

# 2020



## PAN AUST

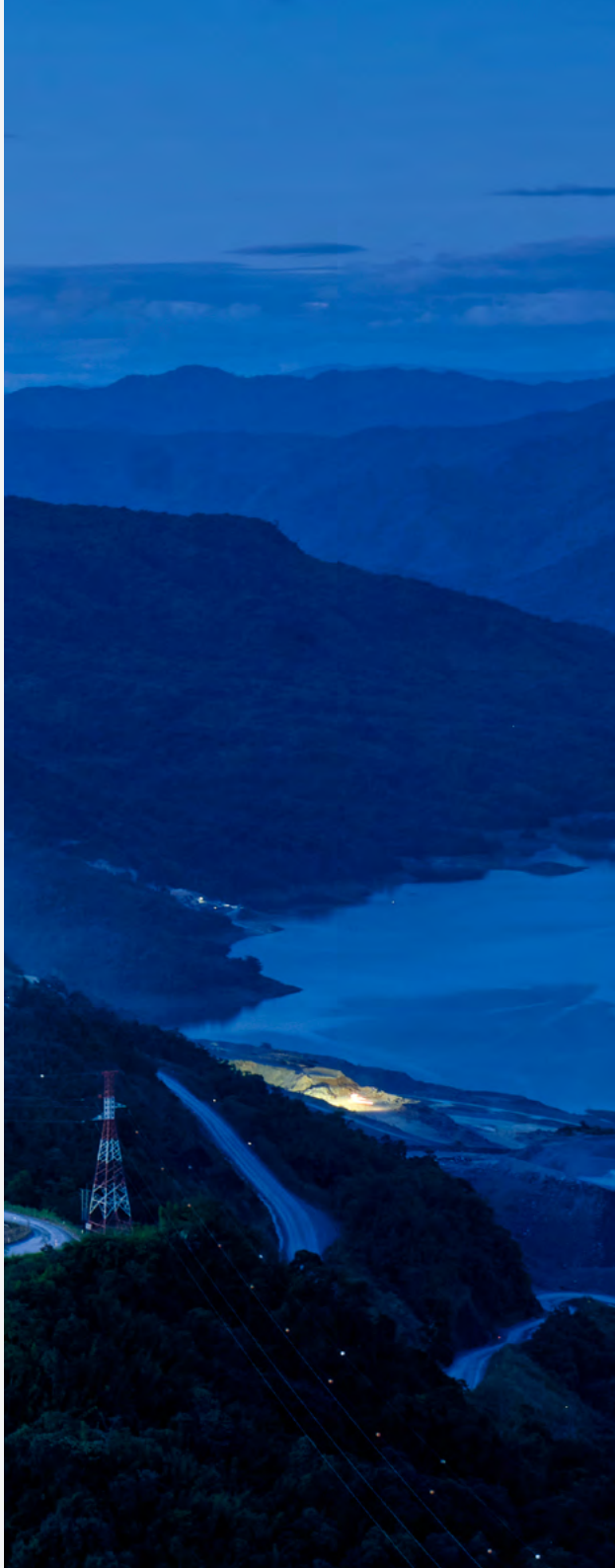
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Business Review and  
Sustainability Report





A view of the Ban Houayxai Gold-Silver  
Operation from ETL hill



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## Company profile

PanAust Limited (PanAust, the Company, and the Group) is an Australian-headquartered copper and gold producer in Laos with pre-development and exploration opportunities in Laos, Papua New Guinea, Myanmar and Chile.

Ban Houayxai Gold-Silver Operation  
Process Operator, Mr Paohuethau at  
the Operation's process plant

PanAust's producing assets are the Phu Kham Copper-Gold Operation (Phu Kham) and the Ban Houayxai Gold-Silver Operation (Ban Houayxai). Both are located in the Company's 2,600 square-kilometre Phu Bia Contract Area (the Contract Area) in Laos.

In Papua New Guinea, PanAust is advancing the Frieda River Project. Frieda River is one of the largest known undeveloped copper and gold deposits in the world and offers PanAust excellent potential for the establishment of a world-class, long-life operation.

PanAust has expanded its presence in Southeast Asia through a joint venture in Myanmar. The partnership presents an exciting opportunity for the Company to establish a mineral exploration and development portfolio in this prospective region.

PanAust is focused on a sustainable business model associated with the safe production and sale of copper and gold, and the delivery of production goals and growth. While copper forms the core product focus, gold and silver provide commodity diversity.

The strategic direction of the Company in 2020 and beyond is to extend the operating life of its existing Operations in Laos, evaluate acquisition opportunities – specifically in Southeast Asia – and advance the Frieda River Project.

PanAust is an Australian-incorporated company that is owned by Guangdong Rising H. K. (Holding) Limited which is a wholly owned subsidiary of Guangdong Rising Holding Group Co. Ltd (GRHG).

GRHG is a Chinese state-owned company regulated under the State-owned Assets Supervision and Administration Commission, of the People's Government of Guangdong Province in China.



## Company structure

### Australia

PanAust's registered head office is located in Brisbane, Australia and provides leadership and support across the Group in relation to strategy, financial management, commercial and technical services, risk management, sustainability, communications, human resources, legal, information systems and technology, governance and reporting.

### Laos

PanAust owns a 90 per cent interest in the Lao-registered company, Phu Bia Mining Limited (Phu Bia Mining). The Government of Laos owns the remaining 10 per cent.

Phu Bia Mining has a Mineral Exploration and Production Agreement (MEPA) with the Government of Laos. The MEPA regulates exploration, development and mining activities within the Contract Area and sets out the tax and royalty obligations.

### Myanmar

PanAust holds a 90 per cent interest in Wuntho Resources Company Limited (WRCL) and has established a joint venture with Myanmar Energy Resources Group International Company Limited, a Myanmar-based company which holds the remaining 10 per cent of WRCL.

WRCL holds tenements covering approximately 1,500 square-kilometres in Myanmar's Sagaing region.

### Papua New Guinea

PanAust, through its wholly owned subsidiary Frieda River Limited, owns the Frieda River Project. The Independent State of Papua New Guinea has a right, prior to the grant of a Special Mining Lease (SML), to purchase up to 30 per cent equity in the Project at a price prorated to the accumulated historical expenditure of the Project.

### Chile

PanAust holds a 66 per cent interest in the Inca de Oro Copper-Gold Project through a Chilean incorporated joint venture company, Inca de Oro S. A. The Company also maintains exclusive sole interest in the nearby Carmen copper-gold deposit. This Project is in care and maintenance with no activities on the ground.

### Auditors

KPMG  
71 Eagle Street  
Brisbane Qld 4000

### Bankers

ANZ Banking Group Limited  
324 Queen Street  
Brisbane Qld 4000

### Board of Directors (as at 14 December 2021)

Mr Shu Yao, Chairman

Dr Qun Yang, Executive Director, MD and CEO

Mr Daling Zheng, Executive Director, Deputy CEO and CFO

Mr Paul Arndt, Non-Executive Director

Mr Wenhao Pan, Non-Executive Director

Mr Xigang Zhang, Non-Executive Director

Mr Mengliang Dai, Non-Executive Director

See PanAust's website for the complete profiles of PanAust's Directors,  
[panaust.com.au/directors](http://panaust.com.au/directors).

### Company Secretary

Mr Chengjie Li

The Ban Houayxai  
Gold-Silver Operation open-pit







## Materiality of scope of this report

This 2020 Business Review and Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option and the G4 Sector: Disclosure for Mining and Metals. The scope of the Report, as per GRI Core option requirements covers “topics that reflect the reporting organisation’s significant economic, environmental and social impacts or topics that could substantively influence the assessments and decisions of stakeholders”.

An employee at the Phu Kham Copper-Gold Operation process plant

Materiality Counts, an independent assurance provider, has provided assurance of a selection of material issues within this Report. A copy of the assurance statement is on page 109.

PanAust’s 2020 Business Review and Sustainability Report focuses on issues that matter most to the Company and its stakeholders. PanAust applies a consistent approach to identifying, assessing and verifying material sustainability issues which is outlined in the following five steps:

### 1. Stakeholders and their issues are identified

PanAust’s stakeholders are identified based on their potential to impact or be impacted by the Company’s business activities. Primary stakeholders and interested parties are listed on pages 52 and 53 of this Report. Regular engagement with primary stakeholders, together with the review of independent external and competitor reports, enables issues of importance to stakeholders to be identified and understood.

### 2. PanAust’s issues are identified

PanAust identifies issues of importance by: reviewing and considering business strategies and policies, external commitments, risk registers, external audit reports, internal reviews and incident reports, issues highlighted through internal reporting processes, regular visits to the Operations, and conducting workshops across the Group.

### 3. Issues are assessed and ranked

Each issue is ranked on its level of importance to stakeholders and to PanAust. The criteria for ranking are largely based on how PanAust defines issues of significance (defined as levels 4 and 5 incidents on a 1 to 5 scale, 5 being the most significant) and benchmarking activities. Issues are considered by level of interest and commonality via requests for information from stakeholder groups and media coverage.



For the 2020 Business Review and Sustainability Report, PanAust sought feedback on issue identification and ranking through meetings with the PanAust management team, managers, internal subject matter experts and stakeholder contacts across the Group.

#### 4. Material issues are verified

Material issues are presented to the PanAust management team for review and feedback and are endorsed for inclusion in the 2020 Business Review and Sustainability Report. Materiality Counts provides independent limited assurance for a selection of datasets relating to material issues in the Report. The rolling assurance program covers the material issues over a three to five-year period. The assurance scope is revisited annually to ensure relevance to those material issues of most significance are addressed in the reporting period.

#### 5. Material issues inform Company activities

PanAust's approach to managing material risks provides a continual improvement feedback loop, which informs Company strategy, budgets and business and engagement activities. At the executive level, material risks define the sustainability and business improvement focus areas for the Company. These outcomes cascade to the broader sustainability governance structure and are incorporated into business and annual plans, and key performance indicators.

#### 2020 a year dominated by COVID-19

In January, international media began reporting that a new highly contagious respiratory virus was fast becoming a concern for global health authorities. Prompted by these reports, the Company's Significant Incident Management Taskforce (SIMT, see page 39) in Laos was enacted to monitor the evolving situation. On 11 March, the World Health Organization (WHO) declared the virus – now named COVID-19 – a pandemic. The Company's Crisis Management Team (CMT, see page 39) was enacted to support the SIMT and oversee PanAust's response to COVID-19.

The CMT and SIMT continued to meet regularly throughout 2020 to identify and plan for the real and potential threats the pandemic posed to its people and the business. These threats included risks to the health, safety and wellbeing of its workforce and host communities, and the financial impacts from disrupted supply and haulage chains.

To mitigate the impact of COVID-19, the CMT initiated several actions and controls that can be grouped into the following three broad categories:



A range of controls were put in place to safeguard the Operations from the impacts of COVID-19 including: identifying alternative suppliers of critical consumables; increasing stock on hand of high turnover products, such as food, water and fuel; securing alternative processes for exporting concentrate and doré from Laos; strengthened cost controls and hedging activities to secure cash flow throughout the year. For further details of these activities, see the Economic performance section of this Report from page 18.

To ensure the health, safety and wellbeing of its host communities, PanAust undertook COVID-19 education and awareness programs; enacted controls to help prevent possible infection and transmission within the host communities; restricted the movement of its workforce into these communities; and provided lifesaving and critical assistance in the form of healthcare equipment and supplies. For further details of these measures, see the Social performance section of this Report from page 46.

To protect the health, safety and wellbeing of its workforce, a range of measures were progressively implemented throughout the year. These included: the review of medical supplies and equipment available at on-site medical facilities, the suspension of all non-essential international business travel, the introduction of working from home arrangements, introduction of COVID-19 screening protocols, social distancing, enhanced cleaning practices and the introduction of quarantine and travel bubbles for transiting to the Operations;

wellbeing initiatives and support to reduce stress relating to job security, the early repatriation of employees and dependants back to their country of origin, roster changes to accommodate changed travel arrangements and temporary pay uplifts for site-based employees. For further details of these workforce health, safety and wellbeing initiatives, see the Health and safety performance and Our people sections of this Report from pages 80 and 100 respectively.

At PanAust, a key part of the sustainability planning process is an annual workshop which is convened with leaders from across the business, peer companies and specialist consultants. This workshop provides a forum to identify and discuss challenges and share best-practice approaches to sustainability issues. In 2020 however, COVID-19 travel restrictions and restrictions on large gatherings of people prevented the Company from convening the workshop.

The figure on page 8 of this Report outlines the outcomes of PanAust's 2020 materiality process within the areas of economic performance, governance, social performance, environmental performance, health and safety performance and its people. Each material issue – including the boundary of impact – is addressed in this Report.



# PanAust material issues 2020



A Trades Training apprentice undergoing on the job training in the maintenance facility at the Company's logistics hub at Ban Thouay



A 777D truck loaded with ore driving to the primary crusher at the Phu Kham Copper-Gold Operation





## Report scope

The principal activities of the PanAust Group during the 2020 calendar year were:

- › Safeguarding the health, safety and wellbeing of its workforce from the impacts of COVID-19.
- › Safeguarding the health, safety and wellbeing of its host communities from the impacts of COVID-19.
- › Safeguarding the operations from the impact of COVID-19.
- › The production and sale of copper-gold-silver concentrate from the Phu Kham Copper-Gold Operation.
- › The production and sale of gold-silver doré from the Ban Houayxai Gold-Silver Operation.
- › Exploration and evaluation of projects in Laos, Papua New Guinea and Myanmar.

Empty 15,000 fuel tank being removed from a concentrate haulage truck at the Company's logistics hub at Ban Thouay

Unless otherwise stated, data in this Business Review and Sustainability Report relates to PanAust's Phu Kham Copper-Gold and Ban Houayxai Gold-Silver Operations.

This Report is for the 2020 calendar year and is PanAust's fourteenth Sustainability Report. It follows the Report produced in 2019 for the 2018 calendar year. A Report was not produced in 2020 for the 2019 calendar year due to disruptions caused by the COVID-19 pandemic however, data for the 2019 calendar year is included in this Report where relevant.

### Data collection protocols and reporting currency

Except for new reporting items, this Report presents data for a three-year period. Data for years prior to 2018 is available in PanAust's Business Review and Sustainability Reports which can be accessed on the Company's website: [panaust.com.au/annual-publications](http://panaust.com.au/annual-publications).

Sustainability performance data is disclosed in accordance with the GRI. Data reflects the annual disclosure of sustainability performance at wholly owned operations and joint ventures where PanAust is the operator. Any variances from these boundaries are noted directly in the data table where applicable.

Unless otherwise stated, all monetary amounts in this Report are expressed in United States dollars (US\$). Data contained in tables and figures may include minor computational errors due to rounding.



## Transparent reporting

PanAust values openness and transparency in its business activities. Each year, the Company produces an Annual Report and a Business Review and Sustainability Report (this document).

The Annual Report is submitted to the Australian Securities & Investments Commission (ASIC) and is available for a nominal fee paid to ASIC.

The 2020 Annual Report was independently audited by KPMG in accordance with the Australian Auditing Standards and was lodged with ASIC in 2021.

Materiality Counts provided independent limited assurance (in relation to key non-financial material issues) of this 2020 Business Review and Sustainability Report.

Through its Minerals Council of Australia (MCA) associate membership, the Company supports the Extractive Industries Transparency Initiative (EITI). EITI is a global initiative to improve governance in resource rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining. PanAust reports payments to its host governments in its Annual Report and Business Review and Sustainability Report (see page 57).

When legally permitted and consented to do so by its host governments, PanAust supports making the material terms of its contracts publicly available (in line with EITI requirements).

The Phu Bia Mining Annual Business Review and Sustainability Report is tailored to, and translated for, Lao stakeholders. Content is sourced from PanAust's Annual Report and Business Review and Sustainability Report.

A detailed index of the GRI indicators and where they are reported – fully, partially or not reported – for this Report can be found on PanAust's website:

[panaust.com.au/annual-publications](http://panaust.com.au/annual-publications)

For further information about PanAust or this Report:

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## Forward-looking statements

This document includes certain 'forward-looking statements'. All statements, other than statements of historical fact, included herein, including without limitation, statements regarding forecast production performances, potential mineralisation, resources and reserves, and future expansion plans and development objectives of PanAust Limited, are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements.



Paramedic, Ms Sengmany Vongsengsy putting on personal protective equipment at the Ban Houayxai medical clinic





## MD and CEO's review

To say that 2020 was an extraordinary year for PanAust is an understatement. It was a year like none other for our business and the COVID-19 pandemic permeated our priorities and challenged our resolve.

Our multicultural workforce, bolstered by the unwavering support from our shareholder, Guangdong Rising Holding Group Co. Limited (GRHG), safeguarded our operations, protected our people and our communities and carried us through the challenges the year presented. And it is our multicultural workforce and their dedication and talents that will continue to support our Company through the continuing COVID-19 pandemic.

The Ban Houayxai Gold-Silver process plant

In January 2020, a Significant Incident Management Taskforce (SIMT) was initiated following reports a new highly contagious respiratory virus (COVID-19) was fast becoming a concern for global health authorities. Managed from Laos, the SIMT monitored the spread of COVID-19 and proactively implemented measures to safeguard the health, safety and wellbeing of our people and host communities.

On 11 March, the World Health Organization (WHO) declared COVID-19 a pandemic and shortly after, we enacted the Crisis Management Team (CMT). Run from our head office in Brisbane, the purpose of the CMT was to support the SIMT and oversee our management of the COVID-19 pandemic.

At our sites, we initiated a number of COVID-19 protocols to control the possible spread of the virus and protect our people and communities. These included: increased deep cleaning of equipment and facilities; reducing site-based workforce numbers to manage population density; mandating our people could only travel to and between sites on Company-controlled transport; stringent social distancing and personal hygiene protocols; and mandating the wearing of face masks.

Shortly after, COVID-19 related border closures affected the movement of our people, goods and product in and out of Laos. It was thanks to the agility of our workforce and Logistics team that we overcame these obstacles with little disruption to our operations.

Dr Qun Yang  
PanAust MD and CEO



On 3 April, one of our employees working at the Phu Kham Operation presented with COVID-19 symptoms to the site medical clinic. On 5 April, a polymerase chain reaction (PCR) test confirmed the employee was positive for COVID-19. In line with Government of Laos guidelines, the employee was transferred for treatment to a hospital in Vientiane and the Company provided all necessary support to him and his family during that difficult time.

The following day, the Company announced it would be locking down its Operations in Laos for an initial period of 14 days. This was done to protect the health, safety and wellbeing of our people and host communities, and protect our Operations while the Company assisted the Government of Laos with their contact tracing efforts. On 5 April, the Lao National Taskforce for COVID-19 Prevention and Control instructed us to cease all operating activities at our sites in response to the positive case detected at Phu Kham.

A second employee on break – and identified as a close contact of the first case on site – tested positive for COVID-19 on 6 April.

From the two positive cases, contact tracing identified 44 people as an exposure risk and they were placed into quarantine for 14 days in separate rooms at the Phu Kham accommodation camp. No further positive cases were detected and everyone was released following their quarantine period. Furthermore, our employees who tested positive for COVID-19 made a full recovery and eventually returned to site.

On 24 April, the strength of our COVID-19 site protocols was reviewed by a visiting contingent from the Taskforce. Their assessment was positive and was a testament to the strength of our proactive approach to managing COVID-19 at our Operations. This is reinforced by the fact that there were no more positive cases recorded at our Operations in Laos for the remainder of 2020.

Following the end of the national lockdown in Laos, we implemented a two-phased restart plan that outlined how we could maintain safe production against the risk of the potential spread of COVID-19 to our people and communities.

Stage one involved enhanced screening of our incoming site-based workforce. This included a requirement to record a negative PCR test and complete 14 days in Company-controlled quarantine.

In partnership with the Government of Laos, stage two saw the cessation of quarantine and the commencement of a screening program to prevent the spread of COVID-19 by early detection through testing and containment. A PCR test was administered by the Government of Laos' National Centre for Laboratory and Epidemiology to the incoming workforce, who were only cleared to return to site once they recorded a negative result.

As a Company, our agility, strength and resilience was tested during the initial onset of the COVID-19 pandemic and throughout the year. It was the leadership and support from GRHG and the Government of Laos that enabled the Company to focus on the health, safety and wellbeing of our people and host communities and protect our operations.

As demonstrated by our response to COVID-19, at PanAust, safety is paramount. It is at the core of all our business decisions and is the single most important factor at all our sites. Our commitment to safety is enshrined in our Zero Harm safety philosophy which is a beacon to ensuring we all continue to work, and go home safe every day. In 2020, our total recordable injury frequency and lost time injury frequency rates were significantly better than industry averages. Yet despite these positive metrics, we all have a long way to go.

It is with great sadness I report that one of our colleagues, Abbe Shall – a Myanmar citizen working at an exploration site in Laos – tragically lost his life in August 2020. In the aftermath of the incident, we provided all practical support to Abbe's family and those who were affected by the incident. This tragic loss highlights our responsibility to continue to improve and strengthen the safety capacity of our Company and continue to strive to achieve our Zero Harm safety philosophy. On behalf of everyone at PanAust, I wish to convey my deepest condolences to Abbe's family.

Despite the challenges of 2020, our production outcomes were strong. We reviewed our annual production targets and profile in light of the lockdowns in Laos and developed and delivered a strategy to support budget and target changes. Pleasingly, our net profit after tax (NPAT) for the year was US\$42 million, only slightly lower than 2019 (US\$43 million). This result could not have been achieved if it were not for the hard work and dedication of our site-based workforce and our technical experts at our head office in Brisbane.

In October, our Mobile Maintenance teams retained their Caterpillar's 5-star Contamination Control ratings for our mobile maintenance and warehouse facilities. This is the seventh consecutive year for the Ban Houayxai facilities and the sixth for the facilities at Phu Kham. Our Operations are two of only three facilities in the world to achieve these ratings in 2020 – an outstanding achievement for our mobile maintenance team, particularly in light of the challenges the COVID-19 lockdowns presented during the year.

At the end of November, we were named runner up in the '2020 SAP Best Run Awards'. The honour highlights our commitment to embracing technology to improve the business of mining.

During the year, our Logistics team extended the in-house management of our concentrate haulage. Furthermore, the innovative approach the team adopted to safeguard our operations in light of COVID-19 border closures in Vietnam and Thailand highlights the maturity of our processes and our ability to act with agility in the face of a crisis.

In Papua New Guinea, work continued with the Government to progress the permitting of the Frieda River Project. The Independent Peer Review (IPR) of the Project's Environmental Impact Statement (EIS) also progressed during the year and the first stage of the EIS public statutory engagement campaign was carried out along the Project's road corridor with impacted villages. We look forward to continuing to work with the Government of Papua New Guinea to ensure all legislative requirements during the permitting phase of the Project are followed.



At PanAust, we recognise that our people make a significant contribution to our success. Our training and development programs strengthen the capacity of our workforce and help provide a long-lasting, positive legacy of skilled people that will help contribute to and grow the economies of our host communities. In 2020, 40 young Lao people joined the Company's Trades Training Apprenticeship Program. Notwithstanding the impact of the COVID-19 lockdown in Laos which interrupted their site-based training, the current intake have returned to site and are progressing their studies.

The group – 43 per cent of whom are women – were chosen from more than 3,500 applicants. Upon completion of the Program, the participants will receive an Australian TAFE Certificate III trade qualification in their chosen field, a Lao High Diploma of Technical Trade Studies and a Certificate of Technical English.

Pleasingly during the year we achieved our highest level of localisation to date, with Lao-nationals making up 93 per cent of the Lao-based workforce. Women's participation across the Group also reached a landmark 20 per cent and we will continue to build on the success of programs that have enabled us to reach these levels of diversity in the years ahead.

We are committed to ensuring that wherever we operate, our presence positively impacts our host communities. This dedication is amplified during times of need and crisis. In 2020, we were one of the first companies in Laos to announce our support to the central and provincial governments to help them fight COVID-19. This included the donation of the country's first mobile sampling unit, along with a large suite of life-saving medical equipment.

In Papua New Guinea, we continued to provide much needed assistance to health, education and capacity-building programs, including vital COVID-19 support.

In Vietnam, support was given to the Vietnam Red Cross to provide basic necessities to those impacted by typhoons that battered central Vietnam in October and November.

In closing, as MD and CEO of PanAust, I want to emphasise how proud I am of this Company, and in particular, of our people. On behalf of our shareholder, I want to express my heartfelt thanks to everyone for their efforts, loyalty, patience and dedication to the Company throughout 2020. We came through a year that was filled with both challenges and victories and your ability to navigate the hard times was nothing short of inspirational.

I look to the future with great optimism and confidence with the knowledge that our people have the strength to grow the Company while pursuing the highest standards and working with absolute integrity.

**Dr Gun Yang**  
PanAust MD and CEO

Concentrate haulage drivers standing in front of their concentrate haulage convey at the Company's logistics hub at Ban Thouay





# 2020 highlights and future challenges

## Highlights



### Economic performance

- › Despite operational challenges caused by the COVID-19 pandemic, a strong balance sheet was maintained with no debt at year end.
- › The Company extended the in-house management of concentrate haulage, saving approximately US\$15–16 million to the life of mine of the Operations in Laos.
- › Hedged production ensured the Company maintained positive cash flow through a period of depressed commodity prices.



### Governance

- › Continued commitment to transparent reporting as an unlisted public company, including disclosing material sustainability matters to GRI Standards (this is the fourteenth Sustainability Report prepared by PanAust).
- › Under the guidance of the sponsorships and donations committees, PanAust provided support of more than US\$1 million to relevant causes, including COVID-19 relief efforts.



### Social performance

- › Total Phu Bia Mining activity, including indirect benefits through employment, training, community development and payments to local suppliers accounted for 1.8 per cent of Laos's 2020 real gross domestic product (GDP)<sup>1</sup>.
- › A total of US\$243,475 was expended on community development fund (CDF) projects in Laos and US\$142,082 on health, education and capacity-building in Papua New Guinea.
- › PanAust continued engagement with its host communities on future closure options for the Phu Kham and Ban Houayxai Operations.



### Environmental performance

- › Revegetation, erosion control and surface water management measures applied across the Operations in Laos continued to support the progressive rehabilitation of existing and new landforms in line with agreed stakeholder expectations.
- › An Independent Peer Review of the Environmental Impact Statement (EIS) for the Frieda River Project was conducted with consultants engaged on behalf of the Government of Papua New Guinea.
- › Stage 1 of the public statutory EIS engagement campaign was carried out along the Frieda River Project's road corridor with impacted villages.



### Health and safety performance

- › Reflective of PanAust's commitment to Zero Harm, response and mitigation measures implemented in response to the COVID-19 pandemic helped provide a safe working environment for the workforce.
- › PanAust Group total recordable incident frequency rate (TRIFR) and lost time injury frequency rate (LTIFR) continued to be significantly better than industry averages.



### Our people

- › Women's participation in the workforce increased to 20 per cent.
- › Achieved 93 per cent localisation in Laos – the highest rate achieved since operations commenced.

<sup>1</sup> The Company uses the Bank of Laos' annual report for the GDP figure and converts it from Lao Kip into US dollars using the average exchange rate over the 2020 calendar year. In 2020, Laos' GDP was US\$19.1 billion.



# 2020 highlights and future challenges

## Future challenges



### Economic performance

- › Maximise returns from existing assets and maintain net profit after tax (NPAT) and positive cash flow to support mine life extensions, shareholder dividends and Company growth projects.
- › Maintain strong cash flow and minimise capital expenditure requirements with the expected lower production profile of the Operations in Laos.
- › Identify near mine replacement production for the Operations in Laos.
- › Leverage the Company's assets, systems and human resources to generate new sources of cash flow.
- › Identify and pursue acquisition opportunities to diversify the Company's asset portfolio.



### Governance

- › Continue to apply governance processes to high-risk activities.
- › Manage stakeholder expectations and maintain robust governance processes in Laos, Papua New Guinea and Myanmar.



### Social performance

- › Progress social closure strategies for the Operations in Laos in conjunction with key stakeholders to reduce mine dependency and ensure successful post-closure outcomes.
- › Continue robust stakeholder engagement and capacity-building programs in Papua New Guinea.



### Environmental performance

- › Continue to manage sediment and erosion control risks that are prevalent in the mountainous and high-rainfall setting of the Phu Kham and Ban Houayxai Operations and the Frieda River Project.
- › Identify further opportunities to improve energy efficiencies.
- › Continue to understand and manage the risk profile of Operations in Laos, particularly in areas such as waste management (tailings, acid rock drainage).



### Health and safety performance

- › Continue to operate with stringent COVID-19 controls in place and proactively manage any future potential outbreaks at the Company's sites and offices.
- › Grow and enhance the Company's safety culture to achieve Zero Harm safety objectives.
- › Continue to work with local contractors to enhance their safety culture and meet PanAust's contractor management standards.



### Our people

- › Leverage highly developed human resources systems and continue the development of the Lao-national workforce to increasingly operate, maintain and manage the Operations in Laos to international standards.
- › Attract and retain high-calibre people in the lead-up to future mine closure in Laos.



# PanAust's Vision and Values

## Our Vision

PanAust is a growth-oriented mining company determined to excel.

## Our Values



### High-performance outcomes

- › Our people are performance-focused with a clear understanding of their tasks and accountability.
- › We constantly seek to improve performance and are committed to supporting our people's development. Individual results and merit form the basis for performance-based pay and career progression.



### Respect

- › Respect through our commitment to our people's health and safety through the Zero Harm safety objective and ensuring consistent and fair treatment.
- › Respect for the environment through best practice environmental performance that reflects the expectations of the communities in which we operate and promotes an internal culture of environmental and social awareness.
- › Respect in the way we manage our business activities and its impacts on our people and the cultures of our host communities.



### Integrity

Demonstrate integrity in all dealings with our people, communities, governments, suppliers, contractors, customers and shareholder.



### Excellence in communications

Communicate with all our stakeholders – especially with our people – in a fair, honest and transparent manner through open, two-way communication.



### High-calibre people

Integral to our continued success are our people who lead by example and garner the respect of their team. We offer an encouraging and stimulating work environment, providing the necessary individual training and development to enable all employees to operate effectively.



### Alignment of employees

To the Company's Vision and Values through strong leadership and the use of systems that drive desired behaviours.



Mining operations taking place inside the  
Phu Kham Copper-Gold Operation open-pit

## Economic performance

Despite lower production and sales volumes in 2020 due to the COVID-19 pandemic, PanAust was able to largely offset the impacts due to higher copper, gold and silver pricing. The consolidated net profit after income tax (NPAT) for the year of US\$42 million was only slightly lower than 2019 (US\$43 million).

Processing and mining operations at Phu Kham and Ban Houayxai were suspended from 5 to 28 April during the lockdown of the Operations after two employees tested positive for COVID-19. Following the lockdown, the change out of the workforce and the introduction of a new site-based roster (that included 14 days in Company-controlled quarantine) for the incoming site-based workforce saw the process plant shut again from 10–27 May due to a workforce shortage on-site.

Processing and mining operations progressively ramped up from 15 June once PCR testing replaced Company-controlled quarantine, before returning to normal production rates in July.

Logistics operations were disrupted following Vietnam and Thailand border closures which impacted the Company's concentrate haulage operations to ports and shipping schedules to customers.

Group consolidated annual metal production performance against budget was also lower with 48,433 tonnes (t) of copper in concentrate produced. Gold and silver production totalled 112,010 ounces (oz) and 921,822oz respectively in concentrate and doré.



## Safeguarding the operations from the impacts of COVID-19

A key aspect of the Company's response to the COVID-19 pandemic was to safeguard its operations. Retaining core business activities as close to pre-pandemic levels, ensured consistent cash flow into the Company. This enabled PanAust to focus on strategies to safeguard the health, safety and wellbeing of its workforce and host communities.

Disinfecting an incoming contractor fuel tanker at the Ban Houayxai Gold-Silver Operation

### Business continuity, trigger action response plans and contact tracing

A Trigger Action Response Plan (TARP) was developed for the Company's response to COVID-19 which outlined the following trigger levels: the declaration of COVID-19 as a pandemic; positive cases detected in countries neighbouring PanAust's Operations; positive cases detected in Laos; positive cases within the host communities; and positive cases detected on site. Each of these trigger levels included corresponding response actions.

Business continuity plans, based on a pandemic business continuity plan from International SOS, were drafted and progressively implemented across the sites. Regular updates on the implementation status of these plans were provided to the CMT.

An in-house contact tracing application was developed to enable site Health and Safety and Loss Prevention teams carry out rapid and efficient contact tracing in the event a case of COVID-19 was detected on site.

### Increasing levels of high turnover consumables and identifying alternative suppliers

A supply contingency and sourcing plan was implemented to increase levels of supplies (including consumables, food and other essential items) at the Operations to mitigate potential supply chain disruptions.

A daily review of critical stock on hand was conducted by the Supply team and reported to the CMT. The review included the days of stock on hand for grinding media and processing reagents, and the status of all incoming deliveries. The Supply team also reviewed alternative suppliers for these critical items and identified when new orders would need to be placed if there were delays to existing shipments.



A decision was made to increase critical stock inventory from 30 to 90 days to provide a buffer against potential disruptions.

The Supply team ensured the Company's fuel suppliers, Petrotrade and PV Oil, were holding PanAust's maximum contractual volume of diesel in Laos to mitigate potential supply disruptions. The volume of Cyanide held on site at the Ban Houayxai Operation was also increased to its maximum capacity.

Additional freezers were procured and installed at the Operations to house increased perishable and non-perishable food stocks. The audit frequency of the Company's water suppliers in Laos was increased to confirm hygiene controls were being maintained. The Supply team checked the existing inventory of P2/N95 face masks and implemented more stringent controls to prevent the waste of current stock. Additional face masks were also procured for the Operations.

#### Securing alternative processes for exporting concentrate and doré from Laos

To maintain export continuity of the copper concentrate from the Phu Kham Operation after Vietnam and Thailand closed borders, a drop trailer process was implemented. For further information, see page 23.

At the onset of the COVID-19 pandemic, PanAust's doré customers in Switzerland and India temporarily closed. The Company therefore had to establish a new refinery service in Hong Kong for its doré shipments out of the Ban Houayxai Operation, increasing flexibility and contingency in the supply chain.

#### Strengthened cost controls

To minimise cash flow impact during the year, the Company stopped the despatch of recurring orders with its major suppliers and confirmed products would only be dispatched when requested.

PanAust also contacted its customers during the lockdown of the Operations and brought forward its copper concentrate shipments from the Hon La port in Vietnam (originally scheduled for May and July) to provide stability of cash flow.

#### Hedging activities

A hedging strategy was implemented in the March quarter to: minimise the risk of adverse price movements; defend medium-term profitability of the Company; and minimise price volatility. The strategy was implemented to protect the Company against potential negative impacts the pandemic could have on the supply and demand for copper and gold.

This hedging strategy allowed the Company to lock in a portion of its 2020 metal production at prices at or above budgeted levels. At the time the strategy was implemented, there was an oversupply of copper in the market and gold was trading at an eight-year high. In the second half of the year, further hedging was approved for copper and silver. Diesel was also hedged at a low price in the second half of the year.

The hedging strategy provided the Company with price certainty through the opportunity of achieving above budget prices for copper and silver, and significantly lower than budget prices for diesel.

The certainty these measures provided allowed PanAust to focus on strategies to safeguard the health, safety and wellbeing of its people and communities.



An aerial view of the Phu Kham Copper-Gold Operations open-pit





The certainty these measures provided allowed PanAust to focus on strategies to safeguard the health, safety and wellbeing of its people and communities.



Preparing a diesel backloading convoy by loading an empty concentrate container on top of a full 15,000 litre fuel tank prior to hauling from the Company's logistics hub at Ban Thouay to the Phu Kham Copper-Gold Operation



## ECONOMIC PERFORMANCE CASE STUDY:

### Extending the in-house management of concentrate haulage and how the Logistics team managed COVID-19 border closures

In 2020, PanAust extended its in-house management of concentrate haulage by utilising Company trucks and Lao-national drivers to transit copper concentrate from its Phu Kham Operations in Laos, direct to the Hon La port in Vietnam. In conjunction with this, PanAust also assumed direct management and operation of stockpile warehouses at the Hon La port in Vietnam and the Sriracha port in Thailand and of the general freight consolidation warehouse located in a Freezone in Thailand.

Identified as part of the Company's commitment to continual improvement and cost saving initiatives, these successful transitions will significantly reduce Company concentrate haulage and general freight costs until the life of mine of its Operations.



Shortly after this transition, COVID–19 border closures in Thailand and Vietnam presented difficulties for the Company’s concentrate and general freight haulage routes. The Logistics team’s management of these closures significantly helped to safeguard PanAust’s operations against the impact of COVID–19 during the year.

### Extending the in-house management of concentrate haulage

At the commencement of mining operations in 2008, the Company’s concentrate haulage was carried out by third party contractors. In 2015, PanAust assumed responsibility for its concentrate haulage in Laos, purchasing a fleet of 57 Volvo prime mover trucks and trailers and the recruiting and training of over 250 Lao-national drivers and support staff. During this time, concentrate haulage from the Lao border to the port in Vietnam was still carried out by third party contractors. This was in part because the Company’s in-house Logistics team did not have the requisite experience to manage the complex operation. However since 2015, PanAust has invested significantly in the training and development of its in-house Logistics team and the Company has matured operationally and logistically.

Prompted by the impending expiration of the contract with its third party concentrate haulage contractor in February 2020, in late 2019, PanAust investigated if it could assume responsibility for direct management and operation of its concentrate haulage from the Lao border to the port in Vietnam.

The analysis of its in-house capabilities highlighted the transition was possible and an in-house model to support the transition was developed.

The in-house model identified a new fleet of trucks and a significant reorganisation of the existing operational plan was necessary. To this end, a new fleet of 40 Scania trucks was purchased to replace the existing fleet of Volvo prime movers, each of which had travelled over 1,000,000 km.

The logistics hub and accommodation camp at Thakhek was also relocated closer to the Lao border at Langkhang. This enabled Company trucks and Lao-national drivers to complete the return journey from the Lao border to the Hon La port in Vietnam within 12 hours. This was crucial to the success of the transition as the Laos-Vietnam border is only open during daylight hours. Significant driver training on port unloading procedures and how to complete the new 140 km haulage route was then provided to over 60 of the Company’s Lao-national drivers.

In parallel with the changes to the Vietnam concentrate haulage route, in Thailand, the Company engaged and monitored a new transport contractor for general freight haulage and backloading of concentrate between Thailand and Laos. The Company also took over the direct management and operation of the copper concentrate storage warehouse at the Sriracha port, and the General Freight consolidation warehouse located in the Freezone near the Laem Chabang port.

By February 2020, the Company had successfully embedded the extension of its in-house management of concentrate haulage. The move is projected to save the Company approximately US\$15–16 million in concentrate haulage and logistics costs over the next four years. Encouraged by this successful transition, in late 2020, PanAust purchased additional bulk haulage tankers and assumed full responsibility for the haulage of quicklime from a producer in Laos. Quicklime was previously sourced from Thailand and hauled using a contractor.

The Company is also investigating further extension of the in-house haulage of consumables, including cyanide.

As an added benefit, extending the in-house management of concentrate haulage has also supported the Company’s commitment to localisation in Laos. Given mine production was forecast to reduce from 2020 onwards, the number of concentrate haulage drivers required would have also reduced. However, the Company was able to retain all its existing Lao-national drivers using the new in-house model.

### Managing COVID–19 border closures

In March 2020, restrictions and closures were imposed at the Thailand and Vietnam borders in response to the COVID–19 pandemic. Given the Company’s concentrate and general freight haulage routes utilised both borders, innovative solutions were necessary to ensure the Company continued to meet its concentrate shipment obligations and continue supply of general freight and dangerous goods to the Operations in Laos.

In Vietnam, PanAust engaged a Vietnamese transport contractor to haul concentrate from the Vietnam border to the Hon La port. This was facilitated by a trailer swapping process conducted between the Laos and Vietnam border crossing checkpoints. The Company collected the Vietnamese trailers loaded with empty concentrate containers and hauled them to its Langkhang logistics hub in Laos. The empty containers were then replaced with full concentrate containers and PanAust returned the Vietnamese trailers to the border. Trailers loaded with full containers were then re-connected to the Vietnamese trucks and taken to the Hon La port.

In Thailand, full and empty concentrate containers were trans-shipped between Lao and Thai trucks at the customs yard (on the Laos side of the border). A trailer swap process, similar to that implemented in Vietnam, was then employed at the customs yard to facilitate the import of the Company’s general freight and dangerous goods.

Processes at both borders followed strict COVID–19 protocols which included no direct contact between employees and contractors, wearing full COVID–19 personal protective equipment, and sanitising all vehicles, equipment and goods.

These innovative solutions to conducting concentrate shipments and general freight activities in the face of border closures were crucial to safeguarding PanAust’s operations from the impacts of COVID–19 during 2020. Furthermore, it highlights the maturity and sophistication of the Company’s in-house Logistics team.

The Ban Houayxai Gold-Silver Operation process plant at dusk

## Operational performance

### Phu Kham Copper-Gold Operation (PanAust owns 90 per cent)

#### Overview

The Phu Kham Copper-Gold Operation is located approximately 140 kilometres north of Laos's capital city, Vientiane and is the Company's flagship Operation. The Operation comprises an open-pit mine feeding ore to a process plant with recovery of copper and precious metals into a saleable concentrate using conventional flotation technology.

The concentrate contains approximately 23 per cent copper and up to 8 grams per tonne (g/t) gold and up to 53g/t silver.

Seventy five per cent of Phu Kham's concentrate is trucked in covered containers to the port of Hon La in Vietnam (approximately 650 kilometres from the Operation) and the remaining 25 per cent to Sriracha Harbour in southern Thailand (approximately 1,000 kilometres from Phu Kham) for export to smelters mainly in Asia.

#### Mining and processing

Driven primarily by the impacts of lost operating time from the COVID-19 lockdown and lower head grades, Phu Kham recorded lower production and higher cost performances during the year with 48,433t of copper in concentrate produced.

The 2020 C1<sup>1</sup> and all-in sustaining costs (AISC<sup>2</sup>) after precious metal credits was US\$1.14/lb and US\$1.88/lb copper respectively.

- 1 Brook Hunt convention for reporting direct costs comprising: mine site, production transportation and freight, treatment and refining charges and marketing costs; based on payable metal content after by-product credits.
- 2 AISC reporting are the C1 cost plus royalties, allocated corporate charges, shared services costs, sustaining capital, lease principal and interest charges, and deferred mining and inventory adjustments capitalised.



Despite lost operating time, mining operations performed well during the year even with ore continuing to harden with the multi-stage deepening of the open-pit. Total ex-pit material mined was 38.5 million tonnes (Mt) and included 10.4Mt of ore; over 12.2Mt of ore was milled.

Copper recovery averaged 82.3 per cent which was a slight increase on 2019. The Phu Kham current Ore Reserve supports a mine life to the end of 2023.

#### Phu Kham Copper-Gold Operation production statistics

	2019	2020	Variance (%)
Total material mined (Mt)	47.2	38.5	(18)
Ore milled (Mt)	16.8	12.2	(27)
Copper grade (%)	0.47	0.48	2
Gold grade (g/t)	0.22	0.22	0
Silver grade (g/t)	1.61	1.74	8
Concentrate produced (dmt)	296,085	212,753	(28)
Copper in concentrate (t)	69,284	48,433	(30)
Gold in concentrate (oz)	64,128	43,274	(33)
Silver in concentrate (oz)	377,017	286,107	(24)

#### Ban Houayxai Gold-Silver Operation (PanAust owns 90 per cent)

##### Overview

The Ban Houayxai Gold-Silver Operation is located approximately 25 kilometres west of the Phu Kham Operation. Commencing production in 2012, the Operation comprises an open-pit mine feeding ore to a conventional carbon in leach (CIL) and gravity recovery process plant.

#### Mining and processing

Impacts from the COVID-19 lockdown resulted in lower than 2019 production and total material mined at the Ban Houayxai Operation in 2020.

Mill operating time also reduced to 85 per cent resulting in lost throughput for the year, however subsequent improvements to production in the second half of 2020 improved throughput.

A total of 13.2Mt of material was mined in 2020 which included 3.6Mt of ore; over 4.3Mt of ore was processed.

The Operation produced 68,736oz and 635,715oz of gold and silver in doré respectively. The average C1 cost after silver credits was US\$940/oz gold and an AISC of US\$1,346/oz gold was achieved.

The Ban Houayxai current Ore Reserve supports a mine life to the end of 2023.

#### Ban Houayxai Gold-Silver Operation production statistics

	2019	2020	Variance (%)
Total material mined	14.6	13.2	(10)
Ore milled (Mt)	4.9	4.3	(12)
Gold grade (g/t)	0.83	0.64	(23)
Silver grade (g/t)	8.4	9.0	7
Gold in doré (oz)	103,289	68,736	(33)
Silver in doré (oz)	730,344	635,715	(13)

A Komatsu PC2000 excavator loading a 777D truck inside the Phu Kham Copper-Gold Operation open-pit





(Left to right) Senior Logistics Officer, Khampha Phandanouvong and Senior Superintendent Logistics Operations, Simon Pettig at the Ban Houayxai Gold-Silver Operation

## Growth opportunities: evaluation and exploration

### Frieda River Project, Papua New Guinea (PanAust owns 100 per cent)

PanAust – through its wholly owned subsidiary Frieda River Limited – holds a 100 per cent interest in the Frieda River Project.

In 2019, the Frieda River Project team worked with the Papua New Guinea Mineral Resources Authority (MRA) and the Conservation and Environmental Protection Authority (CEPA) to progress the permitting and approvals process related to the Project's Proposal for Development for the Special Mining Lease and Environmental Impact Statement (EIS). The Independent Public Review (IPR) process – with CEPA and Hydrobiology – of the Project's EIS and proposed hydroelectric dam facility also commenced in 2019.

In 2020, the Company continued to progress permitting, community support and stakeholder engagement activities in line with the Government of Papua New Guinea's mandated project development process. In light of the COVID-19 global pandemic and the limited active exploration, the Company reduced activities at the Project site to support its landowning communities.



### Sagaing Region Exploration, Myanmar (PanAust owns 90 per cent)

In Myanmar, PanAust holds a 90 per cent interest in Wuntho Resources Company Limited (WRCL) and has established a joint venture with Myanmar Energy Resources Group International Company Limited, a Myanmar-based company which holds the remaining 10 per cent of WRCL.

In 2020, 5,952 metres (m) of drill core was processed and interpreted. Core drilled in the December quarter 2019 was logged, sampled and sent for analysis in the March quarter of 2020. The focus of this drill program was the Syrah prospect. Results are being reviewed to determine if any follow up is warranted. Regional generative work which included mapping, stream sediment sampling and ridge and spur soil sampling was ongoing during the year.

In May, the Company announced it had secured a new Exploration Licence in country. The granting of the Wuntho 3 Exploration Licence was the culmination of a 20-month collaboration between the Joint Venture and the then Government of the Republic of the Union of Myanmar and local stakeholders in Sagaing Region. The Joint Venture now holds six Exploration Licences that cover approximately 1,500 square-kilometres in the Sagaing Region.

### Contract Area exploration, Laos (PanAust owns 90 per cent)

In 2019, ongoing maintenance of the Kham Thong Lai (KTL) sediment dams was also completed.

In 2020, near-mine drilling was completed at the Phu Kham Operation and will continue in 2021. Results of this drilling will be used to assess an extension of the open-pit at the Phu Kham Operation.

Infill and definition drilling was also undertaken at the Ban Houayxai Operation in 2020 and will continue in 2021.

### Inca de Oro Copper-Gold Project (PanAust owns 66 per cent), Carmen deposit (PanAust owns 100 per cent), Chile

PanAust completed a feasibility study on the Inca de Oro Copper-Gold Project in 2014.

No material site activities were planned or undertaken at Inca de Oro or the nearby Carmen deposit in 2020. Both sites are currently in care and maintenance.

### Targeted acquisitions

PanAust continues to search for opportunities to invest in copper and/or gold projects globally. The Company is targeting advanced projects that are in production or can be brought into production within a few years and are of suitable mine life and cost structure.

Drilling at an exploration prospect near the Ban Houayxai Gold-Silver Operation







# Financial performance

Higher metal prices supported financial performance in 2020 and helped to largely offset the negative production and cost impacts from COVID-19.

(Left to right) Tactical Sourcing Superintendent, Fransis Napitupulu and Senior Purchasing and Contracts Officer, Manivanh Sihlath at the Vientiane office

PanAust’s consolidated NPAT for 2020 decreased to US\$42 million (2019: US\$43 million), with underlying earnings before interest, taxes, depreciation and amortisation (EBITDA) of US\$130 million (2019: US\$213 million).

Sales revenue from ordinary activities decreased year-on-year to US\$497 million (2019: US\$635 million) driven primarily by lower overall production due to COVID-19 disruptions. This was partially offset by higher than budgeted average metal prices.

Average prices realised for sales during 2020 were US\$2.81/lb for copper, US\$1,761/oz for gold and US\$21/oz for silver (2019: US\$2.74/lb, US\$1,374/oz and US\$16/oz respectively).

As at 31 December 2020, PanAust remained debt free and continued to generate positive cash flow with a closing cash balance of US\$141 million.

## Cash flows and sales

Net cash inflow from operating activities was US\$125 million (2019: US\$210 million).

## Operational costs year-on-year comparison

	2019	2020	Variance (%)
Phu Kham C1 cost (US\$/lb copper)	1.19	1.14	(4)
Phu Kham all-in sustaining cost (US\$/lb copper)	1.73	1.88	9
Copper price (US\$/lb)	2.74	2.81	3
Ban Houayxai C1 cost (US\$/oz gold)	720	940	31
Ban Houayxai all-in sustaining cost (US\$/oz gold)	919	1,346	46
Gold price (US\$/oz)	1,374	1,761	28



### Capital expenditure

There was no capital expenditure on major development projects in Laos in 2020 (2019: nil).

Expenditure during the year on the Frieda River Project totalled approximately US\$4.5 million (2019: US\$11 million) and included field programs, study works, environmental assessments, lands identification, stakeholder consultation, community development, corporate support and site-based operational activities.

### Balance sheet

As at 31 December 2020, PanAust had a cash position of US\$141 million (2019: US\$161 million); no external debt (2019: nil); and no mobile equipment lease facilities (2019: nil).

### Reporting compliance

As an unlisted public company, PanAust continues to lodge an audited Annual Report (including financial statements) with ASIC and fulfills its reporting and compliance obligations.



A welding technician conducting repairs on a concentrate haulage trailer at the Company's logistics hub at Ban Thouay



Environment Manager, Gerard Bradley and TSP Construction Supervisor, Ha Yang inspecting the Phu Kham Copper-Gold Operation's tailings storage facility embankment

## Governance



Phu Kham General Warehouse Storeperson,  
Mr Phiew Syphonexay

## Sustainability structure

Since transitioning from a listed public company to a subsidiary of Guangdong Rising Holding Group Co. Ltd (GRHG), the Company has retained its governance foundations to ensure it achieves its long-term Vision and Values and annual targets.

PanAust’s corporate governance frameworks, systems and standards are underpinned by the Company’s Values and a culture of continual improvement.

### The PanAust Board of Directors

The Board of Directors is the highest governance body within PanAust. The Directors for the period 1 January to 31 December 2020 were as follows:

Board member	Position	Date appointed
Dr Gun Yang	Director Executive Chairman	26 September 2017
		15 January 2019
Mr Daling Zheng	Director	27 August 2018
Mr Paul Arndt	Non-Executive Director	27 August 2018
Mr Muyi Zhang	Non-Executive Director	29 March 2019
Mr Yong Yang	Non-Executive Director	29 March 2019
Mr Jianming Xiao	Non-Executive Director	29 March 2019
Mr Zhibin Huang	Non-Executive Director	29 March 2019

For the profiles of the current members of PanAust’s Board, see the Company’s website, [panaust.com.au/our-people/#boardofdirectors](http://panaust.com.au/our-people/#boardofdirectors).

PanAust’s Board of Directors and members of the PanAust management team are responsible for ensuring effective measures, systems and controls are in place in relation to managing:

- › Environmental, community, health and safety, human resources and other sustainability-related issues and incidents that may have material strategic, business and reputational implications for the PanAust Group and its stakeholders.
- › Reporting by PanAust in accordance with the GRI Standards or other reporting standards.



## Remuneration strategy

PanAust's approach to employee remuneration promotes a performance-based culture. Remuneration, benefits and rewards are aligned with PanAust's strategy, plans and objectives, and merit forms the foundation of performance-based pay and career progression.

Remuneration is linked to quantitative lead and lag targets against which sustainability performance is measured at all levels of the organisation. These targets reinforce sustainability performance as a key component of the Company's culture.

Sustainability is a focus of the Company's long-term vision. To this end, at the senior management level, the short-term incentive component of at-risk remuneration was removed in 2020. The senior management team members are evaluated against their position descriptions, of which sustainability performance is a component.

## External standards, principles and guidelines

PanAust measures its sustainability performance against international standards and commissions independent audits to evaluate its performance.

PanAust endeavours to act in accordance with the following standards, principles and guidelines:

- The International Finance Corporation (IFC) Performance Standards on Environmental and Social Sustainability (applied to PanAust's operating assets), [www.ifc.org](http://www.ifc.org). Through PanAust's audit process, the Company aligns with the Equator Principles.

- The Minerals Council of Australia (MCA) Enduring Value<sup>1</sup> which aligns with the International Council on Mining and Metals (ICMM) Sustainable Development Framework Principles: [www.minerals.org.au](http://www.minerals.org.au), [www.icmm.com](http://www.icmm.com).
- The ICMM's Principles on climate change policy design: [www.icmm.com](http://www.icmm.com).
- The International Cyanide Management Code (the Cyanide Code). A voluntary industry program administered by the International Cyanide Management Institute (ICMI) for the gold-mining industry that promotes the responsible use of cyanide. PanAust has been a signatory to the Cyanide Code since 2011 for its Ban Houayxai Gold-Silver Operation in Laos (see page 71): [www.cyanidecode.org](http://www.cyanidecode.org).
- The GRI Standards. PanAust reports against the GRI Standards on topics that are material to its business as determined through its risk management approach and materiality determination process: [www.globalreporting.org](http://www.globalreporting.org).
- The Voluntary Principles on Security and Human Rights (VPSHR). A set of principles designed to guide companies in maintaining the safety and security of their operations within a framework that encourages respect for human rights. PanAust has been a member company of the VPSHR since 2013 (see page 98): [www.voluntaryprinciples.org](http://www.voluntaryprinciples.org).

## External recognition

PanAust is proud of its sustainability and operational performance and has been recognised internationally through several awards. A list and description of PanAust's awards can be found on the Company's website, [panaust.com.au/external-recognition](http://panaust.com.au/external-recognition).

## Maintaining a sustainability culture

For PanAust, a successful and sustainable business is one where financial and non-financial performance outcomes are pursued in a complementary manner.

The Company's approach to sustainability has its foundations in its Vision and Values and code of conduct, The PanAust Way. PanAust's Sustainability Policy outlines the Company's commitment to sustainable performance through improving health and safety, host communities, environmental management, and the application of ethical business practices and corporate governance standards. The policy includes a commitment to continually improve sustainability management and performance. The Sustainability Policy is available to employees in English, Lao, Tok Pisin, Vietnamese and Thai languages on the Company's intranet.

Sustainability is implemented through: visible leadership and people management, induction and ongoing training and awareness sessions, strict observance of high-quality corporate governance standards, excellence in financial management, outstanding technical expertise and supportive processes and systems.

Sustainability performance forms part of the PanAust management team's critical tasks for each year. In 2020, the General Manager External Affairs and Site Support was responsible for risk management, human resources, external affairs and sustainability across the PanAust Group, and reported directly to the PanAust MD and CEO.

Since 2009, the Company has facilitated an annual workshop with senior management, managers and sustainability support staff across the Group. In 2019, the format of these Workshops transitioned to a Safety Summit, with a focus on managing operational safety for 2020 and beyond. The new format provided a fresh approach to the management of material risks and sustainability. A plan was formulated during the 2019 Safety Summit that detailed objectives for the coming year and beyond. In 2020, the Safety Summit was postponed due to COVID-19 travel restrictions and restrictions on gatherings of large groups of people. PanAust plans to reconvene the Safety Summit when it is safe to do so.

The delivery of specific sustainability-related targets is the responsibility of operational line managers who are accountable for outcomes as stated in the PanAust Group Risk Annual Plan and individual achievement plans.

<sup>1</sup> PanAust is an associate member of the MCA and a signatory to its 'Enduring Value – The Australian Minerals Industry Framework for Sustainable Development'. The framework commits companies to upholding fundamental human rights and respecting cultures, customs and values in their dealings with people affected by their activities. As an associate member of the MCA, PanAust is committed to applying operational standards globally that are consistent with Australian operational standards, while accommodating variations as a result of cultural, geographical or environmental circumstances in Laos, Papua New Guinea, Myanmar and Chile. Full MCA membership requires Australian-based assets.



Chemist, Daovong Phanthavong preparing cupels for fire assay at the Phu Kham Copper-Gold Operation laboratory

## Business conduct

PanAust is a company with a clear Vision and a strong commitment to high-performance outcomes. It recognises that the way it conducts its business is key to developing and maintaining its social licence to operate in host countries and with host communities.

To ensure the Company's activities are carried out legally, ethically, with integrity and respect, PanAust has a Vision and Values and a code of conduct (The PanAust Way) and both apply to all employees, directors and business partners. Business partners include: contractors, consultants, suppliers and service providers working with or for the PanAust Group, regardless of their position and location. The PanAust Way includes sections on workplace behaviour, operating with integrity, communicating externally and managing sustainability.

PanAust's Vision and Values and The PanAust Way are presented and distributed throughout the Company in English, Lao, Tok Pisin and Burmese. Key concepts are also frequently communicated to reinforce the application of the Company's Vision and Values.

PanAust has internal controls and procedures in place to monitor for the possible misappropriation of funds, bribery and corruption and other code of conduct-related issues. This includes periodic checks through external audits and senior management-led reviews.

**A number of non-material incidents relating to breaches of The PanAust Way were investigated, confirmed and resolved in accordance with Company policy during 2020.**



## Anti-Bribery and corruption

PanAust recognises that acts of corruption undermine the effectiveness and legitimacy of government institutions to the detriment of the general public and that such acts are illegal, and recognises that real or perceived acts of corruption also impact PanAust's social licence to operate. PanAust strictly prohibits employees, directors and its business partners from making or receiving bribes or corrupt payments and endeavours to ensure complete transparency of all transactions.

The PanAust Way communicates the Company's position in relation to anti-bribery and corruption, and provides guidelines relating to gift giving and receiving, anti-competitive behaviour and compliance with the law.

The PanAust Way prohibits employees from making facilitation payments. PanAust has a Company-wide training package that informs employees about relevant anti-bribery legislation and prohibited conduct.

PanAust employees, directors and business partners must comply with the laws of the countries in which the Company operates. Under Australian law, it is an offence for Australian companies, citizens and residents to bribe foreign public officials (*Criminal Code Act 1995*).

PanAust will not use third-party intermediaries to circumvent the application of the Company's strict prohibition of bribery and other corrupt payments.

PanAust has cash management policies in place that promote the active reduction of the use of cash across the business. Strict accounting and reporting processes are in place to ensure transparency relating to the transaction.

PanAust also uses business integrity screening software to improve the detection and prevention of anomalous payments.

There were no instances of Company-related bribery and/or corruption reported to the PanAust Board or the PanAust management team in 2020. Additionally, there were no fines or legal actions for anti-competitive behaviour or anti-trust or monopoly practices, nor did the Company receive any fines or non-monetary sanctions for non-compliance with laws and regulations in 2020.

## The Whistleblower Standard and Service

PanAust has in place a Whistleblower Standard and a Whistleblower Service that allows for the reporting of any conduct that is contrary to The PanAust Way. Issues can be raised via the Whistleblower Service by mail, email, telephone or an online form available on PanAust's website, [panaust.com.au/whistleblower-service](https://panaust.com.au/whistleblower-service). The Whistleblower Service is available in English, Lao, and Tok Pisin and a translation service is available for other languages for submissions made online, by email, or voicemail message. Issues can be reported anonymously and employees are encouraged to use the service if they are uncomfortable raising issues through normal day-to-day reporting channels.

PanAust prohibits any form of retaliatory action against anyone who raises a genuine concern, or for helping to address a concern. A link to PanAust's Whistleblower Service is available on the Company's website, [panaust.com.au/corporate-governance](https://panaust.com.au/corporate-governance).

In 2020, no material matters were reported through the Whistleblower Service.

## Human rights

Human rights are basic rights and freedoms to which all people are entitled. Human rights apply to every person across the globe regardless of their birthplace, age, personal beliefs and/or any other individual attribute.

PanAust supports and respects human rights consistent with the Universal Declaration of Human Rights.

Human rights encompass a broad range of issues in relation to PanAust's employees, contractors and suppliers, host communities, customers, business partners and other stakeholders impacted by its operations. The Company understands that to manage human rights risks and realise opportunities, PanAust needs to build collaborative and transparent relationships with these key stakeholders across the mining lifecycle.

Where available, PanAust uses existing systems and processes for the assessment and management of human rights issues, and as a minimum, PanAust meets applicable legal requirements in relation to human rights.

In 2020, PanAust recorded no breaches of indigenous people's or other human rights. 2020 also represented the first reporting period for the Company under the *Australian Modern Slavery Act (2018)*, with the first report prepared in 2021.

A summary of PanAust's approach to managing human rights is provided in the table on the next page and includes references to examples presented in this Report.





The entrance to the PanAust head office in Brisbane

## PanAust's approach to managing human rights

Commitment	<ul style="list-style-type: none"> <li>› The PanAust Way</li> <li>› Sustainability Policy</li> <li>› Sustainability Standards</li> <li>› Human Resources Standards</li> <li>› Member Company – Voluntary Principles on Security and Human Rights (see page 98)</li> <li>› Alignment to the ICMM Indigenous Peoples and Mining Position Statement</li> <li>› Annual reporting requirement under the <i>Australian Modern Slavery Act (2018)</i></li> </ul>
Assessment	<ul style="list-style-type: none"> <li>› Human rights risk assessments</li> <li>› Human rights due diligence</li> <li>› Environmental and Social Impact Assessments</li> <li>› Stakeholder analysis (including indigenous peoples, gender, vulnerable and disadvantaged)</li> <li>› Modern slavery supply chain analysis and risk assessment</li> </ul>
Action	<ul style="list-style-type: none"> <li>› Workforce practices and feedback mechanisms</li> <li>› Stakeholder engagement (including disadvantaged groups) appropriate to the project and location context and the IFC Performance Standards (see page 50)</li> <li>› Supplier evaluations and contract clauses related to human rights (see page 36)</li> <li>› Project designs, development and closure consistent with cultural and social values of host communities (see page 72)</li> <li>› Grievance mechanisms, resettlement and compensation protocols (see page 54)</li> <li>› Human Resources grievance mechanisms including the Fair Treatment Standard and Workplace Representative Committee</li> <li>› Community development (including opportunities to enhance human rights of host communities, for example, access to water and improved healthcare, education and livelihood opportunities) (see page 58)</li> <li>› Social and Environmental Management Plans</li> </ul>
Check and report	<ul style="list-style-type: none"> <li>› Periodic surveys including socioeconomic, perception, employee surveys</li> <li>› Periodic audits including audits of the Lao Operations against the IFC Performance standards and sustainability standards and contractor audits (see page 41)</li> <li>› Internal and external reporting</li> <li>› Whistleblower Standard and Whistleblower Service (see page 34)</li> <li>› Annual Modern Slavery Statement</li> </ul>



## Sponsorships and donations

PanAust sponsors and donates to programs, organisations and causes that build goodwill in operational areas and align with its Values.

PanAust's sponsorship and donation committees transparently and consistently assess requests against the priority areas:

- › Projects located in the countries where PanAust has operating assets or is undertaking project development activities.
- › Activities of national importance and symbolism.
- › Projects benefiting the people of the provinces and districts in which the Company operates or is present.
- › Projects promoting the culture, history, society and ethnic minorities representative of the areas in which the Company operates.
- › Projects that support capacity-building of relevant sector government agencies.

Decisions are reviewed by the PanAust management team. Details of the Company's sponsorships and donations in 2020 are provided on page 58 of this Report.

## Sustainability in the supply chain

Building mutually beneficial relationships with suppliers and contractors creates a sense of shared value that benefits the broader community and the PanAust Group.

The PanAust Way, along with PanAust's Procurement Policy and Contractor Health Safety and Environment Management Standard, set the minimum expectations for suppliers and contractors in areas including safety, environment, community, human rights and operating with integrity. The safety systems and performance of local contractors in Laos is a material issue for PanAust (see page 92).

In 2018, PanAust risk-profiled the Company's top-tier (by expenditure) suppliers, which represent approximately 80 per cent of direct supplied goods. Each supplier was risk-ranked across a number of categories including safety, environment, compliance and anti-bribery and corruption. The profiling highlighted that within the top-tier of the supply chain, PanAust engages reputable organisations whose systems and in-country legal obligations mean that the necessity for PanAust to further influence performance is either not required or is limited. A further risk review of suppliers used in 2020 was carried out using the 2017 Global Estimates of Modern Slavery: Forced Labour and Forced Marriage Report, Global Slavery Index 2018 Report and the 2020 Trafficking in Persons Report to assess the risk of modern slavery in PanAust's supply chain. This assessment identified that almost 95 per cent of PanAust's 2020 procurement spend was with suppliers incorporated in countries whose governments fully meet the minimum standards for elimination of trafficking or who do not fully meet the standards but are making significant efforts to bring themselves into compliance.

PanAust procures goods and services locally where practical and bases all decisions on a defined and transparent process that covers commercial competitiveness, risk profile and contractor/supplier capacity. This support of local businesses results in direct and indirect benefits accruing to host communities and regional economies in Laos (see page 57) and Papua New Guinea. For this reason, PanAust acknowledges that its greatest supply chain responsibility is at a local level where it has the maximum ability to influence local suppliers and contractors. This will continue to be the focus of the Company's efforts in 2021 and beyond.

In 2020, 45 per cent of goods and services for the Company were purchased in Laos; 73 per cent of goods and services are purchased regionally (Laos and Thailand). At the Frieda River Project site, over 90 per cent of goods and services were sourced from local suppliers in Papua New Guinea.

## Product stewardship

In Laos, PanAust produces copper concentrate which is sold directly in Asia to international smelters or through merchant traders. Gold-silver doré is sold directly to a refinery. Given the volume of product relative to the overall market size, PanAust has limited influence on the end-purchaser or end-product (copper cathode or refined precious metals). When a direct sales contract is placed with a smelter, due diligence is conducted to provide assurance on the customer's reputation, financial capability, and legal and business structure. Contracts are subject to PanAust's standard terms and conditions. All sales are secured by pre-payment or letter of credit.

PanAust's product stewardship approach focuses on the storage and transport of concentrate from mine site gate to port through to the delivery of product in such a way that it meets customer specifications and in-country requirements. PanAust owns and operates its own road transport fleet for concentrate movement in Laos and Vietnam. PanAust's management systems and associated auditing processes are integral to the product stewardship approach and they include global positioning system monitoring and tracking of the product, and the use of escort vehicles on high-risk sections of the haulage route to enhance road safety and reduce the risk of concentrate spillage.

The market considers PanAust's copper-gold concentrate 'clean' and product metal specifications are incorporated in contract terms and conditions with international customers. The Company was in compliance with agreed contract specifications applied to product shipments during 2020. All trace elements, including arsenic, were in compliance with destination country maximum limits. PanAust engages directly with its customers through industry forums and office or site visits. PanAust received two customer complaints in 2020, both related to disputed shipment weights.

**PanAust sponsors and donates to programs, organisations and causes that build goodwill in operational areas and align with its Values.**





Senior Livelihood Officer, Banthavong Silapaphan (far right) purchasing vegetables from local women farmers at Nam Gnone as part of the Company's support for small business development

**Building mutually beneficial relationships with suppliers and contractors creates a sense of shared value that benefits the broader community and the PanAust Group.**





## Risk Management

### PanAust's approach to risk management

PanAust recognises that identifying and managing risk is integral to business management. It improves the Company's profitability, and protects and creates long-term value. PanAust uses risk registers, incident management systems and stakeholder feedback, combined with auditing and benchmarking processes to proactively identify, evaluate, prioritise and manage risks. The aim is to track and improve business performance.

PanAust fosters a risk-aware corporate culture. Materiality and risk tolerance are key considerations in all business decisions. Risk management is embedded throughout the business and mining lifecycle, including PanAust's critical activities across all business functions and processes.

The risk management framework is also applied when considering business cases for growth projects and entry into new jurisdictions. Risk assessments and risk management plans are developed to ensure that potential reputation, legal, business, regulatory and political exposures are addressed and have appropriate mitigations embedded into business strategies and plans.

**PanAust uses risk registers, incident management systems and stakeholder feedback, combined with auditing and benchmarking processes to proactively identify, evaluate, prioritise and manage risks. The aim is to track and improve business performance.**

The Fire and Emergency Services, Medical and Safety teams carrying out an emergency rescue drill at the Ban Houayxai Gold-Silver Operation tailings storage facility crusher



## Crisis Management Framework

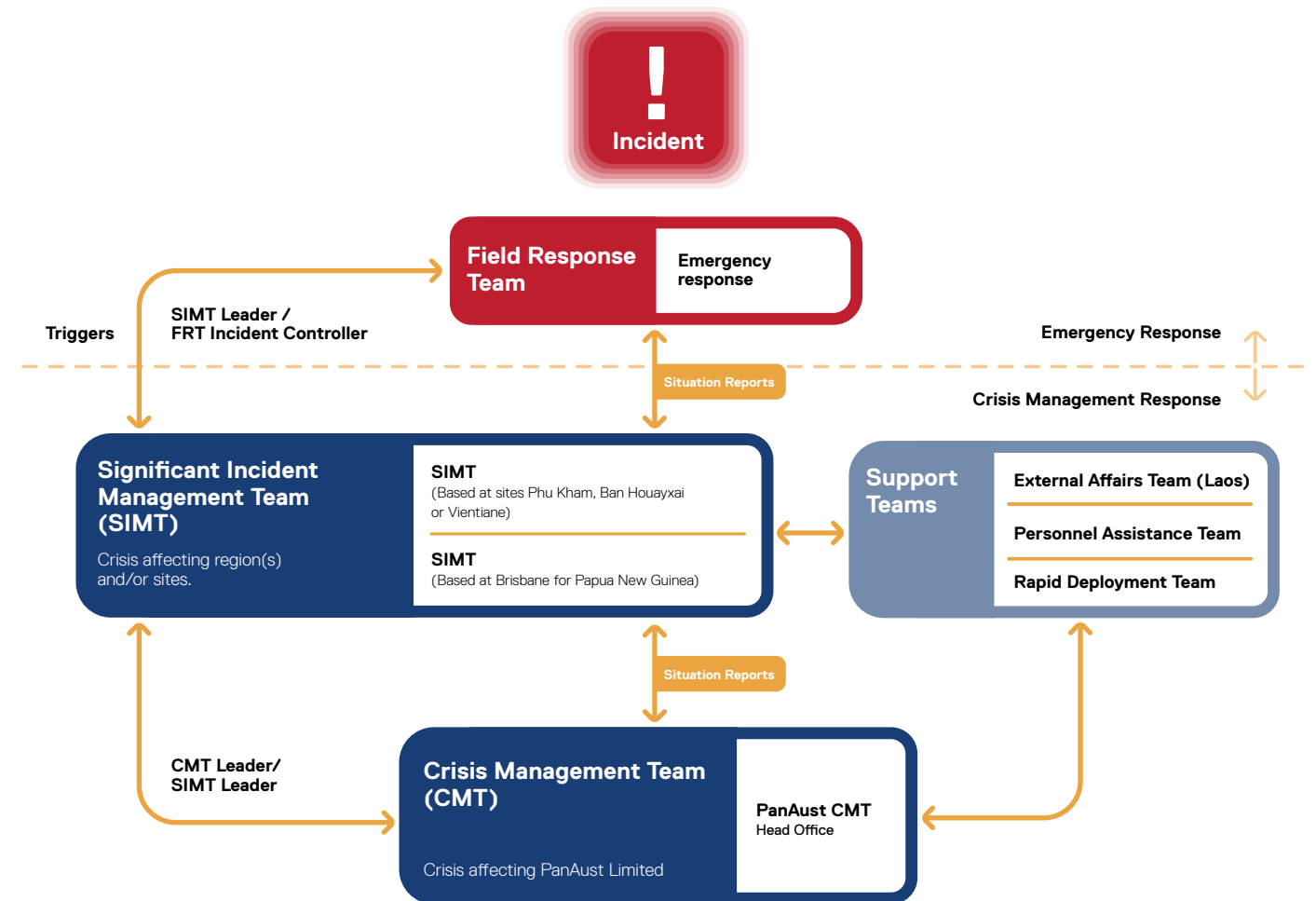
PanAust's crisis management structure enables an appropriate organisational response to potential incidents across the Company's diverse geographical locations of its operational activities.

The organisation's response to an unplanned event is structured around a three-level event, three level response framework:

**Incidents:** Events that have occurred and resulted in or have the potential to result in adverse consequences to PanAust. The Field Response Teams (FRT) at PanAust sites provide a physical response to people or assets in the event of an incident occurring.

**Emergency:** Incidents that have occurred and have the potential to be outside the range of normal operations and require actions beyond everyday actions to contain or control the incident. A Significant Incident Management Team (SIMT) is called together to manage the business aspects of any incident beyond site capabilities or boundaries and is responsible for ensuring all aspects of a crisis are managed within the relevant host country or region.

**Crisis:** These are events with the potential to impact the underlying value of the Company. The PanAust Crisis Management Team (CMT) in Brisbane is formed. This team supports the SIMT and works on the crisis specifically as it relates to the material business aspects of a crisis for PanAust.





The crisis management process was enacted in January 2020 to monitor and plan the Company's response to reports of a highly infectious respiratory virus – COVID–19. An SIMT based in Laos was convened with an initial focus on preparing the business in the event the COVID–19 virus disrupted critical supply lines. PanAust's CMT was assembled in March after the World Health Organization declared COVID–19 a pandemic. The CMT oversaw the Company's COVID–19 response at a Group level.

The CMT and SIMT continued to meet regularly throughout 2020 to manage the Company's response to COVID–19. These meetings continued in 2021. For more information about the Company's crisis management process as it relates to the Company's response to the COVID–19 pandemic, see page 7.

### Risk management policies, framework and processes

PanAust's Enterprise Risk Management (ERM) Policy outlines the requirement for an effective ERM system to identify and manage all material risks. The policy is supported by the Company's ERM Standard.

In 2020, PanAust continued to focus on integrating risk management into all business processes, projects under evaluation and planning for closure infrastructure.

PanAust's risk management framework includes criteria for materiality and guidance on treatment and reporting measures. Procedures align with:

- the International Organization for Standardizations (ISO) ISO 31000 Standard on Risk Management
- the Company's Sustainability Standard 4, Risk and Change Management

- Principle 15 of the Rio Declaration<sup>1</sup> (the Precautionary Principle).

The PanAust ERM system is based on a three lines of defence model:

- 1) operational level activities carrying out risk assessments and implementing control measures
- 2) corporate oversight including the development of the ERM framework and processes and carrying out assurance of the operational level activities
- 3) independent assurance to verify the first two lines are operating effectively.

PanAust's management team is comprised of senior managers and is responsible for ensuring that PanAust's systems of risk management and internal controls are in place. Issues are reported to the PanAust Board as important matters arise. Regular reporting processes are in place.

The management team carefully considers the level of risk it is prepared to tolerate. The PanAust management team guides corporate risk strategy, provides oversight of strategic issues, is accountable for implementing the ERM framework and for monitoring effective implementation.

The PanAust management team has responsibility for a high-level risk register that identifies key material business risks relevant to PanAust at the Group level. Risk owners present to senior management on the management of material risks through a peer review process. In addition, every senior manager has responsibility for operational, departmental or project risk registers and is required to have in place plans to address significant risks.

The Company has a clear process for defining materiality. Group-level risks are defined as an event that would result in a consequence Level 5 or above, evaluated using the PanAust Extended Consequence Table (which uses a rating scale of 1 to 9, with 9 being the highest consequence) on the following basis:

- Is the risk significantly material to require public disclosure?
- Could the risk substantively influence the assessment and decision of stakeholders?
- Could the risk materially change the underlying value of the Company?
- Given the strong reliance on Phu Kham for cash flow, could a production stoppage at the Operation cause a US\$5 million to US\$10 million impact on cash flow and EBITDA respectively (equivalent to 10–14 days production)?
- By considering impacts on short, medium and long-term production and financial results, impacts to health and safety, the environment, social outcomes, the Company's regulatory environment and its reputation.

PanAust has identified 19 active Group-level risks that are material to the Company. These include economic, environmental and social risks. Areas of non-financial risk that have been identified as material or potentially material to PanAust and its stakeholders are addressed in detail in this Report. Financial risks are outlined in PanAust's Annual Report which is submitted annually to ASIC as a component of the Company's regulatory obligations.

Group-level risks were reviewed by the PanAust management team in 2020.

For certain high risk activities, specialist governance structures are implemented to mirror the ERM system model:

- 1) Operational sites are responsible for carrying out the day-to-day risk mitigation activities.
- 2) An internal specialist review committee is formed to provide support and oversight for the operational teams.
- 3) An external independent review committee is chartered to carry out reviews of the operational practices and report their findings to the PanAust Board via the management team.

These specialist governance structures are currently in place for tailings dam risk management and open-pit geotechnical risk management.

### PanAust's sustainability standards

PanAust carries out its activities in a manner consistent with international leading practices and in compliance with:

- the Company's Sustainability Policy and 14 Sustainability Standards.
- legal obligations (including environmental/ social impact assessments for projects).

Requirements and obligations are applied through the Company's Environmental and Social Management Systems. All PanAust employees and contractors are obliged to operate within these requirements.

PanAust's 14 Sustainability Standards apply to all business activities across the Group and have been designed to provide a risk-based management system against which each Operation's performance can be measured and continual improvement implemented.

PanAust's operational performance is regularly assessed against the Sustainability Standards and external commitments. The Company's Operations in Laos have well-developed discipline-specific safety standards which are being progressively elevated to Group standards in support of other regions where PanAust has development projects and/or potential future operations.

<sup>1</sup> Principle 15 of the Rio Declaration states that in cases of threats of serious or irreversible environmental damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent degradation.



## Auditing and benchmarking

PanAust has established a corporate review and audit program to support its ERM programs. Some reviews are carried out internally while others require external auditors.

### 2020 sustainability audit plan and progress

External/internal audits	2020 performance	Next audit
<b>Economic performance</b>		
Group financial audit	Completed annually and disclosed in PanAust's Annual Report to ASIC	2021
External insurance audit	Completed	2021
<b>Social performance</b>		
Risk-based environmental and social performance audit (replacing the IFC audit)	Not completed <sup>1</sup>	2021 <sup>2</sup>
Socio-economic surveys	Lao socio-economic survey deferred due to extension of mine life	2022
Community Development Fund (CDF) reviews	No reviews undertaken during 2020	Household survey planned for 2022
<b>Environmental performance</b>		
Acid rock drainage (ARD) external audit	Environmental Geochemistry International (EGI) reviewed sampling and laboratory process to benchmark laboratory results and compare results to mine waste. Completed to plan. Knight Piesold and EGI undertook an external review of ARD management at Phu Kham and Ban Houayxai. An action plan was developed.	2021 <sup>3</sup>
Cyanide Code Recertification	In 2019, an independent audit by Golder Associates was submitted to the International Cyanide Management Institute (ICMI) and confirmed that the Ban Houayxai Operation was in full compliance with the International Cyanide Management Code. No review was planned in 2020.	2021 external desktop audit 2022 recertification audit
Tailings Independent Review Panel (TIRP) and design engineer tailings storage facility (TSF) construction inspections	One virtual site inspection was undertaken by the TIRP in 2020 to review the performance of both TSFs. The Panel confirmed good management practices for the construction, operation, monitoring and corporate governance of both facilities. The Design Engineer also completed a virtual site inspection to verify the construction performance of both facilities.	2021
Comprehensive dam safety review (CDSR)	A CDSR was not completed in 2020 as it was only previously carried out in 2018. This is consistent with recommendations of the Australian National Committee on Large Dams (ANCOLD) guidelines. An Annual Dam Safety Review (ADSR) was completed in lieu of the CDSR as planned and confirmed that the design and construction aspects of both TSFs are sound.	2021
Open-pit geotechnical review	Virtual independent reviews by the Geotechnical Independent Review Panel (GIRP) were completed for the Phu Kham and Ban Houayxai open-pits in the September and December quarters. Ongoing work has been undertaken to address the GIRP recommendations.	2021

<sup>1</sup> Delayed to 2021 due to COVID-19 related travel restrictions.

<sup>2</sup> Delayed to 2021; however may be further delayed due to impact and restrictions on global travel from COVID-19.

<sup>3</sup> To be confirmed due to COVID-19 international travel restrictions.



External/internal audits	2020 performance	Next audit
<b>Health, safety and security</b>		
Technical safety audits for high-risk activities and/or hotspots	Third-party aviation audits were completed remotely for Laos and Papua New Guinea providers.	2021
Contractor safety management compliance reviews	15 contractor audits were completed for the Operations in Laos. A combination of compliance reviews, risk register reviews and inspections were also completed.	2021
Security setting and security management	Quarterly internal security audits conducted.	2021
<b>Governance and risk management</b>		
Sustainability Standards internal benchmarking: Phu Kham and Ban Houayxai Operations and Frieda River Project	PanAust Asia Safety Standards continued to be reviewed and updated throughout the year by subject matter experts. PanAust Sustainability Standards continued to be implemented at the Frieda River Project.	2021 full benchmarking and review of Sustainability Standards.

### 2020 sustainability performance

Targets	Results	Commentary 2020, revised target 2021
<b>Economic performance</b>		
Achieve annual production guidance for copper and gold and all-in sustaining cost guidance for Phu Kham and Ban Houayxai	Not Achieved	Annual outcomes for production and costs were below budget at both Phu Kham and Ban Houayxai. PanAust delivered full year NPAT below budget of US\$42 million. <b>2021 target:</b> Achieve budget for production and cost.
Complete Frieda River Project permitting phase	In progress	During 2020, the Frieda River Project team worked with the Mineral Resources Authority (MRA) and the Conservation and Environmental Protection Authority (CEPA) to progress the Project permitting process. The Frieda River Project team continued the IPR process. PanAust requested, and was granted by CEPA, two extensions of the public review period. The review period has been extended to allow adequate time for completion of the IPR in light of travel restrictions imposed during the Government of Papua New Guinea's response to the COVID-19 pandemic. <b>2021 Target:</b> Advance project permitting through proactive engagement with landowners, communities, provincial and national Government stakeholders.
Progress exploration and growth opportunities	Achieved	Drilling in Myanmar – completed in the December quarter of 2019 – was processed and interpreted during 2020. The Company secured a new exploration licence in Myanmar's Sagaing Region. Completed near-mine drilling at the Phu Kham Operation. Completed near mine and satellite drilling at the Ban Houayxai Operation. Identified regional copper-gold growth opportunities in Laos. <b>2021 Target:</b> Complete pre-feasibility studies at the BHX 2 satellite deposit. Discover more potential ore. Recommence regional exploration in Myanmar should the political situation allow. Successfully transition exploration team off the MEPA after further defining potential satellite deposits for the Ban Houayxai Operation.



Targets	Results	Commentary 2020, revised target 2021
<b>Governance</b>		
The PanAust Way updated, implemented and embedded consistently across each site/ geographical location	Not achieved	Comprehensive review of The PanAust Way was undertaken in 2019 and continued into 2020; however the updated PanAust Way was not published during 2020. <b>2021 Target:</b> Governance practices to be progressed including the publication of an updated version of The PanAust Way and the publication of the Company's first Modern Slavery Report.
2019 Business Review and Sustainability Report prepared to GRI standards	Not achieved	The 2019 Report was not published as the Company's response to the COVID-19 pandemic was prioritised. <b>2021 Target:</b> Prepare and publish an externally assured 2020 Sustainability Report to the GRI standards.
<b>Social performance</b>		
Community Development Fund (CDF) expenditure plan approved and progressed with 80 per cent of funds committed to spend by year end	In progress	11 of the agreed 15 CDF projects were completed; 4 projects were partially completed with funds carried over to 2021. <b>2021 Target:</b> Review and revise community development fund (CDF) plans for both Phu Kham and Ban Houayxai. Focus CDF programs on long-term projects to last beyond the Phu Kham and Ban Houayxai mine life. Fully implement the five-year CDF Plan 2018-2022 and work towards achieving the UN Sustainable Development Goals.
Develop and implement government affairs and community strategies to enhance and maintain positive relationships in countries where PanAust has a presence	Achieved	Strong government relationships were maintained and managed in Laos, Vietnam (haulage and port), Thailand (haulage and port) and Myanmar. Stakeholder engagement continues with the Government of Papua New Guinea, provincial administrations, landowners and host communities towards securing all relevant permits and licences, including a social license to operate. <b>2021 Target:</b> Continue with positive engagement practices in countries where PanAust has a presence.
<b>Environmental performance</b>		
No level 3 environmental incidents	Achieved	<b>2021 Target:</b> No level 3 environmental incidents.
Energy and greenhouse gas inventory and improvement plan	Partially achieved	A number of energy efficiency opportunities were identified in 2020; however they were unable to be progressed due to COVID-19 related travel restrictions. <b>2021 Target:</b> Continued identification and implementation of energy efficiency projects.
Progress closure planning for the Lao Operations	Achieved	Pre-feasibility study level closure plans are in place. Community engagement continued. <b>2021 Target:</b> Submit Preliminary Mine Closure Plans for Phu Kham and Ban Houayxai to the Government of Laos. Establish a Closure Governance Charter with an internal review committee and an independent review panel.



Targets	Results	Commentary 2020, revised target 2021
<b>Health and safety performance</b>		
Zero fatalities on controlled work sites	Not achieved	One fatal work-related event occurred during 2020. <b>2021 Target:</b> Zero fatalities on controlled work sites
Total recordable injury frequency rate (TRIFR) ≤1.26	Achieved	2020 TRIFR of 0.43 <b>2021 Target:</b> TRIFR of ≤0.76
Crisis management training simulation for PanAust	Partially achieved	While formal training was not undertaken during 2020, the crisis management framework, used extensively during the Company's COVID-19 response, provided practical experience of its application. <b>2021 Target:</b> Crisis management training simulation for PanAust and review of process.
Critical Control Verification (CCV) process implementation	New item for 2021, no target for 2020.	<b>2021 Target:</b> Implement a CCV process to ensure that risk controls considered critical are verified as in place and working as intended.
<b>Our people</b>		
Improve Lao-nationals' development to enable promotion into roles previously filled by expatriates	Achieved	Increased Lao localisation to 93 per cent. In 2020, a total of 441 Lao-national employees were promoted. All promotion categories saw an increase on the numbers recorded in 2019, further supporting the Company's focus on continuing to transition professional, leadership and management roles to Lao-national employees. <b>2021 Target:</b> Maintain Lao localisation above 90 per cent. Continue to improve Lao-nationals' development to enable promotion into roles previously filled by expatriates.
Improve technical trades training capability in Laos	Achieved	Three year, Accelerated Trades Training Apprenticeship Program was introduced in 2020. 40 apprentices participated in 2020. <b>2021 Target:</b> Continue to develop technical trades training capability in Laos.



The Ban Houayxai Gold-Silver Operation Mining team holding a daily mine production meeting





# Social performance

PanAust is committed to ensuring its presence positively impacts the host communities and countries in which it operates.

In 2020, the COVID-19 pandemic presented the Company with complex challenges associated with the safe delivery of its community development and engagement mechanisms. Many ongoing programs were delayed due to COVID-19 related travel restrictions and the Company's internal processes to limit interaction with communities to prevent the possible risk of COVID-19 infection.

Programs that were limited will resume when the risk of COVID-19 infection within PanAust's host communities reduces. Further details are discussed in this section of the Report.



Nam Gnone vegetable farmer, Ms Yue Yan

The Company's approach to community development is underpinned by its commitment to meeting the global demand for resources in a socially responsible way, ensuring respectful and ongoing dialogue with stakeholders, recognising and supporting traditional rights and values, and respecting cultural heritage.

Community development projects enable host communities to build long-term capacity and empower them to determine their own development priorities. The Company's community development plans consider host communities' needs, host countries' development plans and the UN Sustainable Development Goals. The plans are developed in consultation with government authorities and community representatives and are supported by the information obtained from socio-economic surveys. This approach ensures that the development projects meet the needs of the communities while aligning with government and/or aid agencies working in the region where appropriate.

Host communities and countries obtain enduring benefits from PanAust's operations through: taxes and royalties, employment of local people, sourcing of goods and services locally, contributions to community infrastructure, training and capacity-building and long-term economic and social development projects.

PanAust identifies the needs, issues and standards of living in host communities through stakeholder engagement activities and social impact assessments, including periodic updates via socio-economic surveys. These methods enable the Company to gain a deeper understanding of the diversity and priorities of stakeholders, indigenous and vulnerable peoples and assess risks and opportunities.

Partnering with and generating value for stakeholders, including host communities, governments and employees, is essential for PanAust's growth and ongoing stakeholder support.

PanAust's management systems and supporting processes provide the guidelines, tools and mechanisms to address social and environmental impacts while progressing business opportunities. The systems are aligned with the IFC Performance Standards.

PanAust has mechanisms built into its business practices to monitor and evaluate engagement and development activities. Communities can discuss concerns with Community Relations teams, or lodge concerns through a complaint, grievance or request mechanism. Where PanAust's activities unavoidably impact livelihoods, compensation and mitigation schemes are activated.

## PanAust's materiality process identified the following social performance focus areas for 2020 as:

- > Safeguarding community health, safety and wellbeing from the impacts of COVID-19
- > Social licence and stakeholder engagement
- > Economic value generated
- > Community development
- > Closure preparedness and messaging
- > Artisanal and small scale mining



## Safeguarding community health, safety and wellbeing from the impacts of COVID-19



Dr Soulivong Khemvilay from the Ban Houayxai Gold-Silver Operation delivering a COVID-19 awareness program at the Nasaysavang village

A key to PanAust's commitment to ensuring its presence has a positive impact on those living in its host communities, is its drive to safeguard their health, safety and wellbeing. This was highlighted in 2020 during the initial outbreak of the COVID-19 pandemic across its sites.

In Laos, poor health is an issue in a number of rural communities. Factors driving this issue are complex and include a lack of healthcare services, poor hygiene and sanitation practices and limited health awareness. All are underpinned by poverty. Given the highly contagious nature of the COVID-19 virus, the Company quickly identified that local health authorities in its communities would not be able to adequately manage and/or maintain an outbreak of the virus should one occur.

In April 2020, an employee working at the Phu Kham Operation tested positive for COVID-19. A second employee on rest and recreation break and a close contact of this employee would also later test positive for COVID-19. Strict COVID-19 site protocols – in addition to those which were already in place on site (see page 84) – were immediately enacted to protect the health, safety and wellbeing of its workforce, including contractors and communities. These protocols also included a lockdown of everyone on site, including those residing in neighbouring communities. This approach was consistent with the Government of Laos' requirements to restrict the movement of people in and out of the Company's sites to help reduce the potential spread of COVID-19 in the country.

This lockdown impacted the Company's local workforce who could not return to their villages at shift end. This approach was necessary to ensure there was no community transmission resulting in a subsequent outbreak in neighbouring villages.

The site medical teams, in conjunction with the Community teams carried out education and awareness programs about COVID-19 in the local villages. These awareness programs included information on wearing face masks, correct hand washing techniques and social distancing. The Company also supported the broader Lao community through the provision of lifesaving and critical healthcare equipment and supplies to the provincial and central Government of Laos (see the case study on page 48).

In Myanmar, the Company donated personal protective equipment such as face masks and bottled oxygen to villages close to the exploration tenements.

In Papua New Guinea, a range of measures were undertaken to help protect the local villages from COVID-19, including:

- › communicating information about COVID-19 via high frequency (HF) radio
- › the provision of educational materials delivered to villages during crew changes about how to reduce the transmission of diseases by wearing face masks, washing hands correctly and maintaining social distance
- › detergents and sanitisers were issued to the local villages
- › rapid diagnostic test (RDT) kits were supplied to each village and training provided on their use
- › training and awareness about COVID-19 for local community health workers
- › helicopter transportation of PCR test samples to the laboratory on behalf of the Government of Papua New Guinea.





#### SOCIAL PERFORMANCE CASE STUDY:

### Helping the Government of Laos fight COVID-19 through the provision of vital medical aid

In 2020, PanAust's respect for the Government and people of Laos was matched only by its resolve to work with them to fight COVID-19. An essential element of this assistance was the significant effort the Company placed on increasing access to quality healthcare and vital medical equipment for its local and broader Lao communities.

#### In-kind medical aid for Xaisomboun Province

In April, the Phu Kham Medical team presented two ventilators to Xaisomboun Province's Department of Health. Additional medical equipment was presented to the Head of the Lao National Taskforce Committee for COVID-19 Prevention and Control, Lao Deputy Prime Minister and Minister of Finance, H.E. Somdy Douangdy in May. The items were sent to medical facilities that were screening and treating cases of COVID-19 in country.

In October, two additional ventilators, three syringe pumps and 100 viral transport medium tubes were given to the Head of Xaisomboun Provincial Taskforce Committee for COVID-19 Prevention and Control.

This diagnostic and treatment equipment improved treatment pathways for people living in Xaisomboun Province after the onset of the COVID-19 pandemic in Laos.

#### Mobile medical sample collection unit

In October, the Company presented Laos' first mobile medical sample collection unit to the Government of Laos in Vientiane. Worth US\$68,000, the unit was presented to the Minister of Health, Associate Professor Dr Bounkong Syhavong.

(Front row, left to right) Company representatives, Government Relations Manager, Vannaly Phounsavanh; Senior Manager External Affairs, Manilath Arounlangsy; Phu Bia Mining Chairman, Mr Chanpheng Bounnaphol with Minister of Health, His Excellency Associate Professor Dr Bounkong Syhavong standing in front of Laos' first mobile medical sample collection unit



The mobile sample collection unit is used by the Lao National Centre for Laboratory and Epidemiology to collect COVID-19 and other virus/disease specimens for laboratory testing across the country, particularly from those living in remote provinces.

Customised and fitted on a four-wheel drive, the mobile sample collection unit was ergonomically designed and on-board systems – including laboratory facilities, air conditioning, lights, ozone disinfection, surveillance cameras and a microphone – are centrally controlled. The design also incorporates personal protective equipment to allow medical personnel to collect samples from inside the unit through protective sleeves.

#### Medical equipment installation in hospitals across Laos

By November, the Company announced it had completed the installation of essential medical equipment at 25 public hospitals and medical facilities across Laos. Equipment included ventilators, patient monitoring systems and suction pumps. Upon the successful installation of the equipment, medical teams at each facility received training on its use.

The Company sourced the equipment through its partner, Kanya Mittaphab Export-Import Sole Company Limited. The program commenced at the Mahosot, Mittaphab, Setthathirath, 103, Mother and Newborn and Children Hospitals in Vientiane. The program later continued in 17 other provincial hospitals in country.

**The Company's commitment to increasing access to quality healthcare in Laos during the unprecedented COVID-19 pandemic in 2020 demonstrates the importance PanAust places on protecting communities in the countries in which it operates.**

#### Support to Laos in 2020

Support	Value (US\$)
Monetary support to the central Government of Laos	150,000
Medical equipment to 18 provinces (including ventilators and other specialist equipment)	500,000
Mobile sample collection unit	68,000
Two PCR COVID-19 testing machines to the Ministry of Health	95,200
Monetary support to Xaisomboun Province	50,000
Medical equipment to Xaisomboun Province	135,540
Meals for doctors nurses and COVID-19 patients	7,000
Computer equipment for the department of Mining Management, Ministry of Energy and Mines	3,700



(Left to right) Two representatives of the Xaisomboun COVID-19 Taskforce receiving ventilators for the Xaisomboun provincial hospital from Phu Kham Mining Manager, Trevor McIlwaine and Phu Bia Mining Chief Medical Officer, Dr Bounhome Phouvang



A local farmer from Nam Gnone selling her pineapples at the Nam Gnone market

## Social licence and stakeholder engagement

PanAust seeks to build collaborative and transparent relationships with stakeholders. Ongoing and open dialogue through informed consultation and participation with governments and host communities close to its Operations and projects enables PanAust to understand and address issues and identify opportunities for those directly and indirectly affected by its business activities.

PanAust's engagement processes enable community participation and respect for traditional methods of decision-making. PanAust aims to achieve free, prior and informed consent (FPIC) of affected communities in accordance with IFC Performance Standard 7: Indigenous Peoples. PanAust recognises that this intent does not contradict the right of sovereign governments to make decisions on resource exploitation. PanAust's position is consistent with the ICMM's Indigenous peoples and mining position statement.

At PanAust's Phu Kham and Ban Houayxai Operations and the Frieda River Project, the Company has in place stakeholder engagement plans that identify the interests and relationships of stakeholders. These plans contain a range of culturally and socially inclusive engagement activities which are designed in collaboration with stakeholders and consider the needs of vulnerable groups.

During 2020, PanAust's stakeholder engagement activities included:

- › A range of regular meetings with host communities, their nominated representatives (including representation by women) and other special interest groups.
- › Meetings with relevant government departments and officials.
- › Community development programs: community members, local and district-level authorities are engaged in all stages of the planning, approval and delivery of community development activities.
- › Community awareness campaigns: awareness campaigns in villages near operations and projects provide an effective avenue for engagement with government agencies and other stakeholders to reach a large audience on key issues. Many engagement campaigns were paused due to COVID-19 related travel restriction in Laos and Papua New Guinea.



The campaigns undertaken during 2020 in Laos included: COVID-19 health awareness, road safety campaigns and a Nam Gnone awareness program about the dangers of close proximity mining activities to the village.

- › Reports: PanAust's sustainability performance is comprehensively reported via its Business Review and Sustainability Report. An abridged version focused on Phu Bia Mining's activities is provided in English and Lao to key stakeholders in Laos. In addition, reporting to the Government of Laos occurs regularly.

### Government engagement

The Government of Laos is one of PanAust's principal stakeholders. A framework of regular scheduled and ad-hoc meetings with central, provincial and district government-level officials provide important opportunities for dialogue. A dedicated Government Relations team is in place, with regular monthly and annual reports submitted on Company activities to the Government of Laos. A digital portal has been established to facilitate this process and ensure various Government stakeholders can access the information they require. Representatives from key Government ministries are represented at both Phu Kham and Ban Houayxai Operations to ensure transparency, mutual understanding and close and productive relationships at the operational level. In addition, PanAust regularly engages senior Government of Laos representatives through meetings in Vientiane and site visits to the Operations; however many of these meetings and site visits did not occur in 2020 due to COVID-19 related travel restrictions.

In Papua New Guinea, a Joint Provincial Consultative Committee (JPCC) supports provincial-level engagement. The JPCC, which meets quarterly, comprises officials from the West and East Sepik Provinces, as well as relevant district officials and national Government agencies, including the Mineral Resources Authority. During 2020 the JPCC was unable to meet due to COVID-19 related travel restrictions; however Project updates were provided directly to the Mineral Resources Authority.

In Myanmar, the External Affairs team facilitates Government engagement through quarterly Joint Committee meetings with the Department of Geology, Survey and Exploration, in addition to ad-hoc meetings and written communication with Government Ministers.

### PanAust's stakeholders and interested parties

The Company takes a diverse range of external and internal stakeholder interests and concerns into consideration during the course of its business activities. Stakeholders are identified based on the potential impacts of the Company's activities on both them and the Company.

Stakeholder priority and importance differs across the material issues for each stakeholder group.

Engagement mechanisms are designed to provide stakeholders and other interested parties with an awareness of the Company's economic, governance and social performance, and understand stakeholder issues and concerns.

Papua New Guinea Community Relations Advisor, Joel Hamago speaking to members of the Kilifas Village during a community engagement road show, West Sepik Province





The following table outlines key stakeholder groups and engagement mechanisms and priorities in 2020.

Stakeholder group	Engagement mechanisms	Engagement priorities
<b>Primary stakeholders</b>		
Employees	<ul style="list-style-type: none"> <li>› Visits by the Senior Management team</li> <li>› Team meetings (daily, weekly, monthly) and one-on-one interactions</li> <li>› Employee briefings</li> <li>› Inductions, training programs, awareness videos, career and professional development programs, English language training</li> <li>› Workplace Representative Committees</li> <li>› PKM and BHX radio stations as part of a fatigue management initiative</li> <li>› Employee engagement events, toolbox talks, posters</li> <li>› Company intranet, videos, emails, alerts, noticeboards</li> <li>› Fair Treatment Process of appeal</li> <li>› Whistleblower Service</li> </ul>	<ul style="list-style-type: none"> <li>› Health, safety and wellbeing including COVID-19 controls</li> <li>› The PanAust Way</li> <li>› Business performance and growth</li> <li>› Project development activities and progress</li> <li>› Training and development</li> <li>› Community contributions</li> <li>› Building local workforce skills</li> <li>› Maximising localisation</li> <li>› Employee retention as closure of the Operations in Laos approaches</li> </ul>
Local landowners and host communities	<ul style="list-style-type: none"> <li>› Multi-stakeholder consultation and collaboration to agree on community development projects</li> <li>› Community development progress meetings at village, district and provincial levels</li> <li>› Community response, including grievances</li> <li>› Involvement in matters important to the community, including host community events</li> <li>› Stakeholder engagement meetings</li> <li>› Frieda River Project update in communities</li> </ul>	<ul style="list-style-type: none"> <li>› Community development (local capacity-building through training and education, local employment and business opportunities, enhancing public health, poverty reduction, access to clean water, food security and infrastructure development)</li> <li>› Closure planning (Laos)</li> <li>› Operation and project development including revised project scope</li> <li>› Community health, safety and wellbeing during the COVID-19 pandemic</li> <li>› Grievance mechanisms</li> <li>› Community participation agreement committee, membership qualification criteria, landowner association and landowner representative company formation</li> <li>› Benefits and compensation negotiations</li> </ul>
PanAust's shareholder GRHG and the Board of Directors	<ul style="list-style-type: none"> <li>› Board meetings</li> <li>› Reporting (monthly)</li> <li>› Meetings with shareholder</li> </ul>	<ul style="list-style-type: none"> <li>› Financial returns and operating discipline</li> <li>› Funding strategy for growth</li> </ul>
Joint venture (JV) and/or equity partnerships	<ul style="list-style-type: none"> <li>› Management committee meetings</li> <li>› Tailored responses to queries</li> <li>› Monthly reports</li> <li>› Technical reports</li> </ul>	<ul style="list-style-type: none"> <li>› Financial returns, ability to service debt and operating discipline</li> <li>› Governance</li> <li>› JV expenditure, project progression, tenement requirements and statutory obligations</li> <li>› Safety and sustainability performance and stakeholder relationships</li> <li>› Disclosure requirements for JV partners including process on permitting status (EIS, SML, feasibility studies and associated approval hearings)</li> </ul>
Governments	<ul style="list-style-type: none"> <li>› Communication through the Government Relations team</li> <li>› Scheduled and ad-hoc meetings and agreements with local, provincial and central/national government representatives and officials</li> <li>› Joint initiatives with government for community development</li> <li>› Site visits for government officials</li> <li>› Tailored responses to queries</li> <li>› Tailored publications – proactive approach, including frequently asked questions</li> <li>› Online portal for the Government of Laos</li> <li>› Ad-hoc ministerial and department-level meetings with the PanAust Senior Management team</li> <li>› Frieda River Project update to the Papua New Guinea Mineral Resource Authority</li> </ul>	<ul style="list-style-type: none"> <li>› Relationship management</li> <li>› PanAust Vision and Values</li> <li>› Permitting and exploration licences renewals</li> <li>› Progression of project approvals</li> <li>› Environmental compliance/management</li> <li>› Economic contributions and community development</li> <li>› Local employment and workforce localisation</li> <li>› Closure planning (Laos)</li> </ul>



Stakeholder group	Engagement mechanisms	Engagement priorities
Customers (smelters and refineries)	<ul style="list-style-type: none"> <li>› Technical support regarding product quality</li> <li>› Regular customer updates and virtual meetings</li> <li>› Tailored responses to queries</li> </ul>	<ul style="list-style-type: none"> <li>› Reliability of supply and product quality</li> <li>› Product weights and measures, assay exchange</li> <li>› Logistics and product stewardship</li> <li>› Cost and delivery</li> <li>› Safety and Environmental, Social and Governance (ESG) performance</li> </ul>
Contractors and suppliers	<ul style="list-style-type: none"> <li>› Request for proposals (RFPs) and tendering</li> <li>› Regular performance review meetings covering specific performance metrics</li> <li>› Price adjustment mechanisms undertaken quarterly, six monthly and annually</li> <li>› Commodity price forecasting value add by suppliers with access to price indices</li> <li>› Risk management for one-off projects and where incidents occur</li> <li>› Participation in community workshops by site-based contractors</li> <li>› Tailored meetings</li> <li>› Inductions, monthly contractor performance reports</li> <li>› Quarterly contractor safety workshops</li> <li>› Major supplier pre-qualifications</li> </ul>	<ul style="list-style-type: none"> <li>› Security of supply focus on major suppliers for operations including mobile maintenance, fixed plant maintenance, truck fleet maintenance and explosives</li> <li>› Quarterly performance covering specific performance metrics</li> <li>› Certified value guarantee (suppliers provide innovation and efficiencies)</li> <li>› Convening stakeholders to address geographical and shift pattern challenges</li> <li>› Health and safety and ESG performance including safety workplace inspections, Job Safety Observations (JSOs), hazard identification, inspections, audit and review</li> <li>› Leading practice initiatives</li> <li>› Expectations of contractor performance including training, compliance to the PanAust Contractor Health Safety and Environmental (HSE) Management Standard</li> <li>› Contractor HSE Management Plan performance</li> <li>› The PanAust Way</li> </ul>
<b>Interested parties</b>		
Industry associations	<ul style="list-style-type: none"> <li>› Association meetings</li> <li>› Committee participation</li> <li>› Joint initiatives</li> <li>› Presentations and correspondence</li> <li>› Participation at industry conferences</li> </ul>	<ul style="list-style-type: none"> <li>› Policy and legislative setting</li> <li>› Education and knowledge transfer</li> <li>› Leading practice initiatives</li> <li>› Health and safety and ESG performance and stakeholder relationships</li> </ul>
Media	<ul style="list-style-type: none"> <li>› Media releases</li> <li>› Respond to enquiries</li> <li>› Correct material factual errors when identified in online or print media</li> </ul>	<ul style="list-style-type: none"> <li>› Communication with the public on project development and operational status</li> <li>› Communicating the Company's COVID-19 response and controls</li> <li>› Economic, health and safety and ESG performance</li> <li>› Community development and support including COVID-19 initiatives</li> </ul>
Non-government organisations	<ul style="list-style-type: none"> <li>› Provision of company information to inform industry reports</li> </ul>	<ul style="list-style-type: none"> <li>› ESG performance</li> <li>› Contract transparency</li> </ul>
Capital market participants (including investment banks, debt, equity and independent analysts)	<ul style="list-style-type: none"> <li>› Meetings and industry forums</li> <li>› Tailored responses to queries</li> </ul>	<ul style="list-style-type: none"> <li>› General industry performance and ESG benchmarking</li> <li>› Business opportunities</li> </ul>
Other mining companies and academics	<ul style="list-style-type: none"> <li>› Papers and presentations at conferences, participation, meetings</li> </ul>	<ul style="list-style-type: none"> <li>› ESG performance</li> <li>› Knowledge transfer</li> <li>› Leading practice initiatives</li> <li>› Benchmarking and good industry practice</li> </ul>



## Community relations

PanAust provides opportunities for men, women, youth and vulnerable groups to participate in consultation, community development and decision-making processes. Community Relations teams include members from local ethnic groups who are close to PanAust's activities, enabling culturally effective communication between the Company and community members.

In Laos, regular meetings including weekly community meetings and quarterly meetings with the local village Naibans are held with communities to ensure they are adequately consulted, and participate in community activity decision-making processes. However, in 2020 meeting held focused primarily on community awareness related to COVID-19. The regularity of these meetings was impacted in 2020 due to COVID-19 related travel restrictions and internal Company controls to limit contact with communities to reduce the risk of possible COVID-19 infection and transmission.

The Company conducts periodic socio-economic surveys to support community engagement activities and to better understand issues and movement in community living standards. The last such survey was undertaken in 2015 with a socio-economic impact report also completed as part of future closure activities in 2017. The various surveys provide an important mechanism to build an understanding of the needs and expectations of host communities. They inform priorities and initiatives and provide feedback on community engagement effectiveness by assessing the extent stakeholders believe their concerns are being effectively addressed. The next socio-economic survey is a household survey scheduled for 2022.

In Papua New Guinea, PanAust has convened a Community Leaders Forum (CLF) with representatives from the seven host villages

and two district centres. The CLF is a pre-development forum that allows the Company to inform and consult with key stakeholders in the lead up to the final permitting of the Frieda River Project and is pivotal to achieving FPIC in the Papua New Guinea context.

PanAust has hosted CLF meetings since 2014, when it acquired its majority shareholding in the Frieda River Project. In 2020 however, due to COVID-19, the Company was unable to safely mobilise stakeholders to and from the Project site and the CLF was temporarily suspended.

## Grievance management

PanAust has in place grievance mechanisms at its Operations, the Frieda River Project and Exploration Tenements in Myanmar. Grievance mechanisms are designed to meet the intent of Principle 31 of the United Nations Guiding Principles on Business and Human Rights.

The mechanisms are:

- legitimate, predictable, equitable and transparent
- culturally appropriate and based on dialogue and engagement
- accessible
- rights-focused
- accountable (with monitoring and evaluation, disclosure and annual reporting).

The Company's Grievance Management Procedure provides for escalation and arbitration if required. Depending on the nature and severity of the concern raised, it may require further investigation or referral to an independent party.

In Laos, PanAust's electronic reporting and corrective action event management system, INX's InControl, captures engagement activities, feedback, complaints, grievances and commitments. Borealis software is used to capture this information for the Frieda River

Project and Exploration Tenements in Myanmar. The data captured by these systems is used to monitor and identify trends and reporting. In 2020, three grievances were raised in Laos. The grievances related to impacts to property from the construction of the new farm dump and waste rock dump at the Phu Kham Operation. All grievances have been closed out. One grievance was raised and resolved in Papua New Guinea. This related to the Company contributing to the education fee assistance scheme in East New Britain Province.

No grievances were raised in Myanmar in 2020. One grievance was raised and closed in 2019 relating to the Company damaging a fence during exploration activities.

The Company had no disputes relating to indigenous people and customary rights during 2020.

## Resettlement, livelihood restoration and compensation

No involuntary resettlement took place for PanAust's Operations in 2020. The Company seeks to minimise involuntary physical relocation and to minimise the negative impacts of economic displacement related to business activities.

Protocols and procedures that the Company has in place to achieve this goal include planning, participative land access and acquisition practices, transparent compensation and livelihood restoration approaches.

If resettlement is required, the Company is committed to implementing programs in accordance with IFC Performance Standards 5 and 7: Land Acquisition and Involuntary Resettlement, and Indigenous Peoples. In particular, this includes ensuring that resettled people and communities have their livelihoods and standard of living restored or improved after resettlement.

The Company's compensation process in Laos aims to ensure that those affected by its operations are compensated fairly for the loss of assets and/or production. The Company does this by maintaining, at a minimum, pre-impact standards of living, housing and livelihoods and identifying opportunities for participation and other benefits. Physical and economic displacement is managed using the Company's Compensation Standard, Grievance Management Procedure and the Consultation and Community Engagement Procedure. The Compensation Standard aligns with Lao regulations and international standards, such as those outlined by the IFC and ICM.1

The requirements for compensation become more prescriptive as the degree of impact increases. When significant impacts occur at the household level (that is, more than 20 per cent of household production is affected), Lao regulations require livelihood restoration rather than cash compensation.

Compensation is paid in a transparent manner at an agreed and documented schedule of rates via the grievance management process.

Compensation rates in Laos are calculated based on market price surveys, provincial agreements and in consultation and/or with approval from local government and community leaders.

In Papua New Guinea, compensation rates are set by the Government of Papua New Guinea's Valuer General<sup>1</sup>. If the Company believes the set compensation rate is too low, compensation is adjusted to reflect local value rates.

In 2020, US\$172,433 was paid in compensation for economic livelihood impacts in Laos. In Papua New Guinea and Myanmar, there were no requests for compensation from affected landowning communities for issues relating to impacts on community lands.

<sup>1</sup> The most recent agreement, including Government rates, was only effective to December 2018. A more recent agreement is yet to be established.



The Company had no disputes relating to indigenous people and customary rights during 2020.

Mr Oudomxay Thammavong (far right) from the Nam Mo Agriculture Centre speaking with Mr Jackwaxiong and his wife who are pineapple farmers from Thong Khoun



A local villager from Nam Gnone who improved his cattle stalls as part of the Sustainable Livelihood Program's pilot cattle fattening initiative

## Economic value generated

PanAust recognises it has a responsibility to make a positive social and economic contribution to the communities, regions and countries in which it operates. The Company's philosophy is that wherever it operates, it collaborates with local authorities and communities to improve the socio-economic livelihood of the region.

PanAust contributes to the Lao economy in many ways, including through:

- › Revenues from copper, gold and silver including payment of royalties.
- › Profit tax and other payments including tenement rental fees to the Government of Laos.
- › Salaries paid to employees and salary taxes to provincial governments.
- › Training and skills development of host communities through capacity-building programs.
- › Capital expenditure in exploration, project development and project operating costs, particularly through payments to Lao suppliers of goods and services.
- › Investments in community development programs through community development funds.
- › Payment of dividends to the Government of Laos as a 10 per cent shareholder in Phu Bia Mining.
- › Investment in regional infrastructure including roads, water and sanitation.
- › Sponsorships and donations.
- › Local procurement of goods and services from contractors and businesses.

Where appropriate, PanAust engages local companies (Lao and international companies based in Laos) to procure goods and services for PanAust's Lao-based activities. In doing so, the Company takes into consideration commercial competitiveness, risk profile and contractor capacity to ensure goods and services are provided in a safe and responsible manner. Support is also provided to local companies where required to ensure health and safety standards can be met.



To date, approximately US\$1.57 billion has been invested in Laos. This figure represents the expenditure on physical assets and exploration activities and also includes PanAust's 2020 expenditure of US\$2.88 million towards public road infrastructure and maintenance along the Company's logistic route and regional roads close to the Company's Operations. Since 2006, PanAust has invested more than US\$100 million in Lao public road infrastructure. Improvements and maintenance of sections of the Phu Kham and Ban Houayxai transport and haulage routes have benefited 12 villages with a combined population of more than 16,000 people, by providing faster access to markets and public services including hospitals and schools.

Total Phu Bia Mining activity, taking into account investments and in-country operating expenditure, accounted for over 1.8 per cent of Laos's real gross domestic product (GDP) which was US\$19.1 billion in 2020<sup>1</sup>. This investment does not take into account the indirect impacts of the Company's presence, for which a widely accepted and typical multiplier effect of the positive impacts mining projects have in developing countries (such as Laos) exists.<sup>2</sup>

During 2020, PanAust's other economic contributions to Laos included the:

- Payment of US\$148 million to Lao suppliers of goods and services; over 47 per cent of external expenditure on goods and services was to companies in Laos and the Government of Laos.
- Contribution of approximately US\$55 million to the Government of Laos.
- Contribution to capacity-building programs and activities at district, provincial and central government levels.

- Employment of 3,683 people in Laos during 2020. By year end, 93 per cent were Lao-national employees, of whom 22 per cent are from local villages adjacent or in close proximity to PanAust's Operations.
- Administering of a sponsorships and donations program in Laos (in addition to the community development program), providing support of over US\$1 million to a wide range of recipients through cash and in-kind donations (see page 49).

Phu Bia Mining revenues of US\$497 million for the sale (and export) of copper, gold and silver in 2020 represents 8 per cent of total Lao goods exports (estimated by Laos Government as US\$6,115 million).

#### 2020 total payments in Laos, Myanmar and Thailand (US\$ million):

- Direct production costs US\$236.24 (55.3%)
- Transport and selling costs US\$19.53 (4.6%)
- Salaries and wages (incl. taxes) US\$56.14 (13.1%)
- Royalties US\$32.64 (7.6%)
- Exploration costs US\$8.68 (2%)
- Equipment and other assets US\$67.82 (15.9%)
- Interest and other finance costs US\$6.38 (1.5%)

#### 2020 payments for goods and services in Laos, Myanmar and Thailand (US\$ million):

- Lao companies US\$48.95 (16%)
- Lao-based international companies US\$67.07 (22%)
- Lao Government and semi-Government US\$31.97 (10%)
- Thai companies US\$92.47 (30%)
- International companies US\$71.02 (23%)

#### 2020 total payments in Laos, Myanmar and Thailand (US\$ million)

Description	US\$ million		
	2018	2019	2020
Payroll tax	4.21	4.15	4.03
Customs excise (import service fee)	2.35	1.74	1.48
Road tax	4.54	4.11	3.61
Profit tax (income tax)	28.90	23.68	11.54
Royalties	41.01	36.92	32.64
Concession fees	0.06	0.06	0.06
Dividends	5.35	21	1.7
<b>Total contribution</b>	<b>86.42</b>	<b>91.66</b>	<b>55.07</b>
Copper price (US\$/lb)	2.88	2.43	2.81

#### 2020 total payments by PanAust (US\$ million)

Region	Operating costs by region	Employee wages and benefits by region	Payments to providers of capital by region	Payments to government by region
Laos	269.36	55.92	0.77	55.07
Thailand	1.63	0.53	0.00	0.03
Vietnam	1.97	0.04	0.00	0.00
Chile	0.26	0.00	0.00	0.00
Myanmar	2.90	1.13	0.01	0.31
Papua New Guinea	2.13	0.60	0.01	0.41
Australia	4.46	9.23	0.05	0.55
<b>Total</b>	<b>282.71</b>	<b>67.44</b>	<b>0.84</b>	<b>56.37</b>
Group revenue <sup>3</sup>	488.46	-	-	-
Group economic value retained <sup>4</sup>	81.10	-	-	-

<sup>1</sup> The Company uses the Bank of Laos' annual report for the GDP figure and converts it from Lao Kip into US dollars using the average exchange rate over the 2020 calendar year.

<sup>2</sup> Sources: ICMM publication, *The role of mining in national economies (Romine)* (third edition), 2016; World Bank and IFC publication, *Large mines and communities: forging partnerships, building sustainability*, 2012.

<sup>3</sup> Sales revenue, derivative gains/losses, interest income and other income.

<sup>4</sup> Group economic value retained is calculated by Group revenue less Group operating costs, employee wages, payments to providers of capital and payments to governments.



Primary school children from  
the Nam Gnone village

## Community development

PanAust's community development programs aim to make meaningful contributions to building long-term community capacity, thereby empowering people to determine and progress their own development priorities now and beyond the life of the Company's Operations.

All operational and active development projects support community development programs in line with international good practice.

As part of its broader sustainability commitments, PanAust continues to assess other socially responsible projects that fit within its host community development priorities of capacity-building and promoting economic independence.

### PanAust total community development contributions (US\$ million)

	2018	2019	2020
Community development in Laos	0.67	0.11	0.24
Community development in Papua New Guinea	0.24	0.28	0.07
Community development in Myanmar	0.00	0.02	0.02
Logistics costs associated with Papua New Guinea community development	0.06	0.16	0.07
Sponsorship and donations in Laos	0.16	0.06	1.04
Sponsorship and donations in Papua New Guinea	0.01	0.00	0.00
Sponsorship and donations in Myanmar	0.01	0.06	0.01
Sponsorship and donations in Vietnam	-	-	0.02
Sponsorship and donations in Australia	0.13	0.05	0.00
<b>Total contribution</b>	<b>1.26</b>	<b>0.74</b>	<b>1.47</b>
PanAust adjusted earnings before interest, taxes, depreciation and amortisation (EBITDA)	253.33	213.25	129.86
<b>Total contribution as a percentage of EBITDA</b>	<b>0.50</b>	<b>0.35</b>	<b>1.14</b>



### Pre-development, exploration and regional community development

The first stage of the Government of Papua New Guinea’s statutory public engagement campaign was completed in 2019 along the road corridor and near village areas, with stage two scheduled for 2020/2021 to be completed along the Sepik River corridor.

In 2020, PanAust contributed US\$67,231 to community development programs in Papua New Guinea, with US\$74,851 associated with the use of helicopters to deliver programs to the Frieda River Project host communities which are inaccessible by road.

These programs focused on improved health and education services and capacity-building with a greater emphasis on the maintenance and establishment of infrastructure to support these services.

Health programs were delivered in collaboration with Telefomin District Health and Pacific Island Ministries. Activities included medical assistance and referral of patients to regional health facilities.

Education assistance was delivered in cooperation with Telefomin District Education and the Boards of various local schools. Activities included primary school improvement programs, provision of materials for maintaining and upgrading learning infrastructure, logistics support to teachers and their families, and school fee assistance for students at primary, secondary and tertiary levels. The Frieda River Community Affairs team, in conjunction with the Telefomin Secondary School, also implemented programs to retain children in primary school, particularly girls. In an effort to strengthen the confidence parents have in the school system, PanAust is directly investing in the improvement of infrastructure of various schools throughout the District and provides increased support to teachers.

In 2020, with the support of the Australian Government Department of Foreign Affairs and Trade, the Women in Extractives program was completed in the local provinces in Papua New Guinea. This program will be delivered by Frieda River Limited in the future to continue to build the capacity of the local women in the areas of literacy and numeracy training that will lead into business development and operations training.

In Myanmar in 2020, PanAust contributed US\$24,173 to community development projects in the Sagaing region. Projects included school development programs for the Mawlin School, Namkhin Secondary School and Tonbon Primary School, and contributions to regional road development in Wuntho.

Throughout the year, the Company also supported its communities across its logistics haulage route. After a series of five typhoons swept through central Vietnam in October 2020, PanAust donated US\$20,000 to the Quang Binh Red Cross Society to help support local communities who were impacted by flooding from the storms.

### Community development in Laos

The Company’s community development programs support the achievement of the UN Sustainable Development Goals by contributing to poverty alleviation, and supporting economic progress in rural communities adjacent to its Operations. Focus areas are: infrastructure, health, education, agriculture, small business development, and microfinance.

Community development projects are managed in partnership with host communities and closely coordinated with local government authorities. In 2020, Community Development Funds (CDFs) were in place at the Phu Kham and Ban Houayxai Operations, with a Memoranda of Understanding between PanAust and the Government of Laos defining coordination and management arrangements. CDF planning follows a process that begins with community-led needs assessments and a review of the socio-economic situation in each community. As closure of the Operations in Laos approaches, CDF projects are strategically focused to ensure that benefits continue to sustain communities post-closure.

Consultations are held with local government authorities to ensure alignment with national development strategies and goals and to avoid duplication of existing or planned government initiatives. The Company and local governments jointly approve the final annual community development plans. This approach distributes benefits appropriately and aligns with government and/or aid agencies working in the region.

In 2020, a total of US\$381,000 was budgeted for CDF activities in Laos: Phu Kham, US\$300,000 and Ban Houayxai, US\$81,000. CDF programs started during the year comprised 15 projects across rural communities directly and indirectly affected by PanAust’s activities. Work also continued on 21 CDF projects that were not finalised in 2019.

A total of US\$243,475 was expended on CDF projects during the year. Expenditure was lower in 2019 due to the completion of projects aligned to an earlier life of mine. In 2020, COVID–19 restrictions delayed the implementation of new projects.

#### Community Development Fund total expenditure in Laos (US\$)

	2018	2019	2020
Expenditure	671,653	113,942	243,475

Projects from 2020 that were partially completed during the year included the construction of: a Primary School including road works and a concrete road at Nam Mo; a cable bridge at Nam Ou and a gabion weir and a dormitory for nurses and teachers at Nam Kor 2. The remaining costs for these projects will be carried over for completion in 2021.

Year-on-year, community development contributions are not explicitly determined by the Company’s consolidated profit position. The contributions consider a range of factors such as Company presence, impact, local capacity and dependency levels as communities mature. The data does not include in-kind and administration contributions towards community priorities or the purchase of locally produced consumables including fruit, vegetables and water.



### Education

PanAust understands that education is a foundation for improving people’s lives. A sound education is a cornerstone of social development with literacy and numeracy skills opening up opportunities for advancement in many areas of life. For these reasons, PanAust’s first CDF programs in Laos included a particular focus on education.

While primary education is compulsory in Laos, enrolment rates, completion rates and learning outcomes are low due to issues related to poverty, insufficient schools and/or skilled teachers and a lack of teaching aids. Over-crowding is also an issue in many village schools. While access to primary education has improved significantly over the past 20 years, many children leave school before completing the full five-year curriculum, meaning functional literacy – adults who can independently meet the reading and writing demands placed on them – has not been achieved. Secondary and tertiary education completion rates are lower still.

The Company’s education programs aim to improve learning outcomes for children and adults in host communities. Projects have focused on improving children’s access to primary school through: school construction, provision of school uniforms and stationery, education scholarships, and providing measures to improve the quality of education through teacher training and the provision of teaching aides.

In Laos, historically girls stop going to school if they have to travel a long distance from their village to attend. PanAust’s ongoing commitment to improving access to education for its priority villages is addressing this trend.

Since 2010, PanAust has contributed to the construction, expansion and/or improvement of schools in Laos, thereby improving access to education for students.

During 2020, the Company contributed US\$11,488 towards initiatives designed to increase access to education and the quality of learning within communities close to its Operations. This figure is lower than previous years and is driven by COVID–19 delaying delivery of, or finalising, some programs.

Programs for the year included: construction works for the primary school at Nam Gnone and teachers and nurses dormitory facilities, the provision of toys and educational supplies for Nam Gnone and Nam Mo, and supporting summer school programs in the villages around Phu Kham and Ban Houayxai.

### Community health

In 2010, PanAust handed the management of community health clinics at Nam Mo and Nam Gnone back to the District Health Office. Specialists in family planning and nutrition work in the clinics and also vaccinate infants against diseases such as hepatitis B, tuberculosis, diphtheria, pertussis (whooping cough), tetanus, encephalitis, rubella, polio, and general malnutrition.

In 2020, PanAust contributed US\$10,225 towards improved health outcomes in host communities. Community health checks run during 2020 primarily focused on COVID–19 controls and assistance.

### Local enterprise development

PanAust aims to build long-term capacity in communities through economic development and strengthening community resilience.

The Company prefers to source products and services locally and/or regionally. This approach encourages local suppliers to expand their customer base in preparation for the eventual transition to mine closure.

Agriculture is an industry in which local communities can build on their existing farming capabilities to supply PanAust’s Operations, while providing for the expansion of enterprise opportunities.

Post-closure, agriculture will provide an important source of cash income for local communities. This is an improvement on what existed prior to the Company’s presence when activities were largely restricted to subsistence-level farming.

A Sustainable Livelihoods Program (SLP) was implemented in 2018 with the aim of developing positive legacies for local economies that can be sustained beyond the life of the Operations. Program objectives include:

- The promotion and development of two to three commercial agriculture products in Xaisomboun Province.
- To build the capacity of provincial and district Government agencies to deliver effective services to their communities in a sustainable manner.
- Implement a land-use framework to ensure post-closure agriculture will be conducted in a sustainable manner.

SLP program management focuses on the delivery of quality, clean commercial agriculture products (CAP) that will sustainably yield high volumes beyond the life of the Operations. To do this, its 2020–2023 plan was developed in line with PanAust’s Sustainability Policy, the United Nations Sustainable Development Goal 10 (to reduce inequality within and among countries) and the Government of Laos’ decree on the economic development of Xaisomboun Province.

In 2020, the SLP implemented three CAP programs: clean commercial vegetables, cattle fattening, and pineapple growing and harvesting. Additional programs that were prioritised for implementation in 2020 included avocado and orange production and direct seeded rice paddies. In 2020, through CDF programs, PanAust contributed US\$29,624 towards agriculture and small business support activities.

These included: completing construction of fresh vegetable markets; assistance to local weavers; continuing assistance with the Nam Daeng water intake improvement project, and a feasibility study for a rice paddy development.

During the year, the Company, in conjunction with the Department of Agriculture (DOA) and the Ministry of Agriculture and Forestry (MAF), actively promoted a program to encourage disadvantaged and ethnic groups to apply for the Lao Organic Agriculture System. A total of 13 farmers from the five closest villages to the Operations in Laos attended the training in the system’s theories and practices. These farmers have been certified to train other farmers in the system’s practices ensuring vital agricultural skills are retained within the communities.

In 2020, the Company collectively purchased US\$632,369 of consumables (vegetables, drinking water, eggs, fruit and fish) from host community businesses for its Operations and the Frieda River Project.

### Income generated from small business initiatives (US\$)

Country	2018	2019	2020
Laos	1,084,351	746,119	628,714
Papua New Guinea	9,215	14,354	3,656
<b>Total (US\$)</b>	<b>1,093,566</b>	<b>760,473</b>	<b>632,369</b>

### Infrastructure provision

PanAust has made a significant contribution to improving infrastructure in Laos. This includes medical and educational facilities, other building infrastructure, road development and maintenance, and water and sanitation systems. The Company delivers infrastructure projects (as much as possible) in partnership with governments and host communities.



Under this 'community-constructed infrastructure' model, PanAust procures the materials for projects. Host community members, where appropriate, and with supervision from local authorities and Company representatives, complete the projects themselves.

In 2020, infrastructure improvements included the beginning of the construction of a 1.9 kilometres (km) concrete road through Nam Mo (see opposite for more detail), the pre-construction phase for the cable bridge at Nam Ou, and contributions to the construction of a gravity fed water system at Nam Sao.

#### Access to financial services

The Company has helped 12 communities establish microfinance schemes through the Village Savings and Credit Funds (VS&CF). The Funds empower communities, in particular women, through enterprise development and other benefits that accrue from saving for the future.

The VS&CFs provide access to savings and loan facilities that are not otherwise available in rural areas.

Members can access loans to support a variety of small scale income-generating activities and to cover household expenditure such as education and healthcare. Village-level management committees provide oversight of the Funds and are supervised by a District Supervisory Committee, which is headed by the Lao Women's Union.

PanAust has been working with local villages and districts to pursue a more sustainable long-term structure for the Funds. After a period of oversight, PanAust has handed responsibility for the management of the VS&CFs to the relevant villages and districts.



## Construction begins on the Nam Mo concrete road

Since PanAust's operations commenced in Laos, the Company has made a significant contribution to improving infrastructure in country.

PanAust is a heavy user of the road network in Laos to transport goods and services to and from its sites. In recognition of this, the Company pays particular importance to the development, ongoing maintenance and improvement of roads in Laos. Highlighting this commitment, in 2020 the Company began constructing a concrete road between the Nam Mo village and the Nam Mo secondary school.

Made possible through the Company's Community Development Fund (CDF) program, the construction is being supervised by the Phu Kham Infrastructure and Road Maintenance team and is estimated to cost over US\$1 million. The 1.9 km long, 6 metre-wide road will provide additional long-term benefits, including better linkages to different parts of Xaisomboun Province for those residing in Nam Mo.

The concrete road is scheduled to be completed in the second half of 2021.

The Phu Bia Mining Infrastructure and Road Maintenance team laying concrete for the Nam Mo road



## Closure preparedness and messaging

Closure planning is an integral part of strategic and life of mine planning for PanAust. While mine closure for the existing Lao Operations has been extended to the end of 2023, it is recognised as good practice to establish early dialogue with stakeholders and to align operational commitments with post-closure outcomes during the life of the Operations. The Company acknowledges the need to ensure that communities close to its Operations are supported to build capacity and skills to plan for, and manage, post-closure issues and capitalise on any commercial opportunities.

In 2019, the Company facilitated market access in Vientiane and other provinces focused on produce type and quality, managing supply and demand and capitalising on opportunities to sell as a group. With the emergence of COVID-19, a limited amount of direct contact work was possible with the host communities. Planning and implementation of a number of post closure livelihood initiatives however continued.

Where possible, meetings were held at the village district and provincial level to discuss the extension of the mine life to the end of 2023 and what impact this would have on host communities and more specifically post closure livelihood activities. A Sustainable Livelihoods team was established within Phu Bia Mining to help facilitate these discussions. The focus of this department is to take carriage the SLP implemented in 2018.

Mr Oudomxay Thammavong (centre) and Mr Khamheng Chanthavong (right) from the Nam Mo Agriculture Centre visit the pineapple farm of Mr Jackwaxiong and his wife (left) in Thong Khoun





A section of the concrete road constructed at Nam Mo as part of CDF and closure activities in 2020 (see page 61)

## Artisanal and small scale mining

PanAust recognises that artisanal and small scale mining (ASM) is a source of income for many communities worldwide. Income generated from ASM flows to other economic sectors within the communities and can positively contribute to poverty reduction and economic development.

While in many jurisdictions ASM may be considered traditional, informal or even illegal, the Company recognises the importance of engaging with communities and stakeholders involved in ASM within the boundaries of its Operations and projects.

PanAust engages early with the host communities and stakeholders to understand their concerns and issues with regard to ASM. This approach is consistent with the IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts.

ASM activity is present within the Company's MEPA in Laos at some of the regional exploration prospects and near the Phu Kham Operation – but not within its operational boundaries. There are ASM activities within the Frieda River Project area and also within the Company's exploration tenements in Myanmar.

In 2020, ASM activity was identified at the Nam Ve exploration prospect in Laos. ASM activities inside the Company's MEPA have declined with the proliferation of the Company's community development programs that have provided an alternative, sustainable livelihood. An ASM Standard and an ASM Guideline provide a framework to understand, manage – and where applicable – prevent or accommodate ASM activities with the potential to impact the Company's operations and/or reputation.

For the Frieda River Project, there are four villages which participate in ASM activities in the proposed footprint area. These four villages, or the ASM sites, are not located within the SML area for the Project. The Company continues to work with the host communities to understand the extent of ASM and how it might interact with the Project going forwards.

In 2019, the Company engaged a consultant to undertake a pilot program for an in situ value assessment of the alluvial gold deposits within the Frieda River Project area. The pilot program, using methods similar to ASM miners including pitting, dredging and panning, was undertaken in the second half of the year. The results of the program were used to design a full in situ value assessment program, the results of which will enable informed discussions with the communities about how best to use the resource. The full assessment program was deferred in 2020 due to COVID-19 related travel restrictions. The Company aims to recommence studies once travel restrictions ease.

In Myanmar, the Company sponsored an ASM/ large scale mining (LSM) workshop in 2019. Held in Monywa – the capital of Sagaing Region where the Company's exploration tenements are located – the workshop focused on establishing a program to maintain good relationships between ASM and LSM stakeholders. The program was placed on hold in 2020 because of COVID-19 related travel restrictions.



## Environmental performance

Respect for the environment is a core Company Value and is at the forefront of business strategy, decision-making and day-to-day operations.

(Left to right) Environment Manager, Gerard Bradley; TSF Construction Supervisor, Ha Yang; and Loss Prevention Trainer, Sueyang Hnianou, discussing the application of hydroseeding material downstream of the Ban Houayxai Gold-Silver Operation TSF



From exploration to development, throughout operations and into mine closure, PanAust endeavours to limit its impact on the natural environment. It does this by complying with host country legal requirements and/or international standards (when local standards are either lower and/or silent on a material environmental issue) through the effective management of mine waste, efficient use of resources, progressive rehabilitation of land and the maintenance of ecosystem services<sup>1</sup>.

Planning for the management of environmental issues at the pre-development stage is the cornerstone of PanAust's success with regard to its environmental performance.

The Company's approach to environmental management firstly requires an understanding of baseline environmental conditions, followed by the identification of project-specific risks and impacts, then finally the implementation of controls in conjunction with monitoring and measurement of performance.

Baseline studies, environmental and social impact assessments (ESIAs), external audits and an international panel of experts for tailings management are used in conjunction with internal risk management processes to understand PanAust's environmental risk profile.

Environmental risks are managed through PanAust's Environmental Management System which includes sustainability standards, procedures and management and monitoring plans for each site. Progress against management and monitoring plans is assessed at regular intervals. For key material issues, external audits and/or detailed reviews of performances are undertaken (for example, for tailings and waste rock management).

The Company recognises that an environmentally aware workforce is integral to achieving high standards and continual improvement. Each year, PanAust delivers environmental awareness training programs. This includes inductions to all employees and contractors working at its Operations in Laos and at the Frieda River Project site.

PanAust encourages the reporting of all environmental incidents as it reinforces a risk-aware culture and ensures that even minor issues are investigated and appropriately addressed. Incidents are recorded in PanAust's electronic reporting and corrective action event management system, InControl Software (INX). The use of INX allows for trends to be identified to assist in avoiding repeat occurrences where possible. In 2020, PanAust reported no significant environmental incidents, complaints, spills, penalties, fines or non-monetary sanctions for any such legal non-compliance.

Also in 2020, PanAust engaged independent experts (Wellhope Design Consulting Limited and Tetra Tech Coffey) to review the Environmental Impact Statement (EIS) associated with the 2018 Frieda River Project feasibility study. The EIS is currently subject to public and independent peer review by the Conservation and Environment Protection Authority (CEPA) of Papua New Guinea.

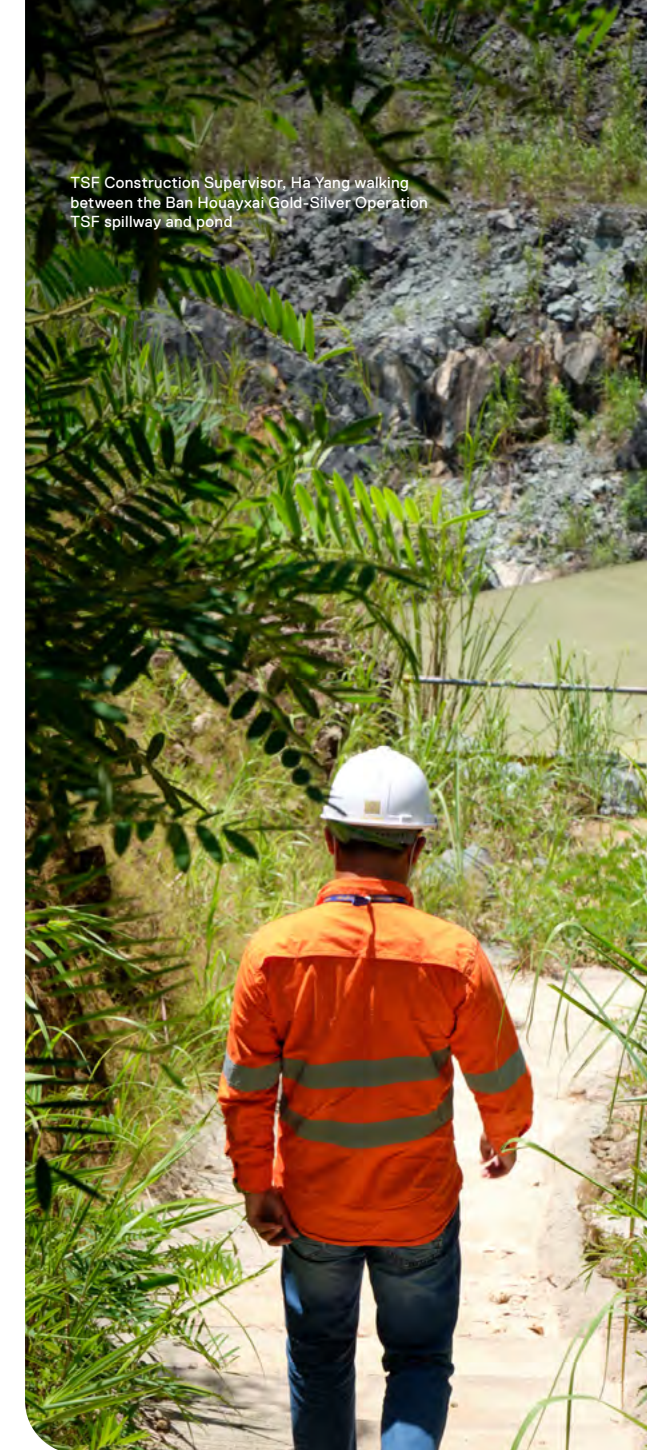
PanAust requested, and was granted, two extensions of the public review period of the EIS. The review period was extended to allow adequate time for the completion of this process due to the impact of the COVID-19 pandemic and the restriction of the movement of people. The Company is working with the Government of Papua New Guinea to ensure all legislative requirements during the permitting phase of the Project are followed.

The Project EIS is available on the Frieda River website: [www.friedariver.com/eis](http://www.friedariver.com/eis).

#### PanAust's materiality process identified the environmental performance focus areas for 2020 as:

- › Water management
- › Tailings and waste rock management
- › Cyanide management
- › Land rehabilitation and closure
- › Energy and carbon management
- › Dust and noise emissions

TSF Construction Supervisor, Ha Yang walking between the Ban Houayxai Gold-Silver Operation TSF spillway and pond



<sup>1</sup> Ecosystem services are the benefits people, including businesses, derive from ecosystems. They can be grouped into four broad categories: provisioning, such as the production of food and water; regulating, such as the control of climate and disease; supporting, such as nutrient cycles and crop pollination; and cultural, such as spiritual and recreational benefits.



## Water management

PanAust recognises that water resources need to be managed responsibly to meet operational requirements – including water for processing ore – while limiting adverse impacts on receiving environments and communities. To this end, PanAust manages water related risk through internal risk management processes.



Local boats moored at the Nam Ve port on the Nam Ngum 2 reservoir where the site-based workforce board the speed boats to transit between the Phu Kham and Ban Houayxai Operations

At the Phu Kham and Ban Houayxai Operations, mine water run-off challenges stem from the location of the sites (steep mountainous terrain in a tropical climate with distinct wet and dry seasons). The Phu Kham and Ban Houayxai Operations are not located in areas of water stress (all human and ecological demands for water are sufficiently met).

Water balance models are in place at the Phu Kham and Ban Houayxai Operations. The models are supported by water management and monitoring programs and incorporate water consumption and run-off and groundwater inputs to the open-pits and tailings storage facilities (TSFs) to predict water discharge volumes. Models also account for high sulphur tailings and waste rock that must remain under a cover of water or encapsulated in clay-lined cells to prevent the generation of acid rock drainage (ARD). At each Operation the majority of water entering the TSF is rainfall run-off from the upper catchments, with a small volume of treated water coming from site processing activities and (at Phu Kham) from pit dewatering. The controlled discharge from each Operation's TSF is closely and regularly monitored by the Company's Environment team together with Government of Laos' Environmental Monitoring Unit (EMU) officials. Results are assessed against World Bank, IFC and Lao ambient water-quality guidelines as well as background water quality conditions.

While PanAust's Operations use a significant amount of water, considerable effort is placed on effective resource management. At Phu Kham, approximately 95 per cent of the water used is recycled. The fresh water used at Phu Kham is drawn from the nearby Nam Mo River and is used predominantly for specialised cooling systems and equipment for the process plant. Water used for domestic purposes is extracted from a combination of water bores and surface water supplies.



The Phu Kham open-pit and TSF have been designed with clean water diversion drains to minimise the capture of rainfall run-off. Water management aims to divert as much clean water run-off as possible and maximise recycling to limit fresh water consumption and discharge volumes. Given the amount of annual rainfall, there is a net positive water balance and excess water is discharged as necessary in a controlled manner throughout the year. In 2020, controlled wet season discharge from the Phu Kham TSF occurred between May and November in accordance with internal permitting specifications. The Government of Laos is notified when discharge events occur during this time and receives discharge volume and monitoring reports from its EMU officials. All discharges were compliant with relevant water quality guidelines.

Ban Houayxai's TSF is located a significant distance from the Operation's processing plant. This geographical constraint limits the amount of water recycling that can occur. Water reuse is therefore maximised within the processing plant area.

The Ban Houayxai TSF is a continuous discharge facility. Exceedances of total suspended solids (TSS) in the facility's discharge occurred during the 2020 wet season. The exceedances do not appear to be related to the tailings discharge into the TSF as the visible TSS disappear when the TSF discharge water enters the Nam Ngum 2 reservoir. The Company is undertaking work to understand the mechanism driving the fluctuations in TSS exceedances.

PanAust is working with local government officials to establish site-specific guidelines for TSS discharge from the Ban Houayxai TSF, including the proposed movement of the discharge compliance point.

## Water withdrawal and discharge Phu Kham and Ban Houayxai Operations

### Water usage and recycling summary (2018–2020) (megalitres)<sup>1</sup>

	2018	2019	2020
Fresh water domestic use	601	720	806
Fresh water to process	8,696	8,766	7,857
Total water used in process	60,419	60,577	38,260
Recycled water to process	51,723	51,810	30,403
Compliant water discharged <sup>2</sup>	66,452	6,298 <sup>3</sup>	65,394
Percentage of recycled water	86	86	79

### Water withdrawal by source Phu Kham, Ban Houayxai and total Phu Bia Mining 2020 (megalitres)

Indicator	Phu Kham	Ban Houayxai	Total
Fresh surface water <sup>4</sup>	6,933	6,933	13,866
Other surface water <sup>5</sup>	30,403	0	30,403
Total surface water <sup>6</sup>	37,336	6,933	44,269
Fresh ground water	161	148	309
Other ground water	0	0	0
Total ground water <sup>7</sup>	161	148	309
Total water withdrawal	37,496	7,081	44,577

### Water discharge Phu Kham, Ban Houayxai and total Phu Bia Mining 2020 (megalitres)

Indicator	Phu Kham	Ban Houayxai	Phu Bia Mining total
Water discharge by destination	Surface water	11,352	54,042
	Ground water	0	0
	Total water discharge	11,352	54,042
Water discharge by fresh or other	Fresh water <sup>8</sup>	0	54,042
	Other water <sup>9</sup>	11,352	0
Water discharge by treatment	No treatment	0	46,930
	Sewerage treatment plant	66	132 <sup>10</sup>
	Manganese treatment ponds	2,139	N/A
	Lime dosing	32,610	N/A
	Cyanide destruction	N/A	5,626

<sup>1</sup> Measured by water meters or other estimation techniques.

<sup>2</sup> Discharge water from the Phu Kham and Ban Houayxai TSFs.

<sup>3</sup> Discharge water in 2019 was significantly lower than other years due to a combination of low rainfall and a major raise of the Ban Houayxai TSF embankment wall and spillway.

<sup>4</sup> Water with concentration of total dissolved solids (TDS) equal to or below 1,000 milligrams (mg) per litre (L).

<sup>5</sup> Water with concentration of TDS above 1,000mg/L.

<sup>6</sup> Water that occurs naturally on the Earth's surface in ice sheets, ice caps, glaciers, icebergs, bogs, ponds, lakes, rivers and streams.

<sup>7</sup> Water that is being held in, and can be recovered from, an underground formation.

<sup>8</sup> Water with concentration of total dissolved solids (TDS) equal to or below 1,000mg/L.

<sup>9</sup> Water with concentration of TDS above 1,000mg/L.

<sup>10</sup> Ban Houayxai sewerage treatment plant discharge also includes all process plant runoff water.



The Phu Kham Copper-Gold Operation  
tailings storage facility

## Tailings and waste rock management

Tailings and waste rock management continues to be the most significant short- and long-term environmental risk for PanAust. The quantity of tailings material, its mineral composition and fine sediment nature and the requirement for long-term stable TSFs necessitates robust tailings management strategies.



The management of waste rock to prevent ARD is comprehensive due to the potential for ARD to induce acidity and dissolved metals into water which can be harmful for receiving environments. To effectively manage these risks, detailed planning and designs are required before mine development. Further comprehensive governance during operations is crucial to ensure environmental impacts are equal to, or better than, international standards. Operational governance also promotes beneficial post-mining land use and reduces post-closure liability.

### Tailings

PanAust operates two purpose-built TSFs, one for each of its Operations in Laos. Each is designed and constructed to international standards and guidelines (including the Australian National Committee on Large Dams, ANCOLD) and considers an integrated life of mine and closure management strategy. The Phu Kham TSF contains waste rock and tailings. The Ban Houayxai TSF is used to store tailings with waste rock placed in separate engineered waste rock dumps.

TSFs require comprehensive management and governance processes throughout the life of each facility. PanAust has a well-established stewardship program for its TSFs in Laos which includes the following:

- › **PanAust senior management commitment:** A commitment from the MD and CEO to ensure appropriate governance processes are in place and construction and operating procedures for the facilities are consistently adhered to.
- › **Tailings Independent Review Panel (TIRP):** The TIRP directly reports to the Board of Directors via the MD and CEO on material risks to the facilities. The TIRP consists of up to three industry-leading tailings, geotechnical and water specialists. Each year, the TIRP review process includes physical inspections of the Phu Kham and Ban Houayxai TSFs and an evaluation of the monitoring and measurement systems. In 2020, due to COVID-19 related travel restrictions, the TIRP review of both TSF operations was carried out remotely using documentation and information on the facilities including photographs, videos and drone footage. The Panel reports its findings to the MD and CEO and PanAust's Tailings Review Committee. Action plans are developed and a follow-up audit is completed ahead of each wet season to confirm progress (see page 41).

- › **Tailings Review Committee:** The Committee reports directly to the Board of Directors via the MD and CEO and consists of the PanAust MD and CEO, Phu Bia Mining Managing Director, PanAust General Manager Technical Services, Phu Bia Mining General Manager Operations, PanAust Group Risk Superintendent, PanAust Principal Tailings Engineer and the Phu Bia Mining Tailings and Geotechnical Manager. Each year the Committee oversees the implementation of actions related to material risks, facilitates the TIRP review and oversees the actions and updates in the relevant risk register. During 2020, a gap analysis was completed on the draft requirements of the Global Industry Standard on Tailings Management (GISTM) and current stewardship activities undertaken by the Company for the management of their tailings facilities. The findings of this analysis were presented to the Committee for consideration. Further work around tailings dam governance and the GISTM will continue in 2021.
- › **Overview and quality assurance:** The Principal Tailings Engineer, based in the Brisbane head office, and the Engineer of Record provide overview and quality assurance of design and construction activities.
- › **Annual dam safety inspections:** In 2020, an independent intermediate dam safety inspection in accordance with the ANCOLD guidelines on Dam Safety Management and Tailings Dams was completed for both facilities by Australian-based consultancy ATC Williams. Due to COVID-19 travel restrictions, the inspections were completed remotely via the review documentation, photographs and videos including drone footage of both facilities.

- › **Risk-based review:** A risk-based review of both facilities is completed monthly by the site teams.
- › **Engineer of Record:** The Engineer of Record is responsible for the design, construction, operation and performance monitoring of PanAust's TSFs.
- › **Quarterly inspections:** Completed by PanAust's Principal Tailings Engineer remotely in the 2020 June and September quarters due to COVID-19 travel-related restrictions. Knight Piesold (Australia) officially assumed the role of Engineer of Record on 17 December 2019. They undertook physical site inspections during the March and December quarters in 2020 and TSF Quantitative Performance Objective (QPO) Reports were completed remotely in 2020 due to COVID-19 travel restrictions.
- › **Inspections and monitoring:** Daily, weekly and monthly inspections and monitoring by trained PanAust employees reporting to a site-based Tailings and Geotechnical Manager. Monitoring of seepage and embankment deformation is undertaken as well as inspections and audit programs to ensure that the equipment is operational and working appropriately.
- › **Detailed dam design:** A detailed dam design for each construction period is completed by the Design Engineer, Knight Piesold.
- › **On-site laboratory:** The quality control and assurance of TSF construction materials is completed at the on-site laboratory at each Operation.
- › **Mine closure:** Mine closure designs for both facilities progressed during 2020. This took the form of an updated design for the closure spillway at Phu Kham and commencement of excavation of the Ban Houayxai closure spillway at the end of 2020.



### Waste rock

PanAust’s approach to Acid Rock Drainage (ARD) management is consistent with current initiatives being adopted as leading-practice across the global mining industry.

PanAust actively manages the potential for ARD from the early stages of mine planning through to operations and closure. At Phu Kham and Ban Houayxai, the management strategy to address the potential for ARD commenced well before mining operations began, with sulphur content being an integral component of ore-body modelling and mine planning processes. The sulphur content assessment facilitated detailed characterisation of rock types based on their acid-forming potential which informed the development of an integrated ARD life of mine plan. A similar approach has been applied to the hydroelectric facility proposed for the Frieda River Project.

The ARD Management Plans provide strategies for the identification, control and monitoring of mine waste and are regularly updated with any relevant changes in sulphur modelling. The Phu Kham and Ban Houayxai ARD Management Plans classifies waste rock and how it is managed in accordance with the following categories:

- Blue waste rock:** lithologies with non-acid forming potential and acid-neutralising capacity; can be deposited in designated site locations.
- Green waste rock:** non-acid forming; can be deposited in designated site locations and can be used for other purposes.
- Amber waste rock:** low acid-forming potential; suitable for placement within the catchment of the TSF and within purpose built, clay-lined cells to prevent oxidation.
- Red waste rock:** high acid-forming potential; deposited within the catchment of the TSF and is progressively submerged below a water cover and within purpose-built, clay-lined cells to prevent oxidation and reduce the potential for ARD.

During 2020, the waste rock classifications for both Operations were reviewed and refined and a new testing methodology introduced to increase the reliability of internal laboratory test results following a quality assurance and quality control program.

High-level governance of ARD management is provided through PanAust’s ARD Review Committee which is comprised of PanAust and external ARD specialists. The Committee ensures that management strategies effectively limit the potential for ARD generation during construction and placement of waste and that such strategies will continue to be effective post mine closure.

Consultant reviews of ARD management at Phu Kham and Ban Houayxai confirm that the programs are comprehensive and consistent with methods described in the Global Acid Rock Drainage Guide (which is sponsored by the International Network for Acid Prevention with the support of the Global Alliance, 2014).

At Phu Kham and Ban Houayxai, mineralised waste and low grade ore stockpiles are managed through internal water management systems. Rehabilitation of these stockpiles is accounted for in mine closure plans.

Mining operations at Phu Kham and Ban Houayxai use a mobile fleet management system (Jigsaw) that incorporates real time global positioning technology to ensure that specific waste rock types are directed to the correct destination on a truck-by-truck basis.

	2018	2019	2020
Waste rock (total)	41,738,296	40,073,294	37,572,385
Red waste rock	18,442,999	11,723,712	11,554,503
Tailings	23,838,265	23,054,451	16,249,721

Waste rock being loaded into a 777D truck inside the Ban Houayxai Gold-Silver Operation open-pit





The Ban Houayxai Gold-Silver process plant at night

## Cyanide management

The Ban Houayxai Operation uses cyanide in the processing circuit to extract gold and silver from mined ore. PanAust recognises that the use of cyanide for precious metal extraction is a sensitive issue and that stringent operating and environmental controls are necessary to ensure the safe transportation, use and disposal of cyanide and cyanide-related products.

PanAust is a signatory to the International Cyanide Management Code (the Cyanide Code) and maintains certification of its Ban Houayxai Operation to the Code. The Cyanide Code is administered by the International Cyanide Management Institute (ICMI) and is a voluntary program for the responsible manufacture, transport, use and disposal of cyanide used in gold production.

The Ban Houayxai Operation's design was prefaced on achieving Cyanide Code compliance and included robust process control systems, bunding, leak detection systems and tertiary emergency ponds. The most notable feature is the plant's detoxification circuit which destroys cyanide in the tailings slurry. Ban Houayxai tailings contain less than the IFC's Environmental, Health and Safety Guidelines (2007) safe levels of cyanide for solutions discharged into the environment.

Ban Houayxai received pre-operational certification to the Cyanide Code in 2012 and operational certification in March 2013. It was recertified in 2016, and again in 2019 with the next recertification due in 2022. PanAust conducts annual internal gap audits at Ban Houayxai to ensure the Operation remains compliant to the Cyanide Code. PanAust's compliance to the Cyanide Code is testament to how effective planning during design can mitigate environmental issues during operations. The Company's certification audit reports and signatory status are available on the ICMI website, [www.cyanidecode.org/sig-directory-type/panaust-limited-australia](http://www.cyanidecode.org/sig-directory-type/panaust-limited-australia).

PanAust recognises that the ongoing management of cyanide risks is dependent upon a trained, competent, cyanide-aware workforce. The site-based Emergency Response Team has been trained to respond to cyanide incidents and an emergency containment pond has the capacity to capture any accidental spill. Cyanide transportation activities are undertaken by a Cyanide Code-certified transporter and the site regularly hosts cyanide awareness sessions with communities along Ban Houayxai's transport and concentrate haulage route.



Environment Manager, Gerard Bradley checking the quality and diversity of the progressive rehabilitation on Waste Rock Dump 1 at the Ban Houayxai Gold-Silver Operation

## Land rehabilitation and closure

The progressive rehabilitation of land and appropriate closure planning is essential for ensuring that end land-use meets stakeholder expectations and environmental requirements.



The Phu Kham and Ban Houayxai Operations progressively rehabilitate land to minimise ongoing environmental impacts and facilitate achieving post-mining land use objectives.

Both Operations have nurseries to propagate native seedlings used in rehabilitation. This is supplemented by hand seeding with the assistance of locally sourced casual labourers and mechanised hydro-seeding across large areas to both facilitate revegetation and promote surface stability.

Annual programs to rehabilitate disturbed land are incorporated into each site’s operating plan. PanAust recognises that, in most cases, achieving full rehabilitation to meet stakeholder agreed completion criteria may take several years and that monitoring and maintenance form an important component of successful rehabilitation at both Operations.

**Land disturbance and rehabilitation (hectares) Phu Kham and Ban Houayxai Operations**

	2018	2019	2020
Land disturbed and not rehabilitated	1,457	1,519	1,507
Land disturbed in reporting year	77	43	97
Land rehabilitated in reporting year	16	55	17
<b>Total land disturbed and not yet rehabilitated</b>	<b>1,519</b>	<b>1,507</b>	<b>1,586</b>

PanAust considers closure planning at all stages of a project’s lifecycle. Where significant risks are posed by ARD, PanAust’s Operations are designed to manage long-term closure risks.

PanAust aims to align with the International Council on Mining and Metals (ICMM) principles and follow ICMM good international industry practices relevant to climate change. Best practice in the principles note the effects of climate change must be considered from a risk and design perspective for the closure design of mine infrastructure.

In 2020, an external consultant Earth Systems, a multidisciplinary environmental and social consulting firm, conducted a closure climate change study for the Phu Kham and Ban Houayxai Operations, which included reviewing the climate monitoring data from both Operations. The study objective was to develop a strategy to ensure that climate change is adequately considered in closure designs for operational sites, including developing an updated climate data sequence. For more information, see the case study on page 74.

The Company has in place a Closure Standard which sets out the closure requirements for bothPhu Kham and Ban Houayxai Operations. Preliminary Mine Closure Plans are also in place for the both Operations and for the Gold Heap Leach (GMO) decommissioned facility, each of which is supported by financial provisioning. The Preliminary Mine Closure Plans are planned to be updated and reissued to the Government of Laos in 2021.

Internal oversight of the closure planning process and stakeholder engagement strategy is provided by the Company’s life of mine and closure committee. The Committee is supplemented by technical consultants as required.

A rehabilitation trial using acacia and eucalyptus tree seedlings donated to the Company by the Burapha Agroforestry was established on the Red Road Waste Dump at the Phu Kham Operation in 2019 and is still continuing. The trial is investigating whether run-of-mine waste material (primary conglomerate) can be used in lieu of topsoil to support the growth of potentially value-adding timber products. It was met with success and supports alternative land use options for mine closure.

In 2020, work continued at GMO to improve surface water management of the heap leach pad at the decommissioned facility. A constructed wetland downstream of the heap leach pad passively treats stormwater and leach pad run-off from the site. Regular monitoring of the downstream river system continues on an annual basis and confirms that water discharged from the site throughout the year remains within ambient water quality limits. Should this trend continue, the Company will look to bypass the wetland system to directly discharge water into the Nam Gnone River, enabling the wetland to be rehabilitated in line with agreed end user requirements.

At Ban Houayxai, the Government of Laos Closure Committee has not accepted the waste rock dump being rehabilitated with elephant grass as this promotes a monoculture environment reducing the biodiversity of the area and poses an increased risk from fire during the dry season. A program was undertaken during 2020 to remove the previously rehabilitated monoculture zones of the waste rock dump and replace those zones with a native species mix.





(Left to right) Loss Prevention Trainer, Sueyang Hnianou; TSF Construction Supervisor, Ha Yang; and Environment Manager, Gerard Bradley inspecting the slurry pipeline at the Ban Houayxai Gold-Silver Operation TSF pond

## ENVIRONMENTAL PERFORMANCE CASE STUDY:

### Climate change as basis for closure design

#### Planning ahead for the best possible outcome

PanAust's approach to mine closure hinges on strategies that will ensure the Company is proud of its former operational sites which exemplify responsible mine closure. This vision is embodied in objectives that aim to achieve acceptable outcomes for closure and rehabilitation.

In 2020, a study for closure designs of operational infrastructure (i.e. TSF, spillway, open-pit) was developed for the Phu Kham and Ban Houayxai Operations. For the first time, this study included an assessment of future climatic conditions.

The 2020 design work on the red road waste dump (RRWD) at Phu Kham highlighted future climate under climate change conditions as a necessary consideration for closure designs. Long-term synthetic climate data sets for the 2100 to 2200 timeframe under specific climate change scenarios were developed for both Operations using a detailed climate sequence.

The Company assessed how future climatic conditions may differ from those experienced at present. For example, consideration was given to what the likely annual rainfall and short term rainfall patterns would be between the years 2100 and 2200. Operational infrastructure was designed using this data to ensure it would meet any future closure governance requirements and manage additional maintenance far into the future.

Moving forward, PanAust will use long-term climate data to assess infrastructure remaining at the Operations at closure for suitability under long-term future climate conditions.

The inclusion of this data to the Company's closure planning and design process highlights how PanAust is working to ensure it remains at the forefront of closure practices to provide the best possible outcomes for environments and surrounding communities at closure and beyond.





The operational spillway at the Ban Houayxai Gold-Silver Operation; the next iteration of this landform will be designed for closure and will consider potential impacts possible future climatic conditions may have



A concentrate haulage convoy returning from the Phu Kham Copper-Gold Operation to the Company's logistics hub at Ban Thouay

## Energy and carbon management

Fuel and electricity are significant cost drivers for the PanAust business. Energy efficiency is considered in the design phase for PanAust's Operations and projects. Ongoing campaigns to minimise the consumption of energy and materials to lower operating costs are consistent with the intent of the ICMM Principles for Climate Change Design.





PanAust assesses and manages carbon and climate change risks through internal and risk management processes and systems. It recognises water risks associated with extreme weather events at its Operations and project sites.

The Company has changed its preferred port for shipment of its copper concentrate produced at its Phu Kham Operation from the Sriracha port in Thailand to the Hon La port in Vietnam. The reduced distance has effectively reduced the Company's emissions associated with the burning of fossil fuel.

As a substantial consumer of energy, particularly in Laos, PanAust identifies annual efficiency programs to reduce energy requirements. Each year, teams across the Group identify and submit for selection and implementation, improvement projects to reduce energy and/or materials consumed. These projects are tracked to identify annual cost and greenhouse savings and associated payback periods.

During 2020, the mobile maintenance teams identified a number of projects to reduce diesel consumption of the mining fleet including fuel additives and hydraulic oil projects. These fuel efficiency projects however were delayed due to operating restrictions placed on the sites due to the COVID-19 pandemic. The Company will re-evaluate these projects as operations normalise.

In 2020, the mining team at Ban Houayxai identified a small efficiency project that would optimise the mining sequence by using 777D trucks in the mining fleet to backhaul material between the open-pit, waste dumps and stockpiles. The project reduced truck cycles and use by 1,134 hours, saving 75,639 litres of diesel, reducing the Company's scope 1 and scope 3 greenhouse gas emissions by 217 and 49 tonnes respectively.

#### Energy consumption (terajoules)

Material	2018	2019	2020
Diesel	2,811.9	2,628.2	2,413.7
Electricity	2,279.8	2,075.3	1,678.8
Petrol	1.6	0.9	0.8
LPG	7.3	8.1	7.5

#### Energy intensity (kilojoules/tonne ore and waste mined)<sup>1</sup>

Material	2018	2019	2020
Diesel intensity (kJ/t)	41,490	42,551	46,739
Electricity intensity (kJ/t)	33,640	33,599	32,509
Total ore and waste mined (Kt)	67,772	61,766	51,642

#### Greenhouse gas emissions (tCO<sub>2</sub>-e)<sup>2</sup>

Greenhouse gas emission scope	2018	2019	2020
Scope 1 (direct greenhouse gas emissions) <sup>3</sup>	216,697 <sup>4</sup>	215,221	203,224
Scope 2 (indirect greenhouse gas emissions from the generation of purchased electricity) <sup>3</sup>	55,657	50,681	41,094
Scope 3 (greenhouse gas emissions from the broader project lifecycle including materials used, travel and transport)	235,567 <sup>4</sup>	206,885	175,972

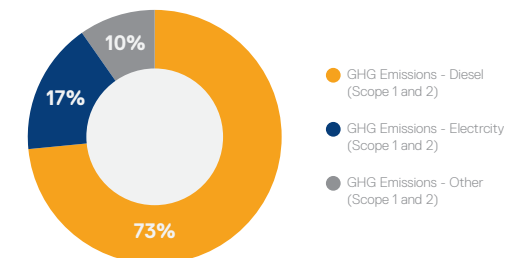
#### Greenhouse gas emission intensity

Greenhouse gas emissions intensity	2018	2019	2020
Phu Kham Operation (tCO <sub>2</sub> -e/t copper)	2.53	2.90	3.71
Ban Houayxai Operation (tCO <sub>2</sub> -e/oz gold and silver)	0.08	0.08	0.09

PanAust's Phu Kham and Ban Houayxai Operations' maintenance facilities retained their Caterpillar 5-star contamination control rating for the fifth and sixth years respectively. Phu Kham and Ban Houayxai are two of only three operations worldwide that have the maximum 5-star rating (as advised by Caterpillar). The work that is in place to achieve and maintain this rating is significant for greenhouse gas emissions savings, particularly in terms of reduced materials consumption. Specifically, the efforts involved in achieving the maximum 5-star accreditation have led to reduced oil consumption and extended replacement/rebuild life of the mining fleet at both Phu Kham and Ban Houayxai.

Diesel consumption for transport activities accounts for the largest component of PanAust's energy and greenhouse gas inventory. PanAust recognises that drivers play an essential role in delivering fuel efficient transport. The Company continues to implement their 'smooth drive' fuel efficiency program, however due to COVID-19 disruptions, implementation was only partial, with driver recognition/rewards for fuel efficiency not given in 2020.

#### 2020 Scope 1 and Scope 2 greenhouse gas emissions by energy source



<sup>1</sup> includes Phu Kham, Ban Houayxai, Frieda River, exploration activities and offices.

<sup>2</sup> Measured according to the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol.

<sup>3</sup> Emissions include Phu Kham, Ban Houayxai, Frieda River, exploration activities and offices.

<sup>4</sup> The number reported in the 2018 Business Review and Sustainability Report was incorrect due to an error in calculation which has been corrected in this Report.

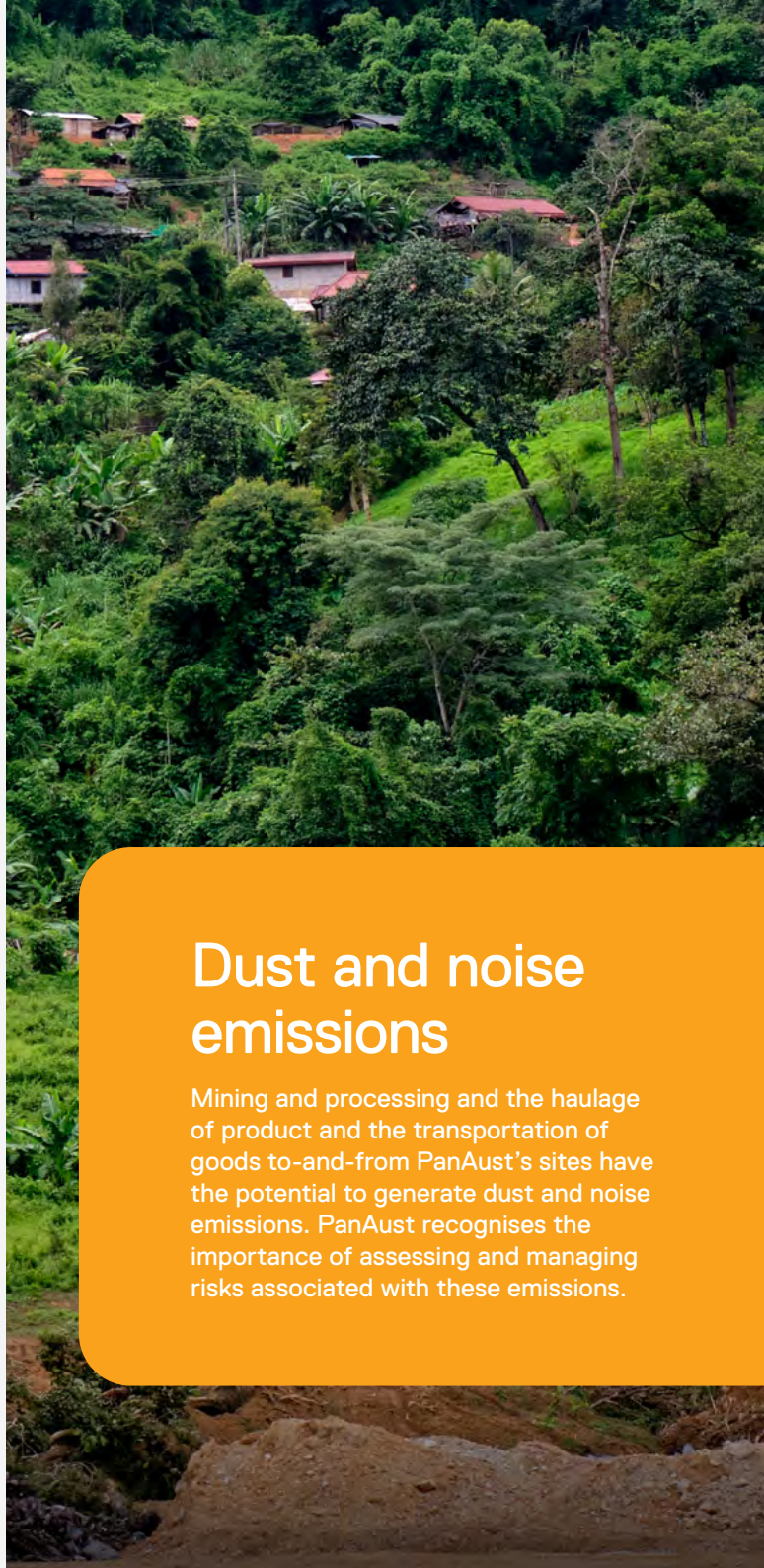


Ambient air quality monitoring is regularly conducted in communities adjacent to the Phu Kham Operations and haulage route.



The Phu Kham Copper-Gold Operation mining fleet working near the Nam Gnone village





## Dust and noise emissions

Mining and processing and the haulage of product and the transportation of goods to-and-from PanAust's sites have the potential to generate dust and noise emissions. PanAust recognises the importance of assessing and managing risks associated with these emissions.

Dust and noise emissions are the most common environmental concern for those living in the communities adjacent to the Phu Kham Operation. This is due to the close proximity of the work associated with the construction of waste rock dumps and the Haul Road Anomaly open-pit. While similar monitoring is carried out at the Ban Houayxai Operation, dust and noise are less of a concern for those living in the host communities given the Operation's comparatively remote location.

### Dust

The main issue of concern relates to the visual impacts of dust particulates on vegetation and community infrastructure. Dust at the Phu Kham Operation is generated from activities on haul roads, the ore stockpile, blasting, drilling and excavating and ore dumping at the primary crusher.

The Company works to limit dust generation by minimising land disturbance, carrying out road watering, using filters and dust suppression equipment on drills and conveyor systems and transporting product in covered vehicles.

An internal dust management forum and Dust Management Plan are in place at Phu Kham. A Trigger Action Response Plan (TARP) is used to manage acute dust emission issues.

Ambient air quality monitoring is regularly conducted in communities adjacent to the Phu Kham Operations and haulage route. Personal exposure monitoring is also conducted in the workplace.

A dust monitoring report is provided on a weekly basis during the wet season and daily during the dry season to the mining team to ensure adequate haul road watering is achieved in areas close to the Nam Gnone village which borders the Operation. Quarterly presentations of dust monitoring results are also provided to local authorities and village communities in order to provide opportunities for feedback including grievance issues related to dust management at Phu Kham. There were no major air quality issues involving dust management in 2020.

In 2020, ambient and operation-related air quality levels were monitored on a daily basis using four strategically located dust monitoring stations at Nam Mo, Nam Gnone, the Phu Kham process plant and the Phu Kham accommodation camp. Together with two additional monitoring stations targeting the waste dump development areas close to Nam Gnone village, the comprehensive coverage provided valuable data which was fed into dust mitigation strategies at the Phu Kham Operation. Despite the controls being implemented, elevated dust levels remain an issue during the dry season influenced largely by regional burning across Southeast Asia.

### Noise

The main issue of concern with noise relates to potential nighttime impacts (including disrupted sleep and related fatigue) for those living in the villages close to the Operation. Noise at the Phu Kham Operation is primarily generated from mining equipment operating near the villages, trucks reversing and the noise from the primary crusher.

The Company has worked to reduce the impact of noise on the villages adjacent to the new waste rock dump construction areas by limiting operations in these areas to daytime only. Additionally, in 2020 the Company deployed four noise monitoring stations adjacent to the Nam Gnone village and close to the north-west dump development area. Data collected from these monitoring stations is reviewed by the site Environment team and is reported to the Mining team weekly to support the continual improvement of noise abatement strategies. A presentation of noise monitoring results is delivered to local authorities and village communities on a quarterly basis and provides an opportunity for direct stakeholder feedback and collective/personal grievances to be addressed in relation to noise management.



# Health and Safety performance

The Company's Zero Harm philosophy considers all workplace incidents and injuries preventable.

Paramedic, Mr Souvanxay Lertsapho performing COVID-19 temperature tests at the Ban Houayxai Gold-Silver Operation medical clinic



Achieving business objectives, while keeping the workforce and host communities safe, is essential to PanAust's success and is closely aligned with the Company's Values. This approach was applied to the Company's response to the COVID-19 pandemic and actions PanAust took to safeguard the health, safety and wellbeing of its workforce and surrounding communities (see page 47).

Through visible leadership, plans and actions, PanAust's leaders are committed to promote a culture of Zero Harm. Visible safety leadership is driven at all levels of the organisation. Recognising that a risk-aware workforce is fundamental to achieving strong safety outcomes, behavioural-based safety programs contribute to the Company's remuneration incentives and drive continual safety improvement.

Lead-indicator programs prioritise visible safety leadership and include: hazard identifications, job safety observations (JSOs) in the field, workplace inspections, planned task observations (PTOs) and safety training.

PanAust assesses and manages health and safety risks across the Group through its Safety Management System (SMS), which is consistent with ISO 45001:2018. The SMS is based on a continual improvement model of: policy and standard setting; planning; implementation and operation; checking and corrective actions; and management review of performance against the model. The SMS is applicable across the PanAust Group, including all sites and locations where PanAust has operational control. PanAust attempts to influence the health and safety outcomes in locations and for activities outside its operational control (such as the inbound and outbound supply chain) through contractual arrangements and the Company's contractor health, safety and environment (HSE) standards.

#### Number<sup>1</sup> and percentage of employees and contractors covered by a Safety Management System (SMS)

Site/Country	Number of employees	Number of contractors	Percentage (%) of employees and contractors
Brisbane head office/Australia	38	14	100
Phu Kham Copper-Gold Operation/Laos	1,534	736	100
Ban Houayxai Gold-Silver Operation/Laos	454	315	100
Commercial, Logistics, External Affairs and Business Support functions/Laos/Vietnam/Thailand	728	48	100
Exploration/Laos	36	186	100
Exploration/Myanmar	26	58	100
Frieda River Project/Papua New Guinea	16	2	100
<b>Total</b>	<b>2,832</b>	<b>1,359</b>	<b>100</b>

In 2020, a review of location-specific (Asia) safety standards commenced with the objective of elevating them to PanAust Group-level safety standards covering material safety risks.

PanAust has seven Cardinal Rules which are clear and simple instructions with which all PanAust employees must comply at all times. Cardinal Rules focus on high-risk activities within the mining industry that have historically caused serious harm to people and are applicable to PanAust. One additional location-specific Cardinal Rule applies specifically to work undertaken by employees in Laos and relates to the potential presence of unexploded ordnances (UXO). Given the serious consequences for breaching the rules, the rules must be unambiguous and all employees trained to fully understand their importance and have the necessary competencies to be able to fully comply.

#### PanAust's Cardinal Rules include:

- 1) Never operate any mobile equipment while under the influence of alcohol or drugs.
- 2) Never operate any mobile equipment unless specifically licensed, trained or properly authorised to do so.
- 3) Never maintain any equipment before first rendering it safe by isolation, unless specifically licensed, trained or properly authorised to do otherwise.
- 4) Never remove, modify or bypass a Safety Protection Danger Tag or Lock unless properly authorised to do so.
- 5) Never work at heights greater than 1.8 metres unless either the work area is fully guarded to prevent falls or appropriate personal fall protection is worn.
- 6) Never enter a designated confined space unless properly authorised to do so.
- 7) Never instruct another person to breach a Cardinal Rule.

#### Supplementary Cardinal Rule

- 8) Never handle any item of UXO or related military objects unless qualified/licensed to do so.

The Company requires all employees, contractors and visitors to undergo a safety induction prior to entering a PanAust-controlled site. The induction may include general safety and workplace-specific inductions as well as hazard identification and Take 5 training. The Company also facilitates a number of mandatory core safety training programs and specialist training for high-risk activities. Training needs are assessed based on location and a person's role and are provided free of charge to employees and the contractor workforce. Contractor organisations are charged a nominal fee for non-mandatory training and specialist high-risk work training.

<sup>1</sup> Average numbers for 2020.



**The general induction for Phu Bia Mining employees and contractors includes the following courses:**

Employee mandatory	Contractor mandatory	Employee and contractor location and role-specific
General safety induction	General safety inductions	Open-pit induction
Cardinal Safety Rules	Cardinal Safety Rules	Processing induction
Workplace behaviour	Workplace behaviour	Mobile workshop induction
Fatigue management	Fatigue management	Material Safety Data Sheets
Human rights	Human Rights	Job safety analysis
Hazard identification	Hazard identification	Job safety observation
Take 5	Take 5	Working under a permit to work
New employee induction		Radiation safety awareness
Introduction to Lao/Falang culture		Dangerous goods storage
Fair treatment policy		Safe manual handling
PanAust Vision and Values		Workplace inspections
The PanAust Way		Excavation permit procedure
Geotechnical hazard awareness		Geotechnical hazard awareness
Geotechnical landslide risk management		Geotechnical landslide risk management
		Basic risk management
		Incident investigation
		Exploration safety induction

In Laos, the general induction training is designed and delivered internally by the Phu Bia Mining training department, while other specialist courses are delivered by the relevant specific departments such as the Fire and Emergency Services department for fire extinguisher training, or by the High Risk Work Training department for specialist High Risk Work licences. All training is available in both Lao and English.

Basic hazard identification training empowers and encourages the workforce to identify hazards as part of their normal work activities, fix them immediately (if it is within their ability to do so), or report the hazard/s to their supervisor on a 'hazard identification form'. Other processes for identifying hazards associated with a person's work include the Take 5 (also included as part of the general induction), job safety analysis development, workplace inspections, job safety observation and planned task observation processes.

Identified hazards are assessed using the PanAust risk management framework and controls are implemented to either eliminate the hazard in the first instance or to reduce the level of risk associated with the hazard. The hierarchy of controls is used as the basis of determining the most appropriate and effective controls to be implemented. Hazard identification is enshrined in the Company's Zero Harm philosophy outlined in The PanAust Way. The PanAust Way highlights no one is to compromise their own or someone else's safety by carrying out an activity they believe is unsafe. Furthermore, people are empowered to stop real or suspected unsafe activities and are also protected against threats or reprisals for reporting legitimate safety concerns.

In 2020, 26,291 hours of safety inductions and HSE training were completed at PanAust's Operations in Laos.

The Company's Group-level Incident Reporting and Classification Procedure is aligned with the MCA's guidelines for tracking and reporting health and safety statistics. The procedure outlines the process for the notification, investigation and reporting of incidents. PanAust uses the Incident Cause Analysis Method (ICAM) to determine the root cause of significant incidents (that is, actual or potential controlled incidents and/or actual or potential influenced incidents) and determine where corrective actions need to be undertaken to prevent reoccurrences of the incident.

The investigation and management of significant incidents is overseen by senior managers with operational oversight. Their role is to ensure that the Group-wide implications of significant incidents and any emerging safety concerns are given appropriate consideration and action as part of the investigation.

This approach ensures that findings and recommendations are shared across the Group where similar activities occur, or where different activities with similar risks occur. These findings are not limited to the incident and affected people only.

In 2019, PanAust convened a Safety Summit with senior management, managers and superintendents from both corporate and operational areas, high-potential employees, contractors and invited peer companies and safety specialists. Formerly the Company's 'Annual Risk and Sustainability Workshop', the Summit progresses safety leadership programs and identifies emerging issues and safety hot spots for the business. A Group action plan for the coming year in the areas of risk (including safety) and sustainability was formulated during the Summit and outcomes were fed into PanAust's corporate business strategy. The Safety Summit was postponed in 2020 due to the COVID-19 pandemic; however the Company plans to reconvene the Summit once travel restrictions associated with the COVID-19 pandemic ease.

Other forums in place across the Group for communicating health and safety issues with the workforce include: quarterly contractor workshops, monthly health and safety committee meetings and weekly toolbox meetings (convened by and held with site-based operational teams).

During 2020, individual departments held 1,904 toolbox meetings and 28 health and safety committee meetings with their workforce. Seven contracting companies attended the Company's one quarterly contractor workshop. The remaining quarterly workshops were not held due to COVID-19 related travel restrictions.



PanAust's Operations in Laos and the Frieda River Project site are in remote areas where there is limited government infrastructure or systems to deal with complicated or severe medical emergencies. The Company's ability to manage medical emergencies is therefore vital to ensuring the health and safety of its employees and host communities. The Phu Kham, Ban Houayxai Operations and the Frieda River Project site are equipped with medical (including trauma management) clinics staffed by doctors and/or paramedics.

The trauma management clinics also undertake a range of occupational health services for the site-based workforce including health related education, and provide emergency services to the host communities.

Each Operation in Laos has dedicated Occupational Health and Hygiene teams. Services carried out by these teams include pre-employment medical checks, functional assessments, drug and alcohol testing, medical consultations for non-work related health issues and education programs relating to alcohol and drug awareness, paediatric health, family planning and good personal hygiene practices. In 2020, some monitoring programs and services were halted due to potential COVID-19 exposure risks. Instead, the teams focused on COVID-19 control surveillance programs. These activities included the development and implementation of a site deep cleaning guideline, the cleaning and disinfection guideline, testing of the reticulated water systems for E. coli and coliforms, monthly food safety audits, an adenosine triphosphate (ATP) surface testing program, and assisting the medical teams with PCR tests for the site-based workforce (including contractors). For further information about the Company's health and safety response to COVID-19, see page 84).

Each Operation has in place an emergency response plan and trained, dedicated professional fire and emergency services teams and equipment. Teams complete training modules equivalent to an Australian Certificate III in Mines Emergency Response and Rescue.

PanAust has a well-established crisis management structure to deal with the strategic response and management of Company-wide impacts during a crisis. The system is tested regularly to ensure that team members are proficient in their roles. For more information about the Company's crisis management frameworks, see page 39.

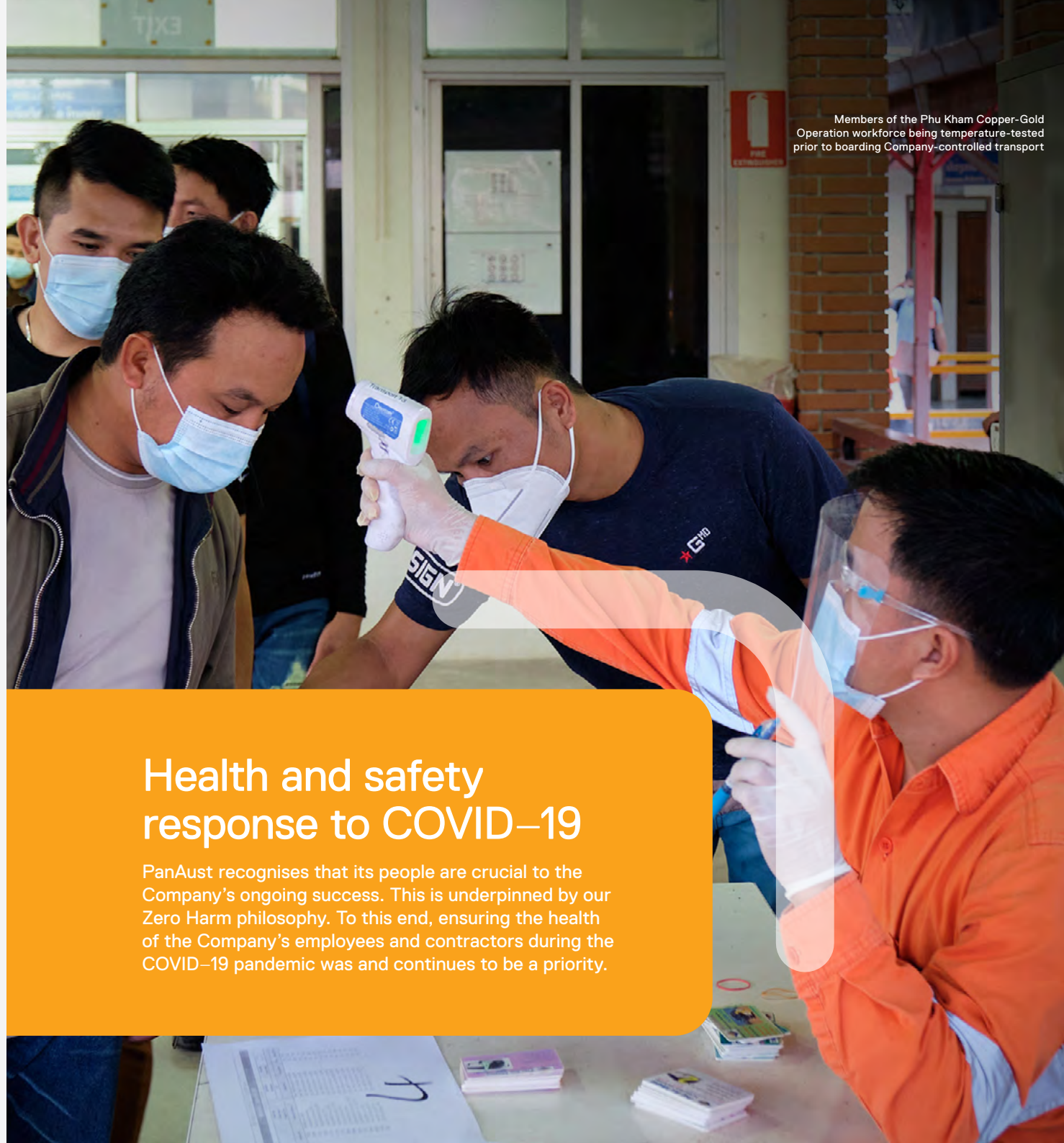
**PanAust's materiality process identified the health and safety performance focus areas for 2020 as:**

- > Health and safety response to COVID-19
- > Safety performance
- > Contractor management
- > Fitness for work
- > Security management

The Phu Kham Copper-Gold Operation Loss Prevention team performing alcohol breath-testing on an employee







Members of the Phu Kham Copper-Gold Operation workforce being temperature-tested prior to boarding Company-controlled transport

## Health and safety response to COVID-19

PanAust recognises that its people are crucial to the Company's ongoing success. This is underpinned by our Zero Harm philosophy. To this end, ensuring the health of the Company's employees and contractors during the COVID-19 pandemic was and continues to be a priority.

### Response to the COVID-19 pandemic

In 2020, the COVID-19 pandemic emerged as a significant health and safety issue across the PanAust Group.

The Company understood it needed to act fast to protect the health, safety and wellbeing of its people.

With reports of a new highly contagious respiratory virus emerging in January, the Company enacted an SIMT to be managed from Laos to monitor potential threats and disruptions to supply lines. A CMT managed from Brisbane was enacted after the World Health Organization (WHO) declared the virus – now COVID-19 – a global pandemic on 11 March. For more information about the Company's crisis management process and framework, see page 39.

### Immediate controls enacted on the outset of the pandemic

The Company understood direct health impacts from the COVID-19 pandemic posed a significant risk to the business. A review of current medical supplies and equipment on site was undertaken and a program initiated to increase the stock of critical supplies such as P2 and N95 face masks, disposable gowns and gloves, disinfection supplies and other critical medications. Additionally, the Operations in Laos increased their non-perishable food and water stores from 7 to 21 days should supply lines be impacted.

The Company suspended all non-essential international business travel and, where possible, allowed people to work from home. A Chief Medical Advisor from Fullerton Health was engaged to provide specialist medical support and advice on demand to the Company's site medical teams in Laos and Papua New Guinea.



The Chief Medical Advisor also undertook a review of the current medical capacity of the Lao Operations to determine if there were any gaps in staffing, equipment, supplies or processes that needed to be rectified to help manage COVID-19.

The following actions were implemented by the Company in Laos to improve monitoring and the protection of the Company's workforce across its Operations in Laos:

- › A Trigger Action Response Plan (TARP) was developed for the management of COVID-19 which identified specific actions to be implemented as soon as certain triggers were met. The trigger levels were monitored daily.
- › Increased awareness and communication campaigns on the importance of maintaining good personal hygiene (washing and sanitising hands regularly) including posters at high traffic locations.
- › Extra hand sanitiser stations were placed around sites at key locations.
- › An awareness video presentation played across TVs at site and voice track played on the Company's site FM radio station.
- › Increased monitoring of hand washing stations outside of mess areas to ensure everyone thoroughly washed their hands prior to entry.
- › The site-based workforce was advised they must travel to and from Company-controlled sites on Company-controlled transportation (i.e. not on public transport).
- › The site-based workforce had their temperature checked prior to boarding Company-controlled transportation at the Don Dok transit facility.
  - Anyone who registered an elevated temperature was not allowed to travel to site and protocols were put in place to manage anyone with a fever or other COVID-19 symptoms.
- › Medical teams boarded Company-controlled transportation at Don Dok to advise the incoming site-based workforce of the COVID-19 site protocols that must be adhered to.
  - A brochure outlining these protocols in Lao and English was later developed and distributed to those who boarded Company-controlled transportation at Don Dok.
  - Personal hygiene packs that included a face mask and hand sanitiser were distributed to the site-based workforce as they boarded Company-controlled transportation.
- › Concentrate and contractor delivery truck drivers were temperature-tested before departing the Company's logistics hub at Ban Thouay in addition to being breathalysed for a blood alcohol reading.
  - All additional incoming traffic to Phu Kham (suppliers, light vehicles and local hire employees arriving on motorbikes) were temperature tested at the gate by the Security and Loss Prevention team.
- › Local hire employees and visitors arriving at the Phu Kham Operation by private vehicle were temperature tested before entry.
- › The Lao People's Army (LPA) were temperature tested at site induction sessions.
- › The incoming Ban Houayxai workforce was temperature tested on arrival at the front gate.
- › Descriptions of COVID-19 symptoms were widely communicated in both English and Lao.
- › The site-based workforce was encouraged to report to the site Medical teams if they believed they had any COVID-19 symptoms.
  - Site medical teams implemented facilities to isolate people showing potential symptoms of COVID-19 infection.

- › Additional deep cleaning of the sites, including increased frequency of cleaning and disinfecting frequently touched surfaces.
- › The Occupational Health and Hygiene teams monitored the effectiveness of site cleaning by monitoring the ATP levels of surfaces after they were cleaned.
- › Mandating social distancing measures, advising the site-based workforce to remain at least 1.5 metres from others at all times, this included:
  - Spacing seating in wet mess areas.
  - Building temporary accommodation on-site to decrease the population density in accommodation.
  - Barriers were installed between workstations to mitigate potential aerosol transmission.
  - Reducing the capacity on Company-controlled transportation and introduction of allocated seating.
- › The introduction of mandatory face masks to be worn in situations where people could not maintain adequate social distance between each other, inside vehicles and in meeting rooms.

#### Positive cases, site lockdown and the temporary cessation of site activities

Despite the pre-emptive safety measures taken to protect its workforce and safeguard the Operations, an employee at the Phu Kham Operation tested positive for COVID-19 in early April. A second employee on rest and recreation break tested positive shortly after. As an immediate measure, 44 close contacts of the first patient were placed into 14 days of quarantine at the Phu Kham camp. All close contacts returned negative PCR tests for COVID-19 for the duration of their quarantine period.

Following the positive cases, Phu Kham and Ban Houayxai were placed into lockdown and all site-based activities ceased. Lockdown required the site-based workforce to remain at site in Company accommodation, including all Lao-national staff who would normally return to the surrounding villages each day.

During the mandated lockdown and ceasing of site-based activities, the Company developed a plan to safely resume Operations that would protect the health, safety and wellbeing of its site-based workforce and the local and broader Lao community.

The plan involved creating a secure 'bubble' of the two sites through requiring the site-based workforce to complete 14 days in a Company-controlled quarantine facility and return negative COVID-19 PCR tests prior to boarding Company-controlled transport to site. This included the workforce who reside in the surrounding villages and were required to remain on site for the duration of their rosters.

All deliveries to and from site were also completed in secure areas with no contact between the site-based workforce and external drivers, and all inbound and outbound deliveries were cleaned and disinfected.

Rosters changed to facilitate these COVID-19 protocols for the site-based workforce to an eight week cycle, encompassing two weeks in Company-controlled quarantine, four weeks on site and two weeks rest and recreation. For more information about the changes to site rosters, see page 103.

The Government of Laos National Taskforce for COVID-19 Prevention and Control endorsed the Company's plan and approved the staged restart of site-based activities at Phu Kham and Ban Houayxai from 28 April.





### Relaxation of COVID-19 controls and return to normal rosters

On 1 September 2020 the Company relaxed a number of COVID-19 site controls. This was done in light of supporting data that Laos was in a low-risk phase of the pandemic and the country had only recorded 21 cases of COVID-19 since March. Measures relaxed included:

- › The site-based workforce were permitted to use public transport to reach Company transit facilities.
- › The workforce residing in villages close to the Operations were permitted to return to their homes following the completion of their shift each day, removing the requirement for them to stay on site for the duration of their roster. These people were also permitted to use personal transportation to travel to and from sites.
- › Contractors were permitted to use their personal transportation to and from sites.
- › Lao contractor delivery vehicles were allowed to return to Company-controlled sites and the independent delivery of goods from Lao suppliers resumed.
- › PCR testing of all the incoming site-based workforce ceased.

The relaxation of controls did not impact the Company's strict compliance with all the Lao National Taskforce Committee for COVID-19 Prevention and Control's decrees, protocols and guidance. The Company also advised it reserved the right to reinstate any or all of the controls and/or additional measures in line with, and above and beyond those defined by, the Taskforce if the COVID-19 situation in Laos escalated.

A number of controls remained in place to ensure the health, safety and wellbeing of the workforce and to safeguard the Operations from the impacts of COVID-19. These included:

- › Regular hand washing and sanitising of hands and social distancing protocols.
- › Additional Company-administered PCR testing of the site-based workforce returning to Laos from all international locations following their Government of Laos mandated quarantine and COVID-19 testing.
- › The incoming site-based workforce were temperature tested at the Don Dok transit facility and/or at designated transportation stops outside of Vientiane before boarding Company-controlled transportation.
- › Temperature testing of the incoming workforce continued at all Company-controlled sites.
- › People were only permitted to travel to the Company's Operations for the purposes of essential work.
- › Thailand-based contractors who crossed land borders into Laos were advised that they had to adhere to all Government of Laos mandated controls while in country.

PanAust continues to monitor the COVID-19 situation in Laos and will reinstate added controls if the risk of possible infection for its workforce poses an unacceptable threat. This approach ensures the Company remains agile to respond to emerging and evolving situations as they happen.

All measures the Company has and continues to implement to protect its workforce were endorsed and strongly supported by its shareholder. GRHG shares the Company's overarching ethos that the health, safety and wellbeing of its workforce is, and will continue to remain, the Company's top priority.

At other PanAust sites outside of Laos including the head office in Brisbane, the Frieda River Project and the exploration sites in Myanmar, a wide range of COVID-19 control measures were also implemented to protect the health, safety and wellbeing of its workforce. These included:

- › Increased awareness and communication about COVID-19, its symptoms and controls to prevent possible infection (i.e. hand washing, social distancing and wearing a face mask).
- › Suspension of all non-essential international business travel.
- › Repatriation of employees and their dependants to their countries of origin (for more information, see page 103).
- › Working from home arrangements where possible.



PanAust continues to monitor the COVID-19 situation in Laos and will reinstate added controls if the risk of possible infection for its workforce poses an unacceptable threat. This approach ensures the Company remains agile to respond to emerging and evolving situations as they happen.

Phu Bia Mining Chief Medical Officer, Dr Bounhome Phouvang (seated) with members of the Company's Medical team at the Phu Kham Copper-Gold Operation site clinic







## Safety performance

PanAust's total recordable injury frequency rate (TRIFR) and lost time injury frequency rate (LTIFR) continue to be significantly better than industry<sup>1</sup> averages.

A Trades Trainee apprentice adding their personal danger lock to an isolation point prior to commencing energised work

In 2020, PanAust achieved an LTIFR of 0.07 (based on one million hours worked) from one lost time injury. This rate is 81 per cent lower than the Company's target of 0.37. PanAust's 2020 TRIFR of 0.43 was 72 per cent lower than the annual target of 1.54. As at 31 December 2020, the Myanmar Exploration team achieved almost two years total recordable injury free, while the Frieda River Project achieved a record three years total recordable injury free.

Despite these figures, in August 2020, an exploration geologist contractor from Myanmar tragically lost their life working at a PanAust exploration prospect in Laos. The contractor was separated from their team while walking back to their vehicle at the end of the day. Upon their return to the vehicle, the team discovered the contractor to be missing. The incident was escalated to management and an SIMT was formed. Local authorities and air assets were deployed to assist with a search for the missing contractor. The search located their body the following day in heavy vegetation. The cause of death was unable to be determined.

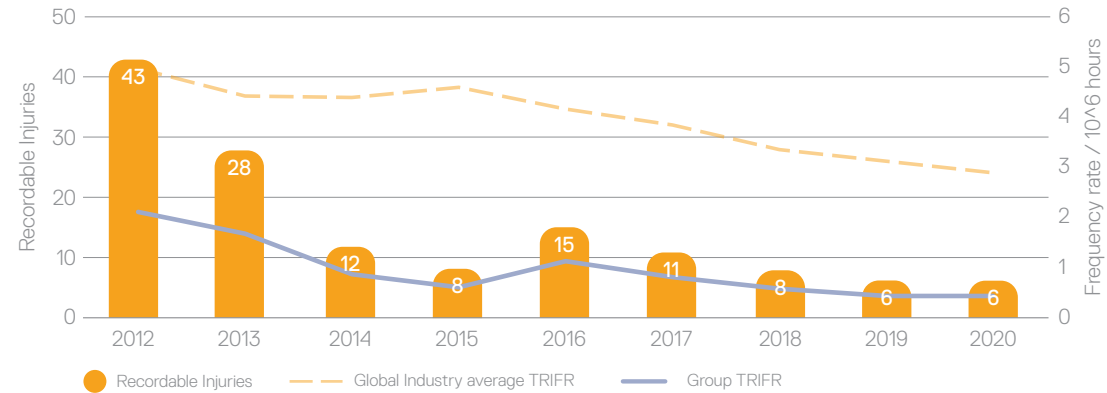
PanAust provided financial support to the contractor's family and helped repatriate their body to Myanmar. Counselling support for their family and employees impacted by the incident was also offered.

A comprehensive investigation was undertaken to determine the cause of the incident and to develop an action plan to prevent similar incidents from occurring.

<sup>1</sup> Industry average referenced from the ICMM safety data 2020



### PanAust's 2020 safety performance compared with industry averages<sup>1</sup>



Except for a slight increase in 2016, PanAust's TRIFR has been steadily decreasing since 2008. This is particularly commendable given the Company's increasing risk profile including entry into Papua New Guinea and Myanmar and extending the in-house management of concentrate haulage into Vietnam.

### PanAust Group reportable incidents (controlled work sites)<sup>2</sup>

	2018	2019	2020
<b>Employees</b>			
Working hours	10,313,042	10,240,104	10,813,663
Fatalities	0	0	0
Fatal Injury Frequency Rate (FIFR)	0.00	0.00	0.00
High consequence work-related injuries <sup>3</sup>	1	0	0
High Consequence Frequency Rate (HCFR)	0.10	0.00	0.00
Total recordable injuries	5	2	3
TRIFR	0.48	0.20	0.28
Lost time injuries	1	1	0
LTIFR	0.10	0.10	0.00
Occupational illness	0	0	0

	2018	2019	2020
<b>Contractors</b>			
Working hours	3,069,184	3,731,580	3,260,767
Fatalities	0	0	1
FIFR	0.00	0.00	0.31
High consequence work-related injuries	0	0	1
HCFR	0.00	0.00	0.31
Total recordable injuries	3	4	3
TRIFR	0.98	1.07	0.92
Lost time injuries	0	2	1
LTIFR	0.00	0.54	0.31
Occupational illness	0	0	0

	2018	2019	2020
<b>Combined employees and contractors</b>			
Working hours	13,382,226	13,971,684	14,074,430
Fatalities	0	0	1
FIFR	0.00	0.00	0.07
High consequence work-related injuries	1	0	1
HCFR	0.07	0.00	0.07
Total recordable injuries	8	6	6
TRIFR	0.60	0.43	0.43
Lost time injuries	1	3	1
LTIFR	0.07	0.21	0.07
Occupational illness	0	0	0

<sup>1</sup> Industry average referenced from the ICMM safety data 2020

<sup>2</sup> Controlled work sites include data for both employee and contractor injuries and work-hours; injury rates are the number of injuries for every million hours worked for the year

<sup>3</sup> High consequence work-related injuries are injuries where the worker, cannot, does not or is not expected to recover to their pre-injury health status within six months



PanAust's reportable statistics include controlled activities and cover all work-related activities where PanAust can set safety, health, environmental and community standards and directly supervise and enforce their application. The statistics include contractors working at PanAust-controlled sites. All activities on PanAust owned or leased sites, regardless of who is carrying out the works, is classified as controlled activities.

Categories that are tracked, but do not form part of externally reported statistics, include influenced and monitored activities where PanAust does not have direct control over the activities but recognises these activities carry a high risk of exposure to injuries or incidents to PanAust employees, contractors or to members of the public. For influenced activities, PanAust requires contractors to have sufficient management structures and systems in place and to directly supervise the works as outlined in contract conditions and contractor management activities. PanAust also provides additional oversight of influenced activities through regular audits and site visits.

Monitored activities are similar to influenced activities but the level of risk exposure to injuries or incidents to PanAust, contractors or members of the public is lower. Monitored activities require contractors to have sufficient management structures and systems in place to directly supervise works as outlined in contractor conditions and contractor management activities, however the level of oversight and auditing by PanAust may be less frequent.

## Categories of control

### Controlled

- › All work conducted by employees, visitors, consultants, and contractors on an active PanAust-owned or leased site including Operations, private easement and exploration sites irrespective of whether PanAust or the contractor provides direct supervision of work activities (PanAust sets standards, has a high level of workplace visibility, provides oversight, and monitors outcomes).
- › All locations external to a PanAust-owned or leased site where PanAust employees directly supervise or conduct work.
- › Transport of the workforce on a public road is considered controlled where the work is performed by a PanAust employee or an appointed contractor on a private charter arrangement exclusively on PanAust's behalf.
- › All product transport via PanAust-operated and maintained vehicles.
- › Controlled incidents are reported internally as well as included in PanAust statistics.

### Influenced

- › Work conducted in either public or private locations, external to controlled sites, where PanAust influences the contractor's standards but requires the contractor to have sufficient management structures and systems in place to directly supervise the work to an agreed standard (outlined through the contract). The contractor's work at these sites is undertaken exclusively on PanAust's behalf.
- › A site where higher-risk exposure exists (either to PanAust or the public) and the reputational exposure is too great to consider the contractor as monitored.

- › A site that provides additional oversight through regular auditing and contract owner visibility in the workplace to ensure the work practices being implemented consistently address the nature of the risk the contractor creates for PanAust.
- › Haulage of PanAust product and public road maintenance performed by a third-party contractor on a dedicated contract for PanAust in the host country of operation.
- › Contractors (controlled and influenced) providing a private transport service to their own workforce (from a host community to a PanAust Operation or site).
- › Contractors transporting high-risk dangerous goods (in bulk) on PanAust's behalf.
- › Influenced incidents are reported internally as well as included in PanAust statistics.

### Monitored

- › Sites in public or private locations and external to controlled sites where PanAust monitors the contractor's performance but requires the contractor to have sufficient management structures and systems in place to directly supervise the work to an agreed standard with minimal contract owner presence.
- › Offsite work may only be designated as monitored where a lower reputational risk exposure exists.
- › Haulage of PanAust product external to the host country of operation.
- › Monitored incidents are reported internally but are not reported in PanAust statistics.

### Uncontrolled

- › Activities where PanAust has no influence (commercial public transport services) beyond the ability to select the provider based on performance.
- › Uncontrolled incidents are not reported in PanAust statistics.

In 2020, the most common work-related injuries for both employees and contractors were lacerations and cuts followed by sprains and strains. These injuries accounted for just over 60 per cent of all work-related injuries throughout the year.

The most common work-related hazards included light vehicle incidents, heavy vehicle incidents, isolation and lockout incidents and ground control incidents. This list has been compiled by reviewing the risk registers from across the Group for hazards with a high risk rating and from actual incidents where there was a potential for a high consequence injury to occur.

Apart from the COVID-19 global pandemic, the main occupational illness risk for employees and contractors is malaria. This is consistent with the site risk registers where infectious diseases such as dengue and malaria are identified as a risk to ill health. In 2020, there were no cases of occupational illness recorded across the Group. This can be attributed to actions undertaken in both Papua New Guinea and Laos to control vector sources. Actions included the removal of containers from around site to prevent accumulation of standing water, mosquito fogging of camp facilities, use of Permethrin-treated mosquito nets and laundering clothing on site with a Permethrin treatment.





Completing a Take 5 hazard identification prior to commencing a work activity at the Ban Houayxai Gold-Silver Operation crusher bini



A storeperson issuing drill rig components to a Phu Bia Mining contractor

## Contractor management

The Company works closely with local contractors with little to no mining experience to improve their safety culture.

This approach is not without challenges and contractor management continues to be a high risk exposure area. The death of a contractor in August (see page 88) highlights the need for the Company's continued vigilance in this area and continued focus on closing gaps in its contractor workforce's safety performance.

PanAust has a Group Contractor Management Standard that details health, safety and environmental requirements for contractors and PanAust contract owners. The Company works with contractors to help them meet the requirements of the Standard by providing templates and direct access to supporting documentation on the Company's intranet and file-sharing sites. PanAust's contractor expectations are reinforced through training for contract owners and superintendents on how to implement the Standard.

Contractors are subject to regular audits of their facilities and activities. These audits involve a review of contractor risk registers, training programs and site compliance to safety management systems. In 2020, 15 audits of contractor HSE awareness were conducted. Audits are scheduled for the year ahead to ensure proactive management of contractor performance. A key element of these audits is to ensure the participation of PanAust's contractor managers in order to consolidate their training and build stronger relationships with their contractors.



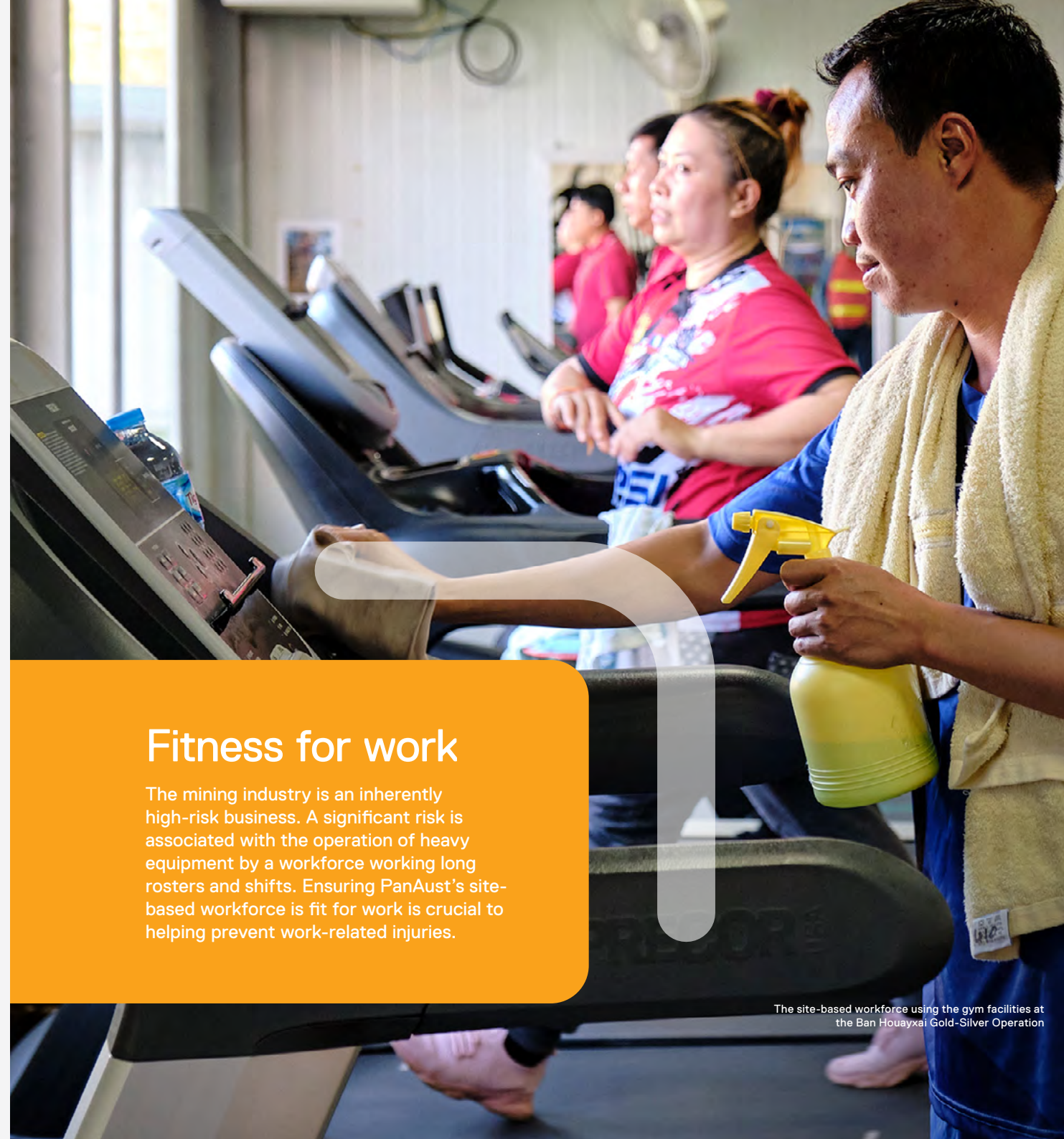
PanAust also supports Lao contractors by embedding maintenance and safety staff within larger long-term local contractor facilities that directly support the Operations. This approach has been in place for a number of years with encouraging outcomes. Contractors have improved their maintenance practices and safety performance and focused on completing quality positive performance indicators. Over the last three years, PanAust has also invested almost US\$500,000 into new workshops and upgrading contractor facilities located on PanAust sites.

In Laos, PanAust runs quarterly contractor safety workshops as a forum for constructive two-way dialogue with PanAust's contractors. These workshops help contractors to determine their position on the safety spectrum and identify ways to improve their organisational safety culture. The workshops also provide an opportunity for PanAust to better understand the issues impacting contractor safety performance and how the Company can help them manage and mitigate these issues. In 2020, only one contractor safety workshop was carried out in the March quarter due to COVID-19 related travel restrictions. The workshop was attended by representatives from seven different contractors. Feedback was positive, with many participants acknowledging its value to help implement safety improvements within their Lao-based workforce.

The trailer swapping process between Phu Bia Mining concentrate haulage fleet and Vietnamese haulage contractor at the Laos-Vietnam border (see page 23)







## Fitness for work

The mining industry is an inherently high-risk business. A significant risk is associated with the operation of heavy equipment by a workforce working long rosters and shifts. Ensuring PanAust's site-based workforce is fit for work is crucial to helping prevent work-related injuries.

The site-based workforce using the gym facilities at the Ban Houayxai Gold-Silver Operation

Being 'fit for work' means a person is physically and mentally able to carry out their work in a way that will not impact the safety of themselves or others. Fatigue, excessive alcohol use, drug use and unreported injuries or illnesses impact a person's fitness for work and pose risks to the safety of the workforce.

The workforce and stakeholders visiting the sites have an interest in how fitness for work is managed. Knowing the Company has a robust process in place gives them confidence that others around do not pose a threat to their safety. To help mitigate this risk, PanAust has in place the Group Safety Standard – Fitness for Work that outlines the minimum requirements to be able to work safely at PanAust sites and programs that support these requirements. Additionally, the Company has an Injury and Incident Free (IIF) program in Laos that covers fitness for work and illustrates how existing safety systems and tools are interlinked and when applied correctly, minimise the potential for harm to people and the business.

The Company has a strict drug and alcohol policy that every employee and contractor must follow. This includes zero tolerance for illegal drug use, a 0.00 blood alcohol content (BAC) at all operational and exploration sites and a random drug and alcohol testing program. There is a process in place for the declaration of prescription medications staff may be taking and ample ability for self-testing of BAC prior to arriving at the workplace. Despite these controls, in 2020, there were 19 positive drug tests from 5,440 tests and 21 breaches of the 0.00 BAC policy. The majority of these breaches were short-term contractors engaged to work during maintenance shutdowns of the processing plants. To help prevent these short-term contractors impacting the safety of themselves or others, targeted blanket drug and alcohol testing programs are implemented during scheduled maintenance shutdowns.



All injuries and illnesses must be reported to the Company's medical clinics regardless of whether the person was injured at work, in one of the camp locations or while a person is on break. The medical teams are then able to determine a person's ability to carry out their work duties in a safe manner. To encourage this reporting, the Company's has 24-hour medical clinics at its Operations in Laos and 24-hour access to medical support at its Frieda River Project site. Staff are encouraged to present at the clinics for free private consultations and treatment whenever they are feeling unwell. In 2020, there were 21,300 medical consultations in Laos and 325 medical consultations in Papua New Guinea.

Managing fatigue is a critical aspect of being fit for work. PanAust has in place comprehensive fatigue management systems that includes the Group Fatigue Management Standard that covers the following topics:

- fatigue risk assessments
- roster and work hour oversight
- work and workplace design
- travel and transport assessments
- accommodation, food and recreation facility assessments
- education and information provision to the workforce.

To help manage operator fatigue at its sites in Laos, in 2020, the Company completed the roll out of the Caterpillar Driver Safety System (DSS) across its 777D mine fleet at the Phu Kham and Ban Houayxai Operations. For further information, see the case study on page 96.



A Loss Prevention team member performing temperature and alcohol breath-testing as part of fitness for work checks



## HEALTH AND SAFETY PERFORMANCE CASE STUDY:

# Improving the management of driver fatigue

## PanAust's journey to reduce driver fatigue-related safety incidents and the roll out of the Caterpillar MineStar Detect Driver Safety System

Fatigue, in particular driver fatigue, is a serious safety concern for PanAust given its Operations work on a 24-hour cycle. Managing driver fatigue has been a journey for the Company. It began with the identification of the concern, the progressive execution of initiatives to combat fatigue, and the implementation of an automated driver fatigue detection system, the Caterpillar (CAT) MineStar Detect Driver Safety System (DSS).

### Identifying the issue

In 2014, management teams across the Group developed a plan to improve the safety performance at the Operations in Laos. Four years of safety incident data was audited to develop a baseline for improvement. The audit showed 48 vehicle-to-equipment or equipment-to-equipment contact (collision) events were recorded across the four years, an average of 12 incidents each year. An additional 38 equipment-to-environment or infrastructure contact events (approximately 9.5 per year) were recorded in the same period.

Further analysis of the collision events uncovered 30 per cent of the incidents were directly attributable to driver fatigue while an additional 10 per cent were the result of driver distraction (i.e. using a mobile phone).

While a fatigue management system was in place, the audit highlighted that drivers had become complacent and a review of the system was needed. A fatigue committee was formed in 2016 to help facilitate this review and embed initiatives that would help address the broader issue of fatigue in Laos. These initiatives included:

- › Identifying and establishing locations where concentrate haulage drivers could have frequent rest breaks.
- › Establishing break/rest rooms at the Phu Kham Operation.
- › Commissioning an independent review into the Company's fatigue systems, processes and infrastructure.
- › Improving operator accommodation on site, focusing on noise and light reduction strategies and reducing the number of drivers per room.
- › The establishment of a fatigue management function within the mine control rooms that prompted drivers to assess their fatigue and encourage them to confidentially advise the mine control room if they felt fatigued.
- › Holding a 'Logistics Safety Day', an awareness campaign to educate drivers' families about the dangers of fatigue and how they can help combat fatigue for the Company's drivers.
- › The expansion of the Company's highly successful 'Phu Kham FM' radio station to the Ban Houayxai Operation.

- › The assignment of room controllers for the Phu Kham mining fleet to manage and minimise disruptions to their sleep.
- › The revision of the fatigue management plan.
- › Roll out of roster changes that shortened the number of consecutive shifts worked before a 24-hour break, as well as the introduction of 15-minute fatigue breaks every two hours during night shifts.
- › The installation of cameras in the 777D mine fleet that recorded drivers, sending a live feed to the mine control room where they were being monitored for signs of fatigue.

These initiatives had a positive effect on the overall safety performance at the Operations. For example, by December 2016, the Phu Kham Operation's TRIFR decreased from 5 to 0.5 – including 10 months of TRIFR of 0.

Despite this overall improvement in safety metrics, there were limitations to the effectiveness of some initiatives given they relied on people monitoring drivers. It was clear an automated system to detect fatigue was required.

### Using technology to identify and manage driver fatigue-related incidents

In response to the continually high rates of driver fatigue, in 2017, the fatigue committee began to review and trial fatigue monitoring technologies. That year, it pushed forward with the trial of CAT Smartbands (a wristband that measured sleep quality and length) and the CAT DSS which was installed in five 777D mine fleet trucks at the Phu Kham Operation.

A non-intrusive, in-cab fatigue detection technology, the DSS automatically alerts a driver once it identifies a fatigue or distraction event through an in-cab vibration and/or alarm. The system uses an algorithm to identify a

fatigue event by measuring the time a driver's eyes are closed and monitoring a driver's head position and how long a driver's face could not be seen. Distraction events are measured by how long a driver looks away from the road. This data is sent to the CAT Fleet Monitoring Centre, a 24-hour facility focusing on fatigue monitoring and data analysis.

Also in 2018, the Company conducted a fatigue risk assessment in partnership with CAT. The assessment reviewed the data recorded during the DSS and the Smartband trial. The results were positive and in 2019, PanAust pushed forward with the full rollout of the DSS across its 777D mining fleet at the Phu Kham and Ban Houayxai Operations.

### The benefits of the system and the reduction in driver fatigue-related safety incidents

In the first six months after full implementation at Phu Kham, the Operation recorded a 41 per cent reduction in overall fatigue events and an 80 per cent reduction in drivers who needed to be relieved from work from due to fatigue.

One year since the full implementation of the DSS, in July 2020, DSS detected driver fatigue events had reduced by 62 per cent. Bolstered by these positive results, the Company approved the implementation of the DSS across its entire haulage fleet.

## The identification and significant improvement of driver fatigue-related safety incidents at PanAust is testament to its commitment to continuing to keep its workforce safe.



777D mining operators changing over at the  
Phu Kham Copper-Gold Operation go-line

Overall fatigue-related  
events reduced by

**41%**

Driver fatigue-related  
events reduced by

**62%**

Drivers needed to  
be relieved from  
work due to fatigue  
reduced by

**80%**



## Security management

PanAust is a member of the Voluntary Principles on Security and Human Rights (VPSHR) and has implemented clear guidance and procedures to manage the human rights aspects of security at its Operations and Projects.

Loss Prevention Officer, Mr Sengdeuan Tawamyxay checking security passes at the entrance to the Ban Houayxai Gold-Silver Operation

With the Company's ongoing presence in Laos, Papua New Guinea and Myanmar, PanAust's existing security processes, procedures and training will continue to be monitored for effectiveness and tailored to these jurisdictions.

PanAust has security staff assigned to its Operations in Laos. The Phu Kham and Ban Houayxai Operations are situated in Xaisomboun Province which was historically the location of insurgent activities, largely arising from remnants of the Indo-China conflicts of the 1970s. While now stable, legacies of conflict remain. At times, regional security incidents have occurred in close proximity to the Operations and around exploration activities. Periodically these incidents have resulted in temporary restrictions on operational and logistics activities.

Strict security protocols are established by the Company to pre-empt, and where required, respond to occasional regional security issues. The security protocols were reviewed and updated in 2020 to ensure their currency for the Operations in Laos in order to incorporate COVID-19 related impacts during remote escort activities. A proactive approach is taken to initiate these protocols early and to progressively restrict unnecessary remote work activities, workforce movements and operational activities based on proximity to operational areas and several risk factors. This is aimed at minimising the need for further response and/or the potential for conflict to impact the workforce.

**Strict security protocols are established by the Company to pre-empt, and where required, respond to occasional regional security issues.**



The Lao People's Army (LPA) is required by the Government of Laos to have a presence at PanAust's Operations in Laos. In 2020, approximately 228 LPA were assigned to Phu Kham and Ban Houayxai. The LPA's role is to support regional security external to PanAust's active working areas. They may also provide a presence alongside selected logistics routes and at Company exploration assets due to their criticality and/or vulnerability. This includes providing security escorts for remote work and along higher risk sections of the Company's transport and logistics route.

The Company works closely with the LPA through a Memorandum of Understanding (MoU) which outlines the Company's expected standard of behaviour and use of force expectations.

Prior to their deployment to the Company's sites and each time they are subsequently engaged, members of the LPA are required to complete a Company-provided induction program. The induction covers safety, the use of force as it relates to the laws of Laos, key components of the VPSHR underpinned by The PanAust Way, the Company's Values and other behavioural guidelines.

The Company's Loss Prevention team perform unarmed access control, static security and emergency response functions at its Phu Kham and Ban Houayxai Operations and at the Frieda River Project site. Loss Prevention staff and contractors are required to complete training covering the VPSHR and appropriate use of force. The entire Loss Prevention team attended this training in 2020.

In 2020, 707 LPA and Loss Prevention employees and contractors completed the VPSHR training through their induction program.

No significant security incidents affecting the PanAust workforce or Operations were recorded in 2020.

In 2020, security initiatives implemented in Laos included:

- › improved digital surveillance through the upgrade of analogue cameras to enhanced digital cameras
- › implementation of effective contact tracing mechanisms during the COVID-19 outbreaks in Laos
- › development of 'care and maintenance' security plans should the sites be required to be placed into care and maintenance due to COVID-19 site lockdowns and operational activities ceasing.

In 2020, the year-on-year decrease in security, trespass and theft incidents at Phu Kham and Ban Houayxai continued, with the Operations recording the lowest rate of incidents and incident severity in seven years.

In Papua New Guinea, private security contractors are used on an ad-hoc basis as required. All security companies used in Papua New Guinea are assessed for their ability to meet the PanAust requirements and commitments to the VPSHR. An MoU with the Royal Papua New Guinea Constabulary that addresses the Company's obligation to the VPSHR is in place.



A Loss Prevention team member completing a security search of a vehicle exiting the high-security area at the Ban Houayxai Gold-Silver Operation





## Our people

PanAust acknowledges and values its multicultural workforce and the significant contribution its people make to its businesses continued success.

(Left to right) Business Process Lead, Vicki Dreaver; Financial Reporting Superintendent, Minh Ha Tran; and Senior Civil Designer, Mark Crabbe attending a meeting in the Brisbane head office

In 2020, this was highlighted in the work the Company carried out to protect the health, safety and wellbeing of its people from the impacts of the COVID-19 pandemic. The pandemic however did impact the Company's ability to continue its regular people development commitments and programs throughout the year.

While PanAust continued to support and actively encourage diversity, its internal and external stakeholders did not consider it a material issue for this Report. While not material, the Company has robust programs in place to support diversity – particularly gender diversity. In 2020, these programs facilitated an increase in female participation in the workforce to a landmark 20 per cent.

The Company remained committed to its localisation strategy throughout 2020, acknowledging the benefits to developing a skilled workforce that can continue to participate in, and help grow, national economies post-closure and the long-term lasting positive legacies this brings.

Training and development also remained a priority focus area, continuing key training programs (albeit impacted by the COVID-19 pandemic) that enable the attraction, engagement, development and retention of a skilled workforce.

A full suite of published and communicated policies, standards and guidelines provide employees with information about the practical application of the Company's Vision and Values. This includes an Employee Policy and The PanAust Way.

The Employee Policy and The PanAust Way, HR-related standards, inductions, training programs and the performance management cycle (including the annual employee development plan), help employees understand their responsibilities when working for PanAust. These processes also provide employees with an understanding of the Company's expectation of their behaviours when interacting with other employees and external stakeholders.

During 2020, despite the COVID-19 pandemic, PanAust's workforce numbers in Laos increased from 2019. This was due to an increase in activities focused on long-term Company growth, including an increase in exploration activities. Numbers in Papua New Guinea declined as the Frieda River Project site transitioned to permitting phase.

Employee numbers in Myanmar decreased as travel restrictions related to COVID-19 made it more challenging to continue with planned work programs.



### Employees by work location as at 31 December 2020

Region	Total workforce	Total employees	Full time		Part time		Permanent		Fixed term		Casual	Total Contractors
			Male	Female	Male	Female	Male	Female	Male	Female		
Australia	52	38	25	12	0	1	23	13	2	0	-	14
Laos	4,971	3,535	2,822	713	0	0	2,652	665	170	48	151	1,285
Myanmar	76	18	13	5	0	0	0	0	13	5	-	58
Papua New Guinea	29	27	21	6	0	0	21	6	0	0	-	2
Thailand	24	24	16	8	0	0	7	7	9	1	-	-
Vietnam	2	2	1	1	0	0	1	1	0	0	-	-
<b>Total</b>	<b>5,154</b>	<b>3,644</b>	<b>2,898</b>	<b>745</b>	<b>-</b>	<b>1</b>	<b>2,704</b>	<b>692</b>	<b>194</b>	<b>54</b>	<b>151</b>	<b>1,359</b>

### New employee hires and employee turnover

	Total		Gender		Age group >30		Age group 30 – 49		Age group 50 and over	
		%	Male	Female	Male	Female	Male	Female	Male	Female
<b>Employee new hires</b>										
Australia	5	0.1	4	1	0	0	4	1	0	0
Laos	373	10.2	285	88	178	71	92	16	15	1
Myanmar	0	0.0	0	0	0	0	0	0	0	0
Papua New Guinea	4	0.1	4	0	1	0	3	0	0	0
Thailand	20	0.5	16	4	7	2	9	2	0	0
Vietnam	1	0.0	1	0	0	0	1	0	0	0
Total Group Employees new hires	403	11.1	310	93	186	73	109	19	15	1
<b>Total Group Employee hiring rate (%)</b>	<b>11.1</b>	<b>-</b>	<b>10.7</b>	<b>12.5</b>	<b>6.4</b>	<b>9.8</b>	<b>3.8</b>	<b>2.5</b>	<b>0.5</b>	<b>0.1</b>
<b>Employee Turnover</b>										
Australia	4	0.1	1	3	0	1	1	1	0	1
Laos	187	5.1	159	28	32	11	112	15	15	2
Myanmar	21	0.6	17	4	1	0	11	4	5	0
Papua New Guinea	16	0.4	14	2	1	0	12	2	1	0
Thailand	4	0.1	2	2	0	2	1	0	1	0
Vietnam	0	0.0	0	0	0	0	0	0	0	0
Total Group Employee turnover 1	228	6.3	192	36	34	13	136	21	22	2
<b>Employee turnover rate (%)</b>	<b>6.3</b>	<b>-</b>	<b>6.6</b>	<b>4.8</b>	<b>1.2</b>	<b>1.7</b>	<b>4.7</b>	<b>2.8</b>	<b>0.8</b>	<b>0.3</b>

PanAust's materiality process identified the main workforce focus areas for 2020 as:

- › Protecting employee wellbeing during COVID-19
- › Training and development



## Protecting employee wellbeing during COVID-19

PanAust's commitment to the wellbeing of its workforce is reflected in its values of integrity and respect.

In 2020, the Company's response to the COVID-19 pandemic included ensuring the health and safety of its people (see page 84), the health, safety and wellbeing of its host communities (see page 47) and safeguarding its operations against the impacts of COVID-19 (see page 19).

Social activities at the Ban Houayxai Gold-Silver Operation went on as usual with COVID-19 site protocols in place (see page 103)



Importantly, PanAust's response also focused on safeguarding the wellbeing of its people. Facilitation of travel and repatriation, flexible working arrangements, salary incentives, mental health initiatives, site roster changes and securing international travel arrangements were actions the Company took to protect the wellbeing of its workforce.

### Early repatriation of Lao based expatriates

In late March and April, international borders began to close in response to the COVID-19 pandemic. Commercial flights were also limited due to these closures. In early recognition of the impact these closures and limitation on flights would have to its Lao-based expatriate workforce, PanAust facilitated repatriation flights for any employee and/or dependant who wished to return to their country of origin due to ongoing uncertainty around the developing pandemic.

### Implementation and expansion of flexible working arrangements

The Company fast tracked flexible working from home arrangements for all employees able to perform their roles remotely after the COVID-19 international travel restrictions prevented employees from returning to work and the forced closure of sites.

Managers maintained contact with their people who were working from home (via the phone, email and/or video conferencing technologies) to ensure that they were both supported to work safely and productively from home and that they remained connected and engaged with other members of their teams.

### Salary maintenance and uplifts

Recognising the significant potential impact COVID-19 may have on its employees' financial position and wellbeing, the Company worked to minimise reductions in headcounts, and alleviate the impact to employee pay.

In Laos, all site-based employees who were unable to return to site due to COVID-19 travel restrictions and were unable to work remotely, were retained on full pay for a period of three months.

Additionally, all Superintendent level and below site-based employees who remained in country, or on site for an extended period of time due to the site lockdowns, were given a 30 per cent temporary salary uplift.

### Support for employees remaining on site

A significant number of employees remained on site in Laos during the lockdown with no access to recreation or social activities. To support employees while they were in this situation, the Communications team ran a number of online engagement competitions, which were hosted and promoted via the Company's internal Facebook group.

As soon as it was safe to do so, and in accordance with Government of Laos decrees and COVID-19 site protocols, the Company reinstated the site gyms, sporting facilities and social activities at each wet mess.

### Roster changes

Following the resumption of site-based activities in Laos (see page 85) due in part from the tireless work from the Company's Government Relations team, the Company was given permission to move its people in and out of its sites. However, continuing international travel restrictions saw fly in fly out (FIFO) employees who were overseas unable to return to site. This situation resulted in a shortage of incoming FIFO and specialist employees to replace those currently on site, and a number of FIFO employees were unable to leave Laos for their rest and recreation (R&R) portion of their roster.

To address this issue, the production budget was reforecast to ensure minimum compliments of employees were available for each cycle shift and to allow site-based employees to rotate off site for R&R.

A new roster was also implemented for all site-based employees. This eight week cycle included two weeks in Company-controlled quarantine (see page 85), four weeks on site and two weeks R&R.

Once Company-controlled quarantine was removed for the incoming site-based workforce, FIFO employees still unable to transit out of Laos were given the option to move to a shorter 14 and 7 roster (14 days on site and 7 days R&R in Laos).

### Facilitation of travel

Once international borders were closed, the Company's Lao-based FIFO employees were either unable to leave Laos, or travel to and from their country of origin. This presented significant difficulties and risks to business continuity.

In October, after negotiations with the Government of Laos (facilitated by the Government Relations team) the Company secured permission to commence monthly private charter flights between Kuala Lumpur in Malaysia and Vientiane using a Boeing 737. This allowed the Company's Lao-based FIFO workforce who had remained in country following border closures to return to their country of origin for R&R. It also allowed Lao-based expatriates stuck outside Laos the opportunity to travel back to resume work.

This charter service operates with strict COVID-19 controls including personal protective equipment (PPE) and PCR testing for all passengers and aircrew and all regulatory requirements in Malaysia and Laos are adhered to.

Permission to fly and land the charter is sought every month with the Lao National Taskforce Committee for COVID-19 Prevention and Control and Phu Bia Mining is the only company in Laos running a regular charter. This highlights the faith the Government of Laos has in the Company's strict COVID-19 controls and prevention methods.

### Employee Assistance Program

Due to the uncertainty created by COVID-19 and its potential impact on employee's wellbeing, the Company undertook a significant campaign to promote the Employee Assistance Program throughout 2020.

This Company funded service, which is available to all employees', offers a wide range of counselling, mental health and financial advice services.

This was promoted through many different channels including the Company's internal newsletter, Facebook group and ad-hoc email communications. More employees accessed this service in 2020 than in 2019.

### Communication

During 2020, the Company prioritised frequent, open and transparent communication with all employees and contractors about the COVID-19 situation, the impact it was having on working arrangements and the actions the Company was taking to address concerns about job security.

Formal and informal communication channels including emails, team meetings, leader-led updates, the Company's internal newsletter and Facebook group, posters and videos were utilised to disseminate these messages to the workforce. Importantly, given English is the second language to a significant portion of the workforce in Lao, wherever possible, messages were delivered/distributed in Lao and English to bridge the language barrier and ensure maximum comprehension.



## Training and development

Training and development programs offered by PanAust contribute to the Company's long-term goals and diversity objectives and are considered as a mechanism that supports employee attraction, engagement, career development, and retention strategies.

Trades Apprentices undergoing on the job training at the maintenance facility at the Company's logistics hub at Ban Thauay



### Annual employee competency training

A core element of the Company’s training and development strategy is its annual employee competency training. This training covers key skills for employees based at site and focuses on technical, leadership, role-specific and health and safety skills.

The completion of this training is mandatory and employees must complete all training prescribed to them annually to ensure that they are able to safely and effectively perform their roles. The Company regularly reports on completion of these annual training programs.

In Laos, an in-house training team delivers this competency training. A total of 182,195 hours of training was delivered in 2020, representing an average of more than 50 hours of training per employee.

#### 2020 training by type

Training type	Hours delivered
Clerical and general work skills	29,432
High-risk work, mining, processing and mobile maintenance skills	83,301
Inductions and health, safety and environment	26,291
Leadership development	6,352
Professional and technical skills	8,487
Trades and engineering skills	28,332

### Annual employee development plan

A significant part of the Company’s training and development strategy is the annual employee development plan.

The annual process is designed to ensure employees in leadership roles have clear and actionable performance goals set for the year.

Managers and employees agree to goals at the commencement of the calendar year and they meet periodically throughout the year to review performance, before an employee is awarded a final evaluation score at the end of the calendar year.

The performance outcomes from this plan are directly linked to the payment of the employee’s short-term incentive bonuses and annual salary reviews.

### Supervisory Skills Training Program

PanAust has established programs to develop an internal talent pipeline to support future Company growth, and build a sustainable workforce.

Throughout 2020, the in-house training team in Laos focused on ensuring that high-potential Lao employees and team leaders completed the Supervisory Skills Training Program in addition to applicable technical/trades/engineering training relevant to their discipline.

The Supervisory Skills Training program is designed to support employees transitioning into more senior roles by providing existing team leaders, supervisors and high-potential employees with the training required for success in frontline leadership roles.

Currently offered to Phu Bia Mining employees, the course – delivered in English and Lao languages – comprises 10 modules covering topics such as: leading work teams, performance counselling, problem-solving, conflict resolution, communication, and delegation techniques.

Participants are required to complete 80 hours of structured training, case studies and practical exercises. In 2020, 139 employees (the majority of whom were Lao-national and included 28 women) graduated from the program.

Inviting and encouraging Lao-national females to participate in the Supervisory Skills Training Program continues to be a priority for the business. Since inception, more than 100 women have graduated from the Program.

### Accelerated Trades Training Apprenticeship Program

In 2020, the Company reintroduced the Trades Training Apprenticeship Program in Laos under a new ‘accelerated’ concept (three years, rather than five years) designed to compress the time period required to complete appropriate certification while still maintaining the quality of training. The intent of this was to have new tradespeople available for the Company to utilise prior to mine closure.

The intake consisted of 40 apprentices across five key trade vocations including mechanical, automotive electrical, fabrication and welding, fitting and machining, and electrical.

Upon successful completion of the Program, participants will graduate with an Australian TAFE Certificate III trade qualification in their chosen discipline, a Lao High Diploma of Technical Trade Studies and a Certificate of Technical English.

### Localisation and regionalisation strategy

PanAust remains focused on the localisation of its workforce.

The term ‘localisation’ refers to the transition of a position previously held by an expatriate employee, to a host nation employee. The strategy enables national employees to increasingly operate, maintain and manage the Company’s Operations and Projects. This has the added benefit of meeting one of PanAust’s long-term legacy objectives to develop a skilled workforce that can continue to participate in, and help grow, the national economy post-closure.

The strategy relies on the training and development of Lao-national employees to meet the requisite skills and competencies required to perform a role to the desired level. It links into the annual workforce planning process which predicts workforce numbers and identifies expatriate positions targeted for localisation.

In 2020, localisation in Laos increased to a landmark 93 per cent. This is the highest level of localisation the Company has ever reported and demonstrates the success of the systems and programs in place and the ongoing commitment to its localisation objectives.

While the intent is to continue to increase the localisation percentage annually, given the size of the business and the majority of the remaining non-localised roles are highly specialised in nature, further increases will be challenging.





Annual safety refresher training at the Company's logistics hub at Ban Thouay

#### Breakdown of employee source by role category (Phu Bia Mining) 2020

	Expatriates (%)	Total Lao (%)
Executives	100	0
Management	65	35
Supervisory/professional	15	85
Experienced/qualified skilled labour	1	99
Skilled labour	0	100
Semi-skilled labour	0	100
Unskilled labour	0	100
<b>Total</b>	<b>7</b>	<b>93</b>

The Company also continues to see a year-on-year improvement in the number of Lao-national employees in supervisory, professional and management roles, as outlined in the table below.

#### Lao-national employees in supervisory, professional and management roles

	2018	2019	2020
Number of Lao-national employees in management roles. Stratum 2 and 3	43	49	61
Number of Lao-national employees in supervisory/professional roles Stratum 1E and 1F	643	683	733

In 2020, a total of 441 Lao-national employees were promoted. Most notably, 95 were promoted to senior technical or team leadership roles, 14 were promoted to superintendent level and two were promoted to manager level. All promotion categories saw an increase on the numbers recorded in 2019, further supporting the Company's focus on continuing to transition professional, leadership and management roles to Lao employees.

At the Frieda River Project site, all superintendent level roles are now filled by Papua New Guinea-national employees.

The fact the Company has met or exceeded its operational and sustainability targets since 2015 with a decreasing expatriate workforce, reinforces the view that PanAust's employee development programs are working. It provides confidence that this approach will achieve similar results in new jurisdictions.



## OUR PEOPLE CASE STUDY:

# PanAust's Trades Training Apprenticeship Program spans generations, helps builds a skilled workforce and enhances gender diversity

The story of a dynamic father and daughter duo working for the Company's Mobile Maintenance team in Laos is an inspiring one. It demonstrates the robustness of PanAust's training and development programs which are strengthening gender diversity and helping deliver long-term legacy objectives for the Company.

Component Rebuild Supervisor, Mr Fong Payengfue commenced his employment with the Company in 2008. Since then he has proven himself to be a very valuable member of the Mobile Maintenance team. Mobile Maintenance Manager, Mark McCartney agrees.

"Mr Fong is a pleasure to work with. He has climbed his way through our ranks and has earned the respect of his team, peers and management," Mark said.

Mr Fong said one of the things he admires most about the Company is its training and development programs. He has seen first-hand how these programs have positively impacted the lives of young people in Laos, providing an opportunity for them to develop skills on a working mine site that will support their future career development.

It was to his pleasure and delight then that in 2020, his daughter, Ms Mee Vue joined the Company's Mobile Maintenance team as an auto electrician apprentice with the Company's Trades Training Apprenticeship Program.

Reintroduced in 2020 under a new 'accelerated' model (see page 105), the Program offers successful applicants a three-year apprenticeship in a technical trade discipline.

Participants graduate with an Australian TAFE Certificate III trade qualification in their chosen field, a Lao High Diploma of Technical Trade Studies and a Certificate of Technical English.

The Program helps deliver one of PanAust's long-term legacy objectives in Laos which is to develop a skilled workforce that can continue to participate in and grow the national economy post-closure. It also builds a pool of talent for the Company to draw on.

The Program also builds on PanAust's commitment to fostering gender diversity. In 2020, over 43 per cent of the Program's initial intake were females. During the Program's recruiting phase, more than 3,500 applications were received for a total of 40 positions.

Ms Mee said she is finding her placement and studies very exciting. And it sounds like she is following in her father's footsteps in more ways than one.

"I am very pleased with Ms Mee's performance. Her passion and commitment to her studies has been evident, as has her strong work ethic. Her joining the Mobile Maintenance team and working alongside her father has been inspirational to watch.

"There will be markedly more career opportunities available to Ms Mee available after she graduates from the Program. It will lay the foundation of her future success within the Company and beyond. I wish her, and all our current apprentices, the very best with the completion of their studies," Mark concluded.

(Left to right) Component Rebuild Supervisor, Mr Fong Payengfue and his daughter, second year Auto Electrical Apprentice, Ms Mee Vue





## Company ownership profile

Subsidiaries below are main operating and services companies.

Name of entity	Place of incorporation	Class of shares	Equity holding <sup>1</sup> (%) 2020	Principal activities
Inca de Oro S.A.	Chile	Ordinary	66	Exploration
PanAust South America Services SpA	Chile	Ordinary	100	Services
Phu Bia Mining Limited	Laos	Ordinary	90	Exploration and mining
Wuntho Resources Company Limited	Myanmar	Ordinary	90	Exploration
Frieda River Limited	Papua New Guinea	Ordinary	100	Exploration
PanAust Services Pty Ltd	Queensland	Ordinary	100	Services
PanAust Services (Thailand) Company Limited	Thailand	Ordinary	100	Services

<sup>1</sup> Holding and dormant companies not included in list.

Horizontal drilling above stage 12  
of the Phu Kham Copper-Gold  
Operation open-pit



# Assurance statement

## Materiality Counts

### Materiality Counts Independent Assurance Report to PanAust

#### Scope of Work

Materiality Counts was engaged by PanAust to provide independent limited assurance of its 2020 Business Review and Sustainability Report (the Report) to the scope of work outlined below. The Report covers PanAust's operations for the 24 months to 31 December 2020, unless stated otherwise in the text. The work was performed using Materiality Counts' assurance methodology to ISAE 3000, the *International Standard on Assurance Engagements Other than Audits or Review of Historical Financial Information*. Materiality Counts interviewed a number of personnel and reviewed relevant data and documentation at PanAust's office in Brisbane and operations in Laos, namely the Phu Kham and Ban Houayxai, all undertaken remotely on Zoom. Data collation processes were reviewed, original records sighted, spreadsheets interrogated and calculations re-performed.

The subject matter for the assurance consisted of the following:

- **Social performance:** *Social licence and stakeholder engagement* (community relations: grievances, resettlement); *Community development* (contributions in US\$).
- **Environmental performance:** *Energy and carbon management* (Scope 1 and 2 greenhouse gas (GHG) emissions from energy and explosives - reasonable assurance); *Tailings and waste rock management* (tailings and waste rock quantities in tonnes).
- **Health and safety performance:** *Safety performance* (working hours; fatalities; total recordable injuries (TRIs); TRI frequency rate (TRIFR); lost time injuries (LTIs); LTI frequency rate (LTIFR) for employees, contractors and combined).

The criteria for the assurance consisted of the following three elements:

- Provision of a balanced representation of material issues in the Report.
- Accuracy of the performance data and statements in the Report.
- Validity of the self-declared Global Reporting Initiative (GRI) Standards core reporting.

#### Materiality Counts' Independence

PanAust was responsible for preparing the Report. Materiality Counts was responsible for expressing assurance conclusions regarding the material issues detailed above in line with the scope of work agreed with PanAust. During the reporting period, Materiality Counts did not work with PanAust on other consulting work. Materiality Counts is an independent consultancy specialising in report development and assurance, materiality determination, stakeholder engagement and strategy development.

#### Our Conclusion

Materiality Counts concludes that, based on the scope of work and related limitations, for the specified subject matter, PanAust's 2020 Business Review and Sustainability Report provides a balanced representation of the material issues concerning PanAust, reports accurate performance information and satisfies the requirements of the GRI Standards core reporting for the 24 months to 31 December 2020.

#### Key Observations

Based on the scope of work, and without affecting our assurance conclusion, Materiality Counts identified good practice in the form of an evidence-based culture, whereby multiple sources of evidence are maintained to support data and statements reported, alongside a good understanding of the value and process of assurance.

Transparency on the impacts of COVID-19 on operations and initiatives is also strong. Areas for improvement identified relate to tightening up internal verification processes for data accuracy during Report development. This includes avoiding double counting (e.g. diesel and petrol use), ensuring that formulae capture all relevant data sources (e.g. Scope 2 GHG emissions) and consistent use of exchange rates. Grievance classification has improved significantly over the years but remains an important dataset to check. Materiality Counts can confirm that all revisions identified have been addressed and work has already commenced on areas for improvement.

Materiality Counts congratulates PanAust on its continued commitment to sustainability reporting.



Materiality Counts, 8 December 2021, Melbourne, Australia

*Materiality Counts has prepared this statement for PanAust in accordance with the standard practised by members of the consulting profession performing this type of service at the same time. No other warranty, express or implied, is given by Materiality Counts as a result of the provision of this statement. To the extent permitted by law, this statement is provided for informational purposes only, without the right to rely, and Materiality Counts will not be liable for any reliance which may be placed on this statement by a third party. This statement may not be used by any third party without Materiality Counts' express written permission.*





**PANAUST**