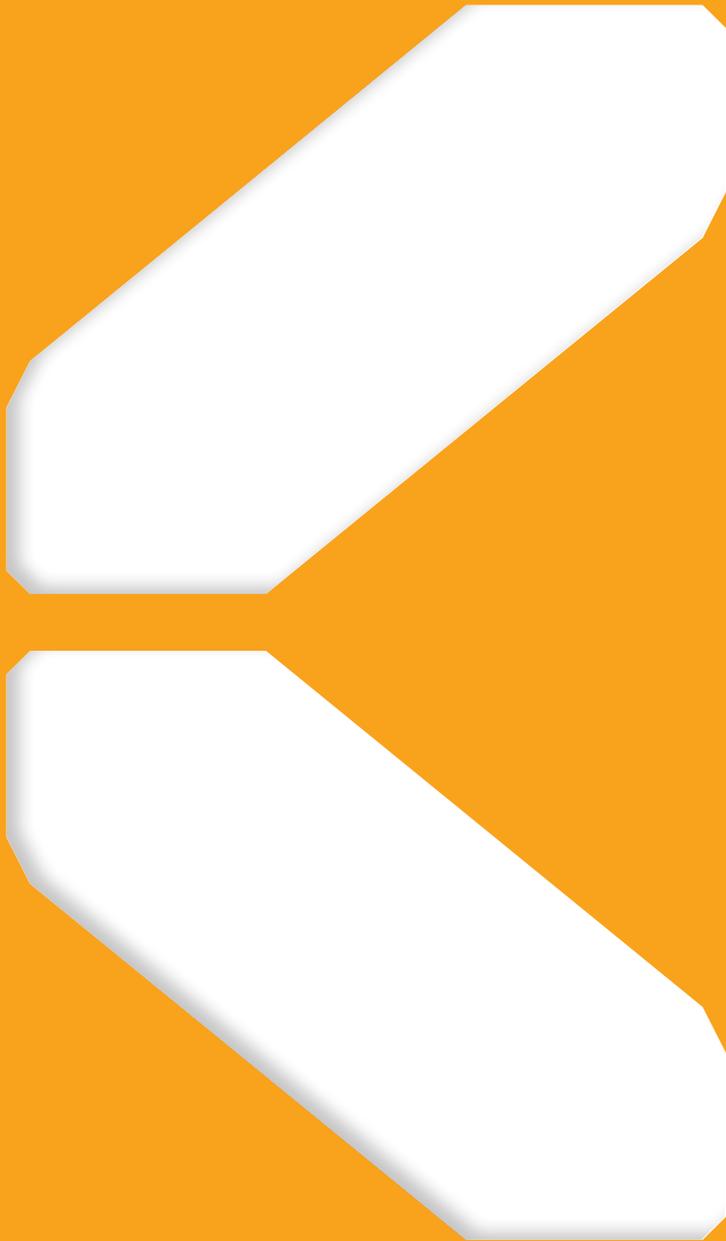




PAN AUST

2018

BUSINESS REVIEW AND SUSTAINABILITY REPORT



PANAUST
IS WAY
AHEAD



BECAUSE OF ITS PEOPLE.

PanAust's people develop and operate world-class projects in challenging geographic locations.

Phu Kham Copper-Gold Operation Mining Operator,
Ms Vongdeuan at the Operation's go line, November 2018

COMPANY PROFILE



Phu Kham Copper-Gold Operation Training and Safety Supervisor,
Yeelor Souvanh working in the Operation's process plant,
November 2018



COMPANY PROFILE

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

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 PNG, PanAust is advancing the Frieda River Copper-Gold Project (Frieda River, 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 production and sale of copper and gold, 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 2019 and beyond is to extend the operating life of its existing Operations, evaluate opportunities to develop greenfield projects in Laos, Myanmar and the Southeast Asian region, as well as advance the Sepik Development Project in PNG.

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 Assets Management Co. Ltd (GRAM).

GRAM is a Chinese state-owned company regulated under the State-owned Assets Supervision and Administration Commission, the People's Government of the Guangdong Province in China. GRAM operates as an investment company in mineral resource development, electronics, industrial waste management, real estate and finance.

Company structure

PanAust's corporate office in Brisbane, Australia provides leadership and support across the Group in relation to strategy, financial management, commercial and technical services, risk management, sustainability, corporate communications, human resources, governance and reporting.

Reflecting its geographically diverse business, PanAust is structured into two business units: PanAust Asia and Project Development.

PanAust Asia business unit

The PanAust Asia business unit has responsibility for operations in Laos and for supporting the implementation of business development strategies within Laos and the region.

Laos

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

PBM 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 roughly 775 square-kilometres in the Sagaing region of Myanmar and has applied for additional Exploration Licences in the region.

Project Development business unit

The Project Development business unit has responsibility for the Company's development projects and provides technical and operational improvement support. It is responsible for the evaluation and implementation of capital-efficient project developments and strategic improvement initiatives to support and enable the Company's growth.

Papua New Guinea (PNG)

The Frieda River Copper-Gold Project is held by the Frieda River Joint Venture, an unincorporated joint venture between Frieda River Limited (FRL) – a PanAust subsidiary company – and Highlands Frieda Limited, a wholly owned subsidiary of Highlands Pacific Limited*. FRL manages the Project and holds an 80 per cent interest; Highlands Pacific Limited holds the remaining 20 per cent. The Independent State of PNG 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.

South America

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 a 100 per cent interest in the nearby Carmen copper-gold deposit.

* Cobalt 27 has entered into a scheme implementation agreement with Highlands Pacific Limited dated 1 January 2019, pursuant to which Cobalt 27 will acquire all of the issued ordinary shares of Highlands that it does not own. As part of the proposed transaction, subject to various conditions being satisfied, PanAust proposes to acquire Highlands Frieda Limited's 20 per cent participating interest in the Frieda River Project. For more information, see page 97.



COMPANY PROFILE

Auditors

KPMG

71 Eagle Street
Brisbane Qld 4000

Bankers

ANZ Banking Group Limited

324 Queen Street
Brisbane Qld 4000

Directors

Dr Qun Yang, Executive Chairman

Mr Daling Zheng, Director and Chief Financial Officer

Mr Paul Arndt, Non-Executive Director

Mr Muyi Zhang, Non-Executive Director

Mr Yong Yang, Non-Executive Director

Mr Jianming Xiao, Non-Executive Director

Mr Zhibin Huang, Non-Executive Director

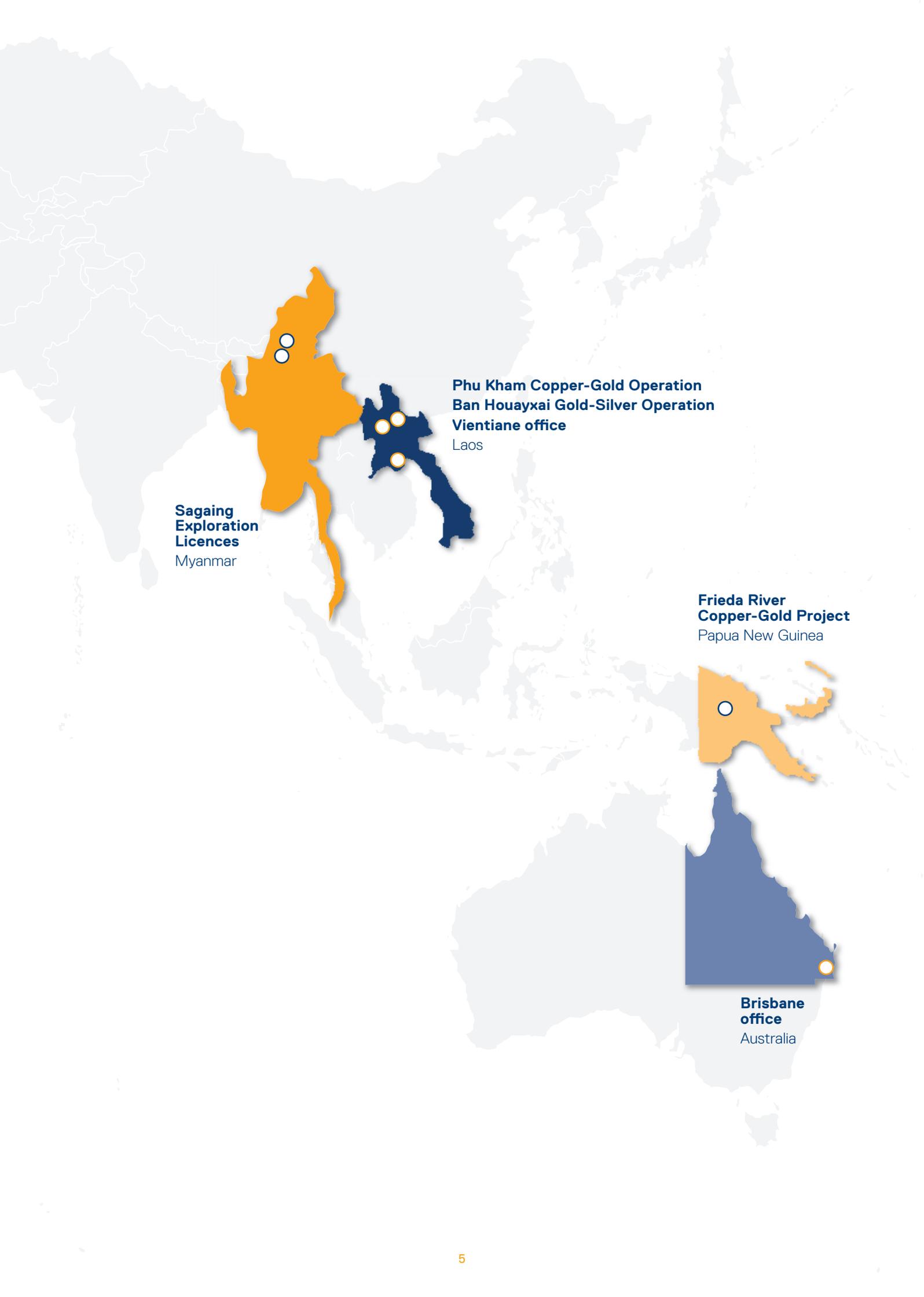
See PanAust's website for the complete profiles of PanAust's Directors, <https://panaust.com.au/directors>.

Company Secretary

Ms Qingshan (Laurinda) Zhang

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**Sagaing
Exploration
Licences**
Myanmar

**Phu Kham Copper-Gold Operation
Ban Houayxai Gold-Silver Operation
Vientiane office**
Laos

**Frieda River
Copper-Gold Project**
Papua New Guinea

**Brisbane
office**
Australia

MATERIALITY AND SCOPE OF THIS REPORT



A view of the Ban Houayxai Gold-Silver Operation process plant with open-pit in the background, November 2018



MATERIALITY AND SCOPE OF THIS REPORT

This 2018 Business Review and Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option, as well as the Mining and Metals Supplement. The scope of the Report, as per GRI materiality 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'. 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 96.

PanAust's 2018 Business Review and Sustainability Report focuses on those 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 page 42 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 the Company's 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 business.

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/potential incidents using the Company's Consequence Table which is available on PanAust's website, <https://panaust.com.au/corporate-governance>) and benchmarking activities. Issues are considered by level of interest and commonality via requests for information from stakeholder groups and media coverage. For the 2018 Business Review and Sustainability Report, PanAust sought feedback on issue identification and ranking through meetings with general managers, managers and subject matter experts across the business. Additional feedback was provided through a comprehensive audit regime of key material risks, the annual risk and sustainability workshop (also attended by invited external peer companies, respected sustainability consultants and key contractors) and the Business Review and Sustainability Report feedback survey button on PanAust's website. Further insight was sought through interactions with non-government organisations (NGOs), academics and industry peers at conferences the Company presented at and/or attended.

4. Material issues are verified

Material issues are presented to the Company's Executive Management Team for review and feedback and are endorsed for inclusion in the 2018 Business Review and Sustainability Report.

Materiality Counts verifies a selection of material issues in the Report. A rolling assurance program aims to work through 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 in the reporting period.

5. Material issues inform Company activities

PanAust's approach to managing material risks provides a continuous improvement feedback loop, which informs Company strategy, budgets, and business and engagement activities. At the executive level, material issues 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. In 2018, PanAust held its tenth Annual Risk and Sustainability Workshop with leaders from across the business, to review and plan for the proactive management of sustainability issues. The Workshop which is also attended by invited external peer companies, specialist sustainability consultants and key contractors, provided a forum for the translation of risk and sustainability strategies into planning processes, facilitated organisational alignment and provided a platform from which the business could share challenges and best-practice approaches to sustainability issues.

The figure on page eight of this Report shows the outcomes of PanAust's 2018 materiality process. Within the areas of economic performance, governance, social performance, environmental performance, health and safety performance, and our people, each material issue – including the boundary of impact – is addressed in this Report.



ECONOMIC PERFORMANCE

- > Operational performance
- > Growth opportunities
- > Financial performance



GOVERNANCE

- > Sustainability structure
- > Business conduct
- > Risk management



SOCIAL PERFORMANCE

- > Stakeholder engagement
- > Economic value generated
- > Community development
- > Closure preparedness

PANAUST MATERIAL ISSUES 2018



ENVIRONMENTAL PERFORMANCE

- > Water management
- > Tailings and waste rock management
- > Cyanide management
- > Energy and climate change
- > Land rehabilitation and closure



HEALTH AND SAFETY PERFORMANCE

- > Safety culture
- > Contractor management
- > Transport, vehicles and mobile equipment
- > Security management



OUR PEOPLE

- > Training and development
- > Workplace diversity
- > Employee engagement and retention

Report scope

The principal activities of the PanAust Group during the 2018 reporting year were the:

- > production and sale of copper-gold-silver concentrate from the Phu Kham Copper-Gold Operation
- > production and sale of gold-silver doré from the Ban Houayxai Gold-Silver Operation
- > exploration and evaluation of projects in Laos, PNG and Myanmar.

Most of PanAust's reporting relates to the Phu Kham Copper-Gold and Ban Houayxai Gold-Silver Operations. Where relevant, information is also included for the Frieda River Copper-Gold Project, and other exploration and growth projects.

Tables in this document advise where reporting includes data from exploration and growth projects other than the Phu Kham and Ban Houayxai Operations.

This Report is for the 2018 calendar year and is PanAust's thirteenth annual Sustainability Report; it follows that which was produced in 2018 for the 2017 calendar year.

Data collection protocols and reporting currency

With the exception of new reporting items, this Report presents data for a three-year period. Data for years prior to 2016 is available in PanAust's Sustainability Reports, which can be accessed on the Company's website, <https://panaust.com.au/reports>.

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, a Business Review and Sustainability Report (this document), quarterly activity reports and other ad-hoc Company Announcements.

With the exception of the Annual Report, which is submitted to the Australian Securities & Investments Commission (ASIC) and is available for a nominal fee paid to ASIC, all documents are made available on PanAust's website, <https://panaust.com.au>.

The 2018 Annual Report was independently audited by KPMG in accordance with the Australian Auditing Standards and will be submitted to ASIC in 2019.

Materiality Counts provided independent limited assurance (in relation to key non-financial material issues) of this 2018 Business Review and Sustainability Report.

Through its Minerals Council of Australia (MCA) membership, the Company supports the Extractive Industries Transparency Initiative (EITI); 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 governments in its Annual Report and Business Review and Sustainability Report (see page 48).

When legally permitted and consented to by 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 2018 can be found on PanAust's website, <https://panaust.com.au/reports>.

To provide feedback on this 2018 Business Review and Sustainability Report, go to <https://panaust.com.au/reports> and click on the 'Sustainability Report Feedback Survey' button.

To request further information about PanAust or this Report, email info@panaust.com.au or telephone +61 7 3117 2000.

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.



AT PANAUST, WE ARE GUIDED BY OUR VALUES.

Our Values dictate that we build our project and operations on strong technical, social, environmental and economic foundations to enable fruitful long-term investments.

As a testament to this approach, in 2018 the Company celebrated the tenth anniversary of the start of production at its flagship Phu Kham Copper-Gold Operation.

It is natural upon reaching such a milestone to reflect on the business, our journey to date, the lessons we have learned and the reasons for the Company's success.

It is my strong belief that our investment in Laos highlights the multitude of benefits that are derived when a principled approach is adopted for the development and operation of new mines in a less developed country.

Before we entered Laos, the area that hosts both our producing assets—the Phu Kham Copper-Gold and Ban Houayxai Gold-Silver Operations—was a special security zone with low levels of socio-economic development. Participation in the broader economy by local communities was constrained and subsistence farming was the norm. Remoteness and a sparse population meant infrastructure was limited, as was the delivery of government service and skilled Lao-national labour.

Mining companies go where others fear to tread, so despite the challenges, PanAust made the decision to invest and to do so with a view to establishing a long-term presence. A keen focus on safety, sustainability and operational excellence laid the basis for success.

Fast forward to year-end 2018 and we see vibrant local communities benefiting from our ongoing presence.

Our total investment in Laos to date stands at US\$1.45 billion. Direct payments to the Government of Laos in taxes, royalties and dividends total around US\$716 million. We have spent US\$1.8 billion to date on goods and services from Lao and Lao-based companies.

At a local level, we have contributed US\$967,551 to community development, donations and sponsorships in Laos, PNG, Myanmar and Australia. In Laos, we have directly purchased US\$1,084,351 of consumables from our local community businesses.

The Company provides direct and indirect employment and business development opportunities. Roads, electricity and telecommunications infrastructure link communities to the national economy. Development indicators including in relation to female capacity-building, education, health and household income levels are much improved. Importantly, people within our local communities have a greater capacity to determine their own destinies.

We reached our highest level of localisation to date in 2018 with Lao-nationals making up 92 per cent of the Lao-based workforce. Also in 2018, women's participation across the Group reached 19 per cent. We continue to treat our people with respect and, through continued vigilance, achieved excellent safety outcomes in the same year, with a total recordable injury frequency rate (TRIFR) of 0.6.

In 2018, production at Phu Kham reached 83,680 tonnes (t) of copper, 70,787 ounces (oz) of gold and 537,888oz of silver at a competitive all-in sustaining cost (AISC) of US\$1.74/lb copper. Gold and silver production at Ban Houayxai totalled 108,570oz and 666,628oz respectively, at an AISC of US\$931/oz gold.

This brings our total accumulated production in Laos to 748,000t copper, 1.48 million ounces (Moz) gold and 10.38Moz silver at year end 2018.

Naturally this is an ongoing journey. We learn from our mistakes, and refine our approach to all aspects of the business.

Our quest for Zero Harm is a good example. It is pleasing to observe the successful transfer of our health and safety systems and processes to the Frieda River Copper-Gold Project where, despite a challenging work program, the site team achieved no recordable injuries in 2018. The Company has consistently over a number of years outperformed our industry peers through a visible commitment to Zero Harm. Our TRIFR and lost-time injury frequency rate (LTIFR) continue to trend at record lows.

I am proud to report that PanAust's Lao-registered company, Phu Bia Mining, received the 'Excellence Award' at the 2018 ASEAN Occupational Safety and Health Network Conference in April. The Award acknowledged the Company's excellence in occupational health and safety management.

Since our humble beginnings as a junior explorer, we have been conscious of the need to apply high standards and hold ourselves accountable for meeting those standards. We continue to maintain this discipline in Laos and in other jurisdictions.

In Laos, as we head toward the closure phase of our Operations, we are working with all stakeholders, including local communities and various levels of government, to implement a sustainable closure plan that gives communities a solid foundation for the future. This will be a central and growing focus in 2019 and beyond.

In 2018, heavy rainfall and associated flooding caused substantial damage in Laos. On Monday 23 July, a failure at the Xepian-Xe Nam Noy hydropower dam in the southern Attapeu Province occurred causing fatalities and leading to the Government of Laos declaring the Province a natural disaster zone.

PanAust, through Phu Bia Mining, provided support to disaster relief operations in coordination with the Government of Laos through the deployment of personnel with specialist capabilities including a doctor, paramedic emergency responders, and logistics specialists along with a boat, vehicles and emergency medical and other supplies. Separately, we donated US\$50,000 to the Government of Laos's central relief coordination agencies. PanAust employees donated money, food, blankets, water and other essential supplies as part of the relief effort.

Heavy rainfall through the year also caused geotechnical issues at Phu Kham where a landslide near the open-pit occurred, and at Ban Houayxai where road access was cut. Despite these setbacks, I am happy to say that there was little impact on production and the safety of our employees was not compromised. This can be attributed to our vigilant wet season preparedness, robust safety systems including pre-emptive inspection regimes and warning systems, water management, and crisis and emergency response processes.

Turning to our engagement with our employees, another 51 young Lao people graduated from the Company's Apprenticeship Program. The group – nine of whom were women – included 17 apprentices from the Chifeng LXML Sepon-owned Sepon copper-gold mine in southern Laos. The tradespeople received an Australian-recognised Certificate III trade qualification in a variety of disciplines including automotive electrical; heavy equipment plan mechanical; metal fabrication and welding; fitting and machining; and electrical. Apprentices from the Company's Phu Bia Mining Operations began transitioning into the Company's fixed plant maintenance and mobile maintenance teams in December. This brings the total number of apprentices trained to 85. We are particularly proud of this achievement and of each of these tradesmen and women who will help drive the future development of Laos.

Pleasingly, our business was recognised by the Association of Southeast Asian Nations (ASEAN) during the year, with receipt of the 'Friend of ASEAN Award' at the ASEAN Business Awards. The Awards recognise foreign companies that have demonstrated a continual and increased commitment to growing its presence and thereby positively impacting its host country's economy. This followed success earlier in the year when we won the 'Friend of Laos Award' in recognition of our contribution to the socio-economic development of Laos at the Lao ASEAN Business Awards.

Being at the vanguard of the next generation of mining in Myanmar, we have a wonderful opportunity to help position the industry as a positive contributor to the country's development. We secured three new exploration tenements in the Sagaing Division of Myanmar in July and successfully commenced a drilling campaign near the town of Mansi in December.

We will apply in Myanmar the same commitment to supporting the long-term socio-economic development of our host communities which has been so successful in Laos. Indeed we are working with local communities in Myanmar to design community development programs at early exploration stage to ensure our presence is accompanied by positive impacts. Looking ahead, we are keen to expand our footprint in Myanmar and ultimately develop Myanmar's next major mining operation.

In PNG, we have been working on a broader integrated scope for the Frieda River Copper-Gold Project to provide a more compelling, longer life development proposition. The result is the nation-building Sepik Development Project: an innovative and inclusive approach that integrates the Frieda River Copper-Gold Project with broader national development plans that align with long-term Government objectives and the aspirations of Papua New Guineans.

We completed work on, and submitted for independent external and joint venture review, an updated feasibility study and completed a revised Environmental Impact Statement (EIS) in the December quarter. The feasibility study and EIS are based on the experience gained from our Lao operations and the high standards that have been successfully demonstrated in similar conditions. In December, an amended Proposal for Development and a new environmental permit application were submitted to the relevant regulatory agencies in PNG to advance the permitting of the Sepik Development Project.

Regrettably, a labour dispute at the Frieda River Project site at the start of the year led to the suspension of site-based activities in late-March. Meeting this challenge, the Company and local landowners negotiated the Frieda River Accord which formalises the shared vision, values and principles that will guide the relationship between all stakeholders and form the basis for a future world-class mining operation. The Accord was signed at a reconciliation ceremony at the village of Paupe in September and witnessed by provincial leaders led by the Governor of West Sepik Province.

2019 will be a year of change for PanAust, with the Company focusing on a new strategy for growth. In January 2019, Dr Fred Hess retired from his position of PanAust Managing Director. At the time of his departure, a business efficiency review was implemented with a new organisational structure to support the new strategy.

It is with great honour that I take my position as leader of PanAust. I would like to thank those who have left the Company for their immeasurable contribution towards making PanAust one of the most respected mid-tier copper and gold mining companies in the world.

I would particularly like to acknowledge and thank Dr Hess for his four-year tenure as Managing Director and his previous nine years as an executive in the business. There is no better indication of Dr Hess's dedication to PanAust than the outstanding operational and sustainability outcomes and record production results that were achieved during his time with the Company.

Our way of doing business, the PanAust Way, is a modern approach to mining that measures success not merely by production volumes but equally by the sustainability of its interactions with its people, its host communities and governments, the environment, and its shareholders.

As Executive Chairman of PanAust, I want to emphasise how proud I am of this Company, and that I am committed to its Vision and Values. I look to the rest of 2019 with much anticipation of all that PanAust's employees can achieve together while pursuing the highest standards and working with the absolute integrity that has become synonymous with this Company.

PanAust Executive Chairman, Dr Gun Yang



2018 HIGHLIGHTS AND FUTURE CHALLENGES

HIGHLIGHTS



ECONOMIC PERFORMANCE

Profitability was strong, with above budget NPAT.

A strong balance sheet was maintained with no significant debt at year end 2018.



GOVERNANCE

Continued commitment to transparent reporting as a private company including publishing quarterly activity reports and disclosing material sustainability matters to GRI Standards (this is the thirteenth sustainability report prepared by PanAust).

Under the guidance of the sponsorship and donations committees, PanAust donated more than US\$209,000 to relevant causes including disaster relief efforts in Laos and PNG.



SOCIAL PERFORMANCE

Phu Bia Mining accounted for over 2.4 per cent (US\$427 million) of Laos's 2018 real gross domestic product (GDP)*.

A total of US\$671,653 was expended on community development fund (CDF) projects in Laos and US\$239,353 on health, education and capacity-building in PNG.

PanAust commenced engagement with the host communities on closure options for the Phu Kham and Ban Houayxai Operations.



ENVIRONMENTAL PERFORMANCE

Water management measures performed well, safeguarding production levels and meeting environmental discharge requirements at PanAust's Operations during the significant wet season in Laos.

PanAust submitted the EIS for the Sepik Development Project to the Government of PNG.



HEALTH AND SAFETY PERFORMANCE

PanAust Group TRIFR and LTIFR continued to be significantly better than industry averages.

The Executive Committee continued to drive safety values through the Company by leading the deep dive program, and providing leadership through the Senior Management Taskforce and Fatigue Committees.



OUR PEOPLE

Women's participation in the workforce increased to 19 per cent.

Phu Bia Mining achieved 92 per cent localisation in Laos; the highest rate achieved since operations commenced.

* The Company estimates Laos' real GDP to be approximately US\$17.7 billion. Total Phu Bia Mining activity including indirect benefits through employment, training, community development and payments to local suppliers accounted for 2.4 per cent of this estimated GDP. 2018 GDP data was not available as at 31 March. The 2018 GDP estimate was calculated using a five-year average growth rate.

FUTURE CHALLENGES



ECONOMIC PERFORMANCE

Maximise returns from existing assets while continuing to advance the Sepik Development Project to a final investment decision.

Maintain strong cash flow and minimise capital expenditure requirements with expected lower production profile of the Lao Operations.

Secure and grow replacement production for the operating assets in Laos.



GOVERNANCE

Continue to apply governance processes to high-risk activities.

Manage stakeholder expectations and implement robust governance processes in Laos, PNG and Myanmar



SOCIAL PERFORMANCE

Progress social closure strategies for the Lao Operations in conjunction with project stakeholders to reduce mine dependency and ensure successful post-closure outcomes. Continue robust stakeholder engagement and capacity-building in PNG to progress the approval of the Sepik Development Project.



ENVIRONMENTAL PERFORMANCE

Continue to manage sediment and erosion control risks that are prevalent in the mountainous and high-rainfall setting of the Company's Operations, Projects and exploration sites.

Identifying further opportunities to improve energy efficiencies within the business.

Endorsement of environmental closure solutions for the Lao Operations from Lao stakeholders.



HEALTH AND SAFETY PERFORMANCE

Vigilantly work to grow and enhance the Company's safety culture and achieve Zero Harm safety objectives.

Continue to work with local contractors to enhance their safety culture and meet PanAust's contractor management standards.

Leverage highly developed systems and procedures in Laos to develop the Company's safety culture in Myanmar.



OUR PEOPLE

Continue the development of the Lao-national workforce to increasingly operate, maintain and manage the Lao Operations to international standards.

Attract and retain high-calibre staff in the lead-up to mine closure in Laos.

A woman wearing a white hard hat and clear safety glasses is smiling while holding a small green sapling. She is wearing an orange safety vest with reflective grey stripes. The background is a lush green nursery with many other plants.

PANAUST'S VISION, MISSION AND VALUES

Phu Kham Environment Assistant,
Miss Chanthavong in the Phu Kham nursery,
November 2018

OUR VISION

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

OUR MISSION

Discover, acquire, develop, operate and enhance a portfolio of copper-gold assets that create shareholder value.

OUR VALUES

High-performance outcomes in all that we do

- > Our employees are performance-focused with clear task definition, measurement and accountability.
- > We constantly seek to improve performance and are committed to supporting employee development. Individual results and merit form the basis for performance-based pay and promotion.

Respect for people

- > Respect through our commitment to our employee's health and safety through our Zero Harm safety objective and treating employees with consistency and fairness.
- > 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 daily business activities for the people and cultures of our host countries.

Integrity

In all of our dealings with employees, communities, government, suppliers and shareholders.

Excellence in communications

With all stakeholders but especially with our employees. We seek fair, honest and transparent dealings with our employees and stakeholders through open, two-way communication.

Recruitment of high-calibre people

Recognising the key to our success will be leaders who earn the authority of their position by gaining 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 Company objectives through good leadership and systems that drive the right behaviour.

ECONOMIC PERFORMANCE



The Phu Kham Copper-Gold Operation conveyor and coarse ore stockpile with process plant and tailings storage facility in the background



**IN 2018, GROUP
CONSOLIDATED
METAL PRODUCTION
EXCEEDED TARGETS.**

PanAust recorded strong performances across all business metrics in 2018. This outcome was achieved despite disruptions to operations caused by sustained heavy rainfall during the year's wet season, the likes of which had not been experienced since typhoons Haima and Nokton in 2011.

Group consolidated annual metal production exceeded targets, with 83,680t of copper in concentrate produced. Gold and silver production totalled 179,357oz and 1,204,516oz respectively in concentrate and doré.

Phu Kham Copper-Gold Operation

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 significant cash flow it generates has successfully supported the Company's growth while maintaining a strong balance sheet.

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 6 grams per tonne (g/t) gold and up to 47g/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

Above-budget production and cost performances were achieved at Phu Kham in 2018 with annual copper in concentrate production of 83,680t.

The 2018 C1* and all-in sustaining costs (AISC**) after precious metal credits was US\$1.32/lb and US\$1.74/lb copper respectively.

Mining operations performed well as ore continued to harden with the multi-stage deepening of the open-pit. Total ex-pit material mined was 52 million tonnes (Mt) and included 21Mt of ore. Close to 19Mt of ore was milled.

Copper recovery averaged 81.4 per cent, attributable to improved grade and ore quality, in conjunction with further advances in automated process control and operating practices within the grinding and flotation circuits.

The Phu Kham Ore Reserve supports a mine life of approximately three years from the end of 2018.

* 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

** AISC reporting are the C1 cost plus royalties, allocated corporate charges, shared services costs, sustaining capital, lease principle and interest charges, and deferred mining and inventory adjustments capitalised

Phu Kham Copper-Gold Operation production statistics

	2017	2018	Variance (%)
Total material mined (Mt)	55.5	51.9	(6)
Ore milled (Mt)	18.5	18.9	2
Copper grade (%)	0.60	0.54	(9)
Gold grade (g/t)	0.25	0.23	(6)
Silver grade (g/t)	2.33	2.15	(8)
Concentrate produced (dmt)	387,867	357,709	(8)
Copper in concentrate (t)	90,363	83,680	(7)
Gold in concentrate (oz)	76,055	70,787	(7)
Silver in concentrate (oz)	587,641	537,888	(8)

Ban Houayxai Gold-Silver Operation

The Ban Houayxai Gold-Silver Operation is located approximately 25 kilometres west of Phu Kham. 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

Above budget production was achieved at Ban Houayxai in 2018. Total material mined was 15.8Mt (2017: 14.7Mt) and included 5.0Mt of ore. Over 5.2Mt of ore was processed (2017: 4.9Mt); more than 19 per cent above nameplate capacity.

The Operation produced 108,570oz and 666,628oz of gold and silver in doré respectively. The average C1 cost after silver credits was US\$726/oz gold and an AISC of US\$931/oz gold was achieved.

The Ban Houayxai Ore Reserve supports a mine life of approximately two years from the end of 2018.

Ban Houayxai Gold-Silver Operation production statistics

	2017	2018	Variance (%)
Total material mined (Mt)	14.7	15.8	8
Ore milled (Mt)	4.9	5.2	6
Gold grade (g/t)	0.89	0.79	(11)
Silver grade (g/t)	9.27	7.65	(18)
Gold in doré (oz)	116,475	108,570	(7)
Silver in doré (oz)	789,735	666,628	(16)

Growth opportunities: Evaluation and exploration

Frieda River Copper-Gold Project, Papua New Guinea (PNG) (PanAust 80 per cent)

PanAust holds an 80 per cent interest in the Frieda River Copper-Gold Project*.

The Company completed a feasibility study for a standalone Project in May 2016. In June the same year, PanAust submitted its application for a SML for the Project to the Papua New Guinean Mineral Resources Authority (MRA).

In May 2017, PanAust announced the completion of an addendum to the 2016 feasibility study. The addendum incorporated data and technical analysis from geological, geotechnical and metallurgical field programs that was not available at the time of the feasibility study.

In line with a commitment made in the Proposal for Development that accompanied the SML application, in 2017 PanAust investigated opportunities identified during the feasibility study to reduce the overall Project risk profile. In December 2018, the Company announced these investigations had identified a new nation-building development pathway for the Project. An updated feasibility study and EIS were lodged with PNG authorities in the same month.

The new pathway focuses on the development of shared-use infrastructure that will support, and in turn, be supported by, the mining operation. Under this inclusive development model, the Frieda River Copper-Gold Project will be a core component to a transformative nation-building opportunity – the Sepik Development Project.

The Sepik Development Project contemplates four interdependent projects that together will create a new economic corridor across the West and East Sepik Provinces: the Sepik Infrastructure Project, the Frieda River Hydroelectric Project, the Frieda River Copper-Gold Project and the Sepik Power Grid Project.

The Sepik Development Project will deliver a long-life hydroelectric power facility and a world-class copper-gold mine. These two commercial projects will be enabled by the third party development of an international maritime port, public roads, a regional airport, telecommunications services, a power transmission system and rural electrification, establishing a new economic corridor in an underdeveloped region of PNG.

In 2019, PanAust will work to maintain its relationships with local communities, the Government of PNG and other relevant stakeholders to advance the necessary government permitting and approvals for the Project.

Sagaing Region Exploration, Myanmar (PanAust 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.

On 5 July 2018 – following the approval from the Government of the Republic of the Union of Myanmar – PanAust announced it had been awarded three new Exploration Licences in the Sagaing Region. Covering copper and gold prospecting and exploration, the Exploration Licences were the first awarded under the Myanmar Union Government's new minerals regulations.

The Exploration Licences comprise the Ton Kyaung, Taung Kin and Naugphat blocks. Together, the blocks represent a 562 square-kilometre area in the highly prospective Wuntho Massif region.

The 2018 Licences complement the Licences granted in 2016 which marked PanAust's first venture into Myanmar. The 2016 Licences lie within a 213 square-kilometre contract area in the Sagaing Region and cover three tenement blocks: Hel Chain, Pin Hin Hka and Nam Awl.

The joint venture now holds six Exploration Licences that cover approximately 775 square-kilometres in the Sagaing Region.

Drilling programs commenced in Myanmar in December 2018.

Contract Area exploration, Laos (PanAust 90 per cent)

Near-mine drilling was completed at the Phu Kham Operation and will continue in 2019. Results of this drilling will be used to assess an extension of the Phu Kham open-pit.

Infill drilling and definition was undertaken at the Ban Houayxai Operation in 2018 and will also continue in 2019.

A desktop review of the 2013 prefeasibility study of the Kham Thong Lai (KTL) Copper-Gold Project in the north of the Contract Area was completed in 2018. The review assessed opportunities to lower the Project's capital cost by using equipment that will become available as closure of the Phu Kham and Ban Houayxai Operations approaches. Findings supported a prefeasibility study based on updated Project metrics which commenced in early 2019. Ongoing maintenance of the KTL sediment dams was also completed during the year.

* Cobalt 27 has entered into a scheme implementation agreement with Highlands Pacific Limited dated 1 January 2019, pursuant to which Cobalt 27 will acquire all of the issued ordinary shares of Highlands that it does not own. As part of the proposed transaction, subject to various conditions being satisfied, PanAust proposes to acquire Highlands Frieda Limited's 20 per cent participating interest in the Frieda River Project. For more information, see page 97.

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

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

No material site activities were undertaken at Inca de Oro or the nearby Carmen deposit in 2018 or are planned. 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.

Financial performance

Full-year production and cost performance results underpinned outstanding financial performance in 2018.

PanAust's consolidated net profit after income tax (NPAT) for the 12 months ending 31 December 2018 was US\$74.6 million (2017: US\$83.1 million).

Sales revenue from ordinary activities decreased year-on-year to US\$768 million (2017: US\$792 million) driven primarily by an eight per cent decrease in copper in concentrate sales, slightly offset by a one per cent year-on-year increase in the realised copper price. Lower sales of gold in doré during the year were offset by a two per cent higher average realised gold price.

In 2018, earnings before interest, taxes, depreciation and amortisation (EBITDA) of US\$253 million (2017: US\$296 million) were well above budget as a result of both higher copper and gold production and an average realised gold price of US\$1,269/oz (budget assumption US\$1,240/oz).

The average prices realised, after hedging, for sales during 2018 were US\$2.88/lb for copper, US\$1,269/oz for gold and US\$16/oz for silver (2017: US\$2.84/lb, US\$1,251/oz and US\$17/oz respectively).

Cash flows and sales

Net cash inflow from operating activities was US\$214.6 million (2017: US\$302.5 million).

Operational costs year-on-year comparison

	2017	2018	Variance (%)
Phu Kham C1 cost (US\$/lb copper)	1.18	1.32	12
Phu Kham all-in sustaining cost (US\$/lb copper)	1.68	1.74	4
Copper price (US\$/lb)	2.84	2.88	1
Ban Houayxai C1 cost	618	726	17
Ban Houayxai all-in sustaining cost (US\$/oz gold)	817	931	14
Gold price (US\$/oz)	1,250	1,269	1

There was no capital expenditure on major development projects in Laos in 2018 (2017: nil).

Expenditure during the year on the Frieda River Copper-Gold Project in PNG totalled approximately US\$26 million (2017: US\$22.8 million) and included field programs, study works, environmental assessments, lands identification, stakeholder consultation, community development, corporate support and site-based operational activities.

Balance sheet

At 31 December 2018, PanAust had cash of US\$182.9 million (2017: US\$135.1 million); no external debt (2017: nil); and no mobile equipment lease facilities (2017: nil).

Reporting compliance

As an unlisted public company, PanAust continues to lodge an audited Annual Report (including financial statements) with ASIC and fulfilled its reporting and compliance obligations in accordance with its debt facility agreements.

Reflecting the Company's Values in relation to 'excellence in communication', PanAust publishes activities reports on a quarterly basis on its website, <https://panaust.com.au/company-announcements>.

CASE STUDY

COMMERCIAL COST IMPROVEMENTS



PanAust saves US\$75 million annually through commercial cost-saving initiatives.

Given the Operations mine and process ore from relatively low-grade mineral deposits, PanAust actively seeks opportunities to increase efficiencies and reduce costs. Since 2012, commercial teams have been on a journey to identify and implement cost saving initiatives across procurement, marketing and logistics.

PanAust General Manager Commercial, Geoff Kernick noted that the Company approached commercial cost savings “like a mine in its own right. There are numerous moving parts, each presenting an opportunity to extract value and to increase efficiencies”.

The first step of the journey was to introduce strategic sourcing into the Company’s procurement function. The focus was on creating robust governance processes to minimise costs for the business.

After a 12-month period, this resulted in a US\$10.5 million cost saving. The majority of this was annualised, which carried through to subsequent years. At the end of 2018 the procurement team had realised over US\$58 million of annualised savings.

The Company is now applying the same governance and procurement principles to copper marketing. The focus has been to maximise the sale price of every tonne of copper and every ounce of gold and silver. Detailed customer analysis is used to help the Company determine its best mix of customers for achieving the greatest product profitability for PanAust.

This has led to millions of dollars in additional net revenue for the Company.

PanAust’s logistics team also continually investigates opportunities to reduce costs and improve business revenue. Key initiatives implemented include: increased payloads, alternative concentrate haulage routes, and the backloading of diesel and general freight. These initiatives have reduced haulage costs by 68 per cent over six years.

Mr Kernick said he was proud of commercial teams for achieving improved cost outcomes, and explained what their approach would mean for the future growth of the business.

“Now we have mature commercial processes in place, we can leverage them with new ventures, which will mean we can capture cost savings earlier in the mine cycle. We look forward to continuing to improve value for our shareholder by lowering costs and increasing revenue,” Mr Kernick said.

Above: A truck bound for the Phu Kham Copper-Gold Operation loaded with a full fuel container (bottom) and an empty concentrate container (top). The backloading of fuel and concentrate between PanAust’s logistics hub at Ban Thouay and the Phu Kham Operation is an initiative implemented by the Company’s logistics teams that is contributing to PanAust’s significant year-on-year commercial cost-savings. For more information about the Company’s backloading program, see page 63.

GOVERNANCE



An aerial photograph showing the proximity of the village of Nam Gnone to the Phu Kham Copper-Gold Operation open-pit and tailings storage facility



**PANAUST
RECOGNISES
THE VALUE OF
AN INTEGRATED
APPROACH TO
SUSTAINABILITY
GOVERNANCE.**

Sustainability structure

Since transitioning from a listed-public company to a subsidiary of GRAM, the Company has retained its governance foundations to ensure it achieves its long-term Vision, Mission 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 Board's composition during 2018 is detailed below.

Board member	Position	Date appointed/ resigned
Dr Qun Yang*	Chairman Non-Executive Director	26 September 2017 27 August 2018
Dr Fred Hess**	Managing Director	11 November 2014
Mr Daling Zheng	Director	27 August 2018
Mr Paul Arndt	Non-Executive Director	27 August 2018
Mr Minzhi Han	Non-Executive Director	Resigned 27 August 2018
Mr Gian Deng	Non-Executive Director	Resigned 27 August 2018
Mr Shu Yao	Chairman Non-Executive Director	Resigned 27 August 2018

* Dr Yang was appointed as Executive Chairman on 15 January 2019

** Dr Fred Hess retired on 15 January 2019

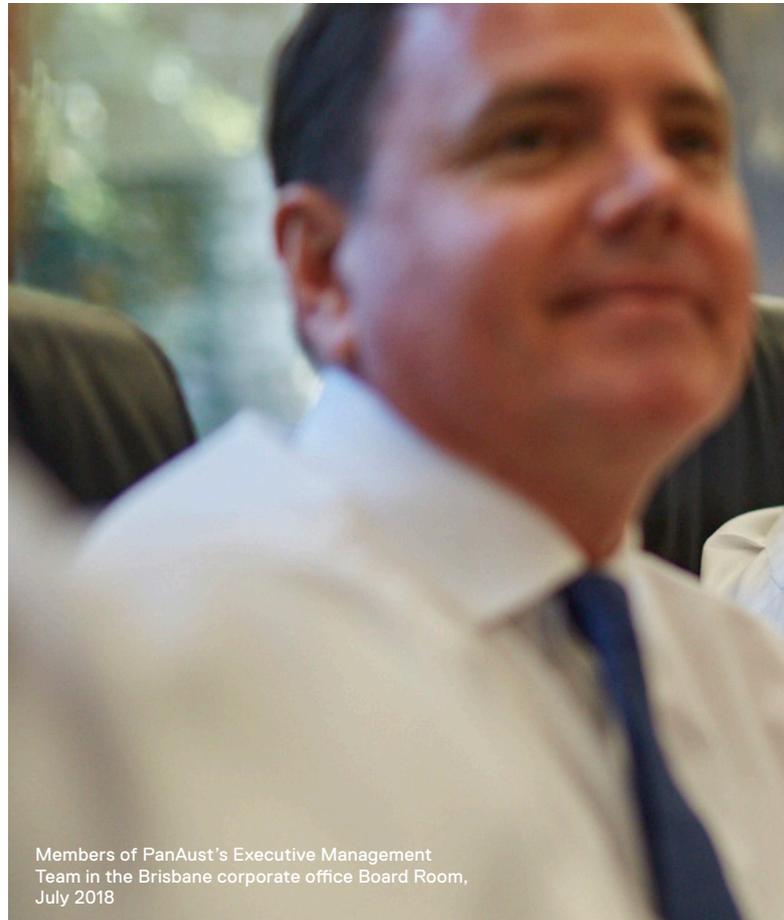
For the profiles of the current members of PanAust's Board, see the Company's website, <https://panaust.com.au/directors>.

PanAust's Board of Directors and Executive Management Teams are responsible for ensuring effective measures, systems and controls are in place in relation to managing:

- > Environmental, community, occupational 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 senior executive remuneration nurtures a performance-based culture. Remuneration, benefits and rewards are aligned with PanAust's strategy, plans and objectives where merit forms the foundation of performance-based pay and promotion.



Members of PanAust's Executive Management Team in the Brisbane corporate office Board Room, July 2018

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. At an executive level, sustainability performance accounts for 15 per cent of the short-term incentive component of at-risk remuneration.

External standards, principles and guidelines

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

PanAust endeavours to comply 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. Through PanAust's IFC audit process, the Company aligns with the Equator Principles.
- > The Minerals Council of Australia (MCA) Enduring Value* which aligns with the International Council on Mining and Metals (ICMM) Sustainable Development Framework Principles: www.minerals.org.au, www.icmm.com.



- > The ICMM's Principles on climate change policy design: 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 (see page 62) in Laos: www.cyanidecode.org.
- > The GRI Standards. PanAust reports the GRI indicators that are material to its business as determined through its risk management approach and materiality determination process: 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 76): 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, <https://panaust.com.au/sustainability>.

* 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, PNG, Thailand and Chile. Full MCA membership requires Australian-based assets.



2018 AN AWARDING YEAR FOR PANAUST



In 2018, PanAust was proud to receive three internationally recognised awards for its health and safety and sustainability practices.

PanAust embeds sustainability requirements in all facets of its day-to-day activities. The Company takes great pride in its safety systems that ensure employees go home safely every day, and its commitment to improving the socio-economic outcomes for those living close to its operations.

In April, PanAust’s sustained focus on safety performance was recognised at the ASEAN Occupational Safety and Health Network (OSHNET) Conference in Siem Reap, Cambodia where its Lao-registered company, Phu Bia Mining, won the ‘Excellence Award’.

The ASEAN OSHNET Awards recognise companies for their excellence in occupational health and safety management from those nominated by each ASEAN country across the region. The Awards also support the ASEAN Labour Ministers’ vision for the cultivation of a favourable environment for economic growth through a productive, competent and competitive workforce.

The Government of Laos nominated Phu Bia Mining as its representative company for the Award, in itself an acknowledgement of the Company’s safety culture and performance. For more information about the ASEAN OSHNET Awards (see page 71).

In September, PanAust received the ‘Friend of Laos Award’ at the Lao ASEAN Business Awards in Vientiane. The Award recognised the contribution the Company has made to socio-economic development in Laos since its Operations commenced in 2008.

Finally, in November PanAust received the prestigious ‘Friend of ASEAN Award’ at the ‘2018 ASEAN Business Awards’.

The ASEAN Business Awards acknowledge and recognise businesses that significantly contribute to the economic growth of the ASEAN region. The ‘Friend of ASEAN Award’ was bestowed on PanAust for demonstrating a commitment to growing its presence in the region and thereby positively impacting its host country’s economy.

The awards PanAust won in 2018 demonstrate the success of the Company’s business model that focuses not only on the physical production of copper and gold, but all aspects of the business including people, safety, environmental management, community relationships and government engagement.

Above: (left to right) The then PanAust General Manager Support Services, Shaun Massey; PanAust Executive General Manager Support Services, Adrian Bell; Phu Bia Mining Chairman, Mr Chanpheng Bounnaphol and Phu Bia Mining Government Relations Manager, Manilath Arounlangsy accept the ‘Friend of Laos’ Award at the Lao ASEAN Business Awards ceremony, 28 September

Building 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; where excellence in one area, encourages and facilitates excellence in the other. Importantly, every PanAust employee is personally invested in achieving holistic business outcomes.

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 (available on the Company's website, <https://panaust.com.au/sustainability>) outlines the Company's commitment to workplace health and safety, host communities, environmental management, and the application of ethical business practices and corporate governance standards. The policy includes a commitment to continuously improve sustainability management and performance.

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.

Fourteen Sustainability Standards relating to PanAust's key outcome areas are applied across the business. For more information on PanAust's approach to sustainability, see the Company's website, <https://panaust.com.au/sustainability>.

Sustainability performance forms part of the Executive Management Team's Five-Year Strategic Plan and critical tasks for each year. In 2018, the Executive General Manager Support Services was the executive-level position responsible for risk management, human resources, external affairs and sustainability across the PanAust Group, and reported directly to the Managing Director.

Each PanAust business unit is provided with organisational support to manage sustainability through either teams of professionals embedded within the unit, or a corporate-based role providing the requisite level of support.

Since 2009, the Company has facilitated an Annual Risk and Sustainability Workshop with executives, managers and sustainability support staff across the business. The Workshop is a mechanism to drive continuous improvement and Company-wide alignment to the management of material risks and sustainability. It provides an opportunity for sustainability-related activities and progress to be reviewed and challenges to be tabled and discussed.

A risk and sustainability plan is formulated at each workshop. Objectives and targets are set for the upcoming year for the Group and are subsequently incorporated into Company and individual performance targets and incentives. Performance against these targets is evaluated at the end of each year

for short-term incentive payments, and more broadly, at the following year's workshop as part of PanAust's continuous improvement process.

PanAust's 2018 Risk and Sustainability Workshop was held in Vientiane over three days in August and was attended by 34 operational and discipline-specific employees. Site representatives from four Lao contractor companies attended the third day of the workshop. External peer companies and specialist consultants were also invited to share their approaches to safety and sustainability management and performance. This included a site visit following which they provided feedback on what they believed PanAust were doing well, and opportunities for improvement.

Human Resources' objectives and targets are set at an annual Human Resources Workshop. The Workshop serves as a key avenue to strategically embed PanAust's Vision, Values, sustainability and continuous improvement into the Company's operating culture which then drives the Group's Human Resources' annual plan.

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

Business conduct

PanAust is a company with a clear Vision and a strong commitment to high-performance outcomes. To ensure the Company's activities are carried out legally, ethically, with integrity and respect, PanAust has clearly stated and widely communicated Vision and Values, and a code of conduct, The PanAust Way; 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 human rights and anti-bribery and corruption and is available on the Company's website, <https://panaust.com.au/corporate-governance>.

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

PanAust has internal controls and procedures in place to monitor for the misappropriation of funds, bribery and corruption, and other code of conduct-related issues. This includes periodic checks through external audits and executive-led internal deep dive 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 2018.

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. PanAust strictly prohibits employees, directors and its business partners from making or receiving bribes or corrupt payments.

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.

There were no instances of Company-related bribery and/or corruption reported to the Board or the Executive Management Team in 2018. 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 2018.

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 and/or an online form available on PanAust's website, <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 such a concern. A link to PanAust's Whistleblower Service is available on the Company's website, <https://panaust.com.au/corporate-governance>.

In 2018, no 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, local communities, 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 2018, PanAust recorded no breaches of indigenous people's or other human rights.

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

DISASTER RELIEF ASSISTANCE



PanAust's approach to managing human rights

Commitment

- > The PanAust Way
- > Sustainability Policy
- > Sustainability Standards
- > Human Resources Standards
- > Member Company – Voluntary Principles on Security and Human Rights (see page 76)
- > Alignment to the ICMM Indigenous Peoples and Mining Position Statement

Assessment

- > Human rights risk assessments
- > Human rights due diligence
- > Environmental and Social Impact Assessments
- > Stakeholder analysis (including indigenous peoples, gender, vulnerable and disadvantaged)

Act

- > Workforce practices and feedback mechanisms (see page 85)
- > Stakeholder engagement (including disadvantaged groups) appropriate to the project and location context and the IFC Performance Standards (see page 42)
- > Supplier evaluations and contract clauses related to human rights (see page 30)
- > Project designs, development and closure consistent with cultural and social values of host communities (see page 54)
- > Grievance mechanisms, resettlement and compensation protocols (see page 45)
- > HR grievance mechanisms including the Fair Treatment Standard and Workplace Representative Committee (see page 91)
- > Community development (including opportunities to enhance human rights of host communities, for example, access to water and improve healthcare, education and livelihood opportunities) (see page 48)
- > Social and Environmental Management Plans

Check and report

- > Periodic surveys including socioeconomic, perception, employee surveys
- > Periodic audits including deep dives and annual audits of the Lao Operations against the IFC Performance standards, contractor audits (see page 34)
- > Internal and external reporting
- > Whistleblower Standard and Whistleblower Service (see page 28)

In 2018, PanAust donated more than US\$70,000 and provided in-kind assistance to emergency response efforts in countries and regions where it operates.

On 23 July, the Xepian-Xe Nam Noy hydropower dam in Laos's Attapeu Province collapsed. The disaster caused multiple fatalities and saw the Government of Laos declare the Province a natural disaster zone.

Standing behind its employees, partners and their families in Laos, PanAust donated US\$50,000 to the Government of Laos's Ministry of Energy and Mines central relief coordination agency. A team of employee volunteers were also dispatched to the Province to assist with relief efforts. The team comprised doctors, paramedics and logistics professionals, along with equipment including a boat, vehicles and emergency medical and other supplies. The Company also matched monetary donations employees made to relief efforts and separately donated more than US\$9,500 to the Attapeu Provincial Administration Office.

In PNG, the Company provided assistance in response to a number of natural disasters early in the year.

In January, a volcano on Kadovar Island began erupting. PanAust made a US\$10,000 in-kind donation of diesel to help evacuate 1,700 people.

In February, a magnitude-7.5 earthquake struck in the Southern Highlands causing widespread damage, including to the Telefomin Secondary School. PanAust provided support to help repair damage to the school. Also in February, the Company provided US\$3,500 of in-kind food and fuel to help manage a whooping cough outbreak in the Ambunti Province.

Left: (left to right) Regional Emergency Services Superintendent, Mike Taylor; Fire and Emergency Services Supervisor, Phatthana Thorphialouang; and Fire and Emergency Services Team Leader, Saly Boualong, three members of the Company's team of volunteers dispatched to provide assistance to those affected by the hydropower dam collapse in Laos's Attapeu Province, July 2018



GOVERNANCE

Sponsorships and donations

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

Sponsorship and donation requests are assessed against:

- > Projects located within 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 the capacity-building of relevant sector government agencies.

PanAust's sponsorship and donation committees transparently and consistently assess requests against the priority areas. Decisions are reviewed by an executive in each business unit.

Details of the sponsorship and donations administered across the Company in 2018 are provided on page 48 of this Report.

No financial or in-kind donations to political parties, politicians or related institutions were made by PanAust or any of its subsidiary companies in Australia, Laos, PNG, Myanmar or Chile during 2018.

More information about PanAust's approach to managing requests for sponsorship and donations is available on the Company's website, <https://panaust.com.au/corporate-governance>.

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 business.

The PanAust Way, along with PanAust's Contractor 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 74).

PanAust has 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.

PanAust procures goods and services locally where practical and based on 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 46) and PNG. 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 2019 and beyond.

In 2018, over 49 per cent of goods and services for the Company were purchased in Laos; 80 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 PNG.

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 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. 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 2018. 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. In 2018, PanAust hosted a site visit to the Phu Kham Operation for its customers. PanAust did not receive any customer complaints relating to product quality in 2018.

More information about PanAust's product stewardship is available on the Company's website, <https://panaust.com.au/corporate-governance>.



CASE STUDY

TENTH ANNIVERSARY OF THE PHU KHAM COPPER-GOLD OPERATION

In 2018, PanAust celebrated the tenth anniversary of its flagship Phu Kham Operation. The economic and sustainability achievements at the Phu Kham Operation over the last 10 years is testament to PanAust's holistic approach to business success.

Success requires excellence not only in the physical production of copper and gold, but across all aspects of the business, including our people, safety, environmental management, community relationships, government engagement and returns to shareholders. This approach to success has facilitated PanAust's growth from a junior explorer to respected mid-tier copper and gold producer.

Since PanAust's operations commenced in Laos, the Company has invested more than US\$1 billion in the country. This includes over half a billion dollars in direct economic contributions, and hundreds of millions of dollars to Laos-based companies and suppliers. PanAust has employed approximately 3,000 Lao-nationals (approximately 870 from the local villages), improved access to education, health outcomes, and infrastructure for those living close to its Operations, and worked to build the capacity of local communities and contractors that supply the Operations with goods and services.

These achievements are outstanding considering the challenging operating environment the Company faced at the onset of its activities: a least developed country with an immature mining industry. Importantly, they were realised safely, sustainably and in collaboration with host communities and Governments.

Phu Kham's ten-year journey from humble beginnings to operational excellence is a prototype for PanAust's holistic approach to business success. It is a model for how the Company intends to develop its Projects in Myanmar and PNG. It highlights that when business, sustainability and governance outcomes are pursued in a complementary manner, companies and local communities can achieve mutually beneficial outcomes.

Above: (Left to right) Process Operator, Chansouk Thongvilay; Phu Bia Mining Chairman, Mr Chanpheng Bounnaphol; former PanAust Managing Director, Dr Fred Hess; PanAust General Manager Operations, David Reid; and Administration Officer, Ms Vimon Sengphachanh cut a cake to celebrate the 10th anniversary of the Phu Kham Copper-Gold Operation during celebrations held at Phu Kham's site, May 2018



An excavator loading a 777D truck at the Ban Houayxai Gold-Silver Operation, November 2018

Risk management

PanAust's approach to risk management

PanAust recognises that identifying and managing risk is integral to business management, 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.

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 publicly available on the Company's website, <https://panaust.com.au/corporate-governance>, and is supported by the Company's ERM Standard which was updated in 2018.

In 2018, PanAust also 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* (the Precautionary Principle).

*Principle 15 of the Rio Declaration advises 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.

PanAust's Executive Management Committee is responsible for ensuring that PanAust's systems of risk management and internal controls are in place. Issues are reported to the Board as important matters arise, and regular reporting processes are in place.

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

The Executive 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 Executives on the management of material risks through a peer review process. In addition, every Executive 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 utilising the PanAust's Extended Consequence Table, available on the Company's website, (<https://www.panaust.com.au/corporate-governance>) on the following basis:

- > Is the risk significantly material requiring public disclosure?
- > Could the risk substantively influence the assessment and decision of stakeholders?
- > Could the risk materially change the underlying value of the business?
- > 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 20 active Group-level risks that are material to the business. 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 Executive Management Team in 2018. Risk issues relating to the Frieda River Project are

addressed at the Group level given the timing and importance of the Project in the Company's growth pipeline, and in recognition that the Project's design phase provides an opportunity to implement long-term strategic sustainability objectives.

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)
- > the IFC Performance Standards on Social and Environmental Sustainability.

Requirements and obligations are applied through the Company's Environmental and Social Management Systems, and 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.

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.

2019 sustainability audit plan and 2018 progress

External/internal audits	2018 performance	Next audit
Economic performance		
Group financial audit	Completed annually and disclosed in PanAust's Annual Report to ASIC.	2019
External insurance audit	Completed.	2019
Social performance		
Risk-based environmental and social performance audit (replacing the International Finance Corporation audit)	Audit due in 2020.	2020
Socio-economic surveys	Lao socio-economic survey due in 2019.	2019
Community Development Fund (CDF) reviews	Deep dive review into the CDF due in 2019.	2019
Environmental performance		
Acid rock drainage (ARD) external audit	Completed to plan. Knight Piesold and Environmental Geo-chemical International undertook an external review of ARD management at Phu Kham and Ban Houayxai with one potentially material issue identified. An action plan was developed.	2019
Cyanide Code annual gap analysis	An independent gap analysis by Golder Associates in 2018 confirms the standards have been maintained in preparation for recertification. Recertification audit due in 2019. Progress on cyanide management is reported on page 62.	2019
Tailings Independent Review Panel (TIRP) and annual designers' tailings storage facility safety inspection	<p>There were two site visits undertaken by the TIRP in 2018 in order to review the dry and wet season performance of both Tailings Storage Facilities (TSFs). The Panel confirmed the good management practices for the construction, operation, monitoring and corporate governance of both facilities.</p> <p>A number of recommendations were considered by the PanAust Tailings Review Committee and are being progressed.</p> <p>The independent design engineer also completed site visits to verify the construction performance of both facilities.</p>	2019
Comprehensive dam safety review	An independent comprehensive dam safety review was completed to plan and confirmed that the design and construction aspects of both TSFs are sound.	2023
Pit geotechnical review	An independent review was completed for the Phu Kham open-pit to verify the life of mine design parameters.	2019

External/internal audits	2018 performance	Next audit
Health, safety and security		
Technical safety audits for high-risk activities and/or hotspots	<p>Third-party aviation audits were completed for Laos, PNG and Myanmar providers (see page 76). A gap analysis against 16 Safety Standards was completed by KASA Consulting for the Lao Operations in the last quarter of 2017 with an additional two standards completed in quarter one 2019.</p> <p>Nine deep dive reviews were conducted by PanAust's Executive Management Team for safety hotspots and high-risk activities (see page 72).</p>	2019
Contractor safety management compliance reviews	Thirteen local contractors were prioritised for the audit and inspection program for the Operations in Laos. A combination of compliance reviews, risk register reviews and inspections were also completed.	2019
Security setting and security management	Internal security audit conducted.	2019
Governance and risk management		
Sustainability Standards internal benchmarking: Phu Kham, Ban Houayxai and Frieda River	At the Frieda River Project, baseline requirements were incorporated into the 2018 EIS for the Sepik Development Project.	2019



An aerial view of the Phu Kham Copper-Gold Operation tailings storage facility with waste rock dump and process plant in the background

2018 sustainability performance

Targets	Results	Commentary 2018, revised target 2019
Economic performance		
Achieve annual production guidance for copper and gold and all-in sustaining cost guidance for Phu Kham and Ban Houayxai.	Achieved	Annual outcomes for safety, production and costs were better than budgeted at both operating sites. PanAust delivered full year NPAT above budget of US\$74.6 million (budget US\$63.5 million).
New target: complete Sepik Development Project permitting phase and continue to add value to the Project.	New	In December, PanAust announced it had identified a new nation-building development pathway for the Frieda River Copper-Gold Project. This was reported in an updated feasibility study in December (see page 19). An updated Proposal for Development and new EIS were submitted to PNG regulatory agencies in the same month.
Progress exploration and growth opportunities.	Achieved	In July, PanAust announced it had been awarded three Exploration Licences in Myanmar's Sagaing Region; drilling programs commenced in December. Near mine drilling was completed at Phu Kham to assess a possible extension of the open-pit.
Governance		
The PanAust Way embedded and implemented consistently across each worksite/geographical location.	In progress	Comprehensive review of The PanAust Way is being undertaken in 2019. Group-wide anti-bribery corruption standards to be implemented in 2019.
2018 Business Review and Sustainability Report prepared to GRI standards.	Achieved	The 2018 Report was externally assured to GRI Standards.
Social performance		
Community Development Fund (CDF) expenditure plan approved and progressed with 80 per cent of funds committed to spend by year-end.	In progress	30 of the agreed 37 CDF projects were completed; 7 projects were partially completed with funds carried over to 2019 (see page 50). New target: 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 (including progressing Government of Laos Closure Committee), Vietnam (haulage and port), Thailand (haulage and port) and Myanmar. Stakeholder engagement continues with the Government of PNG, provincial administrations, landowners and local communities towards securing all relevant permits and licenses, including a social license to operate.
Environmental performance		
No level 3 environmental incidents.	Achieved	No level 3 environmental incidents.
EIS completed to an international standard and approved for each development project.	Achieved	The Sepik Development Project EIS was lodged with the Conservation and Environment Protection Authority of PNG in December (see page 66).
Energy and greenhouse gas inventory and improvement plan.	Achieved	Seventh report to CDP completed.
Progress closure planning for the Lao Operations.	In progress	Pre-feasibility study level closure plans are in place. Community engagement commenced (see page 54).

Targets	Results	Commentary 2018, revised target 2019
Health and safety performance		
Zero levels 4 or 5 incidents on controlled work sites.	Achieved	No level 4 or 5 incidents.
TRIFR <1.26.	Achieved	2018 TRIFR of 0.6. Target for 2019: 1.31.
Address health and safety hotspots and actions assigned to the Senior Management Taskforce on Significant Incidents.	Achieved	All actions assigned to the Taskforce were closed out. In 2019, the Taskforce will focus on addressing hotspots and deep dive review findings.
Advance Visible Safety Leadership Program.	Achieved	Nine deep dive reviews of high-risk activities and hot spots were conducted and led by the Executive Management Team; planned task observation program embedded in Laos.
Crisis management training simulation for PanAust updated.	Achieved	Training for PanAust Asia completed and plans updated.
Implement Group Contractor Management Standard	Partially achieved	Continued to support local contractors to meet Standard requirements (see page 74).
Our people		
Conduct regular employee engagement surveys and implement findings.	Partially achieved	The most recent employee engagement pulse survey was completed in Q2 2017. Feedback from Frieda River personnel was addressed during 2018.
Improve Lao-nationals' development to enable promotion into roles previously filled by expatriates.	In progress	Achieved 92 per cent localisation in Laos. The Leading the PanAust Way Program commenced rollout in 2017 and has been implemented to manager, superintendent and supervisory level employees. The leadership capability model will continue to be introduced to supervisory level employees in 2019 (see page 84).
Improve technical trades training capability in Laos.	In progress	51 trade apprentices completed their training and have entered the workforce as qualified tradespeople. A further trades certification program will be launched in 2019 to provide existing unqualified trades employees with a formal Laos trade qualification (see page 82).

SOCIAL PERFORMANCE



Above: Ms Jue Yang, a vegetable farmer from the village of Nam Gnone,
November 2018



**PANAUST IS
COMMITTED
TO ENSURING
ITS PRESENCE
POSITIVELY
IMPACTS
THE HOST
COMMUNITIES
AND COUNTRIES
IN WHICH IT
OPERATES.**



SOCIAL PERFORMANCE

The Company achieves this by 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. A testament to this commitment is the recognised improvement in socio-economic outcomes for host communities in Laos since PanAust established its presence. PanAust's achievements in this regard have been recognised internationally through a number of awards (see pages 25 and 26).

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 local communities through stakeholder engagement and social impact assessments, including 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 opportunities. The systems are aligned with the IFC Performance Standards.

PanAust's community development projects enable local 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.

PanAust has mechanisms built into its business practices to monitor and evaluate its engagement and development activities. Community concerns can be discussed directly with community relations staff, or lodged through a complaint, grievance or request mechanism. Where PanAust's activities unavoidably impact livelihoods, compensation and mitigation schemes are activated.

In Laos, PanAust's electronic reporting and corrective action event management system, InControl software (INX), captures engagement activities, feedback, complaints, grievances and commitments. In PNG, Borealis software is used to capture this information for the Frieda River Copper-Gold Project. The data captured by these systems is used to monitor and identify trends, and for reporting.



PanAust's materiality process identified the social performance focus areas for 2018 as:

- > Stakeholder engagement
- > Economic value generated
- > Community development
- > Closure preparedness

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. 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 in Laos and the Frieda River Copper-Gold Project in PNG, 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 2018, PanAust's stakeholder engagement activities included:

- > A range of regular meetings with local 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. Campaigns in Laos focused on introducing and obtaining feedback from communities on the Company's plans for post-closure. In PNG, campaigns focused on the Sepik River and infrastructure corridor engagement including in relation to the Sepik Development Project.
- > Reports: each year, PanAust's performance is comprehensively reported via this document. An abridged version focused on PBM'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. Officials from key Government ministries are represented at both Phu Kham and Ban Houayxai 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.

In PNG, 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. Engagement with the national Government occurs regularly through meetings, presentations and letters. The State Negotiation Team represents the central-level engagement mechanism of Government of PNG officials. PanAust also briefed Government ministers and agencies on progress with the Frieda River Copper-Gold Project.

In Myanmar, Government engagement occurs 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.



THE WOMEN IN MINING PROJECT

To ensure benefits are equitably distributed, PanAust prioritises the inclusion of women in Project negotiations.

In PNG, the Company does this through its participation in the Women in Mining Project and ensuring that women are represented in forums including the Community Leaders' Forum and the Resettlement Committee.

The Women in Mining Project, run in collaboration with the Australian Government's Department of Foreign Affairs and Trade, aims to ensure that the economic and social rights and interests of women are heard and addressed throughout the lifecycle of the Frieda River Copper-Gold Project. In 2018, a mentor continued to work with women from the seven near-Project communities to prepare them for participating in the Frieda River Development Forum. Literacy and financial literacy training was also provided, as well as training on gendered approaches to farming (that encourages the equal participation of a household in generating income through farming).

PanAust External Affairs Manager (PNG), Geoff Callister also spoke about the achievements women have made through their participation in the Community Leaders' Forum.

"We are proud that women from each of the seven near-Project communities are now represented in the Community Leaders' Forum. With women involved, the focus of these meetings has shifted to addressing the social issues affecting women and children in the communities.

"One of the key achievements of greater women's involvement has been the endorsement of the women's agenda. The agenda requires women's representation in the Landowner Association once established. This is a significant achievement and an encouraging step towards ensuring benefits from the Frieda River Project will be equitably distributed," Geoff said.

Above: Literacy training for women in the near-Project community of Wabia – part of the Women in Mining Project

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. The following table outlines key stakeholder groups, and engagement mechanisms and priorities in 2018.

Stakeholder group	Engagement mechanisms	Engagement priorities
Primary stakeholders		
Employees	<ul style="list-style-type: none"> > Site visits by the Executive Management Team > Team meetings (daily, weekly, monthly) and one-on-one interactions > Monthly employee briefings (Corporate office) > Inductions, training programs, awareness videos, career and professional development programs, English language training > Workforce planning meetings > Workplace Representative Committees (in Laos and PNG) > PKM and BHX radio stations as part of a fatigue management initiative > Employee engagement events, toolbox talks, posters > Company intranet, videos, emails, alerts, noticeboards > Fair Treatment Process of appeal > Annual Employee Awards and Long Service Awards > Whistleblower Service 	<ul style="list-style-type: none"> > Health, safety and wellbeing > The PanAust Way > Business performance and growth > Project development activities and progress > Mentoring, training and development > Community contributions > Building local workforce skills > Maximising localisation > Employee retention as closure of the Operations in Laos approaches > Leading the PanAust Way Program
Local landowners and host communities	<ul style="list-style-type: none"> > Multi-stakeholder consultation and collaboration to agree on community development projects > Community development progress meetings at the village, district and provincial levels > Community response, including grievances > Involvement in matters important to the community, including local community events > Frieda River Community Leaders Forums, Joint Provincial Consultative Committee (JPCC), awareness campaigns along the infrastructure and Sepik River corridors > Stakeholder engagement meetings 	<ul style="list-style-type: none"> > 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) > Closure planning (Laos) > Operation and project development including revised project scope > Community safety > Grievance mechanisms > Community participation agreement committee, membership qualification criteria, landowner association and landowner representative company formation > Benefits and compensation negotiations
GRAM and the Board of Directors	<ul style="list-style-type: none"> > Board meetings > Reporting (monthly) 	<ul style="list-style-type: none"> > Financial returns and operating discipline > Funding strategy for growth

Stakeholder group	Engagement mechanisms	Engagement priorities
Joint venture (JV) and/or equity partnerships	<ul style="list-style-type: none"> > Management committee meetings > Tailored responses to queries > Monthly reports > Technical reports 	<ul style="list-style-type: none"> > Financial returns, ability to service debt and operating discipline > Governance > JV expenditure, project progression, tenement requirements and statutory obligations > Safety and sustainability performance, and stakeholder relationships > Disclosure requirements for JV partners including process on permitting status (EIS, SML, feasibility studies and associated approval hearings)
Governments	<ul style="list-style-type: none"> > Communication through the Government Relations personnel > Scheduled and ad-hoc meetings and agreements with local, provincial and central/national government representatives and officials > Joint initiatives with government for community development > Site visits for government officials > Tailored responses to queries > Tailored publications – proactive approach, including frequently asked questions > Online portal for the Government of Laos > Ad-hoc ministerial and department-level meetings by the Executive Management Team 	<ul style="list-style-type: none"> > Relationship management > PanAust Vision and Values > Permitting and Exploration Licences renewals > Progression of project approvals > Environmental compliance/management > Economic contributions and community development > Local employment and workforce localisation > Closure planning (Laos)
Customers (smelters and refineries)	<ul style="list-style-type: none"> > Technical support regarding product quality > Regular customer meetings > Representation at conferences including the London Metals Exchange 'LME Week', London and the Centre for Copper and Mining Studies 'CESCO Week', Shanghai > Site visits > Tailored responses to queries 	<ul style="list-style-type: none"> > Reliability of supply and product quality > Product weights and measures, assay exchange > Logistics and product stewardship > Cost and delivery > Safety and Environmental, Social and Governance (ESG) performance
Contractors and suppliers	<ul style="list-style-type: none"> > Request for proposals (RFPs) and tendering > Regular performance review meetings covering specific performance metrics > Price adjustment mechanisms undertaken quarterly, six monthly and annually > Commodity price forecasting value add by suppliers with access to price indices > Risk management for one-off projects and where incidents occur > Participation in community workshops by site-based contractors > Tailored meetings > Inductions, monthly contractor performance reports > Quarterly contractor safety workshops > Major supplier pre-qualifications 	<ul style="list-style-type: none"> > Security of supply focus on major suppliers for operations including mobile maintenance, fixed plant maintenance, truck fleet maintenance and explosives > Quarterly performance covering specific performance metrics > Certified value guarantee (suppliers provide innovation and efficiencies) > Convening stakeholders to address geographical and shift pattern challenges > Health and safety and ESG performance including safety workplace inspections, Job Safety Observations (JSOs), hazard identification, inspections, audit and review > Leading practice initiatives > Expectations of contractor performance including training, compliance to the PanAust Contractor Health Safety and Environmental (HSE) Management Standard > Contractor HSE Management Plan performance > The PanAust Way

Stakeholder group	Engagement mechanisms	Engagement priorities
Interested parties		
Industry associations	<ul style="list-style-type: none"> > Association meetings > Committee participation > Joint initiatives > Presentations and correspondence > Site visits including benchmarking visits to peer organisations > Participation and presenting at industry conferences 	<ul style="list-style-type: none"> > Policy and legislative setting > Education and knowledge transfer > Leading practice initiatives > Health and safety and ESG performance and stakeholder relationships
Media	<ul style="list-style-type: none"> > One-on-one interaction with journalists, press releases > Company Announcements > Hosted site visits > Respond when material factual errors are identified in reporting 	<ul style="list-style-type: none"> > Communication with the public on project development and operational status > Economic, health and safety and ESG performance, including community development
Non-government organisations	<ul style="list-style-type: none"> > Provision of company information to inform industry reports > Meetings 	<ul style="list-style-type: none"> > ESG performance > Contract transparency
Capital market participants (including investment banks, debt, equity and independent analysts)	<ul style="list-style-type: none"> > Meetings and industry forums > Tailored responses to queries 	<ul style="list-style-type: none"> > General industry performance and ESG benchmarking > Business opportunities
Other mining companies, academics	<ul style="list-style-type: none"> > Papers and presentations at conferences, PanAust Risk and Sustainability Workshop participation, meetings etc. > Site visits and study tours 	<ul style="list-style-type: none"> > ESG performance > Knowledge transfer > Leading practice initiatives > Benchmarking and good industry practice



Above: Sepik Development Project stakeholder engagement activities, November 2018

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 close to PanAust's activities, enabling culturally effective communication between the Company and community members.

The Company conducts periodic socio-economic surveys to support community engagement and better understand issues and movement in community living standards. The various surveys provide an important mechanism to build an understanding of the needs and expectations of host communities to inform priorities and initiatives, and to assess the extent stakeholders believe their concerns are being effectively addressed.

Grievance management

PanAust has in place grievance mechanisms at its Operations and for the Frieda River Project. 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 2018, two grievances were raised in Laos. The grievances related to impacts to property from road maintenance activities and were closed out in January 2019. One grievance was raised and addressed at the Frieda River Project site (see page 92).

The Company had no disputes relating to indigenous people and customary rights during 2018.

Resettlement, livelihood restoration and compensation

No involuntary resettlement has taken place for PanAust's Operations. 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 as a result of the resettlement.

The revised Frieda River Copper-Gold Project scope will require four near-Project villages to be resettled. This will affect approximately 200 households comprising approximately 1,300 people. Consultation with residents from the four villages – including discussions regarding resettlement location options – has occurred, and will continue as part of the resettlement planning process. In 2018, a Resettlement Committee was established and comprises leaders from each village including women. Housing and associated facilities and livelihood restoration programs will be provided to the resettled villagers. Housing will be of a higher standard than what is available at current village locations. Villagers are supportive of the resettlement process and its objectives.

The Company's compensation process in Laos aims to ensure that those affected by PanAust's 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 Consultation and Community Engagement Procedure. The Standard aligns with Lao regulations and international standards, such as those from the IFC and ICMM.

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 PNG, compensation rates are set by the Government of PNG's Valuer General. If the Company believes the set compensation rate is too low, compensation is adjusted to reflect local value rates.

In 2018 US\$24,465 was paid in compensation for economic livelihood impacts in Laos. In PNG, US\$69,679 was paid to landowning communities for issues relating to impacts on community land from geotechnical investigation drilling, terrestrial biodiversity investigations along the road corridor access, and ongoing compensation for land use.

Economic value generated

PanAust recognises its responsibility to make a positive social and economic contribution to the communities, regions and countries where 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. Focus areas are: infrastructure, health, education, agriculture, small business development, and microfinance.

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 employees and communities through capacity-building.
- > 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 ten per cent shareholder in PBM.
- > 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\$1.45 billion has been invested in Laos. This figure represents the expenditure on physical assets and exploration, and includes PanAust's 2018 expenditure of US\$2.25 million towards public road infrastructure and maintenance along the Company's logistic route, and regional roads in close proximity to the Company's Operations. Since 2006, PanAust has invested more than US\$62 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 PBM activity, taking into account investments and in-country operating expenditure, accounted for over 2.4 per cent of Laos's real gross domestic product (GDP) which, in 2018, is estimated to be US\$17.7 billion*. 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.**

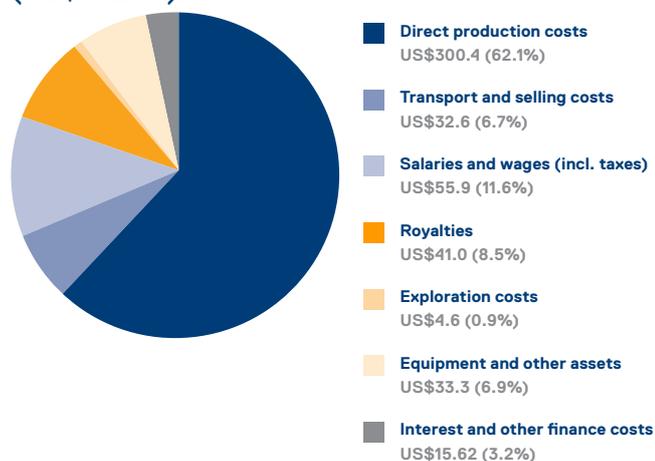
During 2018, PanAust's other economic contributions to Laos included:

- > The payment of US\$208 million to Lao suppliers of goods and services; over 49 per cent of external expenditure on goods and services was to companies in Laos and the Government of Laos.
- > Contribution of approximately US\$86 million to the Government of Laos.
- > Contribution to capacity-building programs and activities at district, provincial and central government levels.
- > Employment of 3,292 people in Laos. By year end, 92 per cent were Lao-national employees, of whom 27 per cent are from local villages adjacent or in close proximity to PanAust's Operations.
- > Administering a sponsorships and donations program in Laos (in addition to the community development program), donating US\$158,000 to a wide range of recipients through cash and in-kind donations.
- > PBM revenues of US\$768 million for the sale (and export) of copper, gold and silver in 2018 represents 18.6 per cent of total Lao goods exports (estimated by the Economist Intelligence Unit as US\$4,126 million).

* The Company estimates Laos's real GDP to be approximately US\$17.7 billion. Total PBM activity including indirect benefits through employment, training, community development and payments to local suppliers accounted for 2.4 per cent of this estimated GDP. 2018 GDP data was not available as at 31 March. The 2018 GDP estimate was calculated using a five-year average growth rate.

** Sources: ICMM publication, *The role of mining in national economies*, 2012; World Bank and IFC publication, *Large mines and communities: forging partnerships, building sustainability*, 2012.

2018 total payments by PanAust Asia (US\$ million):



2018 payments for goods and services by PanAust Asia (US\$ million):



2018 total payments by PanAust Asia (US\$ million):

Description	US\$ million		
	2016	2017	2018
Payroll tax	4.24	4.16	4.21
Customs excise (import service fee)	1.74	1.70	2.35
Road tax	4.48	4.70	4.54
Profit tax (income tax)	16.19	25.33	28.90
Royalties	35.55	43.81	41.01
Concession fees	0.06	0.06	0.06
Dividend	4.520	10.50	5.35
Total contribution	66.76	90.26	86.42
Copper price (US\$/lb)	2.25	2.84	2.88

2018 total payments by PanAust Asia (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	438.94	54.95	1.13	81.07
Thailand	0.75	0.17	-	-
Vietnam	9.10	0.01	-	-
Chile	0.57	-	0.01	-
Myanmar	3.28	0.79	0.02	-
PNG*	-	-	-	0.71
Australia	8.51	19.78	0.02	0.81
Total	461.15	75.71	1.18	82.58
Group revenue**	775.42			
Group economic value retained***	154.79			

* Operating costs only. Does not include payments to government, employee wages and benefits, depreciation or capital projects. Note: PNG costs (with the exception of taxation payments to government) are capitalised. In 2018, US\$26.66 million was capitalised against the Frieda River Project.

** Sales revenue, derivative gains/losses and other income.

*** Group economic value retained is calculated by Group revenue less Group operating costs, employee wages, payments to providers of capital and payments to governments.

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 good international 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.

Corporate, pre-development and exploration community development

In PNG, community development planning occurs within village planning committees. The outcome is a community participation agreement between the Company and the community that details responsibilities and costs.

In 2018, PanAust contributed US\$239,353 to community development programs in PNG, with a further US\$56,545 associated with the use of helicopters to deliver programs to the Frieda River Copper-Gold Project 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 PNG Baptist Church Health Services.

Activities included the provision of national supplementary immunisations, the delivery of community outpatient clinics, the transportation of medical supplies to project community clinics, attending to medical emergencies, and the evacuation and referral of patients to regional health facilities. Support was also provided to Interplast Australia & New Zealand, whom PanAust has collaborated with since 2012 (see page 49).

Education assistance was delivered in cooperation with Telefomin District Education and the Boards of various local schools. Activities included 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 a tertiary level. 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 working to improve the infrastructure of various schools throughout the District and provide increased support to teachers.

Sponsorship of US\$5,000 was provided to the Zonta Club of Brisbane's 2018 Birthing Kit Project. The Project assembles and distributes birthing kits to assist with the provision of clean and safe birthing environments for women in developing countries, including PNG. Kits contain a rubber sheet, soap, gloves, cord, scalpel and gauze. Representatives from PanAust's Brisbane office and their families participated in the birthing kit packing day where almost 13,000 kits were assembled. 2018 was the fifth consecutive year PanAust has supported the initiative.

In Myanmar, PanAust sponsored the annual Myanmar Independence Day celebrations held at the Sagaing Region village of Wuntho. The Company donated US\$3,000 in prizes for various competitions.

PANAUST AND INTERPLAST: WORKING WITH PARTNERS TO CHANGE LIVES FOR PAPUA NEW GUINEANS



In 2018, Foyok, a 15-year-old girl from the village of Ok Isai in PNG’s West Sepik Province, received life-changing surgery in Australia through a partnership between PanAust, Interplast Australia & New Zealand and the Children First Foundation.

When Foyok was four years old, she suffered nerve damage and palsy in her hand after a tree fell and struck her. The damage was so significant, it left Foyok with no use of her arm or hand. Her case was identified by Interplast during a PanAust-sponsored round of surgical assessments in November 2016.

With assistance from PanAust and Children First Foundation in Australia, Foyok travelled to Melbourne, Australia where she underwent specialist surgery. Thanks to Interplast volunteer surgeon, Dr Scott Ferris and the team at St Vincent’s Private Hospital – one of the Children First’s program partners – function in Foyok’s hand has improved. Foyok is continuing to undergo rehabilitation with Children First Foundation and will return to PNG in early 2019.

PanAust and Interplast have a longstanding partnership through which remote communities receive medical screening and, where needed, life-changing plastic and reconstructive surgery undertaken by leading Australian volunteer surgeons.

In PNG, Interplast surgical team provides surgical services and work alongside PNG-national medical professionals at the Vanimo General Hospital to build their capacity and skills.



This mentoring of PNG medical professionals, made possible through the PanAust-sponsored Interplast program, helps ensure that reconstructive surgery skills and services in PNG will endure.

Top: (Left to right) PanAust General Manager External Affairs, Glen Connell, Foyok, and PanAust Group Risk Manager, Bernie Wardle, November 2018

Above: Interplast volunteer surgeon, Russell Corlett identified Foyok as a suitable candidate for surgical treatment during the 2016 PanAust-sponsored Interplast surgical assessment program in PNG.

Photo courtesy of Dylan Evans and Interplast Australia & New Zealand

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.

Community development projects are managed in partnership with local communities and closely coordinated with local government authorities. In 2018, 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 with 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 2018, a total of US\$380,000 was budgeted for CDF activities in Laos: Phu Kham, US\$300,000 and Ban Houayxai, US\$80,000. CDF programs during the year comprised 31 projects across rural communities directly and indirectly affected by PanAust's activities. Work continued on six CDF projects that were not finalised in 2017.

A total of US\$671,653 was expended on CDF projects during the year. Expenditure increased in 2018 to finalise projects that were not completed in 2017. Focus areas were education, agricultural development, small business development, microfinance, and infrastructure.

Community development fund total expenditure in Laos (US\$ million)

	2016	2017	2018
Expenditure	349,190	175,102	671,653

Projects that were partially completed in 2018 included: water intake improvements at Nam Deuan, construction of the Namsak 2 gabion weir, construction of a new community health clinic at Nam Mo and upgrading Nam Gnone primary school infrastructure. The remaining costs for these projects will be carried over into 2019 when they are scheduled to be completed.

Year-on-year, community development contributions are not explicitly determined by the Company's consolidated profit position. The contributions take into account 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.



Below: Students in the Nasaysavang primary school library, November 2018

PanAust total community development contributions (US\$ million)

	2016	2017	2018
Community development in Laos	0.35	0.17	0.67
Community development in PNG	0.11	0.25	0.24
Logistics costs associated with PNG community development	0.27	0.05	0.06
Sponsorship and donations in Laos	0.03	0.12	0.16
Sponsorship and donations in PNG	0.03	0.08	0.01
Sponsorship and donations in Myanmar	0.02	0.02	0.01
Sponsorship and donations in Australia	0.01	0.01	0.13
Total contribution	0.82	0.68	1.27
PanAust adjusted earnings before interest, taxes, depreciation and amortisation (EBITDA)	239.52	295.97	253.33
Total contribution as a percentage of EBITDA	0.34	0.23	0.50

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 in order to: create employment and capacity-building prospects for local communities to support the mine operations, and provide opportunities for individuals and local businesses beyond closure.

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.

PBM's community education program aims to improve learning outcomes for children and adults in local 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.

Since 2006, PanAust has contributed to the construction, expansion and/or improvement of 19 schools in Laos, thereby improving access to education for almost 1,700 students. In 2018, the Company contributed US\$320,816 towards initiatives designed to increase access to education and the quality of learning within communities close to its Operations. Programs for the year included: improvements to buildings, the construction of a sports court, and supply teaching and learning materials for the Nasaysavang primary school; the construction of an upper secondary school at Nam Mo; and the construction of teachers' dormitories and the provision of a summer school at both Nam Mo and Nam Gnone. These projects were undertaken in close coordination with the Anouvong District Education and Sports Office.

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. Latest socio-economic data shows that enrolment numbers for girls attending both primary and high schools is now surpassing boys.



A paramedic from the Anouvong District Health Office, Mr Vongxay Mathem provides health care services to a local woman and her child at the Nam Mo clinic, November 2018

Community health

In Laos, poor health is an issue in many rural communities. Contributing factors include a lack of quality healthcare services, poor hygiene and sanitation practices, limited health awareness, low rates of childhood immunisation, and poor nutrition. All are underpinned by poverty.

In 2010, PanAust handed management of the community health clinics at Nam Mo and Nam Gnone 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 2018, PanAust contributed US\$52,872 towards improved health outcomes in local communities. An educational campaign was run in conjunction with the Anouvong District Public Health Office. Over 124 people attended information sessions that covered antenatal, postnatal and neonatal care, family planning, vaccinations, and preventative diseases. PanAust also commenced construction of a new health centre in Nam Mo. The centre – scheduled for completion in 2019 – will provide improved health services to the community, including the ability to keep patients on site overnight.

Enterprise development (supporting local businesses)

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

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.

In 2018, through CDF programs, PanAust contributed US\$144,364 towards the following agriculture capacity-building programs:

- > The construction of a gabion weir for rice paddies at Nam Sao.
- > Training for farmers on how to develop new markets for their produce beyond their own villages and that which they sold to the Company.
- > Farmers were taught how to maximise agricultural production, particularly that of organic vegetables, oranges, pineapples, beef and rice. This included the provision of materials required to construct 44 greenhouses across five villages, supplying plants, and demonstrating pest control techniques and how to apply fertiliser.
- > Orange growing workshops that covered topics including how to manage pests and apply organic fertiliser, root stock growing, harvesting techniques, and best practices for selling the fruit at markets.
- > The provision of pineapple plants to interested farmers with suitable land.
- > Study visits, training courses and demonstration sessions for cattle farming.
- > Providing support for the development of crops not normally found in the region, however through research, may provide a higher revenue source and chance of success. This included orange trees, training, fertilisers and pesticides to farmers at Nasaysavang. Over 7.8 hectares of orange groves were planted and the first crop was sold for a high revenue; a promising outcome for other local farmers.

In 2018, PanAust collectively purchased US\$1,093,566 of consumables (vegetables, drinking water, eggs, fruit and fish) from local community businesses for its Operations and the Frieda River Project.

Income generated from small business initiatives (US\$)

Country	2016	2017	2018
Laos	954,409	1,041,799	1,084,351
PNG	6,823	16,795	9,215
Total (US\$)	961,232	1,058,594	1,093,566

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

In 2018, infrastructure improvements included repairs and maintenance to landfill access roads at Nam Mo and Nam Gnone, the construction of a landfill at Nasaysavang, a gabion weir at Nam Sao, a further Village Savings and Credit Fund (VS&CF) office that will be used as a bank office for the VS&CF at closure, a community market building, an upper secondary school and teachers' dormitory at Nam Mo, and renovations to the Nasaysavang primary school. Maintenance activities were carried out on existing infrastructure after village authorities confirmed they did not have the financial means to complete maintenance and repair. Post-closure, the maintenance of infrastructure will be responsibly handed to the relevant Government of Laos department.



Ms Seevone, a fruit farmer from the village of Nam Gnone, sells her produce at the village's market, November 2018

Access to financial services

Since 2010, 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.

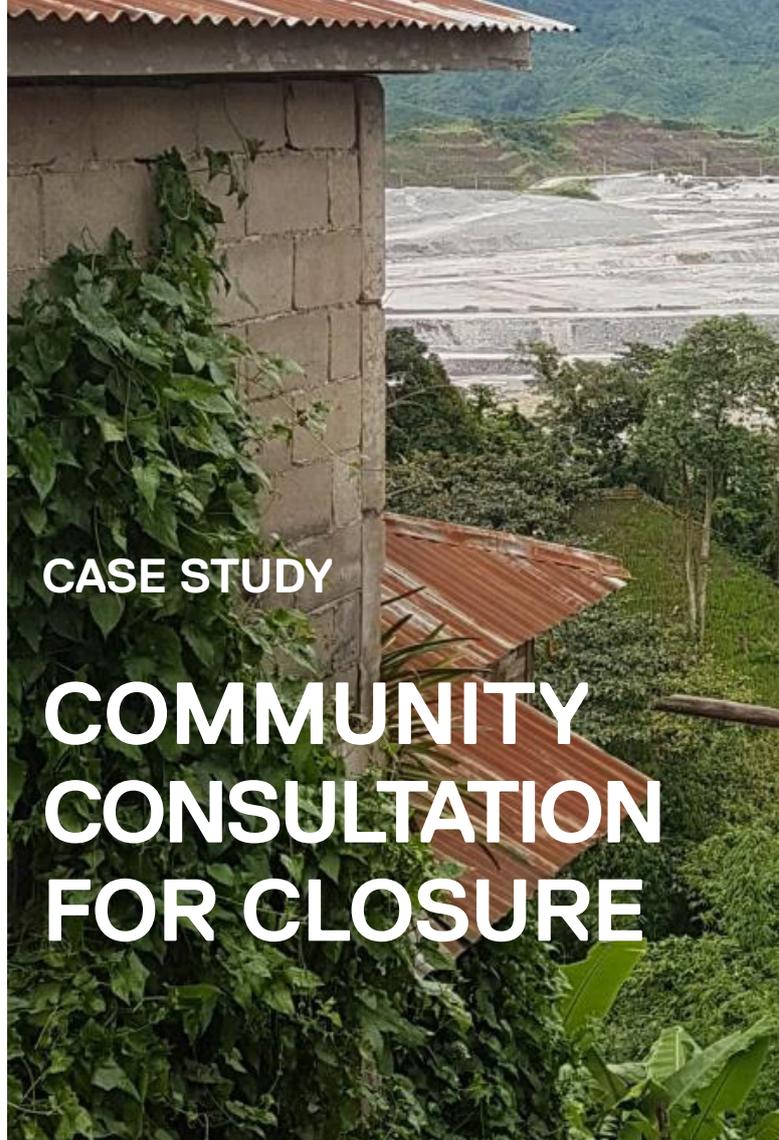
PanAust has been working with local villages and districts to pursue a more sustainable long-term structure for the Funds. After a period of oversight, PanAust has officially handed responsibility for the management of ten VS&CFs to the relevant villages and districts. The remaining VS&CFs in Nam Gnone and Nam Mo continue to be supported by the Anouvong District Supervisory Committee on a monthly basis and through an annual audit. These governance mechanisms ensure that the VS&CFs remain in strict compliance with regulatory and administrative requirements. To support closure objectives, these funds will be transformed into Credit and Savings Unions registered with the Bank of Laos.

Closure preparedness

Closure planning is an integral part of strategic and life of mine planning for PanAust. While mine closure for the existing Lao Operations is within three years, 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.

Local farmers will require new markets to fill the demand shortfall that will exist after closure. Farmers collectively agree that organic vegetables, oranges and pineapples can provide this market security. In 2018, the Company provided training that focused on identifying key markets for this produce, supply and demand, quality, and how to sell the crop/s as a group.

Throughout 2018, the Company continued to engage in dialogue regarding the impacts of closure, post-closure land use and other closure-related issues primarily with the Government of Laos and host communities.



CASE STUDY

COMMUNITY CONSULTATION FOR CLOSURE

PanAust is intent on delivering mine closure responsibly. Host communities have been fundamental to the success of the Operations in Laos, and the Company is determined to support them through the transition to closure.

PanAust aims to leave a lasting positive legacy for host communities to ensure that they can sustain themselves at a higher economic standard than was possible before operations commenced. Engagement with local communities helps the Company understand the community's concerns, and ensures PanAust will be able to provide the appropriate level of support to achieve acceptable post-closure outcomes. Community engagement has been an integral component of PanAust's closure planning since work on closure began in 2013. Community expectations, supported by technical studies fed into the closure plans for both the Phu Kham and Ban Houayxai Operations.

In 2018, two phases of engagement with communities were completed to identify mutually acceptable post-closure outcomes that align with the Company's closure vision. Phase one focused on mine site landforms and possible uses. Phase two explored post-closure livelihoods for communities. External consultants, Geo-Sys were commissioned to manage this two-phase program. Government of Laos and PanAust representatives attended the sessions as required.



Geo-Sys spent three days in each host community (Nam Mo, Nam Gnone and Nasaysavang) to discuss PanAust's strategies for negotiable (waste rock dump, the process plant, workshop areas and non-process infrastructure) and non-negotiable (open-pits, tailings storage facilities and embankments) mine site landforms. Formal presentations, posters, written handouts, question and answer sessions, informal conversations and workshops helped communicate the Company's plans. A mechanism for providing written anonymous feedback was made available to each community following these sessions.

Brainstorming sessions provided an opportunity for communities to share with the Company how they wanted to use negotiable landforms. It was clear to those facilitating the engagement sessions that members from the Company's local communities understood the implications of mine closure. Discussions were held over what final landforms would look like, how they would be engineered and monitored for safety and stability, how environmental monitoring would take place, and how village safety would be ensured. In addition, villagers had questions about their livelihoods post-closure, and how the Government of Laos and PanAust would work with them.

PanAust's closure stakeholder engagement with host communities embodies a collaborative approach that encourages open two-way communication. The Company recognises that in a developing country like Laos, other economic opportunities and social support mechanisms to assist people and communities after closure are not as readily available as in developed countries.

Through ongoing and targeted community engagement, PanAust will continue to understand the issues so it can refine development approaches to progress enduring opportunities beyond the life of mine.



Top: View of the Phu Kham Copper-Gold Operation's tailings storage facility from the village of Nam Gnone; the close proximity of the village to the Operation highlights why for PanAust, planning for closure is an integral part of strategic and life of mine planning

Above: Villagers from Nam Mo with the proposed regional land-use map during phase two of the community consultation for closure

Photos courtesy of Emma Pelletreau/Geo-Sys

A close-up photograph of a woman wearing a white hard hat and safety glasses, looking down at a young green plant seedling. She is wearing an orange high-visibility shirt. The background shows a nursery with many other seedlings in rows, and another person in a red safety vest is visible in the distance. The text 'ENVIRONMENTAL PERFORMANCE' is overlaid on the left side of the image.

ENVIRONMENTAL PERFORMANCE

Phu Kham Environment Assistant, Miss Ai tends to seedlings in the Phu Kham nursery, November 2018



**PANAUST
ACKNOWLEDGES
THAT LEADING-
PRACTICE
ENVIRONMENTAL
MANAGEMENT
IS ESSENTIAL
FOR ONGOING
BUSINESS
GROWTH AND
SUCCESS.**



ENVIRONMENTAL PERFORMANCE

Respect for the environment is a core Company Value (see page 15) and is at the forefront of business strategy, decision-making and day-to-day operations.

From exploration to development, throughout operations and into 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*.

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 performance/s are undertaken (for example, for tailings and waste rock management).

In 2018, PanAust completed an Environmental Impact Statement (EIS) for the Sepik Development Project. The EIS reflects the proposed shared-use infrastructure model that aligns with the Government of PNG's national development plans and incorporates the Frieda River Copper-Gold Project. The EIS incorporated findings from a number of studies including an extensive terrestrial biodiversity assessment that focused on an area of 660,571 hectares. For further information, see the case study on page 66.

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 in PNG.

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 2018, PanAust had no significant environmental incidents, complaints, spills, penalties, fines or non-monetary sanctions for any legal non-compliance. More information about how PanAust manages incidents is available on the Company's website, www.panaust.com.au/managing-incidents.



PanAust's materiality process identified the environmental performance focus areas for 2018 as:

- > **Water management**
- > **Tailings and waste rock management**
- > **Cyanide management**
- > **Land rehabilitation and closure**
- > **Energy and carbon management**

Water management

PanAust recognises that water resources need to be managed responsibly to meet operational requirements – including for processing ore – while limiting impacts on receiving environments and communities. 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).

PanAust assesses and manages water risks through internal risk management processes. Further details of water risks and opportunities can be found in PanAust's submission to the CDP Water Program which is available at www.cdp.net. PanAust has participated in this program since 2012.

At both Phu Kham and Ban Houayxai, water balance models are in place, supported by water management and monitoring programs. The models incorporate water consumption and

* 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.

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 to prevent 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 discharge from each TSF is monitored by Company environment personnel, as well as Government of Laos officials. Results are assessed against World Bank, IFC and Lao ambient water-quality guidelines, and background water quality conditions.

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.

While PanAust's Operations use a significant amount of water, approximately 95 per cent is recycled at Phu Kham. The fresh water used at Phu Kham is drawn from the Nam Mo River and is used predominantly for domestic purposes and specialised cooling systems for equipment in the process plant.

In 2018, controlled wet season discharge from the Phu Kham TSF occurred between June and November in accordance with internal site permits and government notifications. The discharge was compliant with relevant water quality guidelines.

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

The Ban Houayxai TSF remains a continuous discharge facility. Exceedances of total suspended solids (TSS) in the facility's discharge occurred during the intense 2018 wet season. Work with local government officials to establish site-specific guidelines for TSS continues.

Water usage and discharge (megalitres/year*) Phu Kham and Ban Houayxai Operations

	2016	2017	2018
Fresh water domestic use	226	393	601
Fresh water to process	8,677	8,677	8,696
Total water use in process	61,018	57,581	60,419
Recycled water to process	52,341	48,904	51,723
Compliant water discharged**	55,164	67,821	66,452
Percentage of recycled water	86	85	86

* Measured by water meters or other estimation techniques.

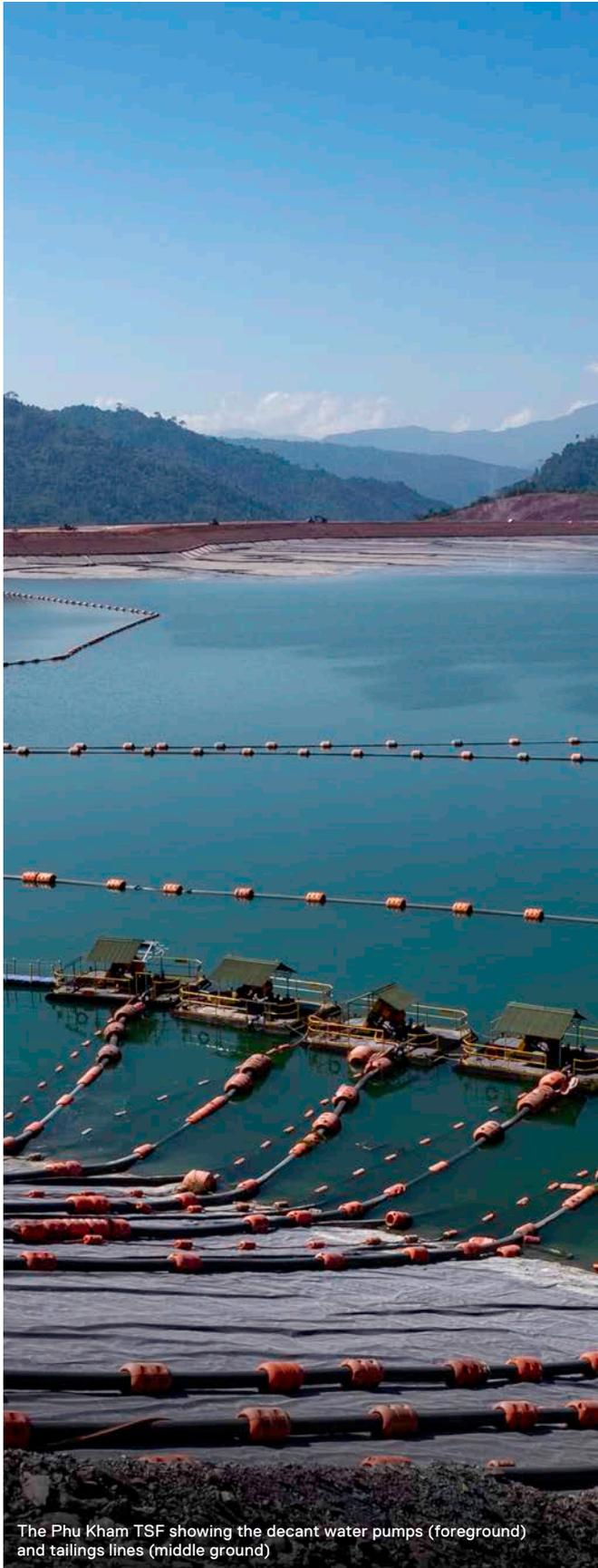
** Discharge water from the Phu Kham and Ban Houayxai TSFs and the GMO wetland.

EFFECTIVE WATER MANAGEMENT SAFEGUARDS THE LAO OPERATIONS DURING AN INTENSE WET SEASON.

In 2018, PanAust's Operations in Laos experienced a particularly intense wet season which caused a number of landslides and flooding.

Rain levels recorded between July and August were comparable to the 1-in-50 year rainfall event experienced in 2011 from typhoons Haima and Nokton. In July, multiple small to medium scale failures occurred in Phu Kham's open-pit. In late August, access to the Ban Houayxai Operations was cut when heavy rainfall induced a landslide and PanAust's transport depot at Ban Thouay was flooded and evacuated.

PanAust's robust water management and wet season preparedness and crisis and emergency processes, ensured these events did not impact full-year production and cost outcomes. Importantly, the safety of PanAust's employees was not compromised.



The Phu Kham TSF showing the decant water pumps (foreground) and tailings lines (middle ground)

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 incorporates the best available technology to account for 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 a separate engineered waste rock dump.

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:

- > Executive management commitment: A commitment from the Executive Chairman 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 on material risks to the facilities. The TIRP consists of 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. The Panel reports its findings to the Executive Chairman 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 34).
- > Tailings Review Committee: The Committee reports directly to the Board of Directors and consists of the PanAust Executive Chairman, General Manager Corporate Development and Exploration, General Manager Operations and General Manager Technical Services as well as the Senior Risk Advisor, Principal Tailings Engineer and tailings and geotechnical discipline leads. Each year the Committee oversees the implementation of actions related to material risks, facilitates the TIRP review, supports close out of actions and updates the relevant risk register.

- > Overview and quality assurance: The Principal Tailings Engineer, based in the corporate office, provides overview and quality assurance of design and construction activities.
- > Annual dam safety inspections: In 2018, an independent comprehensive dam safety review, which is required approximately every five years, was completed to plan. Annual dam safety inspections will resume in 2019, and will be completed by the Principal Tailings Engineer who also acts as Engineer of Record.
- > Risk-based review: A risk-based review is completed annually.
- > Engineer of Record: An Engineer of Record is responsible for design, construction, operation, and performance monitoring of PanAust's TSFs.
- > Quarterly inspections: Quarterly inspections by PanAust's Principal Tailings Engineer.
- > Inspections and monitoring: Daily, weekly and monthly inspections and monitoring by trained PanAust employees reporting to a site-based Tailings Superintendent. 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: Detailed dam design for each construction period by the Design Engineer.
- > On-site laboratory: An on-site laboratory provides for the quality control and assurance of construction materials.
- > Mine closure: A pre-feasibility study for TSF closure was completed in 2017. This work was finalised to a feasibility study level in 2018.

Waste rock

PanAust's approach to ARD management is considered leading-practice across the global mining industry. The Company's methodology was documented as a case study in the 'Australian Government Leading Practice Sustainable Development Program for the Mining Industry Handbook on Preventing Acid and Metalliferous Drainage'.

PanAust actively manages the potential for ARD from the early stages of mine planning through to operations and closure. At both Phu Kham and Ban Houayxai, the management strategy to address the potential for ARD commenced well before mine operations began, with sulphur modelling undertaken as an integral component of ore-body modelling and mine planning processes. The sulphur modelling 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 Frieda River Hydroelectric Project in PNG (see page 19).

The ARD Management Plan provides strategies for the identification, control and monitoring of mine waste and is regularly updated with any relevant changes in sulphur modelling. The Phu Kham ARD Management Plan 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 to prevent oxidation and reduce the potential for ARD.

Mining operations 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.

High-level governance of ARD management is provided through PanAust's ARD Review Committee which comprises internal management personnel and external ARD specialists. The Committee checks 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 closure plans.

Tailings/waste rock quantities (tonnes) Phu Kham and Ban Houayxai Operations

	2016	2017	2018
Waste rock (total)	44,642,896	45,897,510	41,738,296
Red waste rock	7,843,894	13,558,360	18,442,999
Tailings	23,424,057	23,115,347	23,838,172



ENVIRONMENTAL PERFORMANCE

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 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 contains less than the internationally agreed safe level of cyanide for solutions discharged into the environment.

Ban Houayxai received pre-operational certification in 2012, operational certification in March 2013, and was recertified in 2016. 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/signatory-company/panaust-limited.

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.

More information about PanAust's approach to cyanide management can be found on the Company's website, <https://panaust.com.au/environment>.

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 post-mining land use. Both Operations have nurseries to propagate native seedlings used in rehabilitation. Annual programs to rehabilitate land are incorporated into each site's operating plan. PanAust recognises that in most cases, achieving full rehabilitation may take several years.

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

	2016	2017	2018
Land disturbed and not rehabilitated	1,380	1,412	1,457
Land disturbed in reporting year	43	68	77
Land rehabilitated in reporting year	11	24	16
Total land disturbed and not yet rehabilitated	1,412	1,457	1,518

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 limit long-term closure risks.

The Company has in place a Closure Standard, Closure Cost Estimation and Provision Standard, and Closure Stakeholder Engagement Plans which set out the closure requirements for operational sites. Closure plans are in place for Phu Kham, Ban Houayxai and the Gold Heap Leach (GMO) Operations, all of which are supported by financial provisions.

Internal oversight of the closure planning process and stakeholder engagement strategy is provided by the PanAust Asia Closure Committee. The Committee is supplemented by technical consultants as required.

A Government of Laos Closure Committee is also in place. The Committee is a structured engagement forum that ensures PBM's closure activities are aligned with stakeholder expectations. A Memorandum of Understanding between the Company and the Government of Laos sets out the Committee's membership details and expectations of members.

For further information about closure, in particular engagement with local communities, see the case study on page 54.

In 2018, works commenced at the gold heap GMO to reform the heap leach pad to achieve final landform design of a small heap leach gold operation that commenced in 2005 and closed in 2010. A constructed wetland downstream of the heap leach pad passively treats stormwater and leach pad run-off from the site. Monitoring of the downstream river system continues and confirms that water discharged from the site throughout the year was within ambient limits.

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 to manage water risks associated with extreme weather events at its Operations and project sites.

The Company has introduced flexibility into its logistics chain with regard to haulage routes and port access. PanAust also has contingency plans in place for key materials in the general supply chain and maintains appropriate contingent stock levels.

Further details on carbon risks and opportunities for improvements can be found in PanAust's submission to the CDP carbon program, available on the CDP website, www.cdp.net. PanAust has participated in the program since 2011.

PanAust's operating sites develop annual energy and carbon emissions inventories. Both Operations use a combination of direct and indirect energy sources to carry out their activities, predominantly diesel fuel for mobile equipment and grid electricity sourced from hydroelectric power.

As a substantial consumer of energy, PanAust identifies annual efficiency programs to reduce energy requirements. Each year, teams across the business identify and implement projects to reduce energy and/or materials consumed. These projects are tracked to identify annual savings, including greenhouse gas emissions, and payback periods.

In 2018, the Commercial team continued to realise energy savings through programs including increased concentrate payments, tyre management strategies, and the backloading of diesel and general freight. Combined, these projects saved 2,264 and 17,150 tonnes of Scope 1 and Scope 3 greenhouse gas emissions respectively.

At Ban Houayxai, projects implemented included: reducing the length of the waste haul routes and the use of siphons for water discharge for tailings infrastructure construction where achievable. These projects collectively saved 747 tonnes of greenhouse gas emissions which equated to US\$358,000 in direct savings to the business.

Energy consumption (terajoules)

Material	2016	2017	2018
Diesel	2,675.9	2,880.4	2,811.9
Electricity	2,191.5	2,235.1	2,279.6
Petrol	0.3	0.3	0.4
LPG	6.5	6.7	7.3

Energy intensity (kilojoules/tonne)*

Material	2016	2017	2018
Diesel intensity (kJ/t)	38,104	41,044	41,490
Electricity intensity (kJ/t)	31,207	31,849	33,636
Total ore and waste mined (kt)	70,226	70,178	67,772

*includes Phu Kham, Ban Houayxai and logistics operations

Greenhouse gas emissions (tCO₂-e)**

Greenhouse Gas Emission Scope	2016	2017	2018
Scope 1 (direct greenhouse gas emissions)***	198,232	221,053	219,247
Scope 2 (indirect greenhouse gas emissions from the generation of purchased electricity)***	53,538	54,577	55,657
Scope 3 (greenhouse gas emissions from the broader project lifecycle including materials used, travel and transport)	266,744	251,028	236,186

** Measured according to the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol

***Emissions include Phu Kham, Ban Houayxai, Frieda River, exploration, and offices



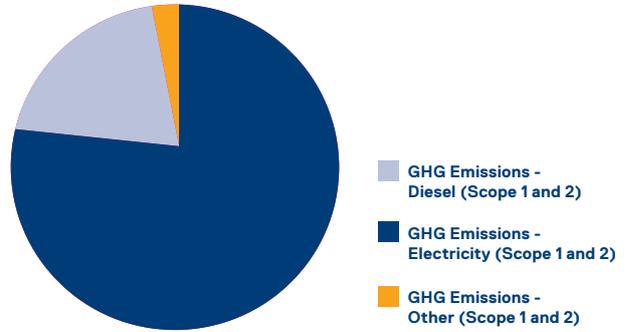
ENVIRONMENTAL PERFORMANCE

PanAust's Phu Kham and Ban Houayxai Operation's 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 four 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 mine 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 which rewards logistics drivers for driving in a manner which reduces fuel consumption.

For further information regarding PanAust's energy efficiency projects, refer to the CDP website.

2018 Scope 1 and Scope 2 greenhouse gas emissions by energy source



Phu Bia Mining driver, Mrs Manyvnh Vilaisom standing in front of a UD body truck coupled with four axle dog trailers she uses to transport 50 per cent of Phu Kham's daily fuel needs from the Company's Petrotrade bulk fuel facility to its logistics hub at Ban Thouay. There the fuel is loaded to concentrate haulage trucks bound for the Operation. For more information about the Company's diesel backloading program, see pages 21 and 63.



PANAUST PARTICIPATES IN THE ‘MINE CLOSURE LEGAL FRAMEWORK IN ASEAN MEMBER STATES’ WORKSHOP



PanAust’s approach to mine closure hinges on strategies that will deliver its closure vision: that closed sites exemplify responsible mine closure that the Company is proud of and enhances opportunities to deliver its next Operation. Recognising the importance that PanAust places on closure, in 2018 the Company was invited to participate in a project to develop mine closure legislation for Laos.

PanAust’s Environment and Closure Manager, Peter Bayliss was invited to speak at the ‘Mine Closure Legal Framework in ASEAN Member States’ workshop in Vientiane. Peter presented the Company’s closure framework and environmental and social studies that support closure planning.

PanAust was the only mining company invited to present. The Company’s approach was well received and aligned with what is considered to be accepted international best-practice.

Following the workshop, PanAust hosted delegates from ASEAN member states at the Phu Kham Operation. The visit gave the Company the opportunity to showcase its biophysical and social closure strategies and stakeholder engagement programs.

Above: Delegates at the ‘Mine Closure Legal Framework in ASEAN Member States’ workshop (of which PanAust was invited to be the keynote speaker), May 2018

CASE STUDY

SEPIK DEVELOPMENT PROJECT ENVIRONMENTAL IMPACT STATEMENT

Respect for the environment is a core value for PanAust. As an internationally recognised leader in environmental management and sustainability in the mining sector, the Company ensures environmental stewardship is at the forefront of its business strategy and day-to-day decision making.

In 2018, PanAust completed an Environmental Impact Statement (EIS) for the Sepik Development Project, which was submitted to the PNG Government's Conservation and Environment Protection Agency (CEPA) in December. The EIS demonstrates PanAust's commitment to limiting its impact on the natural environment, and ensuring its presence positively affects host communities wherever it operates.

In line with the commitment made in the Proposal for Development that accompanied the Frieda River Copper-Gold Project SML application in 2016, PanAust investigated opportunities to increase the value of the Project and reduce its overall risk profile. In December 2018, the Company announced these investigations had identified a new development pathway for the Project.

The new pathway focuses on the development of shared-use infrastructure that will support, and in turn be supported by, a mining operation. Under this inclusive development model, the Frieda River Copper-Gold Project will be a core component of a transformative 'nation-building' opportunity – the Sepik Development Project.

The Sepik Development Project is underpinned by two commercial projects: the Frieda River Copper-Gold Project (FRCGP) and the Frieda River Hydroelectric Project (FRHEP). These are supported by the Sepik Infrastructure Project (SIP) and the Sepik Power Grid Project (SPGP).

The FRCGP comprises a large-scale open-pit copper and gold mine in PNG's West Sepik Province and a concentrate pipeline and export facility stretching from the mine site to the Vanimo Ocean Port. The FRHEP proposes a novel solution that combines large-scale hydropower with the safe storage of mine waste rock and process tailings. This stable, non-polluting facility will generate low-cost hydroelectric power, and securely and permanently store sediment, mine waste rock and process tailings. The SIP underpins the entire Sepik Development Project and comprises road access routes to the FRCGP and FRHEP, including an upgraded road from Vanimo to Green River, and a new public road from Vanimo to Telefomin. The SPGP comprises a 370 kilometre, 275 kilovolt Northern Transmission Line from the FRHEP to the Indonesian border via Vanimo.

The Sepik Development Project presents a transformative development opportunity for the underdeveloped Sepik region. It aligns with the PNG Development Strategic Plan 2010-2030 by leveraging the commercial FRCGP and FRHEP developments to establish an economic corridor that provides important power, transport and communications infrastructure for multiple users.

All four Sepik Development Project components were assessed in the EIS that was completed in 2018. The total Project footprint is roughly 16,000 hectares. It incorporates comprehensive environmental, socio-economic and cultural heritage baseline data spanning a period of 10 years. Extensive stakeholder engagement was also undertaken during this time.

The terrestrial biodiversity assessment extended over 660,000 hectares and was the most labour intensive ever conducted for a PNG resource project. This extensive work identified 85 species that were new to science or undescribed.



Water from the Frieda River contributes approximately 5 per cent of the flow in the Sepik River. The EIS recognised the importance of the Sepik River, both from an environmental perspective, and the valuable contribution it makes to people's lives and livelihoods. Importantly, the detailed assessment provided by the EIS demonstrated that the Sepik Development Project will not cause any long-term reduction in Sepik River water quality.

PanAust and its consultants drew on extensive experience and leading-practice tailings and waste rock governance principles to design the FRHEP. As with the Company's TSFs in Laos, the FRHEP was designed to international guidelines. Its design as a hydroelectric dam limits potential impacts to downstream water quality and acts as a trap that will reduce sediment loading in the Frieda and Sepik Rivers. The concentration of suspended sediment will increase slightly during construction, reducing the water quality of the upper Frieda River. This may lead to a change in non-native species more tolerant of increased suspended sediment already present in the Sepik River basin.

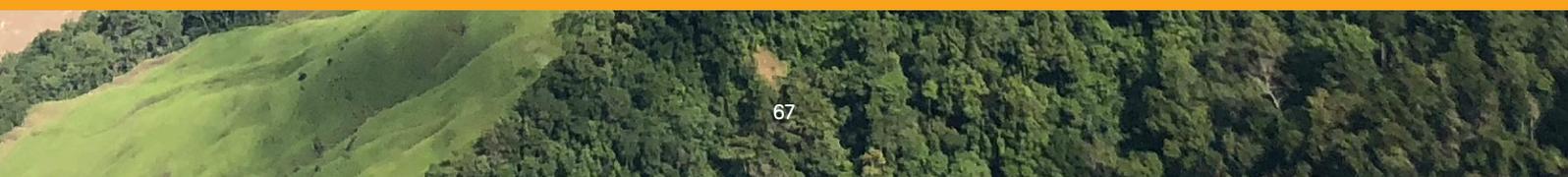
Containment of the mine waste rock, process tailings and sediment within the reservoir under at least 40 metres of water will prevent the formation of acid rock drainage, as has been successfully demonstrated at the Company's Lao TSFs. Furthermore, the facility allows for the generation of hydroelectric power for several decades beyond the expected closure of the FRCGP to provide an ongoing benefit to the region. Over time, natural sedimentation will progressively encapsulate the stored mine waste rock and process tailings which, in conjunction with the permanent water cover, will ensure that the facility remains physically and geochemically stable in perpetuity.

In 2019, PanAust will continue to work with local communities in PNG, as well as the provincial and national governments to progress the necessary environmental permits for the transformative, nation-building Sepik Development Project.



Background: Jimi River Valley just past Yuet Gap in PNG's West Sepik Province

Above: PanAust submits the Sepik Development Project EIS to PNG authorities, 13 December 2018. Left to right: PanAust Frieda River Site Manager, Phil McCormack; Managing Director of the PNG Conservation and Environmental Protection Authority, Gunther Joku; Hon. John Pundari MP, PNG Minister for Environment and Conservation; PanAust Principal Environmental Advisor, Michael Hawkins; Highlands Pacific General Manager Port Moresby, Ron Gawi; and PanAust Community Affairs Manager, Geoff Callister



HEALTH AND SAFETY PERFORMANCE





**PANAUST'S
COMMITMENT
TO HEALTH
AND SAFETY IS
BUILT ON THE
ZERO HARM
PHILOSOPHY.**

(Left to right) Safety Supervisor, Xayya Inthavong and Process Operator, Mr Paouethao in the Ban Houayxai process plant, November 2018



HEALTH AND SAFETY PERFORMANCE

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

Achieving business objectives, while keeping the workforce and neighbouring communities safe, is essential to PanAust's short- and long-term success and is aligned with the Company's Values.

Together, PanAust's Vision and Values and Sustainability Policy provide guidance and structure for the Company's commitment to health and safety. Health and safety is also addressed as the first requirement within The PanAust Way which details the behaviours required of employees, contractors and suppliers.

Through visible leadership, including their words and actions, PanAust's leaders are required 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 substantially 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, deep dive reviews, 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, which is consistent with ISO 45001:2018. The System is applicable across all PanAust business units and subsidiaries, 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 inward and outward supply chain) through contractual arrangements, and the Company's contractor health, safety, environment (HSE) and community standards.

In 2018, work continued on the implementation of operational safety standards for the PanAust Asia business unit. 'Standards champions' have established action plans to address compliance deficiencies identified in gap audits undertaken in 2017 and 2018.

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 further Cardinal Rule applies specifically to work undertaken by employees in Laos and relates to the potential presence of unexploded ordnances. PanAust's Cardinal Rules can be viewed on the Company website, <https://panaust.com.au/health-and-safety>.

The Company requires all employees, contractors and visitors to undergo a safety induction prior to entering a PanAust-controlled work site. The induction includes general safety and workplace-specific inductions. PanAust also facilitates a number of mandatory core safety training programs and specialist training for high-risk activities. Training needs are dictated by an employee's/contractor's role.

In 2018, 21,436 hours of safety inductions and HSE training was completed at PanAust's Operations in Laos.

Basic hazard identification training is delivered as part of a site induction. It encourages employees/contractors to identify potential hazards, remedy the hazard immediately if it is within their power to do so, or report it to their supervisor via a hazard identification form. Other PanAust processes that encourage the identification and reporting of hazards include: the Take 5 process – also covered in site inductions – job safety analysis, workplace inspections, JSOs, and PTOs.

PanAust benefits from a strong hazard and incident reporting culture. 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 investigation and management of significant incidents continues to be overseen by the Senior Management Taskforce for Significant Incidents. The Taskforce is comprised of members of the Executive Management Team with operational oversight. The Taskforce is responsible for ensuring that the Group-wide implications of significant incidents and any emerging safety concerns are given appropriate consideration and action. This approach ensures that findings and recommendations are shared across the business where similar activities occur, or where different activities with similar risks occur, and are not limited to the incident and affected personnel only.

Since 2009, PanAust held the Annual Risk and Sustainability Workshop with Company executives and managers from both corporate and operational areas, high-potential employees, contractors and invited peer companies and safety specialists. The Workshop 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 is formulated during the Workshop, and outcomes are fed into PanAust's corporate business strategy. Further information about the 2018 Risk and Sustainability Workshop can be found on page 27. Quarterly contractor workshops, department monthly health and safety committee meetings for employees and contractors, and weekly toolbox meetings are additional forums that PanAust uses to consult and communicate health and safety issues with its workforce.

PanAust's Operations in Laos and the Frieda River Project site are located 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 local communities. The Phu Kham and Ban Houayxai Operations and the Frieda River Project site are equipped with medical (including trauma management) clinics staffed by doctors and/or paramedics.

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 annually to ensure that team members are proficient in their roles.

Safety performance

PanAust's 2018 safety results were outstanding and continue to be better than industry averages. The results reflect the Company's commitment to Zero Harm and the success of safety programs which focus on safety leadership, hot spots and lead indicators.

In 2018, PanAust achieved a lost time injury frequency rate (LTIFR) of 0.07 (based on one million hours worked) from one lost time injury. This rate is 114 per cent lower than the Company's target of 0.15. PanAust's 2018 total recordable injury frequency rate (TRIFR) of 0.6 was 52 per cent lower than the annual target of 1.26. The Ban Houayxai Operation and Frieda River Project site both achieved a record 12 months total recordable injury free.

Except for a slight increase in 2016, PanAust's TRIFR has been steadily decreasing since 2009. This is particularly commendable given the Company's increasing risk profile over the past three years, including entry into two new jurisdictions (PNG and Myanmar) and bringing the concentrate logistics operations (which operate on public roads in Laos) in-house.

PanAust Group reportable incidents (controlled work sites)*

	2016	2017	2018
Working hours	12,989,512	13,182,310	13,382,226
Fatalities	0	0	0
TRIFR	1.15	0.83	0.6
DART** frequency	0.22	0.16	0.15
LTIFR	0.00	0.08	0.07

* 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

** Days away, restricted or transferred

PanAust's reportable statistics include controlled worksites and cover 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 on PanAust-controlled worksites.

Categories that are tracked, but do not form part of externally reported lag statistics, include influenced and monitored sites. Influenced activities receive additional attention through contractor management and lead indicator programs. A comprehensive description of PanAust's 'categories of control' is available on the Company's website, <https://panaust.com.au/health-and-safety>.



ASEAN AWARDS PANAUST'S APPROACH TO SAFETY

In April, PanAust's Lao-registered company, Phu Bia Mining, received the Excellence Award at the 2018 ASEAN OSHNET Awards in Siem Reap, Cambodia.

The Awards acknowledge companies based in ASEAN countries for excellence in occupational health and safety management.

The Excellence Award is the first time the Company has been formally recognised for its safety outcomes. It affirms that PanAust's safety performance is at an international level, is leading-practice, and demonstrates the success of the Company's targeted safety programs that focus on hot spots and lead indicators. It also shows the maturing of PanAust's positive and proactive safety culture; a culture that was cultivated not simply to achieve minimum compliance, but as a reflection of its Values.

Above: Company representatives receive the ASEAN OSHNET Excellence Award at the 19th Annual ASEAN OSHNET Conference in Siem Reap, Cambodia, April 2018



PanAust's materiality process identified the health and safety performance focus areas for 2018 as:

- > **Safety culture**
- > **Contractor management**
- > **Transport vehicles and mobile equipment**
- > **Security management**

Safety culture

PanAust continues to develop a proactive and positive safety culture. This is not done to simply achieve compliance with legislation. Instead, it reflects the Company's Value of integrity and its commitment to achieve Zero Harm safety objectives.

Behavioural safety programs help create a risk-aware culture across the workforce. As such, they continue to play an important role in the Company's remuneration and incentive programs (see page 24).

The strength of PanAust's safety culture is measured through a range of lead and lag indicators. The Company uses training programs (including Leading the PanAust Way) to help drive the development of its safety culture. It is supported by the Visible Safety Leadership Program (led by executives through deep dive reviews of high-risk activities), Positive Performance Indicators (PPI) – including JSOs and PTOs – and the Annual Risk and Sustainability Workshop.

PanAust's safety culture is shaped by the actions of its leaders and relies on the consistent expression of agreed values, standards and behaviours to the workforce. In 2018, the Company demonstrated its commitment to visible safety leadership by continuing to cascade the Company's leadership capability model, Leading the PanAust Way (see page 84) to managers and superintendents, through five safe behaviours training, and expanding PPIs and deep dive reviews.

A focus on visible safety leadership in 2018 was also seen through the Company's development and roll out of phase two of the Injury and Incident Free Program in Laos. The Program uses videos, training, employee handbooks and quarterly reports to demonstrate how PanAust's existing systems and safety management tools are connected, and when applied consistently, can minimise the potential for harm to people and the business.

The Program's ultimate goal is to ensure that employees continue to embrace safety as a core value, to improve workplace behaviours and provide a supportive safety culture.

The Program's five core components are:

- > Effective communication
- > Visible leadership
- > Fitness for work
- > Behaviour-based safety
- > Hazard identification

Hazard identification was introduced as a PPI in 2018. It complements the fifth element of the Injury and Incident Free Program and focuses on identifying unsafe conditions or potential physical hazards in the workplace as opposed to human behaviours identified in JSOs.

Regular safety audits are undertaken across the Operations. In 2018, in addition to other audits, the key focus was the deep dive review program and reviewing a percentage of PTOs for quality.

The deep dive review program, led by senior executives in the business, continues to promote visible executive-level leadership and oversight on the Company's material risk issues. Executives are supported by operational management and technical experts over a period of three to four days to complete each audit. Each executive undertakes more than one deep dive a year. Since the program was launched in 2014, there have been significant improvements in the management of some of PanAust's key risk issues with visible leadership reinforcing the importance of safety culture to all levels of the organisation.

In 2018, deep dive reviews included: medical treatment and medivac processes in Myanmar, communicable diseases in PNG and transport contractor management, change management, light vehicles, administration of the drug and alcohol program, environmental monitoring programs, maintenance contract transitions and high risk work training in Laos.

CASE STUDY

IMPROVING SAFETY PERFORMANCE AT BAN HOUAYXAI

Strengthening the awareness and use of existing safety systems and processes helped the Ban Houayxai Operation improve its safety performance in 2018.

In 2017, Ban Houayxai's total recordable injury frequency rate (TRIFR) was 4.59. The continued focus on safety in 2018 drove a drop in the TRIFR to 0.00; its best safety performance since operations began in 2012. The journey to this step-change in safety performance is something both the Company and the safety teams at Ban Houayxai are exceedingly proud of.

Between 2015 and 2017, safety performance at Ban Houayxai was steadily deteriorating. Acknowledging the performance was unacceptable and in direct contradiction to the Zero Harm philosophy, the Company focused on strengthening the awareness of existing safety systems and processes on site. An emphasis was placed on improving employees' familiarity of safety tools and developing skills to help individuals better understand safety risks and how to manage them.

Ban Houayxai Safety Superintendent, Zac Simpson spoke about how the site safety teams went about turning Ban Houayxai's safety performance around.

"Our approach was to get the fundamentals right. To ensure that everyone knew: the safety risks they may face when completing a task, what processes and tools are in place to keep them safe and how to use them and who to talk to if they are unsure about working safely. Empowering people to stop work if they don't feel safe was also critical.

"So many people have been involved in Ban Houayxai's turn-around in performance, but I do want to acknowledge my predecessor, Lee Bouckaert. Lee set this project in motion and was the initial driving force for change," Zac explained.

Given that PanAust employees are culturally diverse and a number of different languages, skill and education levels exist within the workforce, improving the visibility and awareness

of systems and supporting tools is an ongoing challenge. The Company addresses this by tailoring its communication channels (training, coaching, videos, toolbox talks, HSE committee meetings, handbooks and regular feedback) to employees.

Site management also made a commitment to spend more time in the field out of the office and employees were encouraged to do the same. Field time involves conversations, inspections, training and mentoring which strengthens safety performance and understanding, maximising opportunities for discussions around safety. Teams work together to identify and resolve issues.

Safety teams at Ban Houayxai use feedback from field interactions and safety incident history to develop and implement educational campaigns focused on topical safety issues and safety hotspot periods (shutdowns, adverse weather, operational activities, or holidays). During hotspot periods, safety provides the necessary level of support for operational teams.

Another initiative was the requirement for support teams across all Operations to wear different coloured shirts: safety (yellow), loss prevention (blue), medical (green), fire and emergency services (red). This distinguishes the support teams from operational teams who wear standard orange. This simple change has modified behaviours and encouraged conversations between teams. Employees are less likely to take short-cuts and more likely to ask for advice when someone who can help is clearly identifiable in the field.

PanAust is proud of Ban Houayxai's improved safety performance. The Operation's journey to improve safety demonstrates the strength of the Company's existing systems and processes, and how continued vigilance is required to ensure safety remains at the forefront of employees' minds.

Above: Safety Supervisor, Xayya Inthavong provides safety support to operational teams in the Ban Houayxai process plant, November 2018

HEALTH AND SAFETY PERFORMANCE

Contractor management

The Company works closely with local contractors with little to no mining experience to improve their safety culture and close gaps in their safety performance. This approach is not without challenges and contractor management continues to be a high risk exposure area to which PanAust gives close attention.

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. PanAust also conducted a deep dive review of its main general freight transport contractor in Laos during the year. Whilst the deep dive review identified compliance with many requirements, a number of non-compliances and improvement opportunities were identified in relation to driver experience and capabilities and fatigue management systems.

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 their focus on completing quality positive performance indicators is outstanding.

In 2018, PanAust once again invited senior representatives from the Company's key contractors including MetroCat, Epiroc, Boart Longyear and TKPV to attend its Annual Risk and Sustainability Workshop. The Workshop reinforced the Company's expectations with regards to safety management and provided contractors with an opportunity to share their experiences.

In Laos, PanAust runs quarterly Contractor Safety Workshops as a forum for constructive two-way dialogue with PanAust's contractors. The Workshops help contractors to determine their position on the safety spectrum, and identify ways of improving their own organisational safety culture. They also provide an avenue for PanAust to better understand the issues that are impacting contractor safety performance and how the business can support them. Feedback from contractors who attended the 2018 Workshops was positive, many noting its value to help implement safety improvements within their Laos-based workforce.

MVDC Safety Supervisor, Linda Sengsoulinthone from Ban Houayxai spoke of her experience presenting at a 2018 quarterly Contractor Workshop.

"I presented our learnings from an ear injury that occurred at MVDC in December 2017. It was a fantastic experience to present. I particularly enjoyed the challenging questions from other contractors and PanAust and exchanging ideas with them. We took away ideas relating to updating our tools, developing a procedure for the activity that caused the injury and implementing training," Linda said.



Loss Prevention Officer, Sonesavanh Viengsone (right) performs alcohol breath testing on an employee entering the Phu Kham process plant, November 2018

Transport, vehicles and mobile equipment

Vehicle safety along PanAust's transport and concentrate haulage routes in Laos, and at the Company's Operations, is a significant area of focus due to the inherent risk exposure that comes with continuous operations and logistics movements on public roads. PanAust implements a number of safety initiatives such as vehicle standards, maintenance practices, driver training and public road improvements to reduce the risk of vehicle incidents.

In 2018, the Company recorded 15 vehicle incidents where there was the potential for a lost time injury. While this remains an overall low number compared to earlier reporting years (12 reported in 2017; 14 reported in 2016; 26 in 2015; 44 in 2014; and 101 in 2013), the Company maintains vigilance with this high risk activity.

A number of initiatives were implemented to improve personnel transport, vehicles, and mobile equipment safety during 2018 including:

- > The continued fitting of in-cab cameras into Company-owned logistics fleet vehicles (buses, trucks and escort vehicles), the major general freight contractor fleet and the heavy mine fleet at both the Phu Kham and Ban Houayxai Operations.
- > A number of initiatives related to fatigue management
- > A deep dive review into light vehicles. The audit reviewed the risk profile standards, procedures, training, capability and behaviour of light vehicles operators and maintenance processes of light vehicles.
- > An ongoing program to ensure fitness for work which includes random, blanket, and for cause drug and alcohol tests, and annual medical check-ups for all drivers that focus on identifying fatigue-related illnesses and sleep disorders. Pre-shift fitness for work declarations are completed by all logistics drivers in conjunction with a PBM doctor or team leader.
- > The separation of traffic and pedestrian flows around the workshops and warehouse facilities at both Lao Operations and at the Dong Dok bus station in Vientiane.
- > The development and delivery of a 'Safe and professional driving – the PanAust way' training presentation to all logistics drivers.
- > Ongoing upgrades of personnel transport buses in Laos to ensure they are compliant with Australian Design Rule (ADR) 68, Occupant Impact Protection in Buses. This upgrade followed a comprehensive audit by an external specialist and included replacing existing vans and contractor buses (that were not ADR 68 compliant) with a fleet of 34 coaster buses and upgrading existing Scania buses.

Given PanAust's mine sites operate continuously, driver fatigue is recognised as a significant risk. The mining fleet (primarily 90t rigid body dump trucks) and logistics fleet (concentrate haulage on public roads) operators are considered most at risk.

The Company's mining fleet travels approximately 4.9 million kilometres each year. The logistics fleet travels approximately 12 million kilometres.

The Company established a Fatigue Management Committee in 2016. Comprised of executives and senior managers from across the business, the Committee's mandate is to ensure that investigation learnings, research or recommendations concerning fatigue management are shared across the Company and implemented accordingly. The Committee continued to provide oversight on fatigue matters in 2018.

A number of initiatives were implemented during 2018 to reduce the risk of fatigue. These included:

- > Engaging a fatigue management consultant to develop a fatigue management training package.
- > The rollout of fatigue management training – delivered in Lao and English languages – to the Logistics team in Laos. A number of fatigue champions were also trained as internal trainers and will deliver additional training packages.
- > Continued evaluation and implementation of fatigue management technologies such as fatigue detection cameras in vehicles (Howden, DTC and CAT systems) and circadian rhythm monitoring watches (myCadian and CAT systems) for personnel. Trials were finalised by year-end 2018 and the fatigue committee endorsed the installation of a fatigue detection camera system in the mining fleet dump trucks in 2019.
- > Continuing accommodation upgrades for mining fleet operators. These upgrades focused on noise and light reduction strategies, as well as reducing the number of drivers per room. The fatigue management-related changes to the accommodation facilities were also included into a new Group Standard for Camps and Related Facilities that was used for the design of the Frieda River Copper-Gold and Frieda River Hydroelectric Projects' facilities.
- > Review of truck turnaround processes at Phu Kham which led to a mandatory turnaround time limit being introduced to prevent exceeding the maximum daily driving time.

Since its inspection in 2016, the Group Fatigue Committee implemented the Group Fatigue Management Standard, improved the accommodation requirements in the Group Camps and Related Facilities Standard, completed fatigue detection camera trials and subsequently endorsed their installation in all mining fleet dump trucks, and developed a consistent fatigue management training package. Given these significant accomplishments, at year end 2018, the Committee determined it had met its initial remit and could transition to a PBM Fatigue Committee with continual oversight for the Group by the Senior Management Taskforce (for significant incidents) given the continued vigilance required around fatigue.



HEALTH AND SAFETY PERFORMANCE

When required, PanAust uses fixed-wing and rotary-wing (helicopter) aircraft to transport personnel and equipment to its Operations and Project sites.

To mitigate risks associated with aviation travel, PanAust implemented a Group Aviation Standard, Helicopter External Load Operations Guideline, and Travel Standard. Coupled with individual country civil aviation regulations, these standards and guidelines detail the minimum controls required for aviation safety across the Company.

Since 2010, PanAust has required an annual third party aviation safety audit of its private charter providers. During 2018, two audits were carried out on fixed and rotary-wing aircraft operators in PNG, two on rotary-wing and fixed-wing aircraft operators in Laos, and one on a rotary-wing operator in Myanmar. The audits confirmed all providers suitably met PanAust's Group Aviation Standard.

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. As the Company's activities in Myanmar ramp up, along with its ongoing presence in Laos and PNG, PanAust's existing security processes, procedures and training will continue to be monitored for effectiveness and tailored to these jurisdictions.

PanAust has security personnel assigned to its Operations in Laos. The Phu Kham and Ban Houayxai Operations are situated in the Xaysomboun 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.

The Lao People's Army (LPA) is required by the Government of Laos to have a presence at PanAust's Lao mine sites. In 2018, approximately 158 LPA were assigned to PBM's activities at Phu Kham and Ban Houayxai (as at 31 December 2018). 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 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. The MoU is available in both Lao and English on PanAust's intranet. The PanAust Group Voluntary Principles on Security and Human Rights Standard was updated in 2018 to more closely align with the MoU.

Prior to their deployment to PBM 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. In 2018, 792 LPA and loss prevention department staff and contractors completed the VPSHR training through their induction program.

PanAust employs loss prevention personnel to perform unarmed access control, static security and emergency response functions at its Phu Kham and Ban Houayxai Operations, and at the Frieda River Copper-Gold Project in PNG. Loss prevention personnel, including contractors, are required to complete training covering the VPSHR and appropriate use of force; all loss prevention personnel attended this training in 2018.

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 during 2018 to ensure their currency for the Operations in Laos. A proactive approach is taken to initiate these protocols early and to progressively restrict remote work activities, personnel movements and operational activities during such periods 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 arise. No significant security incidents affecting PanAust personnel or Operations were recorded in 2018.

Security initiatives implemented in Laos during the year included:

- > The development and implementation of an in-house fuel management system to identify any fuel theft from the Phu Kham site.
- > Implementation of offsite drug and alcohol screening at the Dong Dok bus station for contractor personnel attending site during shutdowns.
- > Continued upgrade of the state-of-the-art CCTV system.

In 2018, the year-on-year decrease in security, trespass and theft incidents at Phu Kham and Ban Houayxai continued, with Operations recording the lowest rate of incidents and incident severity in six years.

In PNG, private security personnel were required to help re-establish safe access to the Frieda River Copper-Gold Project site in March following an employee dispute that suspended activities for a month. A security MoU working group was established and has since developed a draft document for working with the Royal PNG Constabulary that addresses the Company's obligation to the VPSHR.

More information about PanAust's approach to security management is available on the Company's website, <https://panaust.com.au/community/managing-human-rights>.

PANAUST SUPPORTS VIENTIANE RESCUE 1623



PanAust's support of Vientiane Rescue 1623 highlights the Company's commitment to leaving a lasting positive legacy wherever it operates.

Laos has a high road traffic accident rate per capita. Despite this, the country has no ambulance or emergency rescue service. In 2010, Sebastien Perret – a French fire fighter – together with a handful of volunteers founded Vientiane Rescue 1623 to fill this void.

In 2018, the Company donated firefighting helmets, personal protective equipment, medical equipment and hydraulic combi-tools (jaws-of-life). PanAust also donated two shipping containers that have been refurbished and now service as ambulance and emergency services stations in Vientiane.

In conjunction with Vientiane Rescue 1623, the Company also established a work exchange program. The program allows rescue volunteers to attend fire and emergency services training at Phu Kham.

In turn, on a rotating basis, the Company's medical and fire and emergency services teams work with Vientiane Rescue 1623 to respond to incidents in Vientiane.

Regional Emergency Services Superintendent, Mike Taylor spoke about the mutual and long-lasting benefits for both the Company and Vientiane Rescue 1623.

“The work exchange ensures that the Operation's medical and fire and emergency services teams maintain their skills by regularly responding to real emergencies. The program also provides valuable training and coaching for Vientiane Rescue 1623 volunteers.

“This capacity-building and training, as well as the Company's ensures that fire and emergency skills and services in Laos will endure,” Mike said.

Above: Phu Kham's fire and emergency services team with Vientiane Rescue 1623 volunteers

OUR PEOPLE





PANAUST
RECOGNISES THAT
ITS EMPLOYEES
MAKE THE MOST
SIGNIFICANT
CONTRIBUTION TO
THE SUCCESS OF
THE BUSINESS.



PanAust recognises that its employees make the most significant contribution to the success of the business.

The Company understands the inherent business value of attracting, engaging, developing and retaining its employees and providing a meaningful and rewarding environment in which to work.

PanAust supports diversity in the workforce as it enables business improvement and drives success. The Company is also committed to the localisation of its workforce which has the added benefit of meeting one of its long-term legacy objectives to develop a skilled workforce that can continue to participate in, and help grow, the national economy post-closure.

PanAust provides a professional environment where people can work productively and effectively while progressing personal growth and individual career development goals.

The Company's strategic human resources (HR) framework comprises six core components and aligns employees to the Company's Vision and Values, goals and objectives. These components are: employee health and wellbeing, remuneration and benefits, recruitment, training and development, organisational development and HR systems.

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 (which guides PanAust's management of its people and the way work is undertaken) and the Company's code of conduct, The PanAust Way (which aligns employees' actions with PanAust's Values and behavioural expectations, including those supporting diversity in the workplace).

The Employee Policy and The PanAust Way, HR-related standards, inductions, training and leadership development programs and the performance management cycle (including annual achievement plans and reviews), 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 2018, PanAust's workforce numbers in Laos remained consistent when compared to 2017. PNG numbers declined as the project site transitioned to the permitting phase of the Frieda River Project. Employee numbers in Myanmar increased due to activities associated with the new Exploration Licences in the Sagaing Region.

Employees by work location as at 31 December

Region	2016	2017	2018
Laos	3,249	3,293	3,292
Thailand	4	4	4
Myanmar*	-	5	29
Australia	52	51	50
PNG	100	79	43
Total	3,405	3,432	3,418

*An error was found in the 2017 Business Review and Sustainability Report where employees in Myanmar were excluded. This has been corrected.



PanAust's materiality process identified the main workforce focus areas for 2018 as

- > Training and development
- > Employee engagement and retention
- > Workplace diversity

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.

Paramount to the Company's training and development strategy is the annual employee training plan. Regular reporting ensures mandatory compliance and competency training is undertaken by all employees to ensure they can safely and competently perform their roles.

In Laos, an in-house training team delivers mandatory and discipline-specific skills training. A total of 327,983 hours of training was delivered in 2018, representing an average of 100 hours of training per employee. Details of the type and amount of training delivered in Laos are outlined in the table opposite.

Breakdown of training types in Laos 2018

Training subject/focus area	Total hours	Percentage of all training provided
Mine operations	89,002	27
Apprenticeship program (delivered in partnership with the Lao-German Technical College)	111,614	34
Safety and induction	21,436	7
Professional and leadership development	30,066	9
Clerical, education and awareness programs	23,648	7
Trades and engineering	52,217	16
Total training hours	327,983	100

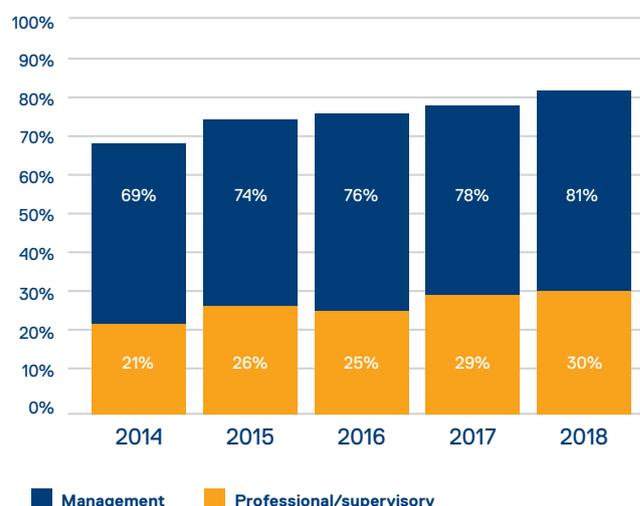
PanAust focuses on progressive learning and supports ongoing skills development through on-the-job experiences and targeted training. These activities ensure employees meet the professional requirements of their current role and are prepared for future promotion. PanAust has established programs to develop an internal talent pipeline to support future Company growth, and build a sustainable workforce.

Throughout 2018, the in-house training team in Laos focused on ensuring that high-potential Lao employees and team leaders completed the Supervisory Skills Training Program as well as technical/trades/engineering training relevant to their discipline. This essential training supports employees transitioning into more senior roles.

As a result of this training, the Company continues to achieve year-on-year improvements in the percentage of Lao national employees in supervisory, professional and management roles in the business.

In 2018, a total of 399 Lao-national employees were promoted. Most notably, 84 were promoted to senior technical or team leadership roles, with an additional 9 promoted to superintendent level. At the Frieda River Copper-Gold Project site, all superintendent level roles are now filled by PNG-national employees.

Management and professional/supervisory roles filled by Lao-national employees in Laos



Talent management

PanAust's talent management strategy is underpinned by the Company's leadership, mentoring and professional development programs. These programs focus on the core leadership capabilities identified as key to success in leadership roles within the Company, regardless of an employee's functional area or position level.

PanAust has a number of initiatives and programs in place to support talent management across the business, including:

- > Localisation strategy (see page 82).
- > Leadership development (see page 82).
- > Mentoring program (see page 84).
- > Workforce planning – the annual budgeting process links into the life of mine plan for the business to plan and predict workforce numbers and identify expatriate positions targeted for localisation.
- > Succession planning – annual planning process to identify high potential employees for more senior roles; includes development plans which may include participation in the mentoring program.

In addition to the formal programs above, a significant amount of informal on-the-job training and coaching between national employees and more experienced expatriate staff contributes to the Company's current success while also leaving a positive and sustainable legacy.

TRADES TRAINING PROGRAM

A key initiative designed to leave a lasting legacy in Laos is the Company's Trades Training Program. This consists of two distinct programs: the Site Training Program targeted at Lao maintenance employees already in the workforce, and the Apprenticeship Program which aims to build a pool of talent for the Company to draw on.

Under the Site Training Program, individual training plans are developed for each Lao maintenance employee to address competency gaps. Since the Program's inception in 2014, 342 Lao employees have progressed from a 'trades technician' level to 'tradesperson' level.

In 2019, PanAust will provide the necessary support for Lao maintenance trainees to obtain a Lao Government recognised Diploma of Technical Trades in their chosen field from the Lao-German Technical College in Vientiane.

The Apprenticeship Program was established in 2013 and offers a five-year apprenticeship in a technical trade. Run in partnership with the Lao-German Technical College, apprentices attend twelve months of vocational training before entering their four-year apprenticeship. The Program aims to address a national shortage of qualified tradespeople within Laos, and to generate a pool of appropriately qualified national candidates for the Company to employ.

Localisation 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.

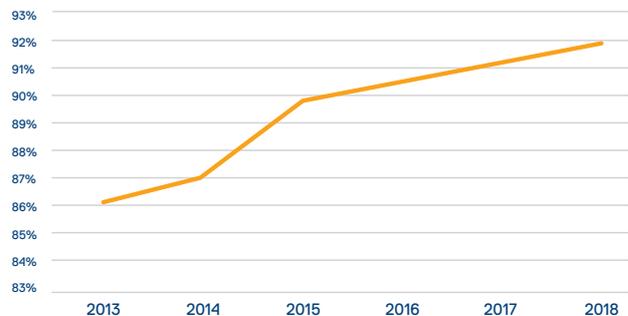
The strategy relies on the training and development of Lao-national employees to meet the requisite skills and competencies required to perform a role to the desired level.

The localisation strategy is an overarching document which is supplemented by the annual training plan and provides a roadmap for Lao-national training and organisational development initiatives. The strategy articulates the steps required to identify high-potential Lao employees and ensure they have the requisite skills and abilities to replace expatriates. Each year, the Company plans for localisation through the workforce budgeting process.

In 2018, the Company increased Lao localisation to 92 per cent. This demonstrates the success of the systems and programs in place and the Company's commitment to its localisation objectives. Given the size of PanAust's business and that most remaining roles are highly specialised in nature, further increases will be challenging.

The fact the Company has met or exceeded 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.

Localisation progress – proportion of Lao-national employees in the workforce



Leadership development

At PanAust, leadership development is delivered by two separate yet complementary programs: The Supervisory Skills Training Program and Leading the PanAust Way.

Supervisory Skills Training Program

The Supervisory Skills Training Program provides existing team leaders, supervisors and high-potential employees with the training required for success in frontline leadership roles. Currently offered to PBM 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

In 2018, the Company's final intake of apprentices obtained an Australian Certificate III Trade Qualification and a Lao Higher Diploma of Technical Training.

The 51 apprentices (35 from PBM and 16 from Chifeng LXML Sepon) included nine women (eight from PBM and one from Chifeng LXML Sepon). Graduates received a qualification in one of the following trades: automotive electrical, heavy vehicle plant mechanical, metal fabrication and welding, fitting and machining, and electrical.

PBM apprentices transitioned into full-time roles within the Company's fixed plant and mobile maintenance teams in December 2018.

With the imminent closure of the Company's Operations in Laos, the Apprenticeship Program will discontinue in 2019.

hours of structured training, case studies and practical exercises. In 2018, 141 employees (the majority of whom were Lao-national and included 13 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, 72 women have graduated from the Program.

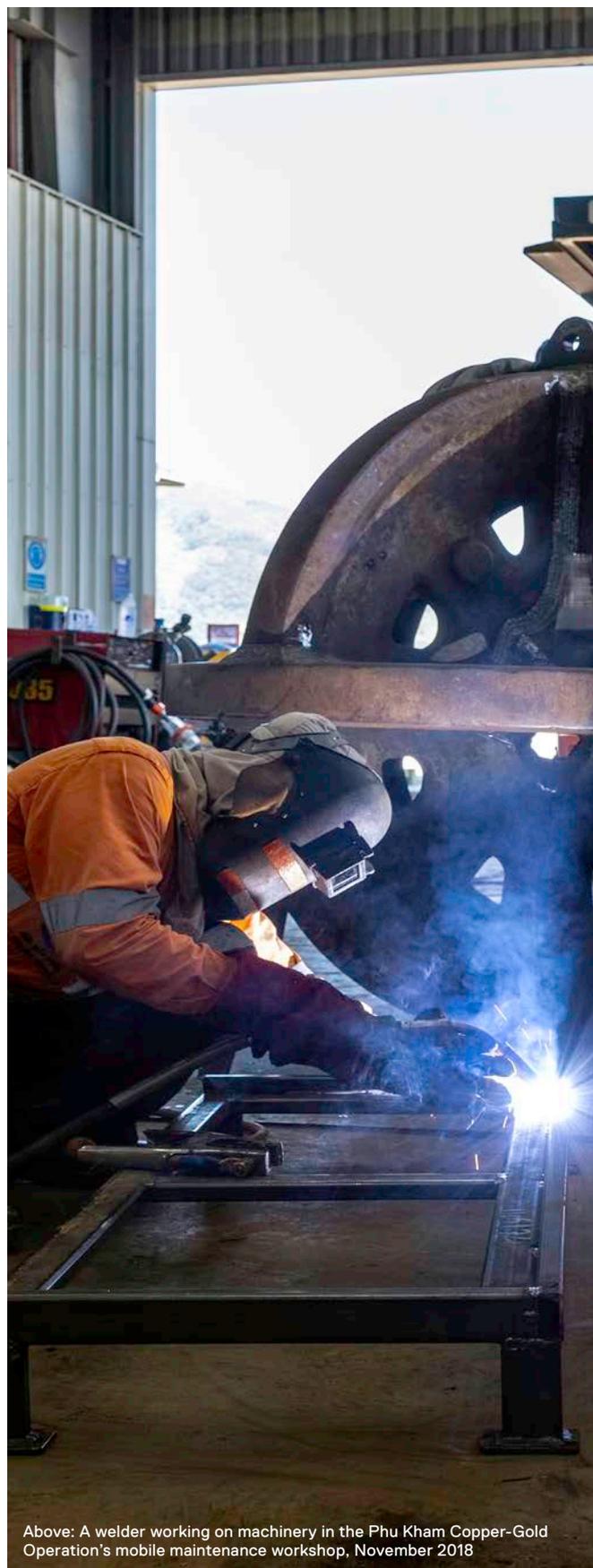
Leading the PanAust Way

Leading the PanAust Way is an internally designed and facilitated leadership development program based on a leadership capability model, which defines the qualities and behaviours that PanAust expects and values in its employees and leaders. The program consists of two half-day workshops that introduce participants to the leadership capability model, followed by a 360-degree feedback survey, and a leadership development plan based on the feedback. The program is delivered in a cascading manner, with each level of management delivering the program to the organisational level below.

Leading the PanAust Way aims to strengthen the existing talent pool through the further development of current and emerging leaders. Those who complete the program gain valuable insight into their own leadership strengths and identify areas for improvement.

The Program was rolled out to all executives and managers in 2017. In 2018, the program was extended to superintendents in Laos and Brisbane

The leadership capability model was also introduced to the supervisor level in 2018. This rollout will continue in 2019.



Above: A welder working on machinery in the Phu Kham Copper-Gold Operation's mobile maintenance workshop, November 2018

Mentoring

PanAust's Mentoring Program is part of the Company's talent management strategy and supports the development of high-potential employees who have been identified as future leaders, to achieve their full potential.

The mentee/mentor relationship provides mentees with access to experienced and knowledgeable leaders who can help them achieve their individual and business-focused development goals and guide leadership behaviours that are aligned with the Company's Values and Leading the PanAust Way.

The Program pairs high-potential employees (mentees) with PanAust executives, managers, or superintendents (mentors). It is run internally after an external 'master mentor' and coach provides the initial training for mentors and mentees.

PanAust's Program addresses inherent language and cultural challenges by allowing Lao participants to be paired with Lao mentors. PanAust's extensive suite of talent management tools have enabled the Company to target more senior leaders across the organisation. Other high-potential employees receive training in the leadership capability model component of Leading the PanAust Way.

PanAust's third 18-month mentoring program was launched in November 2017. Twenty eight high-potential mentees were paired with their mentors in December 2017 and commenced their development meetings shortly thereafter. Program reviews and surveys will be conducted over the course of the Program to track mentee progress.

Senior Government Affairs Advisor, Vannaly Phounsavath is a participant in the current program. Vannaly spoke about how the program has had a positive impact on her professional development.

“The mentoring program has helped me develop and fine tune my critical thinking; a skill which is very useful in both my professional career and on a personal level. My mentor challenges me to see problems in a different way in order to gain more insight and address them more effectively,”
Vannaly said.

Employee engagement and retention

PanAust closely monitors its turnover statistics and carries out exit interviews with departing employees. This enables PanAust to understand factors that influence employees' decisions to leave and guides its approach to employee engagement and retention strategies. In 2018, PanAust noted a slight increase in voluntary turnover across the Group.

LEADING THE PANAUST WAY

Leading the PanAust Way – the Company's in-house leadership program – is continuing to positively impact participants.

Since its rollout began with the executive team in 2017, approximately 650 executives, managers, superintendents and team leaders have attended their training.

All training is facilitated in-house by PanAust leaders, and introduces the program's five leadership capabilities, which are designed to broaden each participant's understanding of what PanAust expects of its current and future leaders.

Following introductory training, participants take part in a 360-degree leadership survey. The survey includes a range of questions relating to the leadership capabilities and is completed by the employee, their immediate supervisor and eight peers and direct reports.

A 360-degree report is generated to help employees identify areas of improvement for their personal leadership

development. The report is made available at feedback sessions attended by the employee's immediate supervisor and an in-house leadership coach.

Group Financial Controller, Stacey Sleeman spoke of her involvement in the Program.

“I have taken part in Leading the PanAust Way training both as a participant and a facilitator. As a participant, I was able to reflect on my own leadership style and how I am perceived by others. While uncomfortable at first, this opened my eyes to new leadership perspectives.

“As a facilitator, I found the training incredibly rewarding. Having PanAust executives and managers facilitate the program promotes open and honest conversations and feedback that builds positive relationships between participants and facilitators. The Leading the PanAust Way program and training reinforced for me that you do not need to be a general manager or a manager to act like, and be considered, a leader at PanAust,” Stacey said.

PanAust voluntary turnover average rate as a percentage of the total workforce

Region	2016	2017	2018
PanAust Group	6.93	4.37	4.69
Australia	10.53	13.21	14.55
Southeast Asia	6.76	3.79	3.85
PNG	1.68	0.97	1.63

PanAust recognises that engaged employees are committed to their work, aligned to Company values, and are committed to achieving Company goals.

PanAust's employee engagement agenda is embedded within all aspects of the HR framework, localisation strategy, training and development plans and the employment cycle. Formal development programs, wellbeing initiatives and performance incentives strengthen the relationship with employees, increase employees' discretionary effort and improve employee loyalty to the Company. The stakeholder and interested parties table on page 42 also outlines specific employee engagement mechanisms and priorities for the 2018 reporting year.

PanAust actively seeks feedback through engagement surveys. In 2017 the 'Your Say' pulse survey canvassed the views of employees across the Group on a range of categories that specifically focused on engagement and retention. Given the imminent closure of the Company's Operations in Laos, the survey highlighted that specific retention initiatives were needed.

The 'You Stay We Pay' campaign regularly reminds staff of the redundancy payment they will receive should they stay with the Company until mine closure. In 2018, PanAust also introduced the 'Benefits of Mine Closure' strategy which promotes the unique career opportunities and mining industry experience closure activities will bring.

Aligning employees with Company policies and business systems

Systems supporting the health and wellbeing of employees operate throughout the Company at an international and country-specific level. In-house medical and recreational facilities are available to employees at all PanAust work sites and a comprehensive range of insurance plans ensure protection for unexpected events. The Company's Employee Assistance Program provides a confidential counselling service for employees and their immediate family members to deal with personal and/or work-related issues.

PanAust fosters an open and transparent environment in which employees are encouraged to report conduct contrary to the Company's code of conduct, The PanAust Way. Employees are introduced to The PanAust Way during their induction, with refresher training run on a regular basis to ensure all employees understand their code of conduct obligations. Supporting The PanAust Way is an externally provided Whistleblower Service (see page 28), which provides a confidential and anonymous means of reporting or raising concerns about serious misconduct.

Information regarding PanAust's expectations for employees' performance and behaviour is accessible to employees via the Company's intranet. Concerns by employees who believe they have been treated unfairly are handled formally via the Company's Fair Treatment Process.

The Company's HR systems are reinforced periodically across the Group in English and local languages.

Workplace diversity

PanAust recognises that a diverse workforce brings a wide range of perspectives and experiences which enables business improvement and underpins Company success. PanAust creates an inclusive environment where employees are treated fairly, can demonstrate their potential talent and are rewarded based on merit.

The Company pays particular attention to ethnic and gender diversity in order to meet strategic objectives, as well as commitments to relevant legislation in host countries.

Workplace diversity is promoted and supported at PanAust through the Employee Policy and the Diversity Standard – both readily available to employees on the Company's intranet and website. All new employees receive an introduction to the Policy and Standard during their induction. The PanAust Way also emphasises behavioural expectations that underpin diversity in the workplace.

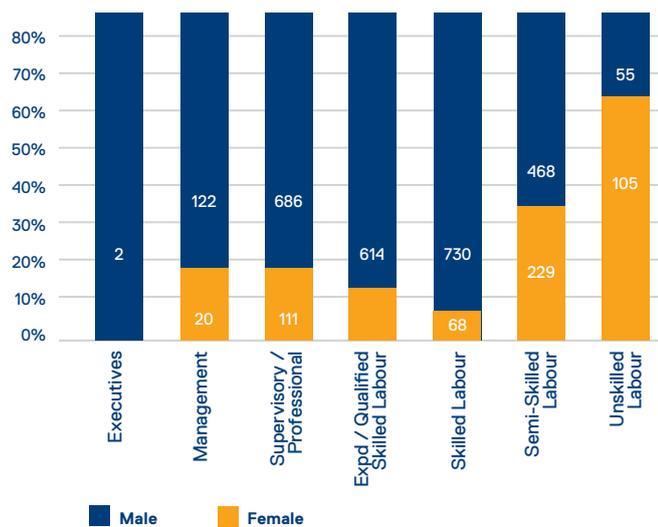
Topics such as child labour, equal employment opportunity, diversity, appropriate workplace behaviour and complying with host country laws are also covered during inductions and when communicating The PanAust Way. Supplier contracts also stipulate the required standards of behaviour when working on PanAust sites or on behalf of the Company including ensuring that forced labour is not used.

PanAust minimises the risk of inadvertently hiring underage workers (child labour) through rigorous recruitment processes. The minimum employable age is 18 years. The Company requires all potential recruits to provide proof of age identification prior to commencing employment. The majority of the PanAust workforce is aged between 20 and 50 years old.

Breakdown of PanAust Group employees by age group

Age group	Total employees	Percentage of workforce
18-20	7	0.5
20-30	1,128	36
30-50	2,103	59
50-60	163	4
Over 60	17	0.5

2018 breakdown of role categories by gender (Lao Operations)



Management and professional/supervisory level roles occupied by women (Lao Operations)



Workforce statistics to 31 December 2018

PanAust Group	2016	2017	2018
Total employees (permanent, fixed-term)	3,405	3,432	3,418
Women	569	618	657
Women as a percentage of the PanAust workforce	17	18	19
Phu Bia Mining	2016	2017	2018
Total employees (permanent, fixed-term)	3,249	3,293	3,292
Lao-nationals	2,946	3,006	3,026
Expatriates	329	287	266
Women	541	582	615
Lao-nationals as a percentage of the workforce	90	91	92
Expatriates as a percentage of the workforce	10	9	8
Women as a percentage of the workforce	17	18	18
Frieda River Copper-Gold Project	2016	2017	2018
Total employees (permanent, fixed-term)*	100	79	43
PNG-nationals	96	74	41
Expatriates	4	5	2
Women	10	10	8
PNG-nationals as a percentage of the workforce	96	94	95
Expatriates as a percentage of the workforce	5	6	5
Women as a percentage of the workforce	10	13	20

* The reduction in total employees in 2018 reflects the Project site's transition to permitting phase.



ANNUAL EMPLOYEE AWARDS PROGRAM

PanAust’s Annual Employee Awards Program rewards employees for their outstanding contributions to safety, sustainability and production.

The Awards promote a clear link to business goals and the Company’s Vision and Values. The Program fosters a culture of continuous business, professional and individual improvement and promotes activities critical to the Company’s success.

Four individual and five team award categories are recognised. Within the individual award categories, the Company formally recognises an employee of the year, an outstanding leader, an individual who has contributed the most to the training and development of employees, and an employee who has contributed the most to sustainable business outcomes. Winners and runners up are selected by a voting committee.

In 2018, Loss Prevention Officer Ms Dasideth was named Employee of the Year. Ms Dasideth is a long-standing, Lao-national employee known for her visible leadership and firm but fair standard of work.

Team awards recognise work groups for their achievements in the areas of safety, business improvement, sustainability, cost and production.

In 2018, the Employee Awards judging panel introduced three Managing Director’s Awards. The Awards acknowledged two teams and an individual for consistently performing at a high level.



The first Managing Director’s Award was given to the Caterpillar 5-Star Contamination Control team for achieving year-on-year external and internal recognition for their contamination control work. The Trades Training team – who proudly oversaw five years of dedicated training with a further 34 Lao apprentices graduating in 2017 – were the second recipients of the new Award. Group Human Resources Manager, Lisa Phommasane, whose role in leadership development over several years (including the roll-out of the Leading the PanAust Way Program, mentoring, succession and recruitment initiatives) earned her the third Managing Director’s Award.

Top: Winner and runners up at the 2018 Employee Awards ceremony celebrate their success at the Award’s gala night, held at the Crowne Plaza in Vientiane, May 2018

Above: Loss Prevention Officer, Ms Dasideth with her Employee of the Year Award

Gender

At year-end 2018, 19 per cent of the total PanAust Group workforce were women, which included 35 in management roles (19 per cent of all management roles across the Company). This is the highest percentage of female participation in the Company's workforce since PanAust's inception.

PanAust's Lao-based workforce (PBM) numbered 3,292 with 615 roles filled by women. A further breakdown indicates that women held 20 roles with management responsibility and 111 supervisory or professional capacity roles.

The Company tracks the proportion of women within various job categories, especially those working in categories atypical for women such as mining operator and technical maintenance. In 2018, 142 women were employed in operator and technical maintenance roles at PBM (12 per cent of the total roles in this job family). At year end, a total of 7 women were employed as trainees (representing 50 per cent of total roles in this job family) – a substantial increase from 2017 (30 per cent).

Following its inception in 2011, the Company's Diversity Committee identified and implemented a number of initiatives that improved women's participation in the workforce. In 2017, the Company completed a deep dive review on gender diversity to identify and better understand the barriers to increasing this participation which had stagnated at 17 per cent since 2014. The deep dive confirmed that while PanAust's organisational culture provided a strong foundation for gender diversity, more specific actions could be undertaken. One notable action was the reinvigoration of the Diversity Committee with a new Chairperson and members.

Momentum from the 2017 gender diversity deep dive was maintained by the Committee throughout 2018. During the year, the Diversity Standard was revised and a new Diversity Committee Charter was developed that set out the roles, responsibilities and structure of the Committee. Importantly, the Committee developed the 2018/2019 Diversity Strategic Plan that included actions and measurable objectives. The Plan was endorsed by the Executive Management Team in December.

The Company's focus on increasing female participation in the workforce, specifically in non-traditional roles, led to a number of firsts in relation to female employment during 2018.

Ms Valmai Alefay was appointed as the first female superintendent at the Frieda River Project site in 2018. Ms Alefay is responsible for the site's administration, camp operations, maintenance and logistics functions.

Also in 2018, PanAust appointed its first ever female mining team leader, Ms Nid Vilaiphone. Having been with the Company for more than ten years, Ms Nid was identified as a high-potential candidate for leadership development, and successfully completed PC3000 shovel training in 2017.

WOMEN'S PARTICIPATION IN THE WORKFORCE UPDATE

In a first for PanAust and Laos, in 2018 the Company appointed its first female firefighter.

Onekeo Chansonath joined Phu Kham's fire and emergency services team in January 2018. Her appointment was based on three interviews, a practical equipment handling test and medical examination.

In a profession dominated by men worldwide, Onekeo was compelled to apply for the role in order to help people and protect vital Company assets. In so doing, Onekeo hopes to learn new cross-functional skills that she can apply to a number of roles within the Company.

Onekeo completed her three-month probationary period in April 2018. She was required to demonstrate her understanding of basic fire and rescue competencies and has since joined her crew at Phu Kham.

Fire and Emergency Services Supervisor, Phatthana Thorphialouang spoke highly of his new recruit.

"Onekeo has settled in extremely well. Having previously worked as a loss prevention officer with the Company, her security background has given her a solid understanding of procedures, discipline and the importance of the 'chain of command'. All essential to being a part of the fire and emergency services team," Phatthana said.

Female participation in shutdowns

All operational work within PBM's process plants stops during a planned shutdown so that routine maintenance can be performed on operational machinery in order to maintain asset availability and reliability at world-class levels. A cross-functional collaborative exercise, shutdowns require input from a number of teams to ensure all work is completed safely and on time.



One such woman integral to shutdowns at Phu Kham is Reliability Engineer, Miss Noud Kounlavong.

After completing a three-year diploma in electrical engineering at the Lao-German Technical College in Vientiane, Miss Noud joined Phu Bia Mining three-and-a-half years ago as a Reliability Technician. She was promoted to her current role early in 2018 after completing an internal technical skills development program that included the successful completion of assessments against Australian standards.

The depth of her knowledge and passion for her role is evident to her colleagues. When asked about her role, she confirmed that she enjoys the variety that her job offers, as well as the challenges reliability engineering presents on a day-to-day basis.

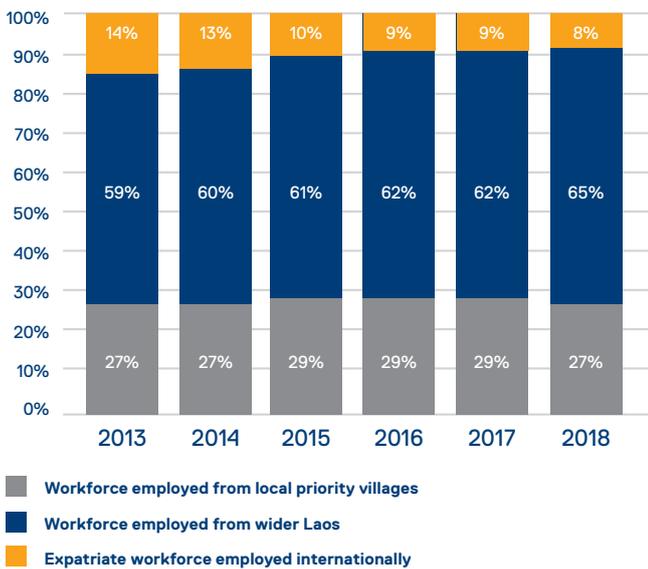
Top: Onekeo Chansonath (centre) surrounded by the Phu Kham fire and emergency services team

Left: Ms Noud Kounlavong during a shutdown of the Phu Kham Copper-Gold Operation in 2018

Targeted recruitment in local priority villages

PanAust focuses on providing employment and career development opportunities to villagers in communities close to where the Company operates. This targeted recruitment strategy has contributed to an increase in the number of local candidates employed with the Company. In 2018, 27 per cent of the workforce in Laos was from local priority villages.

Breakdown of employees by employment location (Lao Operations)



All of the unskilled/entry level roles at PBM are filled by people either from local villages adjacent to the Operations, or from nearby local districts. Aptitude testing forms part of the recruitment process for these roles. The Company uses a culturally neutral, language-free assessment tool to identify candidates with strong cognitive capacity and 'trainability'.

In using this test, the Company ensures candidates from local communities who have limited education or face language barriers are not excluded from employment opportunities. This approach maximises the Company's ability to source suitable candidates from local villages.

In 2018, PBM engaged 20 per cent of operator/tradesperson and trainee roles from local villages. The Company also provided the necessary training for these employees to successfully transition into their roles.

Similar to the approach adopted in Laos, in PNG a preferential recruitment strategy targets local villagers with requisite skills and experience in the first instance. This is part of a broader strategy documented in an Employment and Training Plan, submitted as part of the application for a SML for the Frieda River Copper-Gold Project which PanAust registered with the PNG Mineral Resources Authority in June 2016.

The Employment and Training Plan was revised in 2018 and was included in the updated SML application for the Sepik Development Project in December (see page 19).

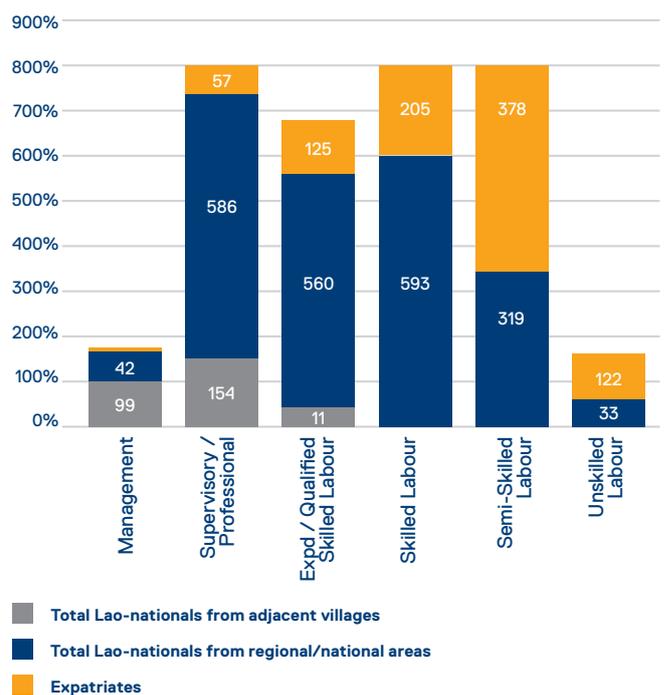
In 2018, 61 per cent of PNG-nationals employed at the Frieda River Copper-Gold Project originated from one of the seven near-Project communities or from the West and East Sepik Provinces.

Number of Lao-nationals employed by PBM from local priority villages*

Role type	2016	2017	2018
Unskilled labour	182	149	127
Semi-skilled labour	335	344	378
Skilled labour	288	279	205
Experienced/qualified skilled labour	115	130	125
Supervisory/professional roles	48	56	57
Management	1	1	1

* Local priority villages are those villages which the Company has determined to be most impacted by its operation (either mine site or concentrate haulage routes)

Breakdown of employees by locality as at 31 December 2018 (Lao Operations)



Workplace Representative Committee

Established in 2011, PBM's Workplace Representative Committee was founded with the aim of promoting harmonious relationships between the Company and its employees. The Committee provides a mechanism by which both the Company and employees can constructively raise and resolve issues when differences arise. It plays an integral role in the Company's employee engagement strategy and has been instrumental in aligning workforce performance with PanAust's needs.

The Committee's charter defines its roles and responsibilities, reaffirms the relationship between the Company and its employees and is founded on the following key values and principles:

- > Mutual interest in the success, wellbeing and prosperity of all stakeholders.
- > Integrity in dealings with each other and the Union Federation of Lao People's Democratic Republic.
- > Respect for each other and all stakeholders that may be influenced by this relationship.
- > Fair, honest and transparent communication.

Committee members are nominated by the Lao workforce and ratified by Executive Management Team representatives in Laos. The Committee elects a President and Deputy President, with the President not permitted to serve more than a two-year term. The Committee has grown from an original six-person group to 23, with each department across PBM represented.

Committee meetings are held every quarter and all members are required to attend. The Company is represented at the meetings by the Human Resources and Training Manager. A continual action log is used to record actions, responsibilities and outcomes at each meeting and is distributed to the Executive Management Team representatives in Laos and Committee members with the understanding they will discuss meeting outcomes with their work teams and departments.

Since its establishment, the Committee has been instrumental in assisting the Company to engage with the broader employee group, more readily understand issues important to its employees, and develop strategies and programs to address these issues. Programs that have been implemented as a direct result of the Committee's activities include: the establishment of a travel allowance for eligible Lao employees, a service award program that recognises the contribution long-serving employees, and greater flexibility with regards to working hours for employees in the Vientiane office.

The Committee is also an avenue for the Company to engage with the Government of Laos when various government officials are invited to attend meetings on an ad-hoc basis.

In 2018, the PBM Workplace Representative Committee provided a template for the establishment of a Workplace Representative Committee at the Frieda River Project. The establishment of this new Committee in PNG followed action taken by a group of employees on site in January which subsequently escalated and forced an evacuation of the site in late March. Executive General Manager Support Services, Adrian Bell met with employees on site in February to propose the establishment of a permanent Workplace Representative Committee with a charter and guidelines. Employees agreed to the proposal as a mechanism for employee and Company representatives to meet regularly to pre-empt any issues and work together to resolve employee concerns. For more information, see the case study on page 92.



Below: (Left to right) Safety Supervisor, Xayya Inthavong and Process Operator, Mr Paohuethao in front of the Ban Houayxai Operation conveyor, November 2018



OUR PEOPLE



CASE STUDY THE FRIEDA RIVER ACCORD

PanAust signs agreement with local communities to peacefully and mutually advance the Frieda River Project.

In 2018, the Company and Project landowners developed and signed the Frieda River Project Accord. The Accord was developed with the seven near-Project villages and ensures the Company and Project landowners will work together to achieve mutually beneficial economic and sustainability outcomes through the life of the Project.

The Accord was formed after a number of historical employee pay complaints led to a work stoppage or 'sit down'. Employees supported their pay complaints by highlighting key achievements and good performance in recent years.

The grievances raised by employees were initially managed through PanAust's existing fair treatment process, then through a newly-established Frieda River Workplace Representative Committee. The Committee responded to employee concerns by commissioning an independent consultant to undertake a remuneration review which including benchmarking against similar roles at peer companies.

The Committee raised a number of issues PanAust were addressing when in March, a small group of employees acted outside of the agreed Company grievance protocols and demanded PanAust address their concerns. The actions of these employees endangered other site colleagues, placed the Company's property at risk, and forced the evacuation of the Project site. These interruptions also forced the suspension of all site activities, including community programs.



An emergency Community Leaders Forum was held in Wewak. Community leaders from the seven near-project landowner villages and Company representatives discussed the short- and long-term effects the shutdown would have on the communities, the Company, employees and ultimately the Project's future. It was agreed that greater co-operation and collaboration was needed and that an Accord would underpin the relationship between the parties moving forward.

Signed on 20 September 2018, the Frieda River Accord ensures that Project stakeholders are focused on the long-term success of the Project. It represents a reconciliation, between all parties, following the disruptive employee actions and the subsequent site evacuation. Regular site activities resumed following the signing on the basis of the principles set out in the document.

The Frieda River Accord marks the beginning of a stronger relationship between PanAust, Frieda River employees and local community representatives. It sets out a shared vision for a successful Project that is built on a foundation of trust, respect for due process, and law and order.



Top: PanAust representatives, community leaders, and delegates from PNG Provincial Government following at the signing of the Frieda River Accord in the village of Paupe, 20 September 2018

Above: Sign welcoming Government of Papua New Guinea officials, PanAust representative and visitors to the Accord signing ceremony

EXECUTIVE MANAGEMENT TEAM

As at April 2019

PanAust corporate

Dr Qun Yang, Executive Chairman

Mr Daling Zheng, Chief Financial Officer

Mr Simon Milroy,
General Manager Corporate Development and Exploration

Mr George Piggott, General Counsel

Mr Geoff Kernick, General Manager Commercial

Mr Scott Cowie, General Manager Technical Services

Ms Qingshan (Laurinda) Zhang, Company Secretary

PanAust Asia business unit

Mr David Reid, General Manager Operations

Mr Shaun Massey,
General Manager External Affairs and Business Support

As at 1 January 2019

PanAust corporate

Dr Fred Hess, Managing Director

Mr Andrew Price, Chief Financial Officer

Mr Adrian Bell,
Executive General Manager Support Services

Mr Simon Milroy,
General Manager Corporate Development and Exploration

Mr Paul Scarr, General Counsel

Mr Geoff Kernick, General Manager Commercial

Mr Glen Connell, General Manager External Affairs

Ms Qingshan (Laurinda) Zhang, Company Secretary

PanAust Asia business unit

Mr David Reid, General Manager Operations

Mr Shaun Massey, General Manager Support Services

Project development business unit

Dr Peter Trout,
Executive General Manager – Technical Support and Studies

Mr Scott Cowie, General Manager Technical Services



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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 2018 Business Review and Sustainability Report (the Report) to the scope of work outlined below. The Report covers PanAust's operations for the 12 months to 31 December 2018, 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. 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:** *Stakeholder engagement* (Grievances).
- **Environmental performance:** *Energy and carbon management* (Energy and explosives for Scope 1 and 2 GHG emissions - reasonable assurance); *Land rehabilitation and closure* (Case Study: The Sepik Development Project Environmental Impact Statement).
- **Health and safety:** *Contractor management*.
- **Our people:** *Employee engagement* (Case study: The Frieda River Accord).

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 2018 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 12 months to 31 December 2018.

Key Observations

Based on the scope of work, and without affecting our assurance conclusion, Materiality Counts identified good practice relating to the accuracy of performance data (in particular energy and explosives) and the completeness of information (in particular on contractor management). Materiality Counts identified an area for improvement relating to balance and transparency, which was addressed in the Report.

Materiality Counts congratulates PanAust on its continued commitment to sustainability reporting.



Materiality Counts, 27 March 2019, 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.

Company ownership profile

Subsidiaries and transactions with non-controlling interests

Name of entity	Place of incorporation	Class of shares	Equity holding* (%)		Principal activities
			2017	2018	
PanAust IDO SpA	Chile	Ordinary	100	100	Investment holding
PanAust Minera IDO Limitada	Chile	Ordinary	100	100	Investment holding
Inca de Oro S.A.	Chile	Ordinary	66	66	Exploration
PanAust Atacama SpA	Chile	Ordinary	100	100	Investment holding
PanAust South America Services SpA	Chile	Ordinary	100	100	Services
Phu Bia Mining Limited	Laos	Ordinary	90	90	Exploration and mining
Wuntho Resources Limited**	Myanmar	Ordinary	80	80	Exploration
PanAust Services (Myanmar) Company Limited	Myanmar	Ordinary	100	100	Exploration
Frieda River Limited ^(a)	PNG	Ordinary and Redeemable Preference Shares	100	100	Exploration
Pan Mekong Exploration Pty Ltd	Qld	Ordinary	100	100	Investment holding
PanAust Exploration Pty Ltd	Qld	Ordinary	100	100	Dormant for the period
PanAust Services Pty Ltd	Qld	Ordinary	100	100	Services
PNA (Puthep) Pty Ltd	Qld	Ordinary	100	100	Investment holding
PanAust Holdings Pte Ltd	Singapore	Ordinary	100	100	Investment holding
PanAust Chile Holdings Pte Ltd	Singapore	Ordinary	100	100	Investment holding
PanAust IDO Holdings Pte Ltd	Singapore	Ordinary	100	100	Investment holding
PanAust SPV1 Pte Ltd	Singapore	Ordinary	100	100	Investment holding
PanAust SPV2 Pte Ltd	Singapore	Ordinary	100	100	Investment holding
PanAust Myanmar Pte Ltd	Singapore	Ordinary	100	100	Investment holding
PanAust Services (Thailand) Company Limited	Thailand	Ordinary	100	100	Services
Masons Hill Gold NL	WA	Ordinary	90	90	Dormant for the period

* Beneficial interest

** PanAust's interest in Wuntho Resources Company Limited increased to 90 per cent in March 2019

^(a) This subsidiary holds an 80 per cent interest in the Frieda River Copper-Gold Project in Papua New Guinea. The remaining 20 per cent interest is held by Highlands Frieda Limited. On 1 January 2019, Cobalt 27 entered into a scheme implementation agreement with Highlands Pacific Limited, pursuant to which Cobalt 27 will acquire all of the issued ordinary shares of Highlands that it does not own. As part of the proposed transaction, subject to various conditions being satisfied, PanAust proposes to acquire Highlands Frieda Limited's 20 per cent participating interest in the Frieda River Project.

