.

As a result of extensive internal and external engagement, we are pleased to now publicly support the TCFD guidelines and confirm that we have started to implement its recommendations in our external reporting. We also announced a GHG intensity target of a 30% reduction in GHG emissions intensity per tonne of ore treated by 2030, against the 2018 baseline.

This target is challenging and will require a significant shift from business-as-usual operations. As close to 90% of our GHG emissions are associated with power generation, opportunities to decarbonise our electricity supply will be key to meeting our targets.

To facilitate our decision-making with respect to acquisitions and key capital investment, including in low-carbon power options and technology development, we adopted a protocol for shadow carbon prices of between \$25/tonne and \$50/tonne of  $\rm CO_2$ -e in the period to 2030 for jurisdictions where there are no regulated carbon prices.

### Our policy is focused on:

- a commitment to the sustainable discovery, development and production of gold and copper, which are essential materials for the low-carbon transition, particularly to meet high global rates of electrification using low-carbon energy sources;
- identifying and implementing technologies and innovative practices to improve process and energy efficiencies to reduce direct mining costs and assess options to use renewable power generation to reduce our GHG emissions intensity while improving our productivity;
- working with experts and research organisations to better understand physical threats from climate change at our current and planned operating sites, to build resilience into our infrastructure; and

 engaging with our industry partners and through our industry associations to identify opportunities to constructively contribute to policy development in our host countries and share international learnings with governments.

During the year, we undertook a high-level risk and opportunity assessment using the TCFD framework. The nature of our portfolio – gold and copper commodities – means the transition to a low-carbon future can offer strong opportunities with manageable risks.

In terms of the transition, potential risks include:

- policy and legal risks linked to GHG emissions, energy, water and biodiversity which may place constraints on the business, for example, possible higher costs of energy, more stringent resource regulations and tighter limits on permits;
- technology risks including challenges in integrating new technologies with existing systems;
- competing business outcomes, for example, greater electrification in our operations will improve health and safety outcomes but may increase GHG emissions in the short term until electricity supply is decarbonised;
- possible short-term costs to transition to lower-emission technologies;
- increased cost of raw materials due to embedded GHG emissions pricing; and
- reputational risks including shareholder action if we do not act in line with expectations.

A range of effective mitigation measures were also identified. We believe that many of the transition risks can be managed by pursuing measures to actively reduce our GHG emissions intensity and to efficiently use both energy and water at our sites.

Examples of physical climate change risks that could potentially impact on our business include:

 changes to the intensity and frequency of extreme events such as tropical cyclones and storm surges, which could impact on safety, production and logistics;

- warming temperatures could result in more extreme-heat days and heat stress and could lead to health and safety concerns and changes to energy demand, for example, for cooling people and equipment; and
- changing rainfall patterns affecting both average rainfall and seasonality factors, which could impact water availability and could require improved water management practices.

For a mining company operating in vulnerable conditions with respect to water availability, cyclones, storm surges and rising temperatures, we understand it is highly desirable that climate change physical impacts are mitigated by keeping global temperature increases as low as possible, in line with the Paris Agreement.

We are conducting climate modelling at Cadia, Telfer, Lihir and Gosowong (not presently at Red Chris) to better understand potential physical threats from climate change for our sites. This information will be used to inform future proposed site specific studies on possible mitigation, adaptation or design measures.

# **Energy consumptions and GHG emissions**

We are pleased to report that our overall energy consumption in FY19 remained flat against our FY18 result, and our GHG emission intensity reduced from 35 last year to 34 kg of  $\rm CO_2e/tonne$  of ore processed this year. This performance was achieved while production, in terms of ounces of gold equivalent, increased by 11% this year. Total Scope 1 + Scope 2 GHG emissions increased 6% to 2.28 million tonnes.

The biggest year-on-year change was at Cadia, which consumed an additional 28% of energy to process 38% more ore. This was a record year for Cadia in terms of production and a record low AISC per ounce. Cadia's energy use is dominated by electricity sourced from the NSW grid. The increase in activity at Cadia was the major contributor to the higher total GHG emissions for FY19.

Gosowong's disproportionately high GHG emissions intensity and energy intensity compared to our other sites is due to it mining relatively less ore, which is at higher grades. When measured on the basis of GHG emissions intensity by gold produced, it delivered the best result of all sites in FY19.

As an energy-intensive business, we are seeking options to increase our energy and process efficiency, while managing our risks and maximising our opportunities in the transition to a low-carbon future. We are assessing options to use renewable power generation and low-emission technologies, which will reduce our GHG emissions intensity while improving productivity. As an example, our team at Cadia is exploring options for on-site power generation using solar energy. Managing increasing power costs in Australia is a challenge for us as energy prices continue to rise due to policy uncertainty.

New technologies and innovative mine design have the potential to reduce energy demand and GHG emissions at site, compared with more traditional approaches. Newcrest pursued several initiatives in FY19 which may help to reduce GHG emissions, including:

- coarse ore flotation, which allows grind size to be coarser, reducing power usage;
- autoclave partial oxidation, which reduces specific oxygen and power needs;
- oxygen storage bullet to reduce oxygen venting and save power;
- ore sorting which reduces the amount of material to grinding circuit, which lowers power demand;
- geothermal upgrades to increase geothermal production; and
- exploring opportunities for liquefied natural gas to replace heavy fuel oil.

We continued to participate in the ICMM, WGC and MCA working groups to monitor industry initiatives relating to GHG emissions.



# New software reduces environmental risk at mine sites

Newcrest has introduced a new software database designed to reduce environmental risk; improve planning, monitoring and quality control; and assist with compliance. The digital system known as EQuIS, has been introduced at Lihir, Telfer, Cadia and Melbourne.

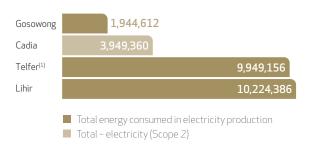
EQuIS is being used by our Environment teams to manage environmental data for planning, quality assurance, quality control receipt, interpretation and reporting. It supports the complete environmental data workflow, including task management, field data collection, data verification and validation, reporting, graphics, and visualisation.

Previously, our sites have used different external applications, some requiring stand-alone spreadsheets and manual data input to monitor, measure and report environmental performance. Using a single source streamlines access to environmental data for external reporting requirements and trend analysis.

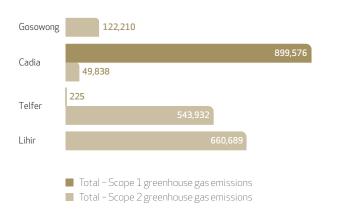
EQuIS will deliver end-to-end integration and enable collaboration between all our sites.

Rigorous analysis of control effectiveness monitoring also reduces risk, enabling better compliance management and timely and informed decision-making.

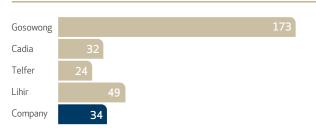
# Electricity production and consumption within the organisation (GJ) $\mbox{FY}19$



# Total – Scope 1 & Scope 2 GHG emissions $(tCO_2-e)$ FY19



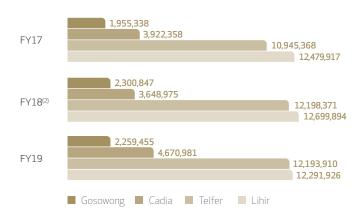
# GHG emissions intensity (tonnes processed) by site $(kg CO_2-e/t) FY19$



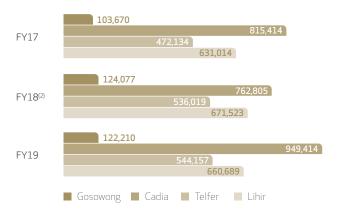
We report on gross Scope 1 emissions, which includes fuel and energy produced or consumed and GHG emissions produced directly, and gross Scope 2 emissions, which are GHG emissions from consumption of electricity, heat or steam imported from sources outside Newcrest, at each of our Australian sites.

We report on GHG emissions from our Australian activities to the regulator as part of the Australian Government's National Greenhouse and Energy Reporting (NGER) Scheme, a reporting system for GHG emissions, energy production and consumption, which applies to companies above a certain threshold of emissions.

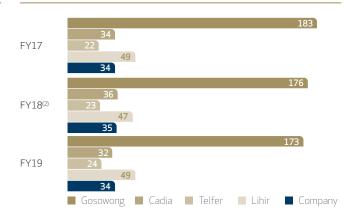
# Energy consumption within the organisation (GJ) FY17–19



Total – Scope 1 & 2 GHG emissions within the organisation (tCO<sub>2</sub>-e) FY17–19



# GHG emissions intensity (tonnes processed) by site (kg CO<sub>2</sub>-e/t) FY17–19



- (1) Telfer figure includes 1264 GJ of grid electricity consumption (Scope 2).
- (2) Newcrest has restated total energy consumption for FY18, which has in turn resulted in a restatement for total emissions and intensity calculations. These restatements are presented on page 75 and are attributed to a reclassification of Lihir fuel consumption.

# 3 **Growing** our business

# Material

# sustainability topic

It is important to our stakeholders, notably our shareholders, that we continue to pursue profitable growth in our business. How we go about achieving our growth aspirations is critical to our financial results, our environmental management and the impact on our host countries and communities.

# Our

# approach

Newcrest's 2020 aspiration is to have exposure to five Tier 1 orebodies. During the year, we made significant progress towards this aspiration whilst maintaining our consistent approach to growth.

Value creation for our shareholders always underpins our decision-making; and, in order of preference, we seek to achieve growth through:

### $\vee$

- 1. organic growth;
- 2. greenfield exploration;
- 3. **early entry partnerships** with explorers; and
- 4. **acquisition or merger** when we see the opportunity to create value through application of our strong and unique technical capabilities

Newcrest's process to pursue profitable growth through our business strategy is guided by all 10 ICMM Principles, but primarily by Principles 1, 2, 4 and 9 (see page 63).



# Performance

in FY19

### Organic growth

We currently have two Tier 1 operations in our long-life, low-cost Cadia and Lihir assets. Throughout the financial year, we pursued our organic growth options at these operations by progressing the Cadia Expansion Feasibility Study, gating the Cadia Molybdenum Plant Feasibility study to execution and achieving our 15mtpa sustainable mill throughput rate at Lihir.

## **Advanced projects**

Wafi-Golpu is our joint venture project between subsidiaries of Newcrest and Harmony Gold Mining Company Limited, located in the Morobe Province of PNG. We expect Wafi-Golpu to be a Tier 1 project. If developed, Wafi-Golpu would be the first major underground mine to be developed in the Morobe Province in PNG. In FY19, the Wafi-Golpu Joint Venture completed the environmental impact statement (EIS) for the Wafi-Golpu development. The project is now awaiting the Government of PNG's decision on the granting of the special mining lease; however, in January 2019 the project was delayed by a court process between the Morobe Provincial Government and the Government of PNG (read more on page 29).

# Impacts of organic growth – insights on water

As our operations expand, we recognise the impacts on our people, the local communities and the natural environments in which we operate.

Water use is discussed in this section of the report as it is relevant to the impact of our organic growth.

During the reporting period, one of our challenges at Lihir has been an ongoing claim by one community group seeking payments for water use by the project. PNG law determines that all water is the property of the State, and the project pays all water use fees to the State. This dispute has been referred to the Mineral Resources Authority and Conservation and Environmental Protection Authority for resolution.

# Water stewardship

Our sites use water from a variety of sources, such as surface water, groundwater, seawater and mine dewatering. Where practical, water is recycled to reduce consumption. The main operational water activities at Newcrest include use of water in process plants for gold and copper production, use of seawater at Lihir for cooling and tailings dilution, dewatering for access to mine voids, use of water for dust suppression, and water for services in camps and potable water supplies.

Our approach to water management is guided by the Newcrest Environmental Policy and Water Management Standard and voluntary commitments, including ICMM Principle 6: Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change. During FY19, we expanded on the water elements of our Environmental Policy to develop a Water Stewardship Policy and implementation plan.

Newcrest sites are located in a variety of climatic regions and depending on seasonal variations may experience water surplus or reduced water availability at different times of the year. Therefore, water presents both challenges and opportunities in terms of managing water consumption and releases within permitted extraction and discharge limits to maintain stable operation of our mines.

As a requirement of the Newcrest Water Management Standard, sites maintain water balances to guide efficient water use and manage potential local and regional catchment impacts on water sources used by operations and local communities. According to the global online Aqueduct Water Risk Atlas<sup>(1)</sup>, the regional water risk ratings (based on quantity, quality and regulatory and reputational risks) in the regions where Newcrest operates range from low to high including: Red Chris (low), Telfer (low to medium), Cadia (medium to high), Gosowong (high) and Lihir (high).

(1) The Aqueduct Water Risk Atlas (https://www.wri.org/applications/maps/aqueduct-atlas) rates water risk according to a five-tiered scale that comprises: low risk (0 to 1), low to medium risk (1 to 2), medium to high risk (2 to 3), high risk (3 to 4), extremely high risk (4 to 5).



We use the MCA Water Accounting Framework to support water reporting for all our sites. Water extraction volumes, discharge volumes and quality are monitored in accordance with regulatory and internal requirements to mitigate potential impacts and manage risks. Site water risks are included on site registers for regular update and review, particularly during expansions or new projects.

The material variance in water withdrawal for the reporting period can be attributed to the divestment of Bonikro in FY18 and inclusion of rainfall and runoff in FY19. Audits against the Newcrest Water Management Standard in FY19 at Telfer and Cadia showed the following key results.

**Cadia:** The intense ongoing drought in NSW over the last year resulted in challenges at Cadia in managing stakeholder engagement about both water and dust management.

Cadia's relative water use is efficiently managed within regulatory and other requirements via a site water management committee. Cadia experienced a particular challenge during the year with the management of dust from the NTSF, and associated complaints from nearby residents. This was due to two main factors: the prohibition notice on the NTSF since March 2018 ceasing tailings deposition, causing the tailings surface to dry, and the persistent drought conditions. Cadia applied various dust suppression products and techniques during FY19, which were only partially successful, resulting in further complaints from nearby residents. Additional work occurred in FY19 to trial more suitable dust suppression products for the NTSF. Dust suppression typically uses a large amount of water, and the team at Cadia trialled activities to reduce water consumption.

Cadia has a mature approach to managing and monitoring water. Both the Water Management Plan and Water Balance were updated during the year, and the risk of drought and related water shortages has been recognised as a risk for the business. To manage this, a Cadia water committee to review water performance was established.

**Telfer:** Telfer's existing bore fields are well within permitted abstraction levels with comprehensive monitoring in place. The water balance was updated during the year. Opportunities exist to improve water security against significant supply disruptions by having medium- and long-term strategies.

The Water Management Standard is intended to complement and enhance site water monitoring programmes and, where required, go beyond regulatory requirements. The standard requires each Newcrest site to assess water risks and maintain a water management plan and water balance. In FY19, we reviewed water monitoring baselines to establish future Newcrest and site-based water targets.

Key opportunities include improved water-use data monitoring to enhance water balances, and models including greater recycling and water reuse. There are also opportunities to engage more broadly with stakeholders to support regional water improvement projects.

### Total Category 1 & 2 water withdrawn (ML) by site FY19<sup>(2)</sup>



Water withdrawn by source (ML) FY17-19<sup>(4)</sup>



- (2) Based on the MCA Water Accounting Framework. Category 1 represents water that is close to the drinking water standards, as it only requires minimum treatment (disinfection) to be safe for human consumption. Category 1 water may be used for all purposes. Category 2 represents water that is suitable for a range of purposes, subject to appropriate treatment to remove total dissolved solids and/or to adjust other parameters to be safe for human consumption and more sensitive agricultural and recreational purposes.
- (3) Excludes seawater. Seawater abstraction at Lihir is not introduced into the processing circuit for the purpose of ore processing.
- (4) Newcrest has restated total water withdrawal by source (ML) for FY17 and FY18. The change amounts to a reduction of 14,918ML in FY18 and 13,215 in FY17. These amounts are attributed to a reclassification of Lihir groundwater consumption in these reporting periods.
- (5) Rainwater (recorded as Category 1 and Category 2 Surface water) has not been recorded as an input to sites' water balances in previous reporting periods for Lihir and Gosowong. This has contributed to a large increase in reported Surface water at these operations compared to previous reporting periods.

## **Greenfield exploration**

Throughout FY19 we continued in our greenfield exploration endeavours, focused on targeting advanced opportunities and building on our existing positions in the premier gold belts of British Columbia (Canada), Paterson Province (Australia), Miracunga Belt (Chile), Northern Andes (Ecuador) and Tanami (Australia). The execution of exploration campaigns across our portfolio of projects included target definition and target testing, with follow-up drilling planned for a number of these areas in FY20.

Our exploration programme is focused on discovering the highest value  ${\sf Tier}\ 1$  and  ${\sf Tier}\ 2$  deposits. We target regions where we can leverage our competitive strengths, including our:

- ability to mine and process a diverse range of gold and gold-copper deposits;
- expertise in exploration for gold-rich porphyry and epithermal deposits;
- exploration innovation; and
- collaboration with external parties.

### Asia-Pacific

While Australia is regarded as a mature exploration location with all of the outcropping ore bodies found and largely mined out, there is strong potential for

new discoveries at depths greater than 200 metres and in areas obscured by post-mineralisation cover.

Newcrest is leveraging its bulk underground capability in Australia to explore for deeper deposits within the known metal districts, and within priority target areas, under post-mineralisation cover.

### Early-entry partnerships

In March 2019, we announced that we had entered into a farm-in agreement with Greatland Gold in relation to the Havieron tenement. Havieron is located within the Paterson Province, Western Australia, 45 kilometres east of Telfer. Subject to a successful exploration programme and feasibility study, Havieron may provide a supplementary source of higher-grade ore for Telfer. This will potentially materially improve Telfer's production costs and mine life. The Havieron project matches Newcrest's deep mining capability, and its proximity to Telfer positions it ideally to take advantage of Telfer's existing processing capacity.

In the Tanami we are searching for the next generation of discoveries under cover within our portfolio of early-stage targets. We have entered into a farm-in agreement with Prodigy Gold across a large tenement holding that covers the major prospective corridors.

### Americas

Within the Northern Andes, we are focused on Ecuador, where we have gained exposure to the Fruta del Norte and Cascabel projects through equity investments in Lundin Gold and Solgold.

We have five active early-stage farm-in projects in the Maricunga Belt in Argentina and Chile. Our exploration target is high sulphidation and intermediate epithermal gold deposits within this emerging gold belt.

Our equity investment in Azucar Minerals has given us access to the El Cobre project located in Veracruz State, Mexico. The El Cobre project is centred on an emerging porphyry district and contains a portfolio of drill-staged targets.

We are also exploring for low sulphidation epithermal deposits in the Great Basin, Nevada.

### Africa

During FY19 we divested our Seguela asset in Côte d'Ivoire and portfolio of regional Côte d'Ivoire exploration projects, retaining a 50% non-managed interest in an exploration joint venture with Barrick in the south-east of the country.



### **Growth through acquisition and merger**

Our Americas strategy is to develop and test a pipeline of growth opportunities through targeting districts where we can leverage our strengths. During the year, we acquired 70% of the Red Chris mine in British Columbia, Canada, as a joint venture with Imperial Metals.

We consider that Red Chris has the potential to be a Tier 1 asset. British Columbia has an established mining industry and a clearly defined regulatory and governance system. In this regard it is a more stable operating environment than some of the other areas we have assessed for growth options and it expands our presence into the Americas.

The Red Chris acquisition in Canada plays to our strengths. We believe that we can improve the existing open pit through our EDGE improvement process. We can bring our extensive caving knowledge from Cadia to caving options under the pit. We can utilise our exploration experience in the highly prospective ground in the thousands of hectares surrounding Red Chris.

# Growth and the importance of building relationships with government

Governments and regulatory authorities are important stakeholders, and we actively engage governments in every jurisdiction in which we have a presence to ensure an open exchange of views and collaboration towards achieving positive and sustainable outcomes.

As we grow our business, we pay close attention to the challenges and opportunities that new geographies and relationships with host governments present to us. In order to address what can sometimes be an unpredictable environment, we developed a new Country Entry Framework and continue to strengthen our Government Relations function.

Fiscal and regulatory certainty is essential to our business across all our jurisdictions. Political and policy instability can affect the viability of our business and the potential value of growth opportunities. Policy positions on issues such as taxation, government spending, mining regulation, currency valuation, trade tariffs, labour laws and environmental management can have a major impact on Newcrest, the resources industry and the economy in general.

In PNG, Newcrest announced in December 2018 that, together with joint venture partner Harmony Gold Mining Company Limited, it had signed a memorandum of understanding (MOU) with the Independent State of Papua New Guinea to affirm the parties' intent to proceed with the Wafi-Golpu project, subject to finalisation of the permitting process and Newcrest and Harmony Board approvals. The MoU reflected the advances to that point of intensive, inclusive work with key national government stakeholders to progress the project.

In June 2019 Newcrest announced a delay to permitting of the Wafi-Golpu project resulting from a period of internal political contest culminating in the Parliament's election of a new Prime Minister, as well as the delay associated with legal proceedings between the Morobe Provincial Government and the National Government regarding the internal distribution of PNG's economic interests in the project.

These developments prompted the Wafi-Golpu Joint Venture (WGJV) to defer and revise the work programme it had planned to commence in 2019. General operations at the site, including community programmes, environmental monitoring and engineering activity, all continue, although at a reduced scale, and there have been project team redeployments and some redundancies to mitigate the costs of the delay.

The PNG Government continues to signal its support for the project, and the WGJV is well placed to resume discussions with the PNG Government given the constructive progress already made on the various agreements required for completion of the permitting process and the granting of a special mining lease. At time of writing permitting discussions were yet to recommence.

The WGJV project site was voluntarily shut down for five days commencing 11 January 2019 as a result of a protest at the Wafi Camp gate by a politically motivated group demonstrating in response to the MoU signed between the WGJV and the PNG Government

Highlights of our collaboration with governments in FY19 in the promotion of our host countries include the participation of Newcrest as sponsor of the 2018 APEC CEO Summit that PNG hosted in December last year (case study on page 57) and as one of the main exhibitors in the PNG Investment Week in June 2019, as well as Newcrest's sponsorship of the Ecuador Day at the Prospectors and Developers Association of Canada (PDAC) Conference in March 2019.



**NSIGHTS** 

# Our new Canadian partners

In August 2019, Newcrest commenced operating the Red Chris copper and gold mine in British Columbia, Canada. Newcrest is a 70% owner, along with previous owner Imperial Metals Corporation (30%).

Red Chris provides Newcrest with production and asset diversification. Red Chris is a copper-gold porphyry orebody with an open-pit mine. Imperial has estimated that it has mineral resources of 20 million ounces of gold and 13 billion pounds of copper.  $^{(1,2)}$ 

The property comprises 23,142 hectares with 77 mineral tenures, five of which are mining leases. It sits in the traditional territory of the Tahltan Nation in British Columbia.

The acquisition of Red Chris is a measured entry into North America and aligns with Newcrest's strategic goal of building a global portfolio of Tier  $\bf 1$  orebodies, where we can deliver value by applying our unique operating capabilities.

We have identified a pathway to potentially  $^{(3)}$  turn this orebody into a Tier 1 operation in one of the premier gold districts of the world.

The geology at Red Chris is similar to the Cadia orebodies in Australia, where Newcrest has created significant value from a deep underground porphyry using its technical expertise in block caving, operations optimisation and selective processing.

We will use this experience to maximise the value of Red Chris and its surrounding tenements.



- (1) The figures shown represent 100% production under Imperial Metals. As at 15 August 2019, Newcrest owns 70% of Red Chris in an incorporated joint venture with Imperial Metals.
- (2) The information in this report that relates to the Mineral Resource estimates of Imperial in relation to Red Chris is based on the "National Instrument 43–101 Technical Report" dated 30 September 2015 and filed by Imperial on SEDAR (www.sedar.com) in accordance with National Instrument 43–101 as required by Canadian securities regulatory authorities. The estimates of the Mineral Resources contain Measured and Indicated Mineral Resources of 1.0Bt at 0.35 g/t Au and 0.35% Cu for 12Moz contained gold and 8.0Blb contained copper and Inferred Mineral Resources of 0.7Bt at 0.32 g/t Au and 0.29% Cu for 8.1Moz contained gold and 5.0Blb contained copper. (Data reported to two significant figures and this may cause discrepancies in totals.) Note that under Newcrest reporting convention for copper, 13Blb contained copper is equivalent to 5.9Mt contained copper. See also Red Chris foreign estimates clarifying statements on page 80 of this report.
- (3) Subject to market and operating conditions, further drilling and study, all necessary permits, regulatory requirements and Board approvals.

# Nursing and midwifery training saves lives in PNG

PNG suffers from high maternal and child mortality rates, often because women give birth without a skilled birthing attendant. Newcrest scholarships to train nurses and midwives are saving the lives of mums and babies in remote PNG, and supporting the national community health system.

Funded in partnership with the Australia Awards programme, the scholarships are one way we invest in developing our host countries, delivering benefits beyond local communities. The impact of our business goes well beyond the boundaries of our site operations.

The innovative public-private partnership directs Newcrest funding through the Australian aid programme to support the PNG Government's development priorities.

Newcrest is a long-term partner for PNG, and we want to see it grow and thrive. We work with others who share these goals, including the Australian Government and provincial authorities, to support the PNG Government to improve health, education, and women's empowerment.

This year, five Newcrest-sponsored students began their three-year Diploma of Nursing in Lae, joining six students who began studying in 2018. Also sponsored by Newcrest, 10 students from across PNG graduated with Bachelors of Midwifery in 2018, and another 10 students began studying this year. We have also committed to supporting 10 midwives and another five nurses in 2020 through the Australia Awards.

By the end of 2019, Newcrest will also have funded advanced maternity care skills training for 28 community health workers from New Ireland and East New Britain.

We also fund Lihir Medical Centre, which treats more than 50,000 patients per year, as well as a ground-breaking malaria eradication programme (see page 60). As our presence grows in PNG, so does the opportunity to have a national impact on important wide-ranging issues such as health and education.



# Technology helps exploration work faster and smarter

A pilot programme using x-ray fluorescent (XRF) equipment is investigating how this innovative technology might enable Newcrest's exploration geologists to make faster and better-informed decisions about whether to continue drilling in areas of prospective mineralisation.

The trial is one of several ways our operations are working to improve Newcrest's long-term financial and economic sustainability by seeking innovative ways to enhance the way we work.

Currently our geologists, who work mainly in remote locations across Australia, PNG, Indonesia, Africa, South America and the USA, must send drill-hole samples to laboratories away from the drill site then wait up to six weeks for accurate results.

The Exploration team's ability to make informed decisions can be significantly delayed and out of sync with target testing. By the time the samples have been analysed and results received, the Exploration drilling programme may be finished, the drills may have moved to different holes and there may not be an opportunity to return to a drill hole.

While laboratory testing will still happen, TruScan™ Innovative Core Scanning Technology enables faster decision-making at our more advanced projects, by providing consistent, reliable geological data, in near real time, at the drill site.

Where our geologists can provide high-quality assay results and a good understanding of the mineral system and its host lithologies, the Exploration team can use this technology to make more accurate and timely decisions on where to drill next or to what depth, reducing time and cost.

Other exploration innovations include DetectOre for in-situ gold analysis, Corescan HCl-4 for highest resolution hyperspectral imagery, deep learning imagery analysis for vein segmentation and global remote sensing merges for mineral mapping.



# 4 Managing mine closure

# Material

# sustainability topic

Managing the environmental and social considerations of mine closure is a significant issue for our stakeholders. Our operations prepare and maintain rehabilitation plans based on the Newcrest Mine Closure Standard.

# $\bigcirc$

# approach

The Newcrest Social Performance Standard, Environmental Policy, Environmental Standards and Mine Closure Management Standard guide the ongoing assessment and mitigation of potential environmental and social impacts from exploration stage through project development, into active operation, and eventual closure and post closure phases.

Our Mine Closure Management Standard outlines a multidisciplinary approach to closure planning that meets regulatory and corporate requirements, while also considering stakeholder expectations. Ongoing engagement on mine closure planning with regulators, the community and industry is important and enables us to achieve responsible environmental and social management objectives.

Mine rehabilitation plans aligned with our Mine Closure Management Standard are regularly reviewed and updated throughout the life of each operation as 'live' documents to support mine planning and progressive rehabilitation.

We are working to align our approach with ICMM's 10 Principles, a number of which relate to the issue of mine life planning and the impact on communities and the environment. Principles 1,3,6,7,9 and 10 are all relevant to mine closure (refer to page 63).





# **Performance**

in FY19

Newcrest conducts regular reviews for each of our sites throughout their life cycle to update planned rehabilitation and closure related activities and progressively refine the cost accuracy of financial provisions. Reviews of our mine rehabilitation plans (for eventual closure) assess closure risks and opportunities and update the plans as the basis for financial provisions.

During FY19 the following work was undertaken:

- Gosowong and Cadia reviewed their mine closure (rehabilitation) plans in accordance with the Mine Closure Management Standard and legal requirements. Each of these plans has been peer reviewed by an independent third party to test assumptions, methodology and practicalities against the standard, and site-specific material risks relating to closure. The reviews also assessed the plans against industry standard guidelines.
- Each of our sites has developed rehabilitation cost estimates as the basis for financial provisions that are regularly reviewed and updated. These estimates are used in Newcrest's Life of Province Plans (LoPP) to ensure costs are integrated as part of business, including progressive rehabilitation.
- Mine Closure Management Guidelines have been provided in draft to all sites to give clear guidance on how to develop costings and meet the standard, including specifying accountability across multiple disciplines.
- Each site has had an internal audit against the Mine Closure Management Standard with recommendations for improvement captured in Newcrest's online community, health, environment and safety system.
- An external audit was completed against the Mine Closure Management Standard, with all outcomes addressed.
- At both Gosowong and Lihir, risk assessments were undertaken to support rehabilitation option assessments for closure.

At 30 June 2019, the total mine rehabilitation accounting provision for Newcrest was \$361 million.

### Social closure

Mine closure planning includes addressing a range of social aspects, for example, the consideration of long-term ownership and use of land, assets and infrastructure beyond the life of the project. Stakeholder concerns and aspirations relating to post-mining transitions must also be identified and addressed. Closure considerations are now being integrated into land use agreements, social investment programmes, and other social development mechanisms throughout the life of each Newcrest operation.

During 2017 and 2018 we continued discussions at the corporate level on the management of the social aspects of risk to effective mine closure. As a consequence of this increased focus, we have revised the Mine Closure Management Standard to include social closure requirements. We also commenced review of the Mine Closure Management Guidelines to incorporate social aspects including provisions for social closure costings. We have now incorporated social mine closure planning as an element in the Social Performance Standard. Our Social Performance team is also represented on the ICMM working group for mine closure.

Critical consideration is given to the future ownership of rehabilitated land and the dynamics of land ownership, particularly in areas owned by land-connected peoples. The ownership, maintenance and viability of services and infrastructure, particularly in remote and regional areas, also requires engagement with regional and local government agencies. Expectations concerning the future economic context and opportunities for sustaining community livelihoods is also now considered as part of the mine closure planning process.

As identifying a mutually agreed closure outcome is very important, our new social closure specifications require us to engage extensively with a range of stakeholders on this topic using a variety of mechanisms suited to their needs.

We also require that all our managed sites develop and maintain overarching social performance plans that integrate closure planning processes. These plans must consider social consequences of any planned investment within the local context and align with our long-term corporate strategic intent to achieve sustainable social closure.

Each of our operations invests in building local capacity and community development opportunities to support the achievement of realistic and sustainable social closure outcomes.

### Land management and rehabilitation

Newcrest practises progressive landscape rehabilitation, ensuring we undertake continual work throughout the life of a mine. Each operation sets rehabilitation objectives based on considerations such as regulatory requirements, mine plan objectives, business resources, closure plan objectives and stakeholder considerations. During annual reporting, sites provide information on the areas of disturbed land. rehabilitated land and land available for rehabilitation, based on current mine plans. This is part of our mine closure planning process and we are working on evolving baseline information into site-specific progressive rehabilitation targets.

Our approach to progressive rehabilitation aligns with regulator and stakeholder expectations, while taking into account the availability of operational areas based on mine plans. We consider whether future mining is likely to affect specific areas of the mine footprint to avoid rehabilitated areas being redisturbed at a later date. Newcrest regularly updates closure plans to refine planned activities and financial provisions.

Progressive rehabilitation integrated into mine plans can efficiently reduce the scope and cost of rehabilitation required at mine closure.

At the local level, each site has procedures to manage local land disturbances. These comply with the Land Use and Disturbance Management Standard and other relevant Newcrest standards and policies including our Environmental Policy.

During FY19, all sites advanced their progressive rehabilitation planning and implementation, including monitoring of effectiveness. Telfer moved ahead on its progressive rehabilitation trials on waste rock dumps to optimise both the design and efficiency of implementation. Gosowong continued to implement an offset programme to improve the economic value of the land and reclamation at the mine site. Cadia advanced its work on an offset area to improve the condition of the land and increase the habitat for significant species in the area.

Lihir does not have waste rock dumps, and so progressive rehabilitation opportunities are limited to small areas from other discontinued operational activities that become available from time to time. FY19 rehabilitation at Lihir was completed on a small parcel of land adjacent to the pit waste that had recently been cleared.

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Newcrest regularly updates closure plans to refine planned activities and financial provisions.





## **Biodiversity**

During FY19, Newcrest introduced a new Biodiversity Policy, outlining our obligations and commitments to protect and manage biodiversity values related to our operations in areas under our control or influence. Our commitments include our new target to establish Biodiversity Actions Plans (BAPs) at all operations and projects during FY20.

During project planning, and prior to surface disturbance activities, we assess protected areas and species within the region, including whether our operations could potentially impact biodiversity. If our operations contain areas of protected habitats or species, these are managed with site-specific plans, and regulatory approvals

are obtained for each phase of the project. Biodiversity management is also a critical component of mine closure planning as rehabilitation of land has a direct impact on the local flora and fauna.

Under our Biodiversity Management Standard, we maintain a documented knowledge base of regional biodiversity features and their significance. In FY19, we included data relating to the International Union for Conservation of Nature Red List and national conservation list species with habitats in areas affected by operations. Three species have been identified as Critically Endangered, and three as Endangered (see page 68). These were subject to the Biodiversity Management Standard performance requirements

during the reporting period. This includes ongoing assessment of the potential risks to these species and the application of site-based monitoring and environmental management systems to complement regulatory requirements as required. It also involves the application of a mitigation hierarchy to avoid, minimize, mitigate and offset potential impacts, in agreement with regulatory bodies.

## 5 Working with our communities

## Material

## sustainability topic

The most relevant topics for our stakeholders are 'managing community expectations and relations' and 'delivering on mutually beneficial agreements'. This includes investing in the development of the local communities where we operate and inclusively engaging with our community stakeholders about our activities.

## approach

We strive to deliver sustainable and long-term benefits in a manner that supports and respects the rights and aspirations of the communities in which we operate. Our engagement and community development activities focus on supporting communities to meet their own long-term needs and aspirations. This includes through our commitment to local employment and training, and local supplier programmes.

We seek inclusive and constructive engagement with governments, landowners and broader local communities to help build mutual understanding and manage expectations about the impact of our operations. We work hard to build trust and acceptance to support that engagement process over the long term.

Our Communities Policy and Social Performance Standard guide our approach to working with communities, government and other stakeholders, and outline our commitment to developing longterm partnerships that are mutually beneficial over the life of our projects and mines.

We are working to align our approach with the ICMM 10 Principles, notably Principle 3 – Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities and Principle 9 – Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities.





## **Performance**

## in FY19

It is critical for our business that our Social Performance Standard reflects business requirements and expectations regarding community impact, development and investment. During FY19 we established the Newcrest Social Performance Management System (SPMS) which comprises the revised Communities Policy, Social Performance Standard and new supporting guidelines. The Social Performance Standard supports our Communities Policy by providing a framework of mandatory requirements, which drives social performance strategies at our sites, guides actions and builds relationships to secure and maintain community support.

All sites actively implement the standard and undergo periodic assurance and audit assessments.

As part of the SPMS we prepared a comprehensive set of guidelines for each element in the standard, including those related to community development and investment. The guidelines support the standard and facilitate effective and consistent delivery across our sites. At a site level, standard operating procedures and other implementation plans and agreements are developed to identify and deliver on community commitments.

To support the SPMS, we also rolled out Borealis, an online social performance and stakeholder engagement software tool. Borealis will enable more efficient and effective management, reporting and tracking of stakeholder interactions, social impacts and grievances, as well as social investments. The system's rollout and training programme will continue in FY20.

## Social performance management comes online

Borealis is an online social performance and stakeholder engagement platform which will be central to Newcrest's SPMS. Borealis will help us better plan, track and manage our interactions and commitments with our stakeholders, across the many areas we operate, ultimately supporting our operations and functions.

It means we can more easily coordinate our relationship efforts, read sentiment, monitor current issues, track grievances to ensure they are resolved, and effectively allocate social funding.

Under stage one of a phased approach, by 30 June 2019, people across our Group functions and at Cadia and Telfer had been trained and were using Borealis. Borealis will be rolled out to our other sites and functions across FY20

The successful deployment and use of Borealis further strengthens our community connections and relationships and, ultimately, helps us forge a stronger Newcrest.

## Managing community impacts and expectations

Newcrest operates in multiple countries under licences or contracts consistent with national legislation and policy. There are often associated local-level agreements at sites, and the terms of these arrangements, in conjunction with our own policies and standards, set the agenda for stakeholder engagement and community development including the management of issues and opportunities.

Our Communities Policy sets out our commitment to being a trusted sustainable development partner. Our Social Performance Standard requires all sites to complete and maintain community social baseline studies to support data-driven social impact and social risk assessments. These assessments inform project development planning and monitoring at all exploration and operating mine sites.

We aim to proactively consider stakeholder issues and local community concerns. All operating sites maintain a grievance management system that is available to be used by community members and employees. We engage in constructive dialogue, give and seek feedback, respect other points of view, and are considerate of stakeholders' needs.

We work hard to improve our communication channels and raise awareness with our stakeholders of both the commercial and broader sustainability aspects of our business (see also page 62).

We are conscious of the need to balance government requirements and community expectations against a project's financial capacity to deliver benefits throughout the life of the mine. We also need to ensure that we do not replace government services or create unsustainable community dependencies on our mining operations.

We actively engage with government and other stakeholders on policy and reforms, either directly or indirectly, for example, through industry groups such as the MCA and the PNG Chamber of Mines and Petroleum. Consultation is critical to any reform process, and we also participate in a wide range of forums.

## Grievances and disputes

There is a range of complexities involved with mining in communities, as all parties work to navigate expectations and strive to achieve agreed objectives. Local communities' expressions of concern are a regular feature of mining requiring management around operations. These are recorded and classified in terms of materiality and reported accordingly. We have mandated and approved processes for working to resolve community concerns.

As an example, during FY19 at Gosowong, changes to Indonesian government regulations regarding strategic planning of integrated community development and associated funding mechanisms resulted in a mandated change to PT NHM's existing community development programming and traditional funding model. The model change caused some disquiet in local village communities. Gosowong's teams have proactively managed a number of grievances and representations from local community groups about these changes during the reporting year.

## **Environmental incident management and communication**

Our SPMS acknowledges that our local communities rely on us to operate with sound environmental management. We are committed to proactive and open communication with our stakeholders about our environmental management activity.

Throughout the life of a mine, we report and record environmental incidents and hazards in our online CHESS system. Incident investigations are undertaken to identify and implement appropriate preventive and remediation measures, and these investigations take into account both the actual and potential outcome of an incident. Environmental incidents are managed and reported in accordance with regulatory and internal requirements.

During FY19, there were no significant environmental incidents recorded.

## Cadia's community open day celebration

**NSIGHTS** 

Friends, family and community members had the opportunity to experience life at an underground mine during a community Open Day at Cadia Valley Operations in April 2019.

Around 2,500 visitors attended the Open Day, which is held every two years to showcase the operation and to demonstrate Cadia's commitment to openness and honesty.

The theme of the Open Day, which also marked 20 years of operation for Cadia, was a celebration of past and future.

Mine tours featured panoramic views of the Cadia open pit, a visit to Cadia's progressive rehabilitation and tailings storage facilities, an expansive display of surface and underground machinery and, for the first time, a visit to the Ridgeway underground mine.

Members of the public also had an opportunity to tour the Blayney Dewatering Facility, the final stage of Cadia's ore treatment process.

The Open Day also featured an Interactive Display Centre at Blayney Shire Community Centre, where the community could learn more about the operations.

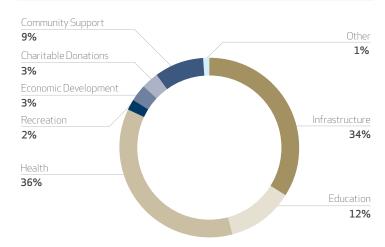
There was entertainment for all ages with food stalls, live music, a free jumping castle and face painting.

Newcrest matched proceeds from the gold coin ticket sales dollar-for-dollar and A\$12,500 was raised for CanAssist Blayney, a local charity dedicated to supporting local people affected by cancer.

The Open Day would not have been possible without the help of more than 100 volunteers from the Cadia workforce who assisted in the running of the event and ensured the safety of all visitors to the mine site.



## Community investments by category FY19(1)



(1) Community investments and charitable donations are recorded as a component of Newcrest's total community expenditure. Community investments represent \$18m of FY19 total community expenditure of \$55m.

## Local community development and investment

Newcrest provides direct and indirect socio-economic benefits to national, regional and local governments including through taxes, royalties, compensation and rates. Some of these benefits are legislated and some are negotiated.

Our presence also provides many indirect benefits to the countries and communities in which we operate. These benefits include:

- improved access to employment, health and education opportunities;
- investment in community infrastructure and services, for example, road access and maintenance, electricity and clean water supply;
- income-generating activities, for example, employment, local-level business development training, supply opportunities and support for local agricultural businesses; and
- improved community lifestyle, for example, sponsorship of local and regional events and sporting activities.

Each of our operations has local agreements, established through extensive formal community engagement and negotiation, which identify and quantify the direct benefits expected from Newcrest, including payments and charitable donations. The scope of these agreements covers sustainable development activities, such as local infrastructure development,

housing, rural electrification, health and education services support, scholarships, agri-business development, business development training, preferential local employment and training, and the terms for supply and procurement opportunities.

We work with all levels of government to ensure social development outcomes align with national, regional and local development objectives and goals. This tailored approach, which varies from country to country and site to site, seeks full participation to deliver a net positive impact on communities, governments, and landholders.

We apply the following principles to guide community investment:

- maximise capability-building, primarily through education and training to build self-sufficiency and economic independence within communities for the long term;
- ensure government and community involvement and engagement in the determination and delivery of community investments; and
- prepare our stakeholders for the post-mining phase, including integrating our social closure planning into our mine closure processes, which are detailed on page 33.

### Telfer

At Telfer approximately 115 full-time Indigenous employees have participated in prior casual work and training programmes, before becoming full time employees. Meetings have been facilitated in Telfer to support education initiatives and programs for regional schools. Support has also been provided via the support of a Martulabour hire business providing assistance to develop new Martu businesses. Telfer provides regular sponsorship of regional events, such as the Marble Bar Cup, sporting and music festivals, and of regional schools.

### Cadia

At Cadia, a number of primary infrastructure projects have been delivered from a partnership initiative between Cadia and the local community to increase the desirability of the district as a place to live and work. In the past year Cadia has worked in partnership with the Clontarf Foundation to support Indigenous youth in continuing studies and gaining employment. Cadia has also supported the Bowen Community Technology Centre in providing homework and technology support for disadvantaged students.

### Lihir

During FY19 Lihir invested in community infrastructure and services, including roads and bridges, airport, education and health infrastructure.

The Lihir team, working under agreement with the 15 local government wards and affected area landowners, invested in village development schemes, providing housing, power, water supply, garbage and sewage systems. In FY19 a total of 158 houses were completed.

In addition, the Boluminski Highway Signage Project was undertaken to provide a total of 831 village, service, road safety and visitor signs along the national arterial road that now connects the people from Namatanai to Kavieng along the 261 kilometre highway. Local commuters now express a willingness to learn the names of places that were once nameless to them and are proud to have their own village names displayed.

## Wafi-Golpu

Also in PNG, WGJV's health, education, agribusiness, supplier development and sporting programmes continue to generate a range of positive economic impacts for local communities. During the past financial year the Cocoa Support Programme has been developed further, with the potential to earn local farmers an estimated PGK 2.1 million per annum. Workforce training programmes have also been established and delivered to multiple landowner associations from project-affected communities, including women's associations, as part of WGJV's supplier development programme.

Investments were made through WGJV in health programmes, including HPV vaccination support for 6,000 girls in project-affected villages and commencement of water, sanitation and health programmes in four villages.

Newcrest acknowledges that there are potentially negative economic impacts, such as the irregularity of local casual employment in WGJV, due to delays in project permitting extending longer than expected. The way Newcrest works with these issues is to sensitively and practically inform our stakeholders of developments, openly resolve concerns as they are raised, and maximise the delivery and sustainability of community benefits by improving the capacity and capability of local institutions.

## Partnering in PNG's development through national support

Newcrest has a vision to contribute to PNG's development priorities across the country. Our National Engagement Strategy aims to establish Newcrest as a partner of choice for PNG. Newcrest partners with reputable organisations working effectively in support of the country's national development aspirations. Under the strategy we are delivering national-level funding and support programmes that:

- protect and empower women;
- support education and generate regional skills development opportunities for youth;
- help build human and administrative capacity through leadership and public sector training;
- support national community health initiatives and programmes; and
- promote the environment and biodiversity.

Over the reporting year, our programmes included platinum sponsor support of PNG's international host-year for APEC 2018, which ran through to December 2018. We also repeated sponsorship of PNG's national netball championships supporting young women and healthy living. In broadening our commitment to helping build community



health capacity in PNG, we extended our Australia Awards-PNG scholarships and community health worker training programmes in child and maternal health.

These later commitments have involved supporting 20 scholars studying midwifery and nursing thanks to the Australia Awards partnership between Newcrest and the Australian Government. A further 14 community health workers were supported to achieve Certificates in

Advanced Maternity Care Skills from the Kavieng Provincial Hospital. The hospital programmes operate in partnership with the New Ireland Provincial Health Authority.

Newcrest's support is helping strengthen education and health capacity in PNG, while promoting equal opportunities and empowering women and girls well beyond the boundaries of our operations. This is delivering long-term benefits to the wider PNG community.



## GRI 201-1 Direct economic value generated and distributed FY19 (\$m)

	Economic value generated		Economic value	distributed		Economic value retained
Segment	Sales revenue <sup>(1)</sup>	Operating costs <sup>(2)(3)</sup>	Community expenditure <sup>(2)(8)</sup>	Employee benefits expense <sup>(2)</sup>	Payments to government <sup>(4)</sup>	Economic value retained
Lihir	1,229	527	37	114	38	513
Cadia	1,630	371	3	62	60	1,134
Telfer	627	407	4	88	20	108
Gosowong	256	136	5	39	12	64
Exploration and projects	-	49	4	16	1	(70)
Corporate and other <sup>(5)</sup>	-	-	2	79	163	(244)
Total	3,742	1,490	55	398	294	1,505
Payments to providers of capital <sup>(6)</sup>						
Dividends						131
Interest payments						110
Total payments to providers of capital						241
Economic value retained FY19 <sup>(7)</sup>						1,264
Economic value retained FY18						1,257

- $(1) \ Amounts \ include \ revenues \ determined \ on \ an \ accruals \ basis, consistent \ with \ the \ Group's \ audited \ Income \ Statement.$
- $(2) \ Amounts \ include \ costs \ determined \ on \ an \ accruals \ basis, consistent \ with \ the \ Group's \ audited \ Income \ Statement.$
- (3) Operating costs exclude community expenditure, employee benefits expense and payments to governments (as these are separately reported). It also excludes significant items and depreciation.
- (4) Amounts include income taxes paid determined on a cash basis, consistent with the Group's audited Statement of Cash Flows, and other payments to governments, determined on an accruals basis, consistent with the Group's audited Income Statement. Other payments to governments primarily relate to royalties. The amount does not include employee taxes, which are disclosed as part of employee benefits expense.
- (5) Operating costs in the Corporate segment is net of Corporate cost recoveries from other segments.
- (6) Amounts include costs determined on a cash basis consistent with the Group's audited Statement of Cash Flows.
- (7) Calculated as economic value generated less economic value distributed. Per GRI guidelines, this does not include capital expenditure.
- (8) Community expenditure includes native title/landowner agreements, Indigenous land use agreements, investment in local communities, donations made to charities and community department costs.

## Committed to malaria research and prevention

Malaria is a chronic and debilitating disease which impacts some of the jurisdictions where we operate, or seek to operate. It threatens half the world's population, kills one child every two minutes<sup>1</sup> and is a significant obstacle to human development.

People are carriers of malaria parasites, which multiply rapidly in the liver and red blood cells. Mosquito bites transfer the parasites from person to person.

Newcrest has a long-term commitment to malaria research and prevention through our Lihir Malaria Elimination Programme (LMEP), run in partnership with the Medicines for Malaria Venture. The programme aims to eliminate malaria parasites from the Lihirian population, depriving mosquitoes of parasites to transmit.

LMEP's community awareness programmes aim to improve behaviours that prevent people being bitten by mosquitoes and to reduce the number of mosquitoes around the human population.

During the year our programme trained 64 Village Malaria Assistants in key areas of malaria prevention and control. The training covered topics such as signs and symptoms, malaria diagnosis and treatment, mosquito behaviours and malaria prevention, including use of mosquito nets, personal protective equipment and reduction of mosquito breeding places. More than 75% of these assistants are now actively working in their communities raising awareness and encouraging the adoption of healthier behaviours.

LMEP also ran an education campaign in all 43 schools throughout the Lihir Group of Islands; strengthened diagnosis, treatment and reporting of malaria cases in the local primary health system; and replenished supplies of both the Rapid Diagnosis Test for malaria, to ensure accurate testing, and anti-malarial drugs.

To evaluate the risk of malaria being reintroduced, the programme surveyed people entering the Lihir region via the main wharf and the airport. This found at least 10% of inbound passengers carry at least one type of malaria parasite in their blood. Work is now underway to map population movements in more detail and further analyse the possible link with transmission of the disease.

Incidence data collected in the Lihirian health facilities showed a slight increase in 2018, although we believe that this was a result of improved diagnosis and reporting rather than an increase in infections. During the same period malaria incidence rates in the broader New Ireland Province continued to grow by 30% year-on-year.  $^1$ 

For more information on this partnership, see page 60.

## Talent scouts at the Punmu Festival

Western Australian footballer Trisaan Robinson's spectacular goal in the football final between Punmu and Kiwirrkurra identified him as one of several potential Australian Football League recruits.

Trisaan is among dozens of talented young people likely to reap benefits from our major sponsorship of the three-day Martu Youth Festival in April.

The annual festival celebrates Martu sport, music and culture, introducing outstanding sports people and local musicians to industry leaders and talent scouts from the West Coast Eagles, Swan Districts Football Club and Softball WA.

We have strong and well-established employment and job-readiness programmes to support the Martu, who are Telfer's primary community stakeholder. The Youth Festival is an integral part of Ngurra Kujungka's annual events calendar and provides opportunities for young people to train with the best and receive opportunities beyond the local region.

Sponsoring the festival is one of many ways Newcrest invests in Martu development. The festival venue changes each year, with the people of Punmu hosting the event in 2019.



## 6 Respecting and protecting **human rights**

## Material

## sustainability topic

One of the most important issues with regard to the people and communities affected by our business is that we manage and protect the human rights of our workers, local communities and stakeholders.

## Our

## approach

Respect for human rights is embedded in our Human Rights Policy, Communities Policy and Security Policy, as well as the Newcrest Code of Conduct, Social Performance Standard and Security Code of Conduct. Our policies and standards align with international standards, including the UN Guiding Principles on Business and Human Rights and the Voluntary Principles on Security and Human Rights.

We are working to align our approach with ICMM Principle 3 – Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities.

## **Performance**

in FY19

In FY19 we completed our second Human Rights Assurance review at all our operational sites, with a focus on human rights that have the potential to be affected by Newcrest activities. The review found we still need to develop further internal capacity and understanding on human rights management.





Some of the most challenging areas for the human rights agenda lie in Newcrest's supply chain and contract management areas. Our sites are becoming more aware of human rights issues that may apply to supply chain practices in the context of addressing human rights issues in general. At a Corporate level our Supply team has developed a Supplier Risk Framework based on the recommendations of an independent Supply Chain Risk Assessment commenced in September 2018. The assessment examined Newcrest's top 200 suppliers and Newcrest's potential exposure to supply chain risk including human rights and modern slavery.

## **The Modern Slavery Act**

We support the 2018 Modern Slavery Act, which is an important part of the Australian Government's broader response to the global problem of modern slavery. The Government released its final guidelines in September 2019. In response, we are working closely with the MCA to understand the broad reporting requirements as well as the practicalities and complexities we must manage to meet these obligations. We contributed to an MCA submission to clarify expectations and ensure the focus is on areas where companies are more likely to have capacity to influence change and support development of a meaningful report.

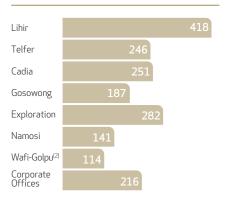
We are in the process of taking steps to provide disclosure in our reporting on this issue in 2020.

## **Fair labour conditions**

We seek fair treatment and work conditions for all employees and expect our leaders to comply with detailed policies and procedures covering remuneration, recognition and reward, benefits and conditions, diversity and inclusion, workplace behaviour, our Code of Conduct, and fair treatment.

We do not engage in or condone forced or compulsory labour or knowingly engage in or condone child labour. We recognise the potential risk of exposure to child labour at international mining operations, due to lack of reliable birth data and pressure from communities to maximise employment, which can unwittingly result in under-age employment. Our human resources teams screen applicants in line with Newcrest recruitment processes, using available records and advice from community leaders. Our employees are paid above the minimum statutory wage in their country of operation.

## Ratios of standard entry level wage compared to local minimum wage $(\%)^{(1)}$ FY19



- (1) Ratios of standard entry level wage compared to local minimum wage are not separated by gender.
- (2) Data presented for Wafi-Golpu is for WGSL in Papua New Guinea, the ratio for Australian operations (WGAS) is 187%.

We also require our suppliers to engage in conduct consistent with international human rights laws and standards, and we encompass this in our supplier audits.

We regularly seek feedback from employees on matters of mutual concern. For example, our annual Organisational Health Survey, which seeks confidential feedback from employees, enables us to assess organisational health, track progress in the way we work, set a clear direction, execute plans, and adapt and improve over time.

In FY19 we achieved our aspiration to achieve the top-quartile in organisational health measure. This is a reflection of the success of the diverse programmes that have been implemented over the last four years to enhance our organisational culture and health.

### Harassment and unfair discrimination

Newcrest's commitment to a workplace free from discrimination is underpinned by our values and our Diversity and Inclusion Policy. Our Workplace Behaviour Standard and Resolving Workplace Behaviour Complaints Procedure, as well as our Code of Conduct, set out the behaviour expected of all employees, contractors, suppliers, consultants and visitors.

We strongly support and encourage employees to report misconduct or unethical behaviour by fostering an environment that protects those who wish to raise a concern. Employees are supported to raise concerns through our independent and confidential Speak Out service, Fair Treatment Procedure and Resolving Workplace Behaviour Complaints Procedure.

## **Security training**

All Newcrest staff and contractors must conform to our Human Rights and Security policies. All security employees and contractors complete additional human rights awareness training through our

Security Code of Conduct. This emphasises both respect for the communities in which we operate and a zero-tolerance for human rights abuse. The online training is part of the initial induction for new security employees and contractors, with refresher training managed through our Learning Management System. In-person training is conducted at our international sites.

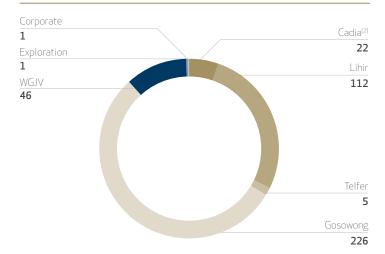
Newcrest has memoranda of understanding in place with public security in countries where the police or military are, or can be, deployed to address security-related issues impacting on our operations. While Newcrest cannot directly control the actions of the police, we actively attempt to encourage positive and effective policing behaviour through collaborative training. For example, in FY19, Human Rights Awareness training was provided to a total of 450 Indonesian police deployed to and rotated through the Gosowong operation.

To ensure local security risks are identified, appropriately managed and communicated, the Newcrest Social Performance Standard requires all operations to provide a fit-for-purpose description of local culture, social context, sensitivities, risks and expected behaviours in their employee, contractor and visitor inductions.

## Indigenous engagement

Newcrest's Indigenous Relations Policy states that we will identify the cultural values, traditions and beliefs of our communities, including Indigenous peoples, and respect and respond to those values and belief systems. All sites are required to work with local communities under national and local laws to protect and manage cultural heritage in the areas of their activities. Our operations are developing Cultural Heritage Management Plans designed by a suitably experienced cultural heritage professional and approved by the General Manager -Social Performance. The plans will inform our internal training programmes.

## Security employees and contractors trained in organisational human rights policies or procedures as at 30 June $2019^{(1)}$



- (1) All security employees and third-party contractors undertake dedicated human rights awareness training through our Security Code of Conduct.
- (2) Cadia security personnel trained number specifically excludes all part-time workers.



Cultural heritage may include tangible places and objects, such as archaeological sites and ceremonial sites, burials, art and historical infrastructure, and intangible heritage, such as story sites, song lines, language and dance, as summarised in IFC Performance Standard 8.

Where relevant we have detailed in-country contracts or agreements with Indigenous peoples at our operations that are located in or adjacent to the lands of Indigenous peoples, specifically at our Telfer, Lihir and Gosowong operations, demonstrating our commitment to free, prior and informed consent. These include:

**Telfer:** A comprehensive Indigenous Land Use Agreement (ILUA) with the Martu

Peoples of the Western Desert in Western Australia, which was signed by the Martu people in December 2015.

Lihir: A comprehensive integrated benefits package, including benefits, compensation and resettlement agreements with the communities at the Lihir gold mine.

Compensation agreements are required under PNG law, and the land-owning communities have a legal right of veto over the development or disturbance of customary land owned by local communities. Agreements providing consent to impact cultural sites, consent to impact economic crops, and consent for site access have all been signed between Lihir Gold Limited (LGL) and the affected landholders prior to any entry or works occurring.

Gosowong: Individual development agreements are in place with local Indigenous groups including the Pagu tribe, a customary land group formally recognised by and registered with the Government of Indonesia.

As a central part of the acquisition of the Red Chris mine in British Columbia, we have engaged openly and negotiated closely with the people of the Tahltan Nation. Our partnership with the Tahltan is critical to our social licence to operate in British Columbia.

During the reporting period, there were zero violations or grievances registered involving the rights of Indigenous peoples.



## **Diversity and inclusion**

Our aim is to create a diverse and inclusive environment where everyone feels safe, valued and supported to bring their 'whole, unique self' to work. This is a human rights focus.

Our Diversity and Inclusion Policy outlines the ways we aim to support a diverse and inclusive workplace. We do this by embracing diversity in recruitment and retention, through leadership development programmes that create inclusive leaders and improve the diversity pipeline, and flexible work practices. Our policy also ensures we comply with legislation and support diversity in local communities through employment opportunities and the use of local suppliers, where possible, to build business capabilities and stimulate local and regional economies.

Having a diverse and inclusive work environment goes beyond gender and local representation: it is about having a culture that values and respects differences. This includes differences in background and life experience, communication styles, interpersonal skills, education, functional expertise and problem-solving styles. These differences help us find better ways to attract and retain the best people and to explore, develop and produce more gold safely and profitably.

We launched our first Diversity and Inclusion Strategy in FY19, with targets taking us through to FY21. Measures encompass both quantitative and qualitative performance, as well as focusing on specific targets, which include:

- continuing to increase the representation of women across our business globally, with additional concentration on the representation of females in leadership roles within our Australian business; and
- improving the representation of Aboriginal and Torres Strait Islander employees in our Australian business and representation of both local and national employees globally.

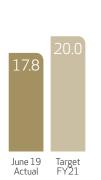
In FY19 we worked on embedding our Diversity and Inclusion Strategy into all aspects of the business by shifting the discussion at Newcrest to a broader conversation about safety, inspirational leadership and culture transformation and by emphasising our values of 'caring about people' and 'working together'.

The biggest year-on-year improvement continues to be demonstrated in the area of Australian representation of women in management and professional roles (Levels 2–4). This success has been driven by promoting existing female talent and recruiting new talent and is supported by building awareness of the business case for diversity and inclusion.

Our commitment to improving Aboriginal and Torres Strait Islander representation is an important area for the business, given we are an Australian-based, ASX-listed company that operates in areas of higher Indigenous populations (for example, Telfer).

## **Our Diversity and Inclusion Strategy**

We are measuring our performance against the following targets to be achieved by FY21 (%)(1):



Increase the Australian representation of women at all levels to a minimum of 20%



Increase the Australian representation of women in management and professional roles (L2–4) to a minimum of 22%



Increase the **global representation of women** at all levels to a minimum of 15%



Increase the representation of locals and/or nationals in management (L2-4) to 80%



Completed baseline data collection

Gain baseline data understanding of Aboriginal/Torres Strait Islander employees

FY20 – Targets set FY21 – Deliver targets

## Other key activities in FY19 included:



Launch of Australian Parental Leave Toolkits and relaunch of Parental Networks;



Newcrest global celebrations for International Women's Day 2019;



Newcrest Australia celebrated LGBTIQ+ diversity with an event;



Finalist in two categories for the NSW Women in Mining Awards 2019;



Winners in two categories for the Victorian Women in Resources Awards 2019 – Young Women in Mining (Bonnie Coxon) and Gender Diversity Champion (Craig Jetson); and



Continued our Diversity & Inclusion 'Our Stories' series.



## Employment ratio by gender and employment type FY19 (%)

# Chief Executive Officer (Level 6) Executive General Manager (Level 5) General Manager (Level 4) 83.3 16.7 Manager (Level 3) 74.4 25.6 Supervisor, Superintendent, Coordinator (Level 2) 0perator, Technical Advisor (Level 1) Male Female

## Employment ratio by age group and employment type FY19 (%)



## NSIGHTS

## Gosowong trains police in human rights

During FY19, 450 Indonesian police deployed in support of security-related activities for our Gosowong operations were trained in human rights awareness as part of a collaborative training programme with Newcrest, bringing to approximately 900 the total number of police at Gosowong trained in human rights awareness over the past three years.

The Gosowong Police Human Rights Awareness training package, developed by Newcrest in consultation with the police force, aligns with the Human Rights Awareness Training provided to security employees and contractors across Newcrest.

The half-day refresher course reinforces the police force's own human rights training and emphasises Newcrest's international obligations to report and escalate any potential incidents.

As part of a memorandum of understanding with the Indonesian police, Newcrest provides human rights awareness training at the start of every deployment. It is about reinforcing the rule of law and encouraging good behaviour and the need to respect the human rights of people in the community.

In the past 12 months Gosowong has received no complaints regarding police performance in relation to mine activities. This is supported by our own Social Performance teams, who actively monitor community issues, concerns and grievances.





## Practical programmes drive Indigenous employment

A unique drive-in, drive-out Community Driving Programme has assisted Telfer to increase its Indigenous workforce to more than 100 full-time employees by enabling them to travel safely to work from areas not serviced by flights.

Thanks to Telfer's driver team, more than half of Telfer's Indigenous workforce travels by vehicle from remote Western Desert locations, often hundreds of kilometres from our operations. Without our driving support programme, most would be unable to work at the site.

Telfer celebrated a milestone in January with 102 Indigenous employees working full-time with Newcrest and our contractors. Many more work casually, in short-term or part-time roles, or are completing on-site training.

We publicly committed to increasing Aboriginal and Torres Strait Islander employment in our Diversity and Inclusion Strategy, launched last year. Work has been completed on gaining baseline data. Indigenous employment targets will be set in FY20 and then delivered from FY21.

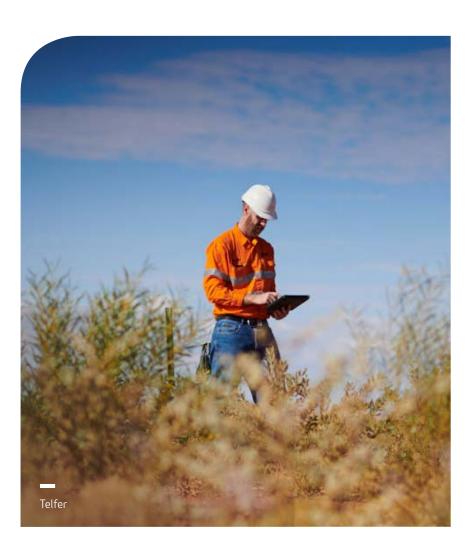
Our Community Relations teams work with local Indigenous communities to develop specific training, employment and support programmes.

## 7 Managing our **waste**

## Material

## sustainability topic

A sustainability aspect of great interest to our stakeholders is how we manage the hazardous and non-hazardous waste materials generated through our mining operations. Waste rock and tailings are our two largest waste streams and are managed on an ongoing basis to facilitate long-term geochemical and physical stability. Waste rock is defined as the barren (non-mineralised) rock in a mine or mineralised material that is too low in grade to be mined and milled economically. Tailings are the waste materials left after the economically recoverable metals and minerals have been extracted from ore. Waste streams from our operations and mine camps are considered as non-mineral waste.



## Our

## approach

## **Tailings management**

Tailings are generally discharged as dense slurry into containment areas, a tailings storage facility (TSF) or through deep-sea tailings placement (DSTP) in suitable deep-ocean locations. Modern gold and copper recovery processes seek to maximise the extraction of chemicals and reagents before the tailings are deposited.

There is an increased industry and global focus on tailings management in light of recent dam failures in Brazil. Considerable work is underway through the ICMM to improve tailings management standards, and Newcrest is actively participating in this activity.

Newcrest's Tailings Management
Framework is aligned to the ICMM Position
Statement on Preventing Catastrophic
Failure of Tailings Storage Facilities.
The foundation for this position statement
is a TSF governance framework which
enhances focus on those key elements of
management and governance necessary
to maintain integrity of TSFs and minimise
the risk of catastrophic failures. The six
key elements of this TSF governance
framework are:

- Accountability, Responsibility and Competency
- Planning and Resourcing
- Risk Management
- Change Management
- Emergency Preparedness and Response
- Review and Assurance

## Deep-sea tailings placement

DSTP was chosen by the initial joint venture operator as the preferred tailings management method for Lihir during the initial studies for the project more than 25 years ago, following a comprehensive risk assessment of social, environmental and safety aspects. The PNG Government required rigorous technical, environmental and social studies to be completed prior to the approval of the Lihir DSTP system. The system is regularly monitored based on an environmental monitoring and management plan approved by the regulator.

### **Waste rock**

Our operations at Cadia, Telfer and Gosowong use purpose-built, engineered waste rock dump structures, while Lihir uses offshore submarine waste rock disposal from barges at government-approved locations. The offshore process is conducted according to the Lihir environmental permits established following an extensive environmental assessment. The volume of waste rock placed by barges is tracked through an electronic system and we conduct regular bathymetric surveys to monitor the condition of the seabed.

## **Performance**

## in FY19

Our commitment to safe and responsible operation of our tailings facilities is documented in our Tailings Management Framework. The framework was developed using a consultant who specialises in the investigation, design and management of operating tailings facilities. The framework has been implemented at sites through undertaking a mapping exercise and identifying where improvements are required. The improvements are being progressively addressed.

In being responsible for the design, operation, closure and reclamation of TSFs, we are committed to:

- compliance to regulatory requirements in connection with these facilities;
- the protection of public health and safety;
- responsible management to minimise harm to persons and the environment;
- the allocation of appropriate resources to meet our obligations; and
- implementation of the Tailings
   Management Framework through the action of our employees, contractors, consultants and other relevant service providers.

All our operations have emergency response teams on site, who are trained and equipped to manage situations, including potential incidents related to tailings management.

As at 30 June 2019, Newcrest had 13 terrestrial TSFs of which four were in active use. Newcrest tailings disposal activities are summarised below:

- Gosowong, in Indonesia, has two facilities with one in operation, which is based on downstream design.
- Telfer, in Australia, has one facility in operation with six small facilities no longer in use. The operating TSF commenced as downstream design and has had lifts added in an upstream configuration.
- Cadia, also in Australia, has three facilities. The Cadia Hill open pit is being used as a tailings storage facility. The Northern Tailings Storage Facility (NTSF) and Southern Tailings Storage Facility (STSF), which both commenced as

downstream design, have had lifts added in upstream configurations. At Blayney, near Cadia, there is a historic copper mine and an associated small remnant tailings facility that is currently under care and maintenance.

- Lihir, in Papua New Guinea, uses the DSTP method given proximity to suitable deep-ocean deposition, its active geothermal and geotechnical setting, high rainfall, and the lack of available land.
- In Ecuador, Newcrest has an equity interest in Lundin Gold, which is building the Fruta Del Norte gold project with an associated downstream TSF.

In March 2018, a limited breakthrough of tailings material occurred at the NTSF embankment at our Cadia operation. The breakthrough was contained within the STSF, with no environmental damage. Details of our response were provided in our FY18 Sustainability Report and ongoing updates were provided on our website.

In response to the event at Cadia, a panel of independent technical experts reviewed the Cadia NTSF and provided a report in April 2019. Newcrest published the findings of the independent review. The report is available on our website.

The independent report 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 were the height of the dam, the prevailing phreatic conditions, and excavation at the toe of the structure in the area of the slump.

Newcrest has accepted all the findings and recommendations of the independent review and is working with our stakeholders, including the NSW regulators, in continuing the extensive drilling and geotechnical analysis of the foundations of the NTSF and the STSF. We continue to place the safety of our workforce and local community, together with care for the environment, at the forefront of our mind in operation of the STSF and as we progress work on the repair plans for the NTSF. We are targeting completion of a concept study on the repair plan in Q2 FY20.

As part of a regular annual schedule of reviews for each of our sites, the Geotechnical team continued reviews of TSFs with third-party specialists to assess performance, effectiveness of management systems (including conformance to the Tailings Management Framework and Tailings Standard) and to track progress of improvement opportunities.

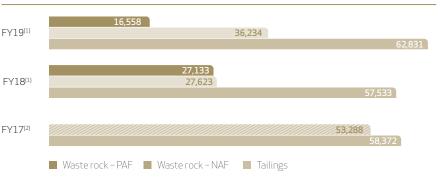
External reviews of each of Newcrest's tailings storage facilities have been undertaken on a rolling annual schedule. In addition to the external reviews, verification activities have been undertaken in line with industry guidelines. The Newcrest Material Risk Program also considers potential risks associated with tailings storage facilities by identifying potential hazards, ensuring associated controls are in place.

In FY19 under broader Material Business Interruption Risk (MBIR) studies across the business, Newcrest commenced a programme of deeper technical and engineering reviews of our tailings storage facilities. These studies are conducted by industry-recognised and independent subject matter experts (SME). The review and analysis undertaken by the SMEs is, in turn, reviewed by a panel of three independent experts who provide an assessment on the veracity of the work done by the SME. These MBIR studies review the design, construction, operation, maintenance and monitoring of the tailings storage facilities. The studies apply a first principles methodology where assumptions are verified.

As at 30 June 2019 the Telfer and Gosowong TSF facilities have been reviewed through MBIR Studies. Actions to address the recommendations from these studies are underway. Cadia is undergoing a more detailed assessment, and Red Chris's TSFs will be reviewed in FY20.

In February 2019 the ICMM announced, with the full support of member company Chief Executive Officers, the establishment of an independent panel of experts to develop an international standard for tailings facilities, for its member companies, and for review and use in the broader mining industry. The standard will be developed by a review of current global best practice in the design, management and operation of tailings storage facilities in the mining industry.

## Waste rock and tailings (kt) FY17-19



- (1) Reported volumes of Cadia's Potentially Acid Forming (PAF) or Non-Acid Forming (NAF) waste rock are based on geochemical analysis and classification that is used to inform regulatory approved management plans for storage and remediation of waste rock dumps. Some volumes of NAF waste rock (e.g. that may contain minor quantities of steel or concrete from underground workings) are also conservatively managed by Cadia as if it was PAF, in engineered storage cells to prevent potential environmental impacts.
- (2) Did not separate waste rock data by PAF and NAF prior to FY18.

### Wafi-Golpu

Following a review of tailings management options and a comprehensive technical and baseline study programme, DSTP was selected in FY19 as the preferred tailings management option for the updated Wafi-Golpu Feasibility Study. The subsequent Wafi-Golpu EIS was lodged with the PNG Government for assessment and made publicly available on the WGJV website. The WGJV also commissioned an independent peer review of all of the land-based TSF options that were investigated to help verify the approach used by the project for assessment of land-based storage options leading to the selection of Deep Sea Tailing Placement (DSTP) as the preferred tailings management method. The PNG Government also sought independent peer reviews of the EIS from both international and national environmental science experts. Read more about the project on page 29.

## Waste rock management

Tailings and waste rock management projects and activities during FY19 also included health, safety and environment audits conducted on waste rock management at Telfer, Cadia, Lihir and Gosowong. These audits assessed site performance against Newcrest's Waste Rock Management Standard.

Telfer continued progressive rehabilitation of waste rock dumps in line with closure designs and is completing a waste rock optimisation programme to apply efficient dumping strategies, constructing final landforms without double handling of material where possible.

Gosowong completed works including a geochemical assessment of waste rock dumps and their designs. These changes were built into an updated closure plan, which was refined for management of waste rock as part of a pit management plan to reduce potential acid metalliferous drainage.

## Non-mineral waste

Our Non-Mineral Waste Management Standard specifies the requirements for managing non-mineral waste streams at each of our sites including waste from mine camps and operational facilities. In accordance with mining permits, Telfer, Lihir and Gosowong maintain landfills, while Cadia uses local contractors to transport waste off-site for disposal in government certified locations. Gosowong and Lihir also use incinerators to help manage waste stream volumes. Sites are audited regularly to ensure compliance with the Non-Mineral Waste Management Standard.

## Diving deep into environmental compliance

During FY19 our Lihirian environmental divers renewed their certifications to continue to support coral reef monitoring at our Lihir mine. Their work is part of our comprehensive Environmental Monitoring and Measurement programme.

The divers completed their advanced diver and rescue training and underwent specialised medical checks.

The local dive programme is a simple and effective way to monitor coral health in the ocean around Lihir, where the divers complete essential compliance tasks.

The divers, who have more than 70 years' experience among them at our Lihir operations, have extensive local knowledge and do quarterly 12-metre dives to check sediment loads and assess coral health.

Our divers know the waters very well and are excited to be back playing their essential role. They are also training other Lihirian divers who are working in our business.



## Innovating for an energy-efficient future

Newcrest is researching innovative ways to extract greater value from mining operations by retrieving copper and gold from low-grade or residual ore.

The project focuses on recovering a metal ion-enriched solution from the ore for further processing to extract the gold and copper and process it for sale.

While the technique has long been used to recover evaporites and potash and is commonly used in uranium mining, there are few examples of in-situ mining being used in hard rock applications, such as gold and copper mining.

This technique also eliminates waste rock and dramatically reduces water consumption, improving energy efficiency and creating a more sustainable way to extract high-value minerals.

Newcrest has partnered with experts from Curtin University, Monash University, CSIRO and engineering consultancy Hatch to research new ways to advance the method. As part of the research, the ore is processed through a bottle wash and put into a large container, where it is rolled in a chemical test solution for seven days.

Samples are taken throughout the process to see how effective the solution is, how much copper is being extracted and over what period of time.

The work is not without challenges, with breakthroughs required to develop a mix of chemicals to most effectively extract precious metals in an environmentally sustainable way.

In the case of gold, we are seeking lixiviant chemistries that don't use cyanide to reduce the impact on the environment.

The team also must determine the best way to access valuable minerals in the hard rock, then maximise their recovery.

While researchers believed the approach might be 20 years away from implementation, Newcrest hopes to be an early adopter and industry leader in this technique.

## 8 Behaving in an ethical and transparent manner

## Material

## sustainability topic

It is a significant expectation of our stakeholders that we deliver on our commitment to high-quality governance, transparency and ethical business practices across the organisation.

## Our

## approach

Adherence to the highest standard of corporate governance is essential to ensuring we achieve our vision. Good governance is at the heart of any successful business. It helps us to drive growth and improvement, while protecting and maintaining our reputation with our stakeholders.

Our Legal Governance Compliance Framework assesses and monitors whether adequate policies, standards and controls are in place to ensure we operate in a legal and responsible way across all our operations.

Our engagement with government and community stakeholders spans economic, environmental and social responsibility. We work with each group and individual to increase the awareness of the many ways we invest and build capacity in communities.

We actively engage with government and other stakeholders on policy and reforms, both directly and indirectly, through industry groups such as the MCA and the PNG Chamber of Mines and Petroleum.

We use targeted baseline research throughout mine development and planning to help build an understanding of the national, regional and local stakeholders, their politics, history, culture and challenges. The studies, combined with extensive



consultation, help us to understand community expectations and concerns, ensuring our policies are relevant to each local community.

We also maintain a presence in each relevant jurisdiction to enable regular dialogue with government and other key stakeholders. This allows us to identify and address concerns as they arise.

In managing this aspect of stakeholder expectations, Newcrest is working towards alignment with ICMM's Principles 1 and 10 (refer to page 63).

### **Ethical conduct**

Our Code of Conduct reflects the values underpinning all of our behaviours and our relationships with our stakeholders. We are guided by our values: caring about people, acting with integrity and honesty, working together, valuing innovation and problem solving, and striving for high performance. These values shape the behaviours we expect from everyone who works for Newcrest.

The Code of Conduct is based on these behaviours and covers the comprehensive range of policies and standards that govern the way we operate day-to-day. We provide regular training, including a biennial refresher, and an online Code of Conduct training module available in the languages of the countries in which we operate.

Our Supply Policy provides an overview of our supply chain principles, including the fair treatment of suppliers and

their representatives, without bias or prejudice, and open and fair competition. All Newcrest's suppliers are expected to act with integrity and in accordance with our policies and procedures, including compliance with contract terms consistent with our Human Rights Policy and Anti-Bribery and Corruption Policy. Compliance is a contractual requirement in all our supply agreements.

## **Anti-bribery and corruption**

Our position on bribery is covered in our Code of Conduct and Anti-Bribery and Corruption Policy, as well as our Conflicts of Interest Standard, and Gifts Hospitality and Sponsored Travel Standard. Employees and contractors have clear obligations, which are broadly communicated in induction materials, contracts and on our website and intranet site. We provide training to ensure these obligations are understood.

The Anti-Bribery and Corruption portal of our intranet site provides employees and embedded contractors with access to our policies and standards about bribery and corruption and information on applicable laws. All employees are required to declare conflicts of interest in the online Conflict of Interest Register. Gifts, entertainment or sponsored travel above threshold values set out in our standard are required to be recorded in a separate online register. Annual Anti-Bribery and Corruption training is provided to roles considered 'high risk'.

## **Performance**

## in FY19

During FY19, our sites received initial or refresher anti-bribery and corruption training as follows:

- 100% of high-risk roles at Lihir, Cadia, Telfer and Fiji;
- 91% of high-risk roles in the Americas;
- 99% of high-risk roles at Corporate and Indonesia; and
- 99%<sup>(1)</sup> completion of training of high-risk roles across the Group.

We will continue introductory and refresher training for all high-risk roles in FY20.

Suspected policy breaches must be reported to the employee's manager, to the Chief Legal Risk and Compliance Officer or legal governance compliance champions. An independent, confidential speak out service is also available to report such conduct, as set out in our Speak Out Standard.

Our suppliers and partners must also comply with anti-bribery and corruption laws and we conduct due diligence before acquiring an interest in a third-party entity or entering into a new joint venture.

## **Revenue transparency**

Newcrest is a supporting member of the Extractive Industries Transparency Initiative (EITI), a global coalition of governments, companies and societies working to improve openness and accountable management of revenue reporting from natural resources.

We support the efforts of governments of EITI member countries in which we operate to improve transparency of the flow of revenues and other benefits generated by the resources sector to government.

We report in line with the EITI requirements in PNG and Indonesia and engage independent auditors to assure material payments are made in line with annual and sustainability reporting requirements. We also participate in forums to improve revenue transparency and we are a member of the EITI multi-stakeholder groups for Australia and PNG.

We prepare annual Tax Contributions reports that are published on the Newcrest website and complement our Annual Report, which sets out our financial balance sheet and contributions each year.

## Risk management

Effective risk management is essential to keeping our people and communities safe, protecting value, and securing our growth. Newcrest has a detailed Risk Management System, comprising a framework and process, which describes the overall approach by the company to risk management. This is supported by a Risk Management Policy, Standard and related Procedure.

We conduct regular risk assessments at all levels of the organisation using approved criteria to identify risks, understand causes and impacts, determine controls, and evaluate how acceptable the residual risk is. Newcrest also considers crisis management and business continuity planning and the provision of effective financing strategies for managing risk, including insurance.

Consistent with our Risk Management Policy, our Material Risk Program integrates risk thinking and risk management into our end-to-end business process. It seeks to manage and mitigate those risks with the highest potential impact on our business, by seeking to maintain effective controls and remediate control deficiencies.

The Material Risk Program operates Newcrest-wide and actively engages key operational and functional employees, risk owners, control owners and subject matter experts. Material risk information is presented to and discussed with the Board, the Executive Committee, the Audit and Risk Committee and the Safety and Sustainability Committee to ensure active oversight and involvement in risk management is maintained at a high level within Newcrest.

Risk is not just managed at a Corporate level; our operations are also accountable. Each Newcrest site is required to understand and actively manage their own material risks and have controls in place to prevent their occurrence, including clear management plans for each material risk.

In FY19 we continued to focus on improving the management of material risks across Newcrest to further embed effective systems and tools for risk management. This included ensuring we have the appropriate resources and capability to implement the Risk Management Framework and improving processes and approaches to the regular monitoring and verification of critical controls.

Work also continues to improve and streamline the assurance and auditing process. In FY19 an improved framework for assurance over risk was developed. This framework will underpin continued focus on implementing Newcrest's assurance activities at all sites and in all functions.

For day-to-day operational risks, employees and contractors receive training, education, and risk control information, including to reduce their risk of exposure to workplace hazards and occupational illnesses or disease (see page 19).

## Newcrest sponsors 2018 APEC summit hosted by PNG

INSIGHTS

We are committed to working collaboratively and transparently with government in our relevant jurisdictions.

Newcrest took the opportunity to demonstrate our work towards sustainable and inclusive growth in PNG to a global audience through our platinum sponsorship of the 2018 APEC Summit held in Port Moresby.

Managing Director and Chief Executive Officer Sandeep Biswas led our participation in APEC Leaders Week, which included ministerial meetings, the CEO Summit, the Youth Summit, and a meeting of the 21 APEC Leaders. Sandeep spoke about the mining industry's contribution to sustainable and inclusive growth, using examples from our operations.

The sponsorship signaled the strength of our commitment to host nation PNG.

"All responsible miners look for ways to partner with host governments to support national development objectives," said Sandeep. "We have a strong interest in the social and economic development of our host countries. We want to operate in countries that are growing and thriving."

Several thousand international visitors attended the week in Port Moresby, where the summit also enabled our leaders to meet mining ministers and senior officials from APEC countries to discuss how to maximise the social and economic benefits brought by mining.



## 9 Financial sustainability and local economies

## Material

## sustainability topic

Managing our financial performance, productivity and economic sustainability is a material aspect of significant importance to our stakeholders. Newcrest's strong financial performance is the result of the operational discipline, energy and skills applied by our employees and contractors and is driven by the Operating Performance pillar of our business strategy.

### Oui

## approach

Empowering every employee to adopt an owner's mindset, Newcrest's EDGE performance improvement process allows us to implement value-adding solutions to identified opportunities. Purpose-built for Newcrest, EDGE is designed to entrench a culture of innovation, high performance and continuous improvement.

Embedding sustainable practice in our business supports Newcrest's financial performance and our contributions to local economies and communities. While all of ICMM's 10 Principles are relevant to our business, Principles 1, 2, 4, 5, and 9 (refer to page 63) are most applicable to this aspect.

## **Performance**

in FY19

Newcrest achieved strong results in FY19<sup>(1)</sup>. We reported both a Statutory profit and an Underlying profit of \$561m, 178% and 22% higher than the prior period, respectively, from gold production of 2.49 million ounces. We also reported our lowest annual All-In Sustaining Cost of \$738 per ounce of gold produced and delivered over \$800m in free cash flow, a 34% increase on the previous year. All our operations were free cash flow positive.

This strong operating performance was supported by a continued improvement in our safety performance, with zero fatalities and a 3% reduction in our TRIFR compared to the prior year.

Notably, Cadia achieved a record year for production and a record low AISC per ounce, and Lihir delivered another year of free cash flow in excess of \$300m.

Our strong operating and financial performance allowed us to further reduce our net debt from 30 June 2018 by 62% to \$395 million, strengthen the balance sheet, and increase dividends to shareholders, with the full year dividend being 19% higher than the previous year.

We continued to invest in growth during the year, gaining exposure to another operating asset, the Red Chris mine in Canada. Our plan is to improve the current operating performance and, subject to drilling and further study, we aim to transform Red Chris into a Tier 1 operation by means of block caving.

We also gained access to a promising prospect in the Havieron deposit in Western Australia, which, subject to drilling and further study, could considerably improve the profitability and extend the life of Telfer.

## Supply chain

Our Supply Policy provides an overview of Newcrest's supply chain principles, including fair treatment of suppliers and their representatives, without bias or prejudice, and open and fair competition.

We are committed to achieving an excellent standard of supply-chain management and performance in all our business activities. We aim to have the lowest total cost of ownership while ensuring safety, quality and service.

Our supply and logistics approach supports the value chain through appropriate contracts; management of suppliers' performance to ensure value is achieved from each relationship; and management of the inbound logistics process with suppliers, as well as storage, distribution and inventory control.

Financial and non-financial criteria are considered in evaluating Newcrest's potential suppliers.

For commodity-based agreements, financial criteria, such as financial strength and company structure, are important. For service-based agreements, significant weighting is given to factors such as safety record, sustainability approach, culture, and ability to meet statutory requirements such as licences, permits and relevant standards.



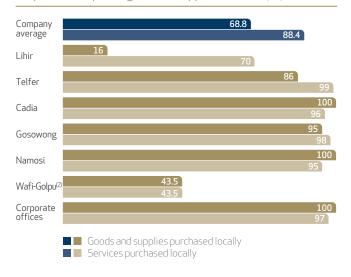
Our suppliers and service providers are contractually required to meet our policies and standards, with provisions articulating the principles and practices we expect in areas such as health and safety, social performance (including human rights), and environmental management. Where appropriate, we conduct due diligence on providers to assess their suitability.

We comply with the UN Security Council Sanctions Check, which means suppliers and their directors are assessed prior to being contracted.

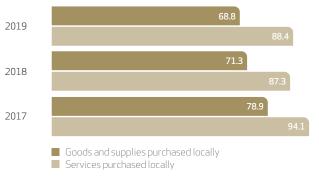
Where safety, quality and service are comparable, preference is given to local suppliers. For example, a local Indigenous community company in the Pilbara region, Western Australia, Mata Kurlu, overcame open-market, national competition to be awarded the contract for the Telfer access road and site civil works. Similarly, a Lihir landowner company, Anitua Radial Drilling Services, was awarded a long-term services contract extension for drilling services to the Lihir mine site.

Risks are managed through processes such as off-site receipting, which involves checking a supplier's goods against our order and receipting them off-site before transporting them to sites; managing relationships with critical suppliers; assessing key safety and human rights risks during the tender submission process; and proactive and continuous review of inventory levels through our SAP system monitoring.

## Proportion of spending on local suppliers FY19<sup>(1)</sup> (%)



## Proportion of spending on local suppliers FY17–19<sup>(1)</sup> (%)



- (1) Locally based suppliers: Providers of materials, products, and services that are based in the same geographic market (i.e. no transnational payments to the supplier are made).
- (2) Wafi-Golpu system is presently unable to distinguish between goods and services procured in PNG; therefore the same percentage has been included for both items.

## **Development partnerships**

Newcrest actively seeks to identify and encourage partnerships with governments and non-government organisations (NGOs) to improve the design and delivery of local community businesses and programmes and to encourage effective regulation and ongoing government commitment. This objective covers our established operations and key growth jurisdictions.

We have significant partnerships with local government agencies and community entities, such as landowner associations and businesses. These are managed through negotiated agreements on the sources and uses of benefits funds. Management systems vary from site to site, and we endeavour where practicable to ensure probity in the use of funds to deliver agreed projects and programmes.

Some of our most significant partnerships are in the area of community health, particularly at our sites outside Australia. During the reporting period, Newcrest entered into an MoU with the Australian Government as part of our PNG sponsorship to train midwives and nursing students under the Australia Awards. See p age 31 for more detail.

We have entered into a number of exciting partnerships with civil society organisations achieving important development outcomes in PNG. For example, we have a five-year alliance working with Medicines for Malaria Venture (MMV), an NGO focused on malaria management and elimination, funded in part by the Bill and Melinda Gates Foundation. In partnership with MMV, the PNG National Department of Health, the New Ireland Provincial Government. ISGlobal and the PNG Institute for Medical Research, Newcrest is supporting the Lihir Malaria Elimination Project to eradicate malaria from the Lihir Group of Islands through control activities with an option to implement rapid elimination and scientifically proven campaigns, including a mass drug administration. Newcrest has committed AU\$6 million for this project, including AU\$1.5 million in funding for the development of Tafenoquine (see also page 43).

## **NSIGHTS**

## Remote monitoring helps us make better decisions, faster

During the year, we launched a remote monitoring and decision support hub in Brisbane, enabling our operational teams to make better decisions, faster, and save money across the business.

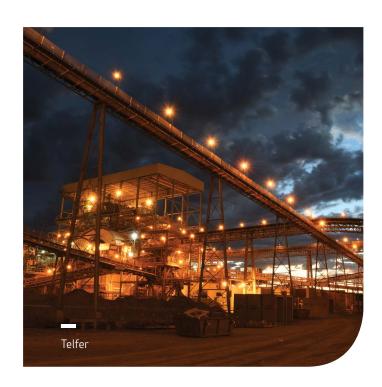
The hub went live for Telfer in January 2019 and for Cadia and Lihir in March. It enables us to maximise cashflow by providing the advanced analytics our operations need to quickly identify and make improvements, reducing the improvement cycle time from weeks to days.

A productivity supervisor staffs the hub each weekday from 5am to 8pm, monitoring performance and providing decision support. The sites and the hub catch up daily, with ongoing ad-hoc communication.

Improvement opportunities are captured as 'decision support records' and high-value improvements are programmed into the remote monitoring system, to automate the response to reoccurring events.

Following the first deep-dive analysis, Telfer modified its reagent addition rates to improve recovery in the flotation circuit. The team is tracking the results and will lock the new tactics into the remote monitoring system, as required.

The additional analytical support the hub provides allows site teams to investigate and quantify a number of opportunities quicker than would have been possible without the analytics and insights from the hub.





## Growing good business skills at Gosowong

At our Gosowong operation, a local training provider teaches hydroponic farming techniques, business development, budgeting and business management to local women. Run by Hobata Farm, the community development programme is improving welfare in remote rural communities near our Indonesian mine by supporting village women to create enterprises that generate sustainable income.

More than 330 women from 83 villages near our Gosowong operations have benefited from the programme to help them set up and run small businesses.

Our camp kitchens have a significant demand for fresh fruit and vegetables, so this is an avenue that delivers mutual benefits. The mine's caterer sources most of their food from Jakarta and Surabaya, but we have been supporting local farmers to complete hydroponics training so the caterer now hopes to source vegetables from the villages. Hydroponic vegetables tend to be fresher and healthier, and this saves money on transport and logistics.

Having completed the training, many of the women now run their own microenterprises, making sweet delicacies and cakes from cassava and tapioca, and juices from local fruit and vegetables. They sell to markets and government offices.

The programme promotes women's economic empowerment by generating savings, encouraging self-management, and developing entrepreneurial skills. The women also receive support from our operations through technology and credit assistance.

It is one of the ways we invest in developing and supporting financial and economic sustainability in the communities in which we operate.

## Sweet kitchen deal means women farmers blossom

More than 2,000 women farmers from the Namatanai region around our Lihir operations have struck an innovative supply deal that benefits farmers, their communities, our business and employees.

Newcrest came up with the solution to enable the women, known locally as 'meri gardeners', to sell their produce to the mine's camp kitchen. The new deal means the meri gardeners no longer have to walk for up to a day selling their produce for inconsistent sales and little or no return.

Promoting women's economic empowerment generates savings, encourages self-governance and helps women develop new skills, and is a key development priority for Newcrest.

The deal is typical of the way we invest in development, building financial sustainability in our communities.

These programmes are transformative for the women, their families and the village. The Lihir partnership has the potential to generate PGK4 million (A\$1.66 million) a year for the Namatanai economy.

Under the partnership, farmers are paid when they deliver their produce to a central point, where it is weighed and sorted for quality. Our site buys some and the rest is shared between the hospital and local markets.

Our mine camp prepares 7,000 meals a day and we previously imported vegetables. The new arrangement provides our kitchen with high-quality, fresh local produce and guarantees a regular, reliable income to the farmers.

Similar partnerships are in place with communities near our Namosi Project in Fiji, where women are learning about financial management, use of business technology, and market development and expansion to secure a future beyond the life of the mine.



## **Appendix**

### Material sustainability topics



Level of importance to Newcrest

## The materiality definition

process

In accordance with AccountAbility's Five-Part Materiality Test, the materiality definition process involves an independent assessment of a range of relevant information including relevant internal policy, risk and strategy documents, media research, peer and industry publications, and internal and external stakeholder interviews.

This process is undertaken every two years. In FY19, we ran an internal desktop process update on the FY18 materiality assessment which included research on emergent industry issues and industry benchmarking. The material topics defined in FY18 were reviewed, revalidated and re-rated against the classification of 'high', 'medium' or 'low' importance, and plotted accordingly. Newcrest's Executive Committee and Board discussed the findings and endorsed the ratings of the material topics. The materiality definition process is a subject of the independent limited assurance conducted over this report.

The nine topics of high significance for FY19 inform the scope and content of the narrative in this Sustainability Report.

## Relevant memberships and commitments

Newcrest engages in a variety of ways with industry and business, nongovernment organisations, education and research institutions (see our GRI Content Index on our website www.newcrest.com.au for a listing of memberships). Our Sustainability Report demonstrates how we are strengthening our engagement with our key stakeholder groups, including our industry associations. Our ongoing relationships with all our stakeholders and our commitment to the ICMM, MCA and the WGC are crucial for enabling a sustainable and profitable business.

Since becoming a member of ICMM in November 2017, we have progressed our alignment and performance in relation to the ICMM 10 Principles and Position Statements, as has been set out in our sustainability reporting. Further definition of the 10 Principles and Position Statements are available at www.icmm.com.



















## ICMM 10

## Principles

## Principle 1

Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development.

## **Principle 2**

Integrate sustainable development in corporate strategy and decision-making processes.

## Principle 3

Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities.

## **Principle 4**

Implement effective risk-management strategies and systems based on sound science and which account for stakeholder perceptions of risks.

### **Principle 5**

Pursue continual improvement in health and safety performance with the ultimate goal of zero harm.

## Principle 6

Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change.

## Principle 7

Contribute to the conservation of biodiversity and integrated approaches to land-use planning.

## **Principle 8**

Facilitate and support the knowledge-base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals.

### **Principle 9**

Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities.

## Principle 10

Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner. Effectively report and independently verify progress and performance.

## **World Gold Council**

## Responsible Gold Mining Principles

In September 2019 the WGC launched its Responsible Gold Mining Principles, an over-arching framework that sets out clear expectations for consumers, investors and the downstream gold supply chain as to what constitutes responsible gold mining.

Developed with input from more than 200 organisations and experts from governments, international organisations and gold supply chain participants, the principles address the key environmental, social and governance issues for the gold mining sector and reflect the commitment of the world's leading gold mining companies to responsible mining (visit www.gold.org for detail).

Companies implementing the principles will be required to publicly disclose their adherence to them and to have this assured by a third-party, independent provider.

Newcrest's undertaking to implement the WGC Responsible Gold Mining Principles aligns with our long-term commitment to increasing sustainability across the business. The Responsible Gold Mining Principles closely align with the ICMM 10 Principles, so that members of ICMM who are also WGC members will be able to streamline implementation and reporting.

























## Stakeholder engagement summary

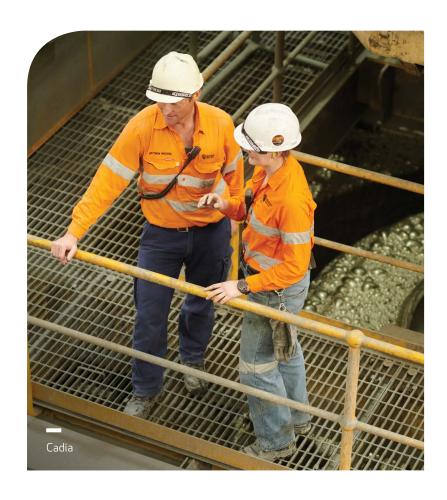
Newcrest communicates with stakeholders via our website, social media, market and media releases, our Corporate publications, formal meetings, events, presentations from our representatives, and through our Annual General Meeting.

At a site level, each of our operations undertakes localised stakeholder engagement planning and documents the activities. This may include community forums and working groups, newsletters, community surveys and consultation, complaints and grievance mechanisms,

representation on committees and engagement to develop community programmes. We also communicate with our employees through a range of face-to-face activities and electronic media. We record, measure and review our engagement on a regular basis to ensure it is effective.

	Topic of interest and our approach	Engagement activities	Report location
Employees and contractors	Health, safety and wellbeing at work Organisational strategy Diversity, inclusion and employee rights Recognition, wages and benefits Career advancement/development Workplace agreement terms and conditions	Employee briefings, intranet, social media, email, newsletters, social events, notice boards, departmental site and toolbox meetings, performance reviews, site general manager town hall meetings, direct engagement between people leaders and their teams, and annual Organisational Health Survey participation.	Our stakeholders pg. 13 Improving safety and health pg. 17 Respecting and protecting human rights pg. 44
Shareholders, and investors	Financial and operating performance Share price performance and dividend payments Balance sheet strength Reserves and resources Health, safety, environmental and social performance Reputation, transparency and ethical behaviour Compliance with government regulations and permit requirements Mergers, acquisitions and divestments Corporate governance	Annual reports, quarterly production reports, half-yearly financial reporting, website, email, investor briefings, one-on-one discussions, investor days, conference calls, market announcements, annual general meeting, industry conferences, and social media.	Growing our business pg. 25 Financial sustainability and local economies pg. 58 Behaving in an ethical and transparent manner pg. 55 Establishing a response to climate change pg. 21
Local communities	Safety and wellbeing at work Local employment opportunities Investment in community including education and infrastructure Managing environmental impacts Ethical and transparent approach to economic contributions Indigenous peoples' rights	Community Relations team visits, resident and community meetings, site visits, communication and feedback forums with leaders and communities, complaints and grievance mechanisms, sponsorships and partnerships, collaborative agreements, media engagement on local initiatives, community newsletters, factsheets, websites and social media.	Improving safety and health pg. 17 Growing our business pg. 25 Working with our communities pg. 36 Managing mine closure pg. 32 Respecting and protecting human rights pg. 44 Behaving in an ethical and transparent manner pg. 55 Financial sustainability and local economies pg. 58
Government and regulators	Regulatory and legal compliance Government regulations and permits Taxes and royalties Local employment Contribution to national and local economies Infrastructure planning Managing environmental impacts	Face-to-face meetings, regular briefings, and direct engagement.	Behaving in an ethical and transparent manner pg. 55 Working with our communities pg. 36 Managing mine closure pg. 32 Managing our waste pg. 51
Suppliers	Safety and wellbeing at work Contract and payment terms and conditions Business opportunities Financial and operating performance Responsible and efficient business practices Innovation Partnership and collaboration opportunities	Collaborative guidelines, out-to-market approaches, face-to-face discussions, performance meetings, and contractual agreements.	Improving safety and health pg. 17 Growing our business pg. 25 Behaving in an ethical and transparent manner pg. 55 Financial sustainability and local economies pg. 58
Customers	Financial and operating performance Reserves and resources Health, safety, environmental and social performance Compliance with government regulations and permit requirements	Market tenders, meetings, reports, face-to-face discussions and site visits.	Financial sustainability and local economies pg. 58 Growing our business pg. 25 Behaving in an ethical and transparent manner pg. 55 Improving safety and health pg. 17

## Our performance data



**GRI 102-8** Information on employees and other workers FY19

	Company	Lihir	Telfer	Cadia	Gosowong <sup>(1)</sup>	Exploration	Namosi	Wafi-Golpu	Corporate Offices
Employment type	, ,								
Male employees – full time	4,574	2,097	447	710	842	81	6	185	206
Female employees – full time	699	310	59	70	75	15	5	42	123
Male employees – part time	9	0	4	2	0	0	0	0	3
Female employees – part time	52	0	6	22	0	2	0	2	20
Total employees	5,334	2,407	516	804	917	98	11	229	352
Breakdown by employee category									
Male employees – permanent	4,082	1,772	423	691	774	80	6	141	195
Female employees – permanent	658	264	55	88	70	16	5	33	127
Male employees – fixed term or temporary	501	325	28	21	68	1	-	44	14
Female employees – fixed term or temporary	93	46	10	4	5	1	-	11	16
Contractors									
Male contractors/ supervised workers	5,631	2,764	1,008	781	962	-	10	-	106
Female contractors/ supervised workers	799	554	137	53	-	-	0	_	55
Total contractors	6,430	3,318	1,145	834	962	_	10	_	161

<sup>&#</sup>x27;–' is not available.

 $<sup>(1) \ \ \</sup>mathsf{Data} \ \mathsf{for} \ \mathsf{contractors} \ \mathsf{at} \ \mathsf{Gosowong} \ \mathsf{is} \ \mathsf{not} \ \mathsf{presently} \ \mathsf{captured} \ \mathsf{by} \ \mathsf{gender}.$ 

## **GRI 102-41**

## Collective bargaining agreements (%) FY19

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Namosi	Wafi-Golpu	Corporate Offices
Employees covered	28	0	37	45	100	34	0	0	0

### **GRI 202-1**

## Entry level wage as a percentage of local minimum wage (%) FY19(1)

	FY19	FY18	FY17	FY16	FY15
Lihir	418	417	131	141	253
Telfer	246	267	271	329	331
Cadia	251	275	275	322	322
Gosowong	187	-	124	238	144
Exploration	282	303	303	356	354
Namosi	141	152	162	140	140
Wafi-Golpu <sup>(2)</sup>	114	-	131	143	149
Corporate Offices	216	233	244	263	262

### **GRI 202-2**

## Proportion of senior management hired from the local community (%) FY19(3)

	FY19	FY18	FY17	FY16	FY15
Lihir	21.0	16.0	20.8	20.0	0.0
Telfer	75.0	92.0	100.0	100.0	0.0
Cadia	67.0	71.0	100.0	100.0	100.0
Gosowong	58.0	6.0	4.0	5.6	3.4
Exploration	92.0	23.0	0.0	-	-
Namosi	100.0	100.0	100.0	0.0	75.0
Wafi-Golpu	13.0	13.0	0.0	0.0	0.0
Corporate Offices	83.0	84.0	93.2	0.0	-

## Proportion of spending on local suppliers (%) FY19(4)

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Namosi	Wafi-Golpu <sup>(5)</sup>	Corporate Offices
Goods and supplies purchased locally	68.8	16	86	100	95	-	100	43.5	100
Services purchased locally	88.4	70	99	96	98	-	95	43.5	97

## **GRI 205-2**

## Employees that have undergone training in organisational anti-corruption policies and procedures FY19<sup>(6)</sup>

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Namosi	Wafi-Golpu	Corporate Offices
Number of employees ident	ified as being ir	n high-risk roles (#	<del>(</del> )						
Level 6 employees	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
Level 5 employees	7	N/A	N/A	N/A	N/A	N/A	N/A	_	7
Level 4 employees	37	2	2	2	_	_	0	-	31
Level 3 employees	122	15	9	8	_	-	2	-	88
Level 2 employees	109	34	0	40	_	-	7	-	28
Level 1 employees	53	32	2	9	-	-	2	-	8
Otherwise classified <sup>(7)</sup>	136	11	0	0	79	45	1	-	0
Contractors	5	0	0	2	-	-	0	-	3
Percentage of employees ic	dentified in high	-risk roles that red	ceived organis	sational anti-	bribery and co	orruption training	(%)		
	99	100	100	100	99	91	100	-	99

- (1) Ratios of standard entry level wage compared to local minimum wage are not captured by gender.
- (2) Data presented for Wafi-Golpu is for Wafi-Golpu Services Limited in Papua New Guinea; the ratio for Australian operations is 187%.
- 'Senior managers' are defined as level 3.1 and above.

Definitions of 'local communities':

- Corporate: Australian citizens/permanent residents. Lihir: Papua New Guinea nationals.
- Gosowong: Citizens that have Maluku Utara identification.
- Telfer: Australian citizens/permanent residents. Cadia: Australian citizens/permanent residents.
- Namosi: Fiji national employees.
- Wafi-Golpu: Papua New Guinea nationals.
- (4) Locally based suppliers: Providers of materials, products, and services that are based in the same geographic market (i.e. no transnational payments to the supplier are made).
- (5) Wafi-Golpu system is presently unable to distinguish between goods and services procured in PNG, therefore the same percentage has been included for both items.
- (6) Newcrest identifies employee need for specific anti-bribery and corruption training based on an assessment of risk in the assigned role.
- $(7) \ \ Where it was not possible to breakdown by grade, employees and contractors have been grouped as "Otherwise classified".$

**GRI 302-1** Energy consumption within the organisation (GJ)  $FY19^{(1)}$ 

	Company	Lihir <sup>(2)</sup>	Telfer	Cadia	Gosowong	Exploration	Corporate Offices
Diesel (ADO)	1,617,465	140,971	35,876	0	1,440,501	0	0
Fuel oil combusted	6,903,909	6,903,909	0	0	0	0	0
Natural gas	7,491,188	0	7,491,188	0	0	0	0
Electricity consumption (self-generated)	6,104,445	3,179,506	2,420,828	0	504,111	0	0
Total energy consumed for production of electricity	22,117,007	10,224,386	9,947,892	0	1,944,612	0	-
Acetylene	486	179	99	86	108	0	13
Diesel (ADO)	4,839,253	1,864,859	2,027,292	672,682	270,318	4,220	0
Grease	4,617	1,552	842	1,384	815	25	0
Liquid petroleum gas (LPG)	1,160	0	392	753	0	0	15
Pipeline natural gas	9,368	0	0	0	0	0	9,368
Oil (lubricating oil)	138,244	71,573	37,818	12,100	16,684	68	0
Petrol (ULP)	10,501	10,437	62	2	0	0	0
Hydraulic fluid	2,595	0	933	1,661	0	0	0
Total – non-transport (including on-site mobile fleet)	5,006,224	1,948,600	2,067,438	688,668	287,925	4,313	9,396
Aviation gas	9,986	0	0	0	9,986	0	0
Diesel (ADO)	317,727	85,819	177,316	32,909	16,933	4,739	10
Jet fuel	33,120	33,120	0	0	0	0	0
Petrol (ULP)	42	0	0	42	0	0	0
Total - transport	360,875	118,939	177,316	32,951	26,919	4,739	10
Total – diesel used	6,774,445	2,091,649	2,240,483	705,591	1,727,752	8,959	10
Total – electricity (Scope 2)	3,955,411	0	1,264	3,949,360	0	98	4,689
Total – energy consumption	31,439,517	12,291,926	12,193,910	4,670,981	2,259,455	9,150	14,095

## **GRI 302-3**

## Energy intensity by tonnes processed FY19(1)

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration
Energy consumed (GJ)	31,439,517	12,291,926	12,193,910	4,670,981	2,259,455	9,150
Ore processed (t)	66,094,586	13,350,443	22,734,119	29,302,113	707,911	0
Energy intensity by tonnes processed (MJ/t)	476	921	536	160	3,192	_

## Energy intensity by gold produced FY19(1,3)

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration
Energy consumed (GJ)	31,439,517	12,291,926	12,193,910	4,670,981	2,259,455	9,150
Gold produced equivalent (Troy oz)	3,071,650	932,784	535,226	1,413,454	190,186	0
Energy intensity by gold produced (MJ/oz)(4)	10,235	13,178	22,783	3,305	11,880	_

## MM1 Amount of land disturbed or rehabilitated, across operational sites (ha) $FY19^{(1)}$

	,	,			
	Company	Lihir	Telfer	Cadia	Gosowong
Total land disturbed (ha)	7,514	732	4,695	1,616	471
Total land undisturbed (ha)	103,197	1,555	95,360	3,276	3,006
Total land area <sup>(5)</sup>	119,089	2,527	101,634	11,009	3,918
Land disturbed FY19 (ha)	81	0	50	0	30
Total rehabilitated FY19 (ha)	1,432	1	990	0	441
Closing land balance FY19 (ha)	6,163	731	3,755	1,616	61
Land area held for ancillary purposes (ha)	5,786	0	0	5,786	0

<sup>&#</sup>x27;-' is not available.

<sup>(1)</sup> Values in tables are rounded to the nearest whole number.

<sup>(2)</sup> Geothermal energy produced by Lihir to supplement operations in FY19 was 390,600 GJ.

 $<sup>(3) \ \</sup> Production of silver accounts for less than 1\% of total production and is not included in the calculations for total gold equivalent.$ 

 <sup>(4)</sup> Cadia and Telfer are reported as gold plus gold equivalent ounces based on a gold price of US\$1,200/oz and a copper price of US\$3/lb.
 (5) Total land area number includes a value for total land rehabilitated, not shown in the table.

GRI 303-1 Water withdrawal by source (ML) FY19<sup>(1,2)</sup>

	Company	Lihir	Telfer	Cadia <sup>(3)</sup>	Gosowong
Category 1					
Surface water <sup>(4)</sup>	67,330	54,874	0	3,478	8,978
Ground water	977	0	916	56	5
Produced water	0	0	0	0	0
Third-party water	5,589	0	0	5,589	0
Total Category 1	73,896	54,874	916	9,123	8,983
Category 2					
Surface water	41,369	37,422	0	2,959	988
Ground water	22,455	0	10,530	1,339	10,586
Produced water	6,298	0	6,298	0	0
Third-party water	0	0	0	0	0
Total Category 2	70,121	37,422	16,828	4,297	11,574
Total Category 1 & 2 (Freshwater)	144,017	92,296	17,744	13,420	20,557
Category 3					
Surface water	0	0	0	0	0
Ground water	0	0	0	0	0
Seawater <sup>(5)</sup>	217,713	217,713	0	0	0
Produced water	0	0	0	0	0
Third-party water	0	0	0	0	0
Total Category 3 (Other water)	217,713	217,713	0	0	0
Total water withdrawn (ML)	361,730	310,009	17,744	13,420	20,557

## $\begin{array}{l} \textbf{GRI 304-4} \\ \textbf{IUCN Red List species and national conservation list species with habitats in areas affected by operational sites FY19^{(1)} \\ \end{array}$

	Company	Lihir	Telfer	Cadia	Gosowong
Critically endangered (#)	3	1	0	2	0
Endangered (#)	3	2	0	0	1
Vulnerable (#)	8	1	1	0	6
Near threatened (#)	7	2	1	0	4
Least Concern (#)	279	11	180	6	82

A conservative approach to reporting critically endangered or endangered species has been taken for GRI reporting where each operation has identified species that could potentially occur within the mine area (potentially using mine areas as feeding grounds). However, the environmental impact studies for the operations determined that populations of these species would not be expected to be impacted by the operations.

Additionally, Lihir has a species of Melanesian Megapode that is on the PNG National Conservation List. This species was identified during the environmental impact study for the mine to occur within the mine area (along with other habitat areas across Lihir Island). Monitoring throughout the life of the mine in sampling sites across the island has indicated the local populations of Melanesian Megapode have remained stable.

Although not specifically related to the potential occurrence of critically endangered or endangered species, Cadia has established a biodiversity offset for selected areas of mine disturbance in consultation with government and community stakeholders as part of mining approvals.

## Critically Endangered:

Cadia: Superb Parrot (*Polytelis swainsonii*); Regent Honeyeater (*Anthochaera phyrgia*) Lihir: Hawksbill Turtle (*Eretmochelys imbricate*)

## Endangered:

**Lihir:** Green Turtle (*Chelonia mydas*); Humphead Wrasse (*Cheilinus undulatus*) **Gosowong:** White Cockatoo (*Cacatua alba*)

## National Conservation list:

**Lihir:** Melanesian Megapode (*Megapodius Eremite*)

<sup>(1)</sup> Values in tables are rounded to the nearest whole number.

<sup>(2)</sup> Based on the MCA Water Accounting Framework. Category 1 represents water that is close to the drinking water standards, as it only requires minimum treatment (disinfection) to be safe for human consumption. Category 1 water may be used for all purposes. Category 2 represents water that is suitable for a range of purposes, subject to appropriate treatment to remove total dissolved solids and/or to adjust other parameters to be safe for human consumption and more sensitive agricultural and recreational purposes.

<sup>(3)</sup> Cadia abstraction volumes exclude storage facility releases (spillway and ecological flow).

<sup>(4)</sup> Rainwater (recorded as Category 1 and Category 2 Surface water) has not been recorded as an input to sites' water balances in previous reporting periods for Lihir and Gosowong. This has contributed to a large increase in reported Surface water at these operations compared to previous reporting periods.

<sup>(5)</sup> Use of seawater at Lihir has been classified incorrectly as Category 2 in previous reporting years. Seawater abstraction at Lihir is not introduced into the processing circuit for the purpose of ore processing.

**GRI 305-1** Direct GHG emissions (Scope 1) by source ( $tCO_2$ -e) FY19<sup>(1)</sup>

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Corporate Offices <sup>(2)</sup>
Diesel (power generation)	113,546	9,896	2,527	0	101,123	0	0
Fuel oil (power generation)	509,785	509,785	0	0	0	0	0
Pipeline natural gas	386,504	0	386,021	0	0	0	483
Acetylene	25	9	5	4	6	0	1
Automotive diesel	339,716	130,913	142,308	47,222	18,976	296	0
Grease	16	5	3	5	3	0	0
Liquid petroleum gas (LPG)	71		24	46	0	0	1
Lubricating oil	1,921	995	526	168	232	0	0
Petrol (ULP)	715	708	4	3	0	0	0
Aviation gasoline	677	0	0	0	677		0
Aviation turbine (jet fuel)	2,325	2,325	0	0	0	0	0
Diesel (haulage & production)	22,400	6,050	12,501	2,320	1,194	334	1
Non-combustion emissions (soda ash & SF6)	86	2	14	69	0	0	0
Total – Scope 1 GHG emissions	1,377,787	660,689	543,932	49,838	122,210	632	485

### **GRI 305-2**

## Indirect GHG emissions (Scope 2) (tCO<sub>2</sub>-e) FY19<sup>(1)</sup>

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Corporate Offices <sup>(2)</sup>
Total - Scope 2 GHG emissions	900,977	0	225	899,576	0	14	1,161

## **GRI 305-4**

## GHG emissions intensity $FY19^{(1)}$

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Corporate Offices <sup>(2)</sup>
Scope $1 + 2$ (tCO <sub>2</sub> -e)	2,278,761	660,689	544,157	949,415	122,210	646	1,646
Ore processed (t)	66,094,586	13,350,443	22,734,119	29,302,113	707,911	0	_
Intensity by ore processed (kg CO <sub>2</sub> -e/t)	34	49	24	32	173	-	-

## GHG emissions intensity FY19 $^{\left( 1,3\right) }$

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Corporate Offices <sup>(2)</sup>
Scope 1 + 2 (tCO <sub>2</sub> -e)	2,278,761	660,689	544,157	949,415	122,210	646	1,646
Gold produced equivalent (troy oz)	3,071,650	932,784	535,226	1,413,454	190,186	-	-
Intensity by gold produced (tCO <sub>2</sub> -e/oz) <sup>(4)</sup>	742	708	1,017	672	643	-	-

## **GRI 305-7**

## Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions (kg) FY19

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	Company	Lihir	Telfer	Hedland	Cadia	Dewatering	Gosowong	Exploration	Namosi	Golpu
S02	4,490,406	4,402,774	2,384	2,681	304	2	82,261	-	-	-
NOx	10,573,742	6,999,073	1,854,832	4,703	379,196	1,419	1,334,520	-	-	-
CO	5,138,363	3,275,316	1,061,001	522	184,702	590	616,233	-	-	-
PM<10 µm	14,932,254	403,910	8,554,651	477	5,898,463	127	74,627	-	-	-
PM < 2.5 µm	563,961	389,712	76,732	296	25,079	117	72,024	-	-	-
Total volatile organic compounds (VOCs)	538,540	378,025	72,636	196	21,917	150	65,617	-	-	-

<sup>&#</sup>x27;–' is not available.

<sup>(1)</sup> Values in tables are rounded to the nearest whole number.

<sup>(2)</sup> Corporate offices includes Orange Lab, New South Wales.

<sup>(3)</sup> Production of silver accounts for less than 1% of total production and is not included in the calculations for total gold equivalent.

<sup>(4)</sup> Cadia and Telfer are reported as gold plus gold equivalent ounces based on a gold price of US\$1,200/oz and a copper price of US\$3/lb.

**GRI 401-1**New employee hires and employee turnover FY19

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Namosi	Wafi-Golpu	Corporate Offices
Employment type									
Total full-time employees (#)	5,273	2,407	506	780	917	96	11	227	329
Total new full-time hires (#)	979	371	142	187	37	25	0	127	90
Full-time employee turnover (#)	679	338	87	47	77	2	0	57	71
Full-time employee turnover to total full-time (%)	13	14	17	6	8	2	0	25	22
Total part-time employees (#)	61	0	10	24	0	2	0	2	23
Total new part-time hires (#)	9	0	2	2	0	0	0	2	3
Part-time employee turnover (#)	10	1	1	2	0	0	0	1	5
Part-time employee turnover to total part-time (%)	16	0	10	8	0	0	0	50	22
Gender									
Total males employed (#)	4,583	2,097	451	712	842	81	6	185	209
Total new male hires (#)	776	307	110	164	33	19	0	90	53
Male turnover (#)	550	281	66	42	71	2	0	46	42
Male turnover (of all employees) (%)	10	12	13	5	8	2	0	20	12
Females employed (#)	751	310	65	92	75	17	5	44	143
Total new female hires (#)	201	64	34	25	4	6	0	28	40
Female turnover (#)	137	57	22	7	6	0	0	11	34
Female turnover (of all employees) (%)	3	2	4	1	1	0	0	5	10
Age Group									
Total employees <30 (#)	524	253	65	113	20	3	0	24	46
Total new hires <30 (#)	231	117	26	39	4	2	0	20	23
Turnover employees <30 (of total employees) (%)	1	1	2	1	0	0	0	7	2
Total employees 30-50 (#)	3,751	1,617	324	546	797	72	6	159	230
Total new hires $30-50$ (#)	603	211	95	124	23	20	0	77	53
Turnover employees 30–50 (of total employees) (%)	8	10	12	4	5	1	0	4	12
Total employees 50+ (#)	1,059	537	127	145	100	23	5	46	76
Total new hires 50+ (#)	145	43	23	26	10	3	0	23	17
Turnover employees 50+ (of total employees) (%)	3	3	3	1	3	1	0	13	8

**GRI 401-3**Return to work and retention rate after parental leave by gender FY19

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Namosi	Wafi-Golpu	Corporate Offices
Male employees entitled to parental leave (#)	4,334	2,097	423	691	774	80	6	68	195
Male employees that took parental leave (#)	5	0	4	1	0	0	0	0	0
Male employees that returned to work after parental leave (#)	4	0	3	1	0	0	0	0	0
Female employees entitled to parental leave (#)	704	310	55	88	70	16	5	33	127
Female employees that took parental leave (#)	65	36	1	9	1	0	0	4	14
Female employees that returned to work after parental leave (#)	41	25	0	5	0	0	0	4	7
Return rate of male employees who took parental leave (%)	80	N/A	75	100	N/A	N/A	N/A	N/A	N/A
Return rate of female employees who took parental leave (%)	63	69	0	56	0	N/A	N/A	100	50

**GRI 403-2** Work-related injuries FY19<sup>(1)</sup>

	FY19	FY18	FY17	FY16	FY15
LTIFR (per million hours worked) (#)					
Company	0.4	0.5	0.6	0.7	0.4
Lihir	0.2	0.0	0.1	0.2	0.1
Telfer	0.7	1.7	1.2	0.6	1.3
Cadia	1.8	2.0	2.3	2.7	1.3
Gosowong	0.2	0.3	0.9	0.6	0.0
Exploration	0.0	0.0	0.0	0.0	3.4
Namosi	0.0	0.0	0.0	0.0	0.0
Wafi-Golpu	1.3	0.0	0.0	0.0	0.0
Corporate Offices	0.0	0.0	0.0	1.3	0.0
TRIFR (per million hours worked) (#)					
Company	2.3	2.4	3.3	3.7	3.6
Lihir	0.6	0.5	0.7	0.6	1.1
Telfer	7.3	9.4	10.7	10.9	10.7
Cadia	5.9	6.7	10.7	10.6	8.1
Gosowong	0.7	1.1	2.4	4.3	4.4
Exploration	2.2	0.0	2.9	0.0	1.2
Namosi	0.0	0.0	0.0	0.0	0.0
Wafi-Golpu	2.6	0.0	0.0	0.0	0.0
Corporate Offices	0.0	0.0	0.0	2.6	0.0

### LTIFR by employee type (per million hours worked) (#) FY19

	Employees	Contractors
Company	0.6	0.5
Lihir	0.2	0.2
Telfer	2.0	0.3
Cadia	2.1	1.6
Gosowong	0.5	0.0
Exploration	0.0	0.0
Namosi	0.0	0.0
Wafi-Golpu	0.0	3.6
Corporate Offices	0.0	0.0

### TRIFR by employee type (per million hours worked) (#) FY19

	Employees	Contractors
Company	1.4	2.9
Lihir	0.5	0.7
Telfer	4.9	8.0
Cadia	3.5	7.7
Gosowong	1.6	0.0
Exploration	0.0	3.7
Namosi	0.0	0.0
Wafi-Golpu	2.0	3.6
Corporate Offices	0.0	0.0

**GRI 404-1** Average training hours per employee by gender and employee category (#)  $FY19^{(1)}$ 

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Namosi <sup>(2)</sup>	Wafi-Golpu <sup>(2)</sup>	Corporate Offices
Senior Executive – male (Level 5 & 6)	13.9	-	-	-	-	-	-	-	13.9
Senior Executive – female (Level 5 & 6)	12.0	-	-	-	-	-	-	-	12.0
General Manager – male (Level 4)	27.0	30.3	34.5	17.8	57.0	1.8	-	-	20.9
General Manager – female (Level 4)	12.8	-	-	-	-	-	-	-	12.8
Manager – male (Level 3)	40.2	52.0	56.1	27.2	68.0	7.7	-	-	30.0
Manager – female (Level 3)	40.3	75.8	43.7	28.9	52.0	15.1	-	-	26.2
Supervisor, Superintendent, Coordinator & senior technical specialist – male (Level 2)	42.3	68.5	51.4	26.7	84.0	3.6	-	-	19.9
Supervisor, Superintendent, Coordinator & senior technical specialist – female (Level 2)	31.5	55.7	38.5	28.3	42.0	1.8	-	-	22.7
Operator, technical advisor & other – male (Level 1)	51.2	62.5	40.0	117.3	82.0	0.5	-	-	4.9
Operator, technical advisor & other – female (Level 1)	47.2	29.6	42.0	161.6	39.0	1.8	-	_	8.9

**GRI 405-1** Breakdown of employees by category, gender and age group FY19

	Company	Lihir	Telfer	Cadia	Gosowong	Exploration	Namosi	Wafi-Golpu	Corporate Offices
Executive General Manager (Level 5)									
Total employees (#)	8.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	7.0
Male (%)	87.5	0.0	0.0	0.0	0.0	0.0	0.0	100.0	85.7
Female (%)	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3
<30 years of age (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30–50 years of age (%)	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3
50+ years of age (%)	75.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	85.7
General Manager (Level 4)									
Total employees (#)	46.0	2.0	2.0	2.0	2.0	3.0	0.0	4.0	31.0
Male (%)	84.8	100.0	100.0	100.0	100.0	100.0	0.0	100.0	77.4
Female (%)	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6
<30 years of age (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30–50 years of age (%)	43.5	0.0	50.0	100.0	0.0	0.0	0.0	25.0	51.6
50+ years of age (%)	56.5	100.0	50.0	0.0	100.0	100.0	0.0	75.0	48.4
Manager (Level 3)									
Total employees (#)	197.0	22.0	10.0	16.0	17.0	22.0	2.0	21.0	87.0
Male (%)	76.6	90.9	70.0	62.5	94.1	86.4	50.0	95.2	66.7
Female (%)	23.4	9.1	30.0	37.5	5.9	13.6	50.0	4.8	33.3
<30 years of age (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30–50 years of age (%)	68.5	59.1	90.0	62.5	70.6	59.1	50.0	38.1	79.3
50+ years of age (%)	31.5	40.9	10.0	37.5	29.4	40.9	50.0	61.9	20.7
Supervisor, Superintendent, Coordinat	or (Level 2)								
Total employees (#)	1,409.0	641.0	125.0	175.0	209.0	39.0	6.0	85.0	129.0
Male (%)	86.5	90.0	88.8	85.7	92.3	84.6	66.7	81.2	63.6
Female (%)	13.5	10.0	11.2	14.3	7.7	15.4	33.3	18.8	36.4
<30 years of age (%)	3.1	2.8	7.2	4.0	1.4	2.6	0.0	1.2	3.9
30–50 years of age (%)	72.5	64.9	68.8	82.3	81.8	84.6	33.3	80.0	79.1
50+ years of age (%)	24.3	32.3	24.0	13.7	16.7	12.8	66.7	18.8	17.1
Operator, Technical Advisor (Level 1)									
Total employees (#)	3,674.0	1,742.0	379.0	611.0	689.0	34.0	3.0	119.0	97.0
Male (%)	86.2	86.0	87.3	90.0	91.6	76.5	33.3	77.3	39.2
Female (%)	13.8	14.0	12.7	10.0	8.4	23.5	66.7	22.7	60.8
<30 years of age (%)	13.0	13.5	14.8	17.3	2.5	5.9	0.0	17.6	42.3
30–50 years of age (%)	70.1	68.2	60.2	63.8	89.1	76.5	100.0	70.6	43.3
50+ years of age (%)	16.9	18.3	25.1	18.8	8.4	17.6	0.0	11.8	14.4

<sup>&#</sup>x27;–' is not available.

<sup>(1)</sup> Training hours include inductions, compliance training, Leading Matters and Managing Matters training, NewSafe NextGen, and technical training as required. For Senior Executive and General Manager levels they exclude hours allocated to retreats in FY19, which were a component of FY18 data for these levels.

(2) Data presently not captured for Namosi and Wafi-Golpu project sites.

GRI 405-2
Ratio of basic salary and remuneration of women to men FY19

	Lihir	Telfer	Cadia	Gosowong Ex	ploration	Namosi	Wafi-Golpu	Corporate Offices
Ratio of basic salary and remuneration of women to men (%)								
Basic salary of women to basic salary of men	68.4	88.7	69.9	89.0	81.6	105.0	79.9	66.1
Ratio of basic salary by gender and employee category (%)								
Basic salary of women to basic salary of men (Board)	-	-	-	-	-	-	-	77.6
Basic salary of women to basic salary of men (Senior Executive)	-	-	-	-	-	-	_	66.1
Basic salary of women to basic salary of men (General Manager)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0
Basic salary of women to basic salary of men (Manager)	94.5	101.9	98.9	66.9	92.8	133.8	80.9	94.1
Basic salary of women to basic salary of men (Supervisor, Superintendent, Coordinator)	62.6	95.5	85.6	78.0	101.1	89.4	98.6	84.6
Basic salary of women to basic salary of men (Operator, Technical Advisor)	92.1	83.0	76.6	127.2	165.8	135.5	243.8	96.1

### **GRI 410-1**

### Security personnel trained in organisational human rights policies or procedures as at 30 June $2019^{(1)}$

	Company	Lihir	Telfer	Cadia <sup>(2)</sup>	Gosowong	Exploration	Namosi	Wafi-Golpu	Corporate Offices
Directly employed security employees & contractors (#)	413	112	5	22	226	1	-	46	1
Directly employed security personnel trained (%)	100	100	100	100	100	100	-	100	100
Third-party police personnel trained (#) <sup>(3)</sup>	450	-	-	-	450	-	-	-	-

### **MM3**

### Waste rock and tailings (kt)

waste rock and tallings (kt)					
	FY19	FY18	FY17 <sup>(3)</sup>	FY16	FY15
Waste rock – PAF					
Company	16,558	27,133			
Lihir	16,282	21,476			
Telfer <sup>(4)</sup>	276	5,656			
Cadia <sup>(5)</sup>	0	1			
Gosowong	0	0			
Hidden Valley	_	_			
Bonikro	_	0			
Waste rock – NAF					
Company	36,234	27,623	53,288	23,473	27,677
Lihir	0	0	16,680	1,505	5,934
Telfer <sup>(6)</sup>	35,750	21,001	19,017	6,688	7,221
Cadia <sup>(5)</sup>	293	283	25	0	6
Gosowong	191	236	218	263	325
Hidden Valley	_	-	-	3,613	8,383
Bonikro	-	6,104	17,348	11,404	5,808
Tailings					
Company	62,831	57,533	58,372	58,689	61,851
Lihir	13,350	14,274	13,091	12,936	10,775
Telfer	20,041	19,826	18,318	17,559	21,918
Cadia	28,935	20,894	23,666	21,749	22,797
Gosowong	505	704	565	479	738
Hidden Valley	_	-	-	3,456	3,647
Bonikro	_	1,835	2,732	2,510	1,976
Total waste rock and tailings	115,623	112,289	111,660	82,162	89,528

<sup>&#</sup>x27;–' is not available.

 $<sup>(1) \ \ \</sup>text{All security employees and contractors undertake dedicated human rights awareness training through our Security Code of Conduct in FY19.}$ 

<sup>(2)</sup> Cadia security personnel trained; number specifically excludes all part-time workers.

 $<sup>(4) \ \ \</sup>text{Did not separate waste rock data by PAF and NAF prior to FY18; therefore total waste rock is recorded under Waste rock - NAF for FY15-17.}$ 

<sup>(5)</sup> Reported volumes of Cadia waste rock for PAF or NAF waste rock are based on geochemical analysis and classification that is used to inform regulatory approved management plans for storage and remediation of waste rock dumps. Some volumes of NAF waste rock (e.g. that may contain minor quantities of steel or concrete from underground workings) is also conservatively managed by Cadia as if it was PAF in engineered storage cells to prevent potential environmental impacts.

<sup>(6)</sup> Total figure includes scats, reported in FY18 for the first time.

### MM6

### Significant events relating to land use, customary rights of local communities and Indigenous peoples FY19(1)

Newcrest understands that operating a mine in developing countries comes with inherent background risk. The way we work is to sensitively and practically resolve concerns as they are raised, including those related to land use, customary rights of local communities and Indigenous peoples, and human rights. The following events were of significance in FY19 but did not reach internal risk thresholds of sensitivity to report to market.

Lihir	<ul> <li>No significant community incidents reported.</li> </ul>
Cadia	- No significant community incidents reported.
Telfer	- No significant community incidents reported.
Gosowong	<ul> <li>Two Mine gate approaches by Indigenous Pagu tribe regarding the MoU, September 2018.</li> <li>Road blockage at Bukit Tinggi regarding Nusa Halmahera Minerals (NHM) school bus programme, September 2018.</li> <li>Road blockage at Bukit Tinggi regarding PT Airlie recruitment process, October 2018.</li> <li>Claim of land ownership over Port Barnabas, threats to blockade port did not eventuate, February 2019.</li> <li>Road blockage and demonstration at front gate preventing egress from site, relating to village and sub-district funding and the transparency of PT NHM Corporate Social Responsibility (CSR) fund expenditure, March 2019.</li> <li>Road blockage at Bukit Tinggi over perceived disproportionate CSR funding, May 2019.</li> <li>Major community demonstration at front gate relating to March demonstration, June 2019.</li> </ul>
Namosi	- No significant community incidents reported.
Wafi-Golpu	<ul> <li>Site shut down for five days in relation to protests by a politically motivated group responding to the MoU signed between WGJ\ and the National Government, January 2019.</li> </ul>

### **2018 Restatements**

### **GRI 302-1**

Energy consumption within the organisation (GJ) FY18

	Restatem	ent FY19	Published FY18		
	Company	Lihir	Company	Lihir	
Diesel (ADO)	1,756,477	224,298	8,742,653	7,210,474	
Fuel oil combusted	7,185,263	7,185,263	0	0	
Total – electricity (Scope 1)	23,010,277 10,835,858		22,811,190	10,636,771	
Total – energy consumption	31,332,875	12,699,894	31,133,789	12,500,807	

### **GRI 302-3**

Energy intensity by tonnes processed FY18  $\,$ 

	Restaten	ent FY19	Publish	ed FY18
	Company	Lihir	Company	Lihir
Energy intensity by tonnes processed (MJ/t)	514	890	511	876
Energy intensity by gold produced (MJ/oz)	11,296	11,296 13,296		13,088

#### **GRI 305-1**

Direct GHG emissions (Scope 1) by source (tCO<sub>2</sub>-e) FY18

	Restatem	ent FY19	Published FY18	
	Company	Lihir	Company	Lihir
Diesel (power generation)	123,305	15,746	613,734	506,175
Fuel oil (power generation)	530,560 530,560		0	0
Total - Scope 1 GHG emissions	1,386,235	671,524	1,346,106	631,393

### **GRI 305-4**

GHG emissions intensity FY18

	Restatement FY19		Published FY18	
	Company	Lihir	Company	Lihir
Scope 1 + 2 (tCO <sub>2</sub> -e)	2,146,242	671,253	2,106,112	631,393
Intensity by ore processed (kg CO <sub>2</sub> -e/t)	35	47	35	44

### **GRI 303-3**

Water withdrawal by source (ML) FY18

	Restatem	Restatement FY19		Published FY18	
	Company	Lihir	Company	Lihir	
Category 2 Ground water	26,143	0	41,062	14,918	
Total Category 2	311,404	278,001	326,323	292,919	
Total water withdrawn (ML)	322,121	278,001	338,890	292,919	

# Assurance **statement**



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Independent Limited Assurance Report in relation to Newcrest Mining Limited's 2019 Sustainability Report

To the Board of Directors of Newcrest Mining Limited ('Newcrest')

#### **Our Conclusion**

Based on our limited assurance procedures, nothing has come to our attention that causes us to believe that the Subject Matter, as detailed below and as presented in Newcrest's 2019 Sustainability Report ('the Report'), is not presented fairly, in all material respects, in accordance with the Criteria as presented below.

#### Subject Matter

The Subject Matter for our limited assurance engagement included the following for the year ended 30 June 2019:

- Subject Matter 1: The alignment of Newcrest's sustainability policies to International Council on Mining and Metal's ('ICMM') 10 Sustainable Development Principles and mandatory requirements set out in ICMM Position Statements
- Subject Matter 2: Newcrest's material sustainability risks and opportunities based on its own review of the business and the views and expectations of stakeholders
- Subject Matter 3: The 'existence' and 'status of implementation' of sustainability data collation and reporting processes used by Newcrest to manage a selection of the identified material sustainability risks and opportunities
- Subject Matter 4: Newcrest's reported performance during the reporting period for a selection of material Global Reporting Initiative ('GRI') indicators – which were selected based on Newcrest's materiality assessment process, in consultation with EY (see table 1 below).

Table 1: GRI performance indicators that form part of the Subject Matter

GRI category	GRI performance indicator	Subject Matter	Page(s)
Social	403-2	Lost time injury frequency rate ('LTIFR') (Company)	71
		Total recordable injury frequency rate ('TRIFR') (Company)	71
		Number of work-related fatalities (Company)	17
	410-1	Percentage of security personnel trained in the organisation's human rights procedures that are relevant to operations (Company)	73
Environmental	302-1	Total energy consumption in gigajoules (Company)	67
	302-3	Total energy intensity in gigajoules per troy ounce of gold equivalent (Company)	67
	303-1	Total water withdrawal by source (Company)	68
	305-1	Total direct greenhouse gas emissions (scope 1) in tonnes of carbon dioxide equivalent ('tCO <sub>2</sub> -e') (Company)	69
	Total indirect greenhouse gas emissions (scope 2) in tCO <sub>2</sub> -e (Company)		69
Mining and Metals Sector Supplement	ММЗ	Total waste rock, and tailings in tonnes (Company) and associated risks	73
Economic	Subset of 201-1	Direct economic value generated and distributed: Community investment in US dollars (Company)	40

These disclosures are referenced in Newcrest's GRI Standard Content Index and sector supplements, and the GRI Data Tables

The Subject Matter did not include:

- Data sets, statements, information, systems or approaches other than the selected material GRI indicators and related disclosures as detailed in Table 1
- Management's forward looking statements
- Any comparisons made against historical data or comparative information from prior years.

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#### Criteria

The following Criteria have been applied to the Subject Matter described above:

- Subject Matter 1: ICMM principles and any mandatory requirements set out in ICMM Position Statements
- Subject Matter 2: Newcrest's own reporting process for determining material risks and opportunities, the outcome of this process, and how the views and expectations of its stakeholders were considered during this process. Assessed with regard to AccountAbility's AA1000 Assurance ('AA1000AS') and Principles Standards ('AA1000APS')
- Subject Matter 3: Newcrest's own reporting criteria for 'existence' and 'status of implementation' of systems and approaches, as detailed in the Disclosures on Management Approach for material sustainability risks and opportunities
- Subject Matter 4: Performance information criteria disclosed by Newcrest for each indicator such as:
  - ▶ Definitions as per the GRI Standards
  - Company-specific definitions that are publicly disclosed.

#### Management's Responsibility

The management of Newcrest is responsible for the preparation and fair presentation of the Subject Matter in accordance with the Criteria, and is also responsible for the selection of methods used in the Criteria. Further, Newcrest's management is responsible for establishing and maintaining internal controls relevant to the preparation and presentation of the Subject Matter that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate criteria; maintaining adequate records and making estimates that are reasonable in the circumstances.

### Assurance Practitioner's Responsibility

Our responsibility is to express a limited assurance conclusion on the Subject Matter based on our assurance engagement conducted in accordance with the International Federation of Accountants' International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ('ISAE 3000') and in accordance with the requirements of a Type 2 assurance engagement under A41000AS and the terms of reference for this engagement as agreed with Newcrest.

Our procedures were designed to obtain a limited level of assurance on which to base our conclusion, and, as such, do not provide all of the evidence that would be required to provide a reasonable level of assurance. The procedures performed depend on the assurance practitioner's judgement including the risk of material misstatement of the Subject Matter, whether due to fraud or error. While we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls.

Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within information technology systems, which would have been performed under a reasonable assurance engagement. No conclusion is expressed as to whether management's selected methods are appropriate for the purpose described above.

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

### **Summary of Procedures Undertaken**

Our procedures included but were not limited to the following:

- Interviewing a selection of Newcrest staff and management at corporate and sites responsible for the Subject Matter and the preparation of the Report.
- Performing a site visit to the Cadia and Lihir sites to perform interviews and visually inspect operations.
- Determining whether material topics and performance issues relevant to the Subject Matter identified during our procedures had been adequately disclosed.



Page 2

- Sample testing of reported data and performance statements, included in the Subject Matter against supporting source information and Newcrest's reported boundary.
- Sample testing of claims and case studies included in the Subject Matter against supporting source information and relevant context.
- Sample testing as to whether the methods used for calculating data were aligned with the stated Criteria.
- Reading selected management information and documentation supporting assertions made in relation to the Subject Matter and assessing alignment with the reported data.
- Reading selected Newcrest policies and standards and assessing alignment with ICMM's 10 Sustainable Development Principles and other mandatory requirements as set out in ICMM's Position Statements.

In order for us to provide a conclusion in relation to the AA1000 AccountAbility Principles we considered the following questions:

- Inclusivity: Has Newcrest demonstrated a commitment to including its stakeholders in developing and achieving an accountable and strategic response to sustainability?
- Materiality: Does Newcrest have in place a process to identify, prioritise and include in its report the material information and data required by its stakeholders to make informed judgements, decisions and actions?
- Responsiveness: Does Newcrest have in place processes that enable it to respond to material sustainability issues through decisions, actions and performance?

### Use of our Limited Assurance Report

We disclaim any assumption of responsibility for any reliance on this assurance report, or on the Subject Matter to which it relates, to any persons other than management and the Directors of Newcrest, or for any purpose other than that for which it was prepared.

### **Independence and Quality Control**

In conducting our assurance engagement, we have met the independence requirements of the *APES 110 Code of Ethics for Professional Accountants*. We have the required competencies and experience to conduct this assurance engagement.

### Positive Observation and Opportunities for Improvement

The following observation, which does not affect our conclusions expressed above, was identified in the execution of our procedures:

- Newcrest has made significant progress in setting up policies, targets and systems to better align with the ICMM principles and Position Statements.
- During site visits, Newcrest employees demonstrated a commitment to sustainability related principles and an understanding of the specific reporting metrics. They also were better able to articulate their key responsibilities as it relates to the reporting process. There is an opportunity for Newcrest to further improve their data collection and recording processes and enhance their internal communication to support ongoing management decision making.
- From our review of Newcrest's water reporting, we identified it is proactively preparing for the GRI (2018) and the ICMM Water Reporting Guidelines, demonstrating commitment to continuous improvement in reporting of material issues.

### AccountAbility's AA1000 Principle of Inclusivity

At the corporate level, Newcrest continued to seek stakeholder perspectives to inform the sustainability reporting process through numerous different platforms. Newcrest is working towards expanding its stakeholder engagement process to include a broader range of stakeholder perspectives. This included the formalisation of a corporate-wide stakeholder engagement plan outlining the scopes and frequency of engagement per stakeholder group during the reporting year. There remains an opportunity for Newcrest to further integrate existing stakeholder engagement mechanisms into the materiality assessment process and across the strategic response to sustainability

### AccountAbility's AA1000 Principle of Materiality

In alternate years Newcrest performs a formal 'deep-dive' materiality assessment consistent with the guidance provided by the GRI and AccountAbility's Five Part Materiality Test. For this reporting year, Newcrest has built on the prior year assessment as a basis to conduct an interim internal review and revalidation. The internal review incorporated a range of inputs and there was a clear process for identifying, prioritising and reporting on material issues. There remains an opportunity for Newcrest to integrate the materiality process into its ongoing operations throughout the year.

### AccountAbility's AA1000 Principle of Responsiveness

Newcrest has continued to respond to the needs, concerns and expectations of stakeholders through comprehensive and balanced communication on material issues. There remains an opportunity for Newcrest to better document, monitor and demonstrate how it is responding to stakeholders. The ongoing implementation of a social performance management system and stakeholder engagement software will help Newcrest to further meet this objective.

Ernst & Young

Ernst & Young Melbourne, Australia 1 November 2019





### Australia

### 1 CADIA

Location: 25 kilometres from Orange, New South Wales

FY19 Production: 913koz of gold, 91kt of copper

Mining Method: Underground

Reserves and Resources:(1)

Ore Reserve: 22moz gold and 4.3mt copper

Mineral Resource: 38moz gold and

8.3mt copper

Ownership: 100% Newcrest

### 2 TELFER

Location: Pilbara, Western Australia FY19 Production: 452koz of gold, 15kt of copper

Mining Method: Open pit and underground

Reserves and Resources:(1)

Ore Reserve: 2.0moz gold and 0.20mt copper

Mineral Resource: 6.4moz gold and

0.59mt copper

Ownership: 100% Newcrest

### Papua New Guinea

Location: Niolam Island, New Ireland Province, 900 kilometres north-east of Port Moresby

FY19 Production: 933koz of gold Mining Method: Open pit

Reserves and Resources:(1)

Ore Reserve: 24moz gold Mineral Resource: 50moz gold Ownership: 100% Newcrest

### Indonesia

### 4 GOSOWONG

Location: Halmahera Island, North Maluku Province

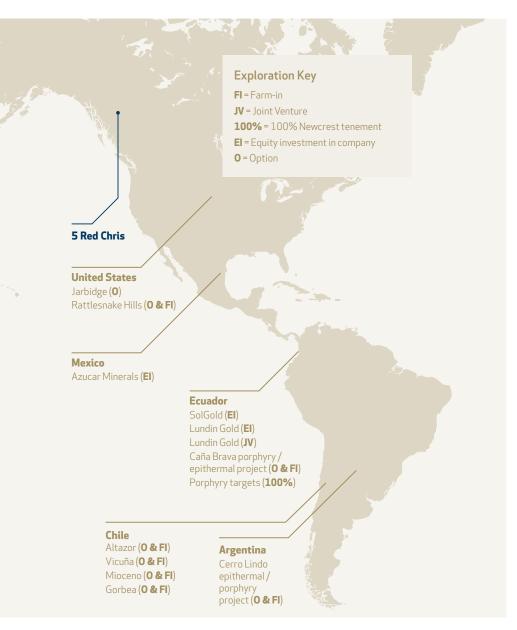
FY19 Production: 190koz of gold Mining Method: Underground

Reserves and Resources:(1)

Ore Reserve: 0.37moz gold Mineral Resource: 1.1 moz gold Ownership: Gosowong is owned and operated by PT Nusa Halmahera Minerals

(Newcrest 75%). The figures represent 100% of mineral resource and

ore reserve.



### Canada

### **5 RED CHRIS**

**Location:** British Columbia, approximately 1,000 kilometres north of Vancouver

Mining Method: Open pit

**Ownership:** 70% Newcrest, 30% Imperial Metals Limited. Transaction completed 15 August 2019.

## Advanced Projects

### **6 WAFI-GOLPU**

Location: Morobe Province, 65 kilometres south-west of Lae, Papua New Guinea (PNG) Potential: Golpu: Underground copper-gold mine; Wafi: Open pit gold-copper mine; Nambonga: Underground gold-copper mine

Reserves and Resources:(1)

Ore Reserve:  $5.5 \text{moz gold}^{(2)}$  and 2.5 mt copper

**Mineral Resource:** 13moz gold<sup>(3)</sup> and 4.4mt copper

**Status:** Updated feasibility study completed – Awaiting special mining lease approval.

**Ownership:** 50% Newcrest, 50% Harmony Gold Mining Company Limited.

The figures represent Newcrest's 50% of the Mineral Resource and Ore Reserve.

### Disclaimers

### Forward-looking statements

This report includes forward-looking statements. Forward-looking statements can generally be identified by the use of words such as 'may,' will,' 'expect,' intend,' 'plan,' 'estimate', 'anticipate', 'continue', 'outlook' and 'guidance', or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. The Company 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.

Forward-looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from statements in this presentation. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward-looking statements are based on the Company's good faith assumptions as to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions will prove to be correct. There may be other factors that could cause actual results or events not to be as anticipated, and many events are beyond the reasonable control of the Company. Readers are cautioned not to place undue reliance on forward-looking statements. Forward-looking statements in these materials speak only at the date of issue. Except as required by applicable laws or regulations, the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in assumptions on which any such statement is based.

### Reliance on third-party information

The views expressed in this report contain information that has been derived from sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. This report should not be relied upon as a recommendation or forecast by Newcrest.

### Competent Person's Statement

The information in this presentation that relates to Mineral Resources or Ore Reserves (other than Red Chris) has been extracted from the release titled "Annual Mineral Resources and Ore Reserves Statement - 31 December 2018" dated 14 February 2019 (the original release). Newcrest confirms that it is not aware of any new information or data that materially affects the information included in the original release, and in the case of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the original release continue to apply and have not materially changed. Newcrest confirms that the form and context in which the competent person's finding are presented have not been materially modified from the original release.

### Red Chris foreign estimates

The estimates of mineral resources for the Red Chris deposit are qualifying foreign estimates under the ASX Listing Rules reported in accordance with the National Instrument 43-101 (NI 43-101) by Imperial and filed on SEDAR (www.sedar.com) on 30 September 2015. These qualifying foreign estimates were restated by Imperial in their July 2017 Mineral Resource and Mineral Reserve statement (www.imperialmetal.com) but have not been updated since 30 September 2015 and have not been depleted for production to date.

The supporting information required by ASX Listing Rule 5.12 was contained in the release titled 'Presentation re Newcrest's agreement, to acquire potential Tier 1 orebody in Canada' dated 11 March 2019 (original Red Chris release). Newcrest confirms that it is not aware of any new information or data relating to the Red Chris qualifying foreign estimates that materially impacts on the reliability of the estimates or Newcrest's ability to verify such foreign estimates following completion as mineral resources in accordance with Appendix 5A of the ASX Listing Rules. The supporting information provided in the original Red Chris release referred to in ASX Listing Rule5.12 continues to apply and has not materially changed.

### Cautionary statement

The estimates of Mineral Resources for the Red Chris deposit are qualifying foreign estimates under the ASX Listing Rules and are not reported in accordance with the JORC Code. Competent persons have not done sufficient work to classify the qualifying foreign estimates as Mineral Resources in accordance with the JORC Code. It is uncertain, that following evaluation and further exploration, the foreign estimates will be able to be reported as Mineral Resources in accordance with the JORC code.

### Non-IFRS financial information

Newcrest results are reported under International Financial Reporting Standards (IFRS) including EBIT and EBITDA. This report also includes non-IFRS information including Underlying Profit (profit after tax before significant items attributable to owners of the parent company), All-In Sustaining Cost (determined in accordance with the updated WGC  $\hbox{Guidance Note on Non-GAAP Metrics, which was}$ released in November 2018 and partially adopted by Newcrest (due to the inability to adopt the leasing changes until after 30 June 2019)), AISC Margin (realised gold price less AISC per ounce sold (where expressed as USD), or realised gold price less AISC per ounce sold divided by realised gold price (where expressed as a %)), Interest Coverage Ratio (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 EBIT margin (EBIT expressed as a percentage of revenue). These measures are used internally by Management to assess the performance of the business and make decisions on the allocation of resources and are included in this presentation 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.

### This report

The online version of this report is the definitive publication record.

# Corporate **directory**

# **Investor Information**Registered and Principal Office

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# Stock Exchange Listings Australian Securities Exchange

(Ticker NCM)

### **PNGX Markets Limited**

(Ticker NCM)

### **New York ADRS**

(Ticker NCMGY)

## **Share Registry**Link Market Services Limited

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\* For faxing of proxy forms only.

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### **PNG Registries Limited**

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### **American Depositary Receipts (ADRS)**

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www. mybnymdr.com

T: +1888 BNY ADRS or +1888 269 2377 (toll free within the US) International Callers: +1 201 680 6825 E: shrrelations@cpushareownerservices.com

### **COMPANY EVENTS**

### Annual General Meeting

12 November 2019 at 10.30am

The Pavilion Arts Centre Melbourne 100 St Kilda Road Melbourne, Victoria 3004

Visit our website at www.newcrest.com to view our key dates; current share price; market releases; annual, quarterly and financial reports; operations, project and exploration information and corporate, shareholder, employment and sustainability information.



