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PNG LNG Environmental and Social Report – **Annual 2024**



PNG LNG

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TO OUR STAKEHOLDERS

I am pleased to return to ExxonMobil PNG Limited (EMPNG) as Chairman and Managing Director at a time when the company has recorded our greatest milestone to date – the completion of the first decade of Papua New Guinea Liquefied Natural Gas (PNG LNG) production.

In my previous roles with PNG LNG, I have been fortunate to be part of an amazing team that has made significant strides in delivering career and community development opportunities for the people of Papua New Guinea, while at the same time finding new ways to preserve the nation's unique biodiversity. Some of the many highlights achieved in the past decade include: the signing of 11 conservation deeds by landowning communities to protect 20,000 hectares of land in the Upstream area; recruiting the 10th intake of Operations and Maintenance training program participants; and helping to strengthen the capabilities of community organisations such as the Port Moresby Nature Park and Buk bilong Pikinini libraries.

Since the start of production in 2014, EMPNG has safely produced a total 85.9 million tonnes of LNG and shipped 1143 LNG cargoes to provide energy for customers in Asia. Our production capacity was further strengthened in 2024 with the start-up of the Angore Project, which is designed to deliver up to 350 million standard cubic feet per day of gas and an estimated 1 trillion cubic feet over its life to support stable, long-term LNG production.

All these milestones have been made possible by our highly skilled 3500-strong workforce, of whom 90 percent are Papua New Guinean citizens. During the year, a national content milestone was achieved with the LNG Plant Central Control Room fully operated by skilled Papua New Guinean employees. In 2024, we recorded our safest year-to-date with zero Lost Time Incidents, and zero Tier 1 or Tier 2 process safety events, a true testament to the dedication of our employees.

EMPNG has also spent more than a decade working with landowner companies and other Papua New Guinean businesses to build the capacity of communities. In 2024 alone, this resulted in the completion of more than 10 infrastructure projects including new classrooms and teacher housing built by Lancos and other local suppliers.

Additionally, by collaborating with communities and Papua New Guinean government agencies, EMPNG has made an extraordinary contribution to preserving biodiversity through the implementation of an industry leading Biodiversity Implementation and Monitoring Program. This has resulted in the identification and documentation of new species, the increased technical capacity of conservation professionals, and resource mapping for conservation planning in the Upstream area.

It has been an honour for EMPNG to work as part of the Papua New Guinean community to achieve these and many other positive outcomes, and to share the benefits of resource development, which has delivered PGK30.2 billion of production revenues back to the State of Papua New Guinea and its people to date. Of this, PGK4 billion was paid in taxes to the Papua New Guinean Government in 2024 alone.

Within our first decade, EMPNG's workforce, the Papua New Guinean Government, local suppliers and communities have truly succeeded in putting the nation firmly on the map as a global leader in LNG production.



“

This is just the beginning. With so much achieved in the first 10 years of production, it will be truly inspiring to see the new opportunities that the next decade will bring for Papua New Guinea and its people.

Dinesh Sivasambo, Chairman and Managing Director
ExxonMobil PNG Limited

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About this report

This *PNG LNG Environmental and Social Report – Annual 2024* provides information about ExxonMobil PNG Limited's safety, health, environment and social management performance during production. It forms part of PNG LNG's commitment to keep the Government and citizens of Papua New Guinea, interested civil society organisations and other stakeholders informed of production activities.

Printed copies are available.

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EXECUTIVE SUMMARY

ExxonMobil PNG Limited has achieved 10 years of production, resulting in almost 86 million tonnes of LNG and more than 1100 LNG cargoes shipped to customers in Asia.

In 2024, Papua New Guinea Liquefied Natural Gas (PNG LNG) commemorated its 10th year of production with celebrations across all worksites and the launch of its 'Celebrating 10 years of partnership, growth and success' campaign. In addition to workplace celebrations, a gala event was held by ExxonMobil PNG Limited (EMPNG) to thank the workforce, both past and present, for their achievements in delivering safe and reliable LNG for Papua New Guinea and the world. A second gala event was hosted with more than 300 government, industry, co-venturer, business and community representatives to thank them for their support over the past decade.



Performers in traditional Huli dress welcome guests to the gala events in celebration of PNG LNG's 10th year of production

A subsidiary of Exxon Mobil Corporation, EMPNG manages the operation of PNG LNG facilities on behalf of its co-venturers: Santos Limited, Kumul Petroleum Holdings Limited, ENEOS Xplora Incorporated (formerly JX Nippon Oil and Gas Exploration Corporation), Mineral Resources Development Company Limited (MRDC) and their affiliates.

This PNG LNG Environmental and Social Report provides an overview of EMPNG's environmental and social performance from 1 January to 31 December 2024.

Production

Two major production milestones were achieved in 2024, with the start of drilling of the Hides F2 well in August, and start-up of the Angore Project in November. The Angore Project is designed to deliver up to 350 million standard cubic feet per day of gas. It unlocks a significant natural gas resource, estimated at 1 trillion cubic feet, to support stable, long-term LNG production.

A total 8.1 million tonnes of LNG was produced, with 108 LNG cargoes and 12 naphtha cargoes loaded, in 2024. More than 85.9 million tonnes of LNG have been produced, as well as 1143 LNG cargoes and 111 naphtha cargoes loaded, since production began.

National content

EMPNG maintains a firm commitment to national content, with Papua New Guinean citizens representing the majority of PNG LNG's workforce. By the end of 2024, 90 percent or 3155 workers were from Papua New Guinea.

PERFORMANCE HIGHLIGHTS

PRODUCTION

85.9 million

tonnes of LNG produced since production began

1143 cargoes

of LNG loaded since the start of production

111 cargoes

of naphtha loaded since the start of production



Of these, Papua New Guinean women accounted for 19 percent and represented 96 percent of all women working at PNG LNG facilities. During the year, a national content milestone was achieved with the LNG Plant Central Control Room fully operated by skilled Papua New Guinean employees.

Career development and training opportunities are delivered to workers through physical classes and online. EMPNG and its contractors provided training opportunities to 10,500 participants during 2024 over the equivalent of 254,600 hours through 2120 courses. Since the start of production, the equivalent of more than 1.3 million hours of training has been delivered to approximately 136,000 course participants.

Three Papua New Guinean women and eight Papua New Guinean men became the 10th intake of Operations and Maintenance trainees to begin training at the Kumul Petroleum Academy in 2024.



Trainees from the 10th intake of the Operations and Maintenance training program with Harry Steven, Safety Officer and Assistant Operations Trainer at the Kumul Petroleum Academy

Six of these trainees are completing the mechanical discipline, while the remaining five are studying the operations discipline.

In October, 17 trainees from the ninth intake began working as Junior Technicians at EMPNG worksites. Of the 248 Operations and Maintenance training program graduates currently employed by EMPNG, 58 percent are based at the LNG Plant, and 35 percent at the Hides Gas Conditioning Plant (HGCP). The other seven percent are working at either ExxonMobil Haus or in roles outside of their operations and maintenance disciplines.

Nine new graduates were recruited through EMPNG's Graduate Engineering Program and eight third-year university engineering students were recruited under the Intern Engineering Program during 2024.

A Graduate Management Development Program is also offered and selects graduates from subject disciplines such as human resources, accounting, business, law and public policy, IT, journalism and science for above field roles across EMPNG. Through this program, graduates work in different EMPNG departments within their first three years of employment to gain a broad understanding of the business. EMPNG currently has 14 workers who are part of the Graduate Management Development Program and eight who have graduated to date. During the year, EMPNG established application centres in the Upstream area to help local community members apply for the company's graduate and Operations and Maintenance training programs.

As well as its own workforce, EMPNG invests in the development of Papua New Guinean businesses. During 2024, 11 landowner companies (Lancos) and 248 non-Lanco Papua New Guinean businesses were engaged for production-related work scopes. In-country spend with Papua New Guinean businesses was almost PGK1.4 billion (USD355 million) in 2024 compared to PGK883 million (USD221 million) during 2023. Almost 26 percent of spending was for Lanco services, which equates to approximately PGK366 million (USD91 million) compared to PGK358 million (USD89.5 million) spent on Lanco services in 2023. Since the start of production, EMPNG has spent almost PGK8.1 billion (USD2.05 billion) on Papua New Guinean services. Of this, PGK2.6 billion (USD654 million) was spent on Lanco services.



Non-Destructive Testing Technicians, Israel Kuilenge, Nathan Manup and Nelson Amos, from Papua New Guinean business Nares Engineering Limited working at the LNG Plant site

Lancos were engaged in the construction of new facilities in Upstream area and LNG Plant site villages during 2024. These included double classrooms that were handed over to two primary schools in the Upstream area, and four schools near the LNG Plant site.

Staff houses were also constructed and handed over to three primary schools in the Upstream area and two schools near the LNG Plant site.

Papa Village has a new courthouse funded by EMPNG. It will provide a place for Papa Village to conduct law and justice, which was previously undertaken under the shade of trees in the village.

A new Ambulance Education Centre was opened in Port Moresby in September through a collaboration between the National St John Ambulance Service and EMPNG, which provided PGK250,000 (USD80,000) funding for the facility. The Centre's first group of 25 ambulance service recruits graduated in November. A new ambulance was also donated by EMPNG to the ambulance service and another ambulance was donated to the Metoreia Urban Health Centre in Hanuabada, Central Province where EMPNG helped to set up an ambulance standby post for the Motu Koita people. In addition, a 25-seater bus was donated to Kwikila Interim Hospital in the Central Province. The hospital will use the bus for child and maternal health community visits, including antenatal and postnatal care, and immunisation clinics.

During 2024, EMPNG provided funding for 18 women from Boera Village to participate in a pilot Entrepreneurial Community Gardening Program. The women completed the 14-month training program in horticulture and market management to give them the knowledge and skills to cultivate community gardens. The program was facilitated by the Centre for FutureNau Incorporated and involved hands-on training focused on growing resilient gardens, gaining financial and community literacy, and achieving family wellbeing.



Entrepreneurial Community Gardening Program participants

EMPNG continues to support weekly fresh produce markets at Hides, Komo and Angore. In 2024, approximately 100 local vegetable farmers sold their produce to the HGCP and Angore camp caterers and earned additional income from sales to community members. Seventy-six markets were held during the year, generating more than PGK237,200 (USD59,300) in income for communities from the sale of produce to EMPNG catering contractors for use in camp kitchens.



Women from Hibaku Village in Hela Province who provide produce for sale at the Komo Station market

The Hiri Moale Festival celebrated its 50th anniversary in March with PGK350,000 (USD87,500) funding from EMPNG. The festival is held every year to honour the traditional trade voyages that took place over 300 years ago between the Motu and Koitabu people of the Central and Gulf provinces. EMPNG also provided PGK100,000 (USD25,000) funding for the inaugural Hiri-Koiari Trade and Cultural Festival held in Boera Village in September. The three-day festival celebrated the rich heritage of the Hiri and Koiari people through markets, a trade show for Papua New Guinean businesses, art exhibitions and a music festival.

In addition to supporting annual events such as International Women's Day, the Women in Energy Network supported the inaugural Introduce A Girl to Engineering Day in November, which involved introducing Grade 9 female students from Papua New Guinean schools to science technology, engineering and mathematics through a range of fun educational activities. A team of 36 EMPNG engineering and technical volunteers supported the inaugural event.



Some of the EMPNG volunteers who supported the inaugural Introduce A Girl to Engineering Day event

EMPNG invested PGK26.9 million (USD6.7 million) in community programs during 2024 through sponsorships, community contributions, in-kind support, and local projects. Another PGK152.8 million (USD38.2 million) of funding was made available to support construction of public infrastructure through the Papua New Guinean Government's infrastructure tax credit projects.

In 2024, EMPNG celebrated 10 years of support for the Port Moresby Nature Park. Over the past decade, EMPNG has invested PGK3.45 million (USD862,500) in helping to transform the park into a major national educational and tourist attraction, which has enabled vital research such as the park's 'Breed-for-Release' program for the endangered pig-nosed turtle (*Carettochelys insculpta*), or *piku* and supported conservation efforts for the long-beaked echidna and bird-of-paradise.



Students from Luwanga Secondary School participating in an educational excursion at the Port Moresby Nature Park

EMPNG continues to provide funding support for Buk bilong Pikinini's Literacy Week activities, teacher training and other educational programs. Buk bilong Pikinini has supported the educational needs of Papua New Guinean children through its libraries and programs since it was established in 2007. Since 2011, EMPNG has donated more than PGK2 million (USD500,000) to Buk bilong Pikinini.

More than 300 EMPNG employees volunteered over 720 hours during 2024 to support community-based activities in Papua New Guinea.

PERFORMANCE HIGHLIGHTS

NATIONAL CONTENT

1.3M⁺ hours

equivalent of training delivered since the start of production to more than 136,000 course participants

PGK8.1 billion

spent in-country with Papua New Guinean businesses since the start of production

PGK2.6 billion

spent in-country with Lancos since the start of production



Environment

A new species of treefrog discovered during the 2017 biodiversity survey was scientifically described in 2024. Two specimens of the new species, named the Gigira Ridge treefrog (*Litoria skeliphros*), were found at a single site on Gigira Ridge, a limestone spur in the Hela Province.



Gigira Ridge treefrog (*Litoria skeliphros*), a species discovered at Gigira Ridge

During 2024, the Lake Kutubu Wildlife Management Area (WMA) Committee held its first stakeholder engagement meeting regarding development of the Lake Kutubu WMA Management Plan. Stakeholders who attended the two-day meeting included representatives from local-level, provincial and national government agencies, industry, and non-government organisations.

In June, July and November, more than 1310 community members participated in engagement activities undertaken across the Lower Kikori. The June and July engagements were conducted by EMPNG and supported by the Conservation and Environment Protection Authority and Gulf Provincial Administration representatives over a 15-day period with 12 communities. Engagement activities included resource mapping and Management Effectiveness Tracking Tool assessments. The November engagements, also conducted by EMPNG, involved eight communities and 13 conservation groups, including women and youth, to continue resource mapping and discuss the potential extension of the current Neiru WMA boundary to incorporate more land for conservation.

In the proposed Wau Creek conservation area, communities reviewed and verified with EMPNG the required documentation for final submission to the Conservation and Environment Protection Authority to officially declare the area to be a Community Conservation Area under the new Protected Area Policy.

As part of EMPNG's commitment to build the technical capacity of conservation professionals, two Master's degree students were supported through Component 3 of EMPNG's Biodiversity Offset Program to complete their studies at the Papua New Guinea University of Technology in April. Another two PhD students progressed their studies at the University of South Bohemia in the Czech Republic during 2024 under the program.

EMPNG continues its plans to implement measures to mitigate flaring and greenhouse gas emissions intensity. In 2024, this included the installation of the low-pressure fuel gas compressor at the LNG Plant to reduce wet flare and the installation of energy efficient LED lighting at several Upstream facilities and the LNG Plant.

To continuously improve long-term waste management solutions across all worksites, EMPNG undertakes a range of activities to enhance waste handling practices, promote recycling and reuse, and engage employees and local communities in waste awareness campaigns.

During 2024, around 214 tonnes of non-restricted waste from the LNG Plant site was recycled and reused. This included more than 24 tonnes of empty plastic bottles returned to the supplier and approximately 36 tonnes of wood waste reused at EMPNG worksites.

At the Hides Waste Management Facility, 67 tonnes of construction and demolition materials were reused and 31 tonnes of used oil from the HGCP was transferred to Carbon Recycling PNG in Lae for recycling.

Six earthquake recovery projects and the completion of reinstatement works on the Angore pipeline were the focus of EMPNG's reinstatement activities in 2024. Four of the earthquake recovery projects, the Angore pipeline reinstatement, and repair work after a natural landslide occurred at Kilometre Point 98.5 were all completed during the year.

PERFORMANCE HIGHLIGHTS

ENVIRONMENT

100+ species

of vertebrates documented in more than 18,000 photographic events over the equivalent of almost 24,000 sampling days

11 deeds signed

for community conservation, which is the largest number of conservation deeds ever signed at one time in Papua New Guinea

>20,000 hectares

of land in the Lower Kikori region has been committed by Papua New Guinean landowners for conservation efforts



Social

EMPNG achieved its safest year since production began with zero Lost Time Incidents, and zero Tier 1 or Tier 2 process safety events. Hides Alliance Group Limited also celebrated 10 years without a Lost Time Injury and the HGCP Ground Transport team reached two years without a motor vehicle accident while driving in challenging terrain in the Upstream area. More than 146 million hours have been worked since the start of production, of which 20.8 million hours were worked in 2024.



EMPNG Facilities Surveillance Engineers, Kimberly Sabarei (left) and Nathan Levis (right) with Upstream Civil and Integrity Engineer, Solomon Sova at the HGCP

During the year, EMPNG commenced implementation of ExxonMobil's new corporate Personnel Safety Management System as part of its focus on delivering industry-leading safety performance. The system involves a framework where the leadership team drives organisational changes through specific behaviours by role to deliver safe performance and desired results across every task, every day.

Twelve EMPNG workers were trained as trainers and coaches to roll-out the system to the broader workforce, which will be completed early 2025. By the end of the year, almost 120 supervisors were trained in the Personnel Safety Management System and almost 150 leadership team members were provided with leadership reset training.

A week of Culture of Health program activities was held in October for workers, starting with expert talks about prioritising mental health in the workplace for World Mental Health Day. The week also covered lifestyle, nutrition and physical activities, cooking demonstrations, and cancer education sessions for Pinktober.



Members of the Women in Energy Network supporting Pinktober

EMPNG conducted 2502 formal engagements and 7228 informal engagements in 2024, which were attended by approximately 38,800 stakeholders. In addition to community engagements, some 570 representatives from national government agencies, provincial-level governments, and co-venturers participated in 43 EMPNG advocacy workshops during 2024. Advocacy workshops are a valuable forum for EMPNG to provide information about its current operations, community development work, biodiversity programs, national content initiatives, and financial benefits paid to the Papua New Guinean Government and landowners.

As EMPNG embarks on the next decade of production, it will continue to focus on engaging with government, non-government and community stakeholders to build national content initiatives that will deliver long term socioeconomic benefits to Papua New Guinea while supporting environmental programs that are intended to preserve the nation's unique biodiversity.

PERFORMANCE HIGHLIGHTS

SOCIAL



>146 million

hours worked since the start of production

81,550+

engagements conducted with communities since production began

PGK30.2 billion

has been distributed from PNG LNG revenues to the State of Papua New Guinea and its people



The PNG LNG production facilities and associated gas resources are designed to deliver reliable and affordable energy for the Asia Pacific region.

ExxonMobil PNG Limited (EMPNG) is responsible for managing and operating the USD19 billion (PGK68 billion) Papua New Guinea Liquefied Natural Gas (PNG LNG) facilities, which are located in Papua New Guinea's Hela, Southern Highlands, Western and Gulf provinces, and also in the Central Province and National Capital District. Multiphase fluids are gathered from Hides wells and transported through the Hides Spine to the Hides Gas Conditioning Plant (HGCP). At the HGCP, these fluids are stabilised and transformed into two streams – gas and condensate.

Dry gas from Hides, along with associated gas from the Kutubu and Gobe fields, travels through more than 700 kilometres of pipeline to the LNG Plant, which is located northwest of Port Moresby at the Gulf of Papua. At the LNG Plant, the dry gas is liquefied so it can be transported on an LNG cargo ship to customers throughout Asia. Dry gas also provides energy for Port Moresby businesses and communities through NiuPower Limited and Dirio Gas & Power Company Limited.

Condensate, which travels through the HGCP-Kutubu Condensate Pipeline to the Kutubu Central Processing Facility, is transported to the Kumul Marine Terminal in the Gulf of Papua for export.

Figure 1.1 shows the locations of PNG LNG facilities.

More than 11 trillion cubic feet of natural gas is anticipated to be produced during the life of the PNG LNG facilities. This will provide a long-term energy supply to customers including China Petroleum and Chemical Corporation (Sinopec), Osaka Gas Company Limited, JERA Company Incorporated and CPC Corporation in Taiwan.

This report, as well as previous PNG LNG Environmental and Social Reports, are available on the PNG LNG website.

www.pnglng.com



Printed copies of this report and translated summaries are provided to Papua New Guinean citizens who may have limited access to the internet.

Figure 1.1 – PNG LNG facilities





The LNG vessel *Gigira Laitebo* loading LNG cargo at the LNG Plant Marine Terminal

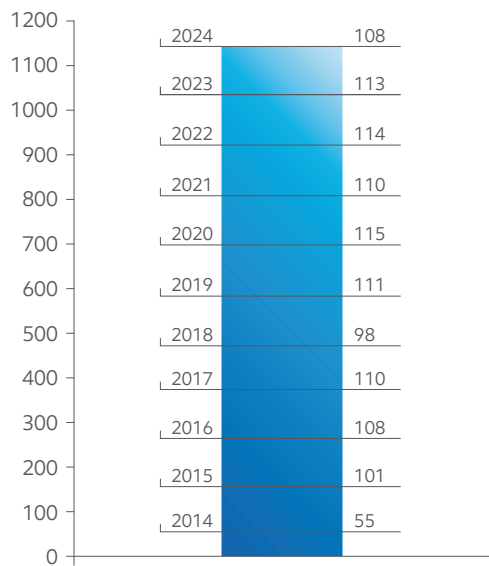
1.1 Production

In 2024, PNG LNG marked its 10th year of production, as discussed in the [Case Study: Reflecting on the first decade of PNG LNG production](#). EMPNG also achieved two major production milestones in 2024, with the commencement of drilling the Hides F2 well in August, and start-up of the Angore Project in November.

A total 8.1 million tonnes of LNG was produced during the year, with 108 LNG cargoes and 12 naphtha cargoes loaded. Since production began, more than 85.9 million tonnes of LNG have been produced, as well as 1143 LNG cargoes , as shown in Figure 1.2, and 111 naphtha cargoes loaded, for customers in Asia.

Figure 1.2 – LNG cargoes

NUMBER OF CARGOES LOADED BY YEAR



During 2024, operations and engineering teams deployed industry-leading closed-loop Real-Time Optimizer technology at the LNG Plant. It was the first implementation of this technology for any ExxonMobil Upstream operation and resulted in increased production through optimising operational efficiencies.

HIGHLIGHT

DINESH SIVASAMBOO APPOINTED AS EMPNG CHAIRMAN AND MANAGING DIRECTOR

In 2024, Dinesh Sivasamboo was appointed Chairman and Managing Director of EMPNG. He replaces outgoing Chairperson and Managing Director, Tera Shandro, who has moved to a new role as Vice President Brownfield Project Delivery with ExxonMobil Global Projects.

Dinesh Sivasamboo returns to Papua New Guinea to take up the role, having previously served from 2016 to 2019 as Vice President for Production. During his 30-year ExxonMobil career, Mr Sivasamboo has held numerous global senior leadership positions, including Chairman and President of ExxonMobil Exploration and Production Malaysia Incorporated, a position he was appointed to in June 2023. Prior to this, he was Managing Director of ExxonMobil Kazakhstan Incorporated. In addition, Mr Sivasamboo has held roles in Qatar and the United States.

“I am honoured to return to Papua New Guinea as Chairman and Managing Director of EMPNG. PNG LNG has – through the strength of its partnerships – achieved so much during its first decade,” he said. “I look forward to leading EMPNG into its second decade and building upon its success to help deliver the next phase of LNG projects for this country.”



EMPNG’s new Chairman and Managing Director, Dinesh Sivasamboo

A focus on planned downtime for maintenance activities also enabled EMPNG to maintain consistent LNG production throughout the year.

1.2 Wells

Drilling was completed on two Angore wells and both were tied-in for production during the year.

Following completion of drilling in Angore, the drilling rig finalised abandonment works on a decommissioned Angore well and was then moved to Hides in August to drill the Hides F2 well.

1.3 Hides Gas Conditioning Plant

Throughout 2024, cross-functional teams worked on several optimisation initiatives to increase the deliverability of Hides wells. These initiatives included pipeline compressor pressure optimisations, opening the Hides G1 and G2 wells cross-over line, and gas temperature optimisations. These collectively minimised the HGCP ullage constraint.



EMPNG Operations Technician, Jason Bonou, at the HGCP

Later in the year, with the start-up of the Angore Project, the final tie-in and testing of piping from the Angore pipeline to the HGCP was completed and operations began.

The additional production from Angore has now enabled the HGCP to process at full plant capacity.

HIGHLIGHT

NEW WELL SPURRED IN HIDES

In August, EMPNG successfully spudded a new well using existing Hides Wellpad F production infrastructure. This work is considered complex due to its proximity to a currently producing well and the unique challenges of the terrain.

The new well includes eight casing strings and tight clearances. It is being constructed using Nabors International's *Rig 702* that was initially mobilised for Angore works.

The start of this drilling campaign was commemorated by a *mumu* ceremony to pay respect to the traditional landowners. The ceremony, which involves cooking food using hot stones in a traditional earth oven, was attended by landowning tribes, members of EMPNG's Land and Community Affairs and Wells teams, and personnel from Nabors International. Groundbreaking ceremonies such as these are integral to honouring the local culture and customs of Papua New Guinea.



Aerial view of Hides Wellpad F



Aerial view of the HGCP at night

1.4 LNG Plant

The LNG Plant set new safety, operational excellence, and workforce development benchmarks during the year.

In 2024, this worksite achieved its safest year on record with a 98.6 percent uptime in operations.



Aerial view of LNG Plant site

A two-phased major maintenance campaign on top tier machinery was conducted during the year in preparation for start-up of the Angore Project. This included maintenance works and dry gas seal change-outs on five top tier machines, along with four planned engine change-outs, and one unscheduled engine change-out in Train 2.

These campaigns were all led for the first time by Papua New Guinean workers with minimal original equipment manufacturer oversight.

1.5 Marine facilities and shipping

A remotely operated vehicle inspection, including a visual inspection, cathodic protection survey and thickness inspection, was completed to confirm the LNG Plant Marine Terminal's integrity.



The LNG Plant Marine Terminal jetty

In May, the terminal Port Facilities Security Plan was updated and approved by the Department of Transport.

1.6 Angore Project

A key milestone was achieved for PNG LNG with the successful start-up of the Angore Project, which is designed to deliver up to 350 million standard cubic feet per day of gas. The initial production phase from the two-well development unlocks a significant natural gas resource, estimated at 1 trillion cubic feet, to support stable, long-term LNG production.



Aerial view of Angore Wellpad C

HIGHLIGHT**OFFSHORE PIPELINE REMEDIATION WORK COMPLETED**

EMPNG has completed the first remediation work on three critical pipeline freespans along the offshore pipeline. Freespans are areas where the pipeline is not supported by the seabed. The works were undertaken to help ensure the integrity of the pipeline.

The scope of work involved inserting inflatable grout bags to support the critical freespans so they remained within acceptable environmental criteria. The team who undertook the work were careful to choose the right design and placement of grout bags to reduce environmental risk. The works involved nine days of offshore work aboard the deep-sea vessel *Southern Star*.

EMPNG Production Manager, Nick Pearce, said the EMPNG team worked collaboratively with Santos Limited to successfully complete the freespan remediation works. He said, in addition to experienced engineers who led the works, it provided an opportunity for graduate engineers to learn from a complex offshore pipeline campaign supported by mentors who were experts in their field.



Footage from a remotely operated vehicle used to install grout bags to support the offshore pipeline

2024 PERFORMANCE HIGHLIGHTS**OVERVIEW**

108 cargoes

of LNG loaded in 2024

1143 cargoes

of LNG loaded since production commenced

12 cargoes

of naphtha loaded in 2024

111 cargoes

of naphtha loaded since production commenced

8.1 million

tonnes of LNG produced in 2024

85.9 million

tonnes of LNG produced since production commenced

CASE STUDY

REFLECTING ON THE FIRST DECADE OF PNG LNG PRODUCTION

EMPNG had a landmark year in 2024 because it signified the completion of the first decade of production.

Since production began in April 2014, PNG LNG facilities have produced almost 86 million tonnes of LNG and shipped 1143 LNG cargoes and 111 naphtha cargoes to provide a steady supply of energy to customers in Asia. During this time, a total PGK30.2 billion (USD8.6 billion) has been distributed from PNG LNG revenues to the State of Papua New Guinea and its people.

EMPNG has developed long term collaborative relationships over the past 10 years that have aided the development of organisations such as Port Moresby Nature Park and Buk bilong Pikinini libraries to support the education of young children.

With the aim of preserving the unique biodiversity of Papua New Guinea, EMPNG has also worked with Upstream communities on major initiatives. These include the signing of 11 conservation deeds to protect 20,000 hectares of land, and supporting the Lake Kutubu Wildlife Management Area Committee in the management effectiveness of the WMA.

Additionally, EMPNG has had long term success of engaging with local Papua New Guinean businesses and landowner companies (Lancos). By the end of 2024, 11 Lancos and 248 non-Lanco Papua New Guinean businesses provided services to PNG LNG. EMPNG has spent almost PGK8.1 billion (USD2.05 billion) on Papua New Guinean services since production began. Of this, PGK2.6 billion (USD654 million) was spent on Lanco services.

At the end of the first decade, the PNG LNG workforce consisted of 3509 people, including 3155 Papua New Guinean citizens. More than 150 of these workers have been part of PNG LNG for the entire production phase and some were part of the construction workforce.

"One of the main reasons I've been here for 12 years is knowing that the company is taking care of me."
- Freda Moroka, Upstream Logistics Supervisor



Former EMPNG Chairperson and Managing Director, Tera Shandro (centre) with EMPNG employees and staff contractors who have worked for PNG LNG for 10 years or more at the launch of the anniversary campaign at ExxonMobil Haus

HIGHLIGHT

10-YEAR LOGO INSPIRED BY PEOPLE, CULTURE AND TRADITION

In 2024, EMPNG unveiled a new logo that was inspired by people, culture and Papua New Guinean tradition to commemorate the completion of 10 years of production.

Advocate Media graphic designer Bill Raquauqau, who designed the logo, said PNG LNG operations traversed heights past the mountains, rivers and down to the coastline.

This is what inspired him to design a logo that carried the PNG LNG brand colours of red, yellow, black and white contained within the number 10. At the same time, the logo incorporates iconic Papua New Guinean cultural imagery.

The number one in the '10' represents Hela Province and includes imagery that commemorates local identity. The zero contains imagery of shell money, from which the Papua New Guinean kina is based. The Central Province is also represented within the logo as host of the LNG Plant site. Wave imagery around the anniversary text signifies the journey that LNG takes from the mountains, past rivers and down the coastline to the LNG Plant site and LNG Plant Marine Terminal for export to customers in Asia.

"It is an honour and a privilege to be part of this milestone," Bill said.

"I'm grateful for ExxonMobil and PNG LNG and I will share this with my children and hopefully they will share it with my grandchildren."



The logo commemorating 10 years of PNG LNG production

2014

Start of production
First LNG shipment
on *Spirit of Hela*

100th cargo

First cargo on first custom-
built PNG LNG vessel, *Papua*

**2015****2016**

First cargo on the second
custom-built PNG LNG
vessel, *Kumul*

1 trillion cubic feet of gas
produced from the HGCP
since production began

**2017****2018**

No Lost Time Incidents
occurred in 2018 despite the
challenging activities required
in response to the earthquake

500th cargo

No Lost Time Incidents
for more than two years

**2019****2020**

Produced 8.8 million tonnes
of LNG despite extensive
COVID-19 disruptions
Dirio power tie-in

Weekly and monthly
production records
in August

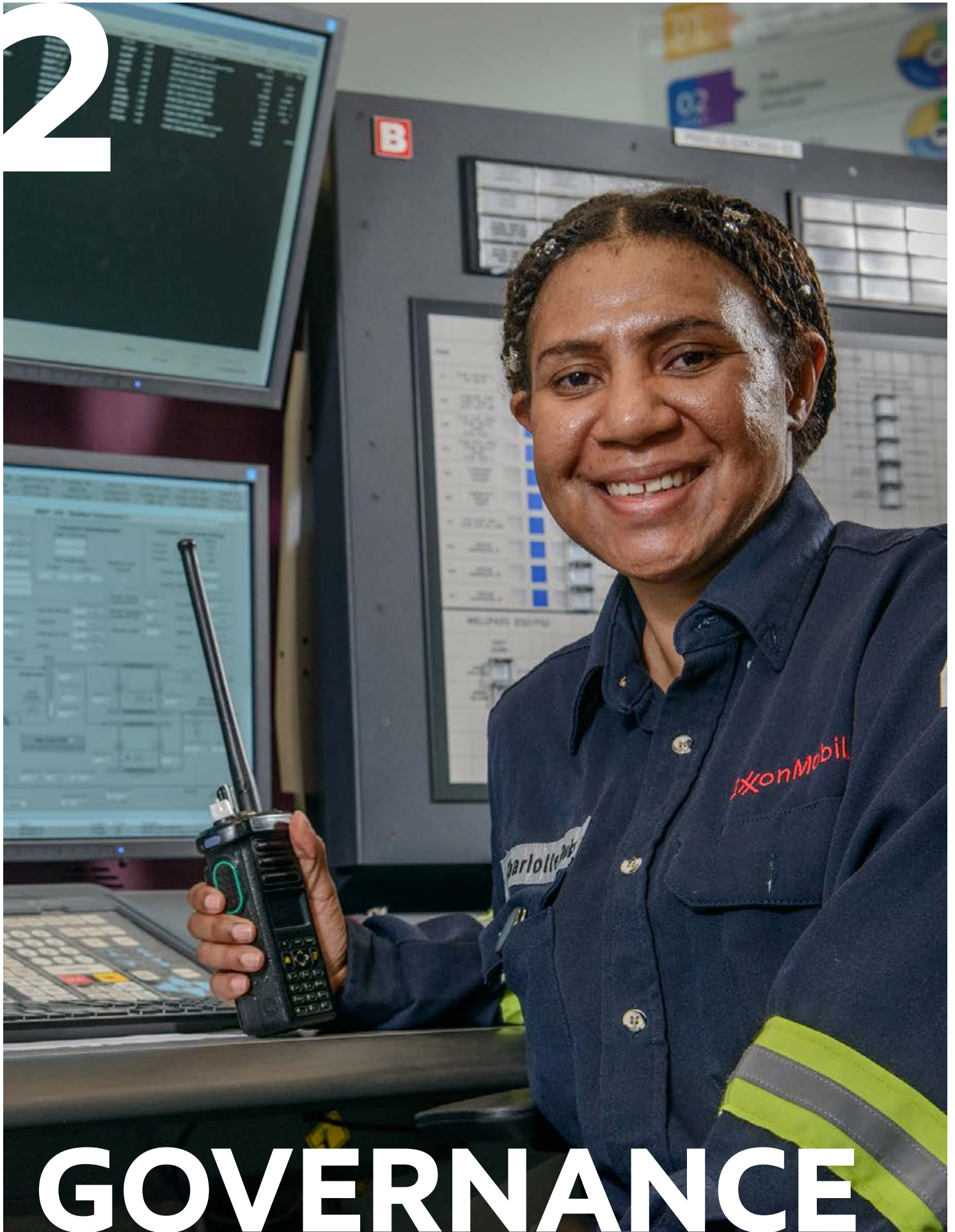
**2021****2022**

Daily production records
More than 96% uptime
maintained throughout
the year

1000th cargo**2023**

**10 YEARS OF
PRODUCTION**

2



GOVERNANCE

To help maintain the wellbeing of workers, communities and the environment surrounding production facilities, EMPNG's operations comply with the PNG LNG Production Environmental and Social Management Plan, and Papua New Guinea's laws and regulations.

In addition to the Production Environmental and Social Management Plan (ESMP), EMPNG operates in accordance with some 1331 regulatory obligations and 2710 licences, permits, certificates, and associated conditions, while also meeting PNG LNG Lender Group requirements.

2.1 ExxonMobil Standards

EMPNG's operations comply with its Standards of Business Conduct, which require business to be conducted in a way that is compatible with the environmental, social, and economic needs of communities where the company operates, while simultaneously adhering to high ethical standards.

EMPNG also complies with the structured and disciplined Operations Integrity Management System (OIMS) risk management framework.

OIMS is designed to protect the safety and health of workers involved in operational activities, as well as members of the public and the environment. This is achieved through identifying, evaluating, and managing risks across all ExxonMobil exploration, construction and production activities.

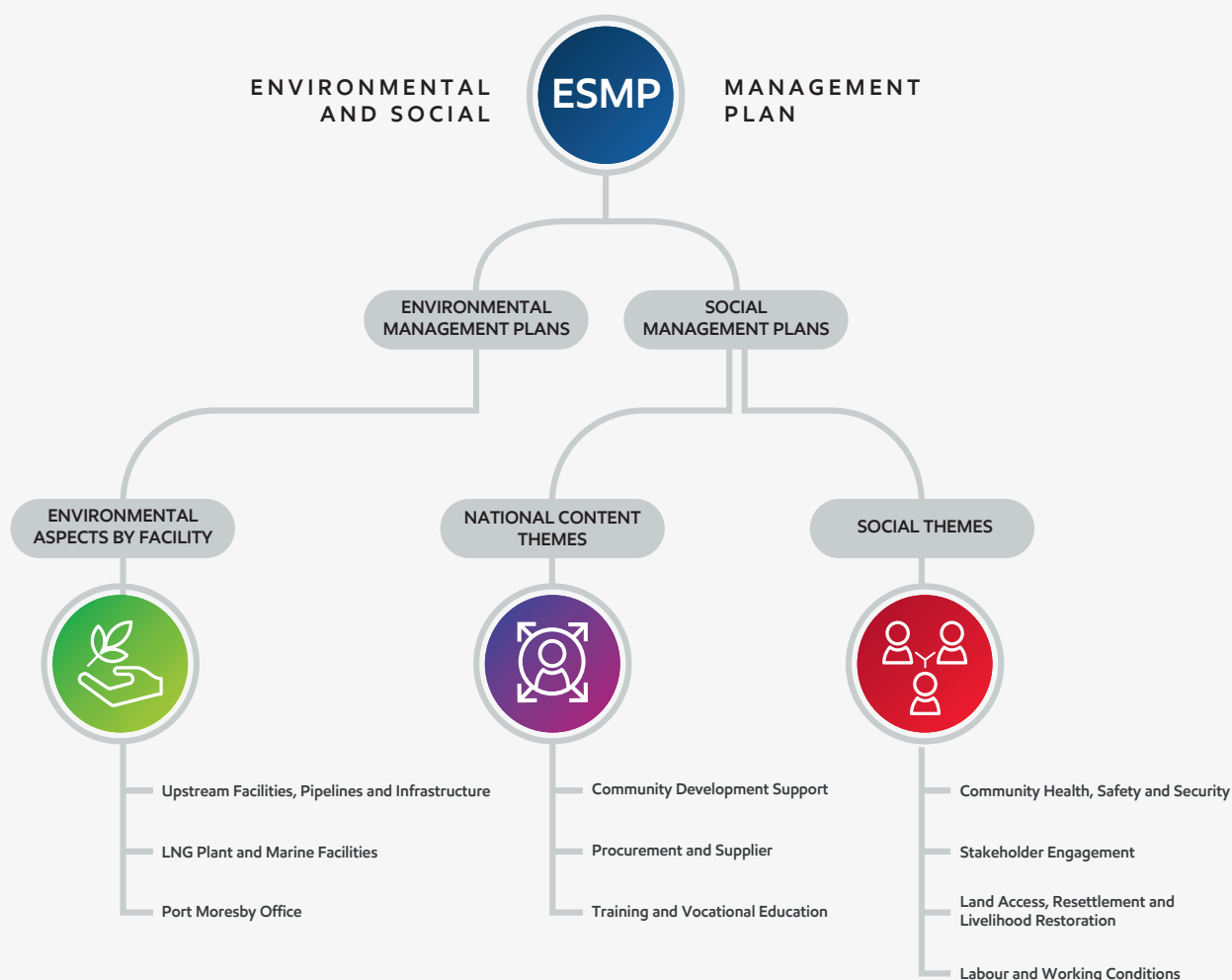
2.2 Environmental and Social Management Plan

Under the Production ESMP, EMPNG is required to operate in a way that mitigates and manages any environmental, social, community health, safety and security impacts associated with production activities. This includes ensuring compliance with Papua New Guinean legal and regulatory requirements.

The Production ESMP was developed through a combination of extensive stakeholder engagement and lessons learned from the PNG LNG construction phase. It encompasses environmental and social monitoring, mitigation and management measures identified in the PNG LNG Environmental Impact Statement, OIMS requirements, International Finance Corporation Performance Standards, and other relevant international standards such as the Equator Principles.

As shown in Figure 2.1, the Production ESMP consists of three Environmental Management Plans, which cover all environmental aspects for PNG LNG facilities, and seven Social Management Plans based on key social themes. EMPNG must comply with all commitments outlined in the Production ESMP.

Figure 2.1 – Production ESMP structure



Requirements of the Production ESMP apply throughout EMPNG operations, including during normal operating conditions and in reasonably foreseeable abnormal operating conditions or emergency situations.

The Production ESMP is periodically reviewed through consultation with stakeholders so that it remains current in meeting Papua New Guinea's environmental, social, and operational conditions. The updated Production ESMP is published on the PNG LNG website.

www.pnglng.com



2.3 Assessment and external monitoring

EMPNG has a robust assessment and monitoring framework to identify, manage and mitigate risks associated with production activities. To maintain high ethical standards and promote transparency, monitoring policies, tools and processes are in place to confirm the effectiveness of the Production ESMP in areas such as:

- the implementation of mitigation measures that are designed to manage risks and potential impacts
- whether mitigation measures are achieving their intended outcomes, or are on track to achieve intended outcomes
- identifying actual impacts and their comparison to predicted impacts, as described in the PNG LNG Environmental Impact Statement
- compliance with applicable laws and regulations.

In addition to EMPNG's own monitoring and evaluation, an Independent Environmental and Social Consultant and Independent Technical Consultant are engaged by the Lender Group to monitor PNG LNG's performance against the Production ESMP requirements.

2.3.1 Assessments

Internal and external assessments provide a periodic health check of EMPNG's Controls Integrity Management System, OIMS Systems and confirm that the company is meeting its Production ESMP commitments.

In August, a business unit internal assessment was conducted to test business processes within the business unit, including hydrocarbon measurement processes and stewardship, industrial control systems and commercial and contracting activities. The aim of the assessment was to determine the health of business process controls designed to prevent key business risks such as financial loss and reputational damage. The assessment team consisted of members from different functions across EMPNG as well as subject matter experts from outside EMPNG to provide expertise and an unbiased assessment. Findings provided insights for areas of improvement and positive efficiencies to be implemented across all worksites.

2.3.2 External monitoring

External parties such as Papua New Guinean Government agencies and regulatory authorities also monitor EMPNG's operations.

In May, both the Independent Environmental and Social Consultant and Independent Technical Consultant conducted monitoring visits with EMPNG management in Port Moresby and site visits to the LNG Plant, Hides facilities and Angore worksites, as well as several earthquake repair locations. Findings from these monitoring visits are available on the PNG LNG website.

Three inspectors from Water PNG Limited inspected EMPNG's potable water supply and sanitation systems at the LNG Plant, Moro, Hides facilities and Angore in July. As a result of this inspection, EMPNG's water supply and sanitation license was renewed for a further 12 months.

In early October, Occupational Safety and Health Inspectors from the Department of Labour and Industrial Relations reviewed EMPNG's compliance with dangerous goods and pressure vessel licenses at the LNG Plant and ExxonMobil Haus. This review resulted in the renewal of EMPNG's dangerous goods and pressure vessel licenses for another 12 months.

To coincide with the completion of the drilling program for the Angore Project, three Department of Petroleum and Energy inspectors witnessed Angore Wellpad C start-up processes in October.



Department of Petroleum and Energy inspectors: Paul Arete, Drilling Engineer; Charlyne Lawton, Principal Engineer; and Joseph Kia, Chief Inspector, at Angore Wellpad C

EMPNG subsequently received approval for Angore Wellpad C to go into production from November.

In late October, two Department of Petroleum and Energy inspectors visited and verified the Colorado Engineering Experiment Station Incorporated laboratory in Iowa, United States, a third-party facility where ExxonMobil ultra-sonic meters are calibrated and approved for use at EMPNG facilities.



Department of Petroleum and Energy inspectors at the Colorado Engineering Experiment Station Incorporated laboratory in Iowa, United States

2.4 Management of Change

EMPNG implements its Management of Change procedure for temporary or permanent changes or modifications to facilities, or to critical documents that may impact the operation of facilities.

This procedure is designed to:

- manage temporary, permanent, and urgent or emergency changes to integrity critical procedures, process equipment, operating conditions or critical parameters
- manage changes or modifications to existing facilities
- control the introduction of new chemicals to be used and stored at EMPNG sites
- conduct a thorough evaluation of proposed changes to identify potential risks and exposure to operations
- determine changes to safeguards or mitigations to address potential operations and integrity risks associated with proposed changes.

Before any change can be made, safety, security, health, environmental, social management, operability, maintenance, regulatory, cost, and scheduling requirements must be considered.

Communication with workers whose job tasks may be impacted and who may require training is also conducted before a change is implemented.

EMPNG classifies and manages changes in accordance with their impacts, probability, and consequences. Management of Change classifications, based on impact significance, are agreed with the Lender Group and outlined in the Production ESMP. These classifications are used as the basis for determining Lender Group approval, review or notification requirements associated with changes. Class I changes require Lender Group review and written approval before a proposed change is implemented. Class II changes require the Lender Group to be notified through presentations during annual monitoring visits and reporting in the annual PNG LNG Environmental and Social Report. Class III changes can be implemented without notifying the Lender Group.

There were no changes that required Lender Group notification or approval during 2024.

2024 PERFORMANCE HIGHLIGHTS

GOVERNANCE

3 environmental

management plans govern PNG LNG operations

7 social

management plans govern PNG LNG operations

1331

regulatory compliance obligations in 2024

2710

licences, permits, certificates, and associated conditions met during 2024



PART A



NATIONAL CONTENT

EMPNG's National Content Strategy is based on a long term and strategic approach to help build Papua New Guinea's human, social and economic capacity.

The EMPNG National Content Strategy consists of three pillars, which have been designed to deliver tangible, positive results for people, communities, and businesses:



Workforce Development – To provide Papua New Guineans with technical and professional skills for existing and future projects, operations, and for the benefit of the broader economy



Supplier Development – Involves evaluating, developing, and utilising Papua New Guinean suppliers that meet operational requirements and are globally competitive with regard to price, quality, reliability, availability, and delivery to form a competitive industrial base



Strategic Community Investments – Identify and assess opportunities to build and maintain economic growth and improve social conditions.

These pillars are designed to provide a strong foundation for EMPNG and its stakeholders to assist with long term social and economic development for Papua New Guinea.

3



To support the career development of Papua New Guinean citizens, EMPNG provides consistent, structured training and development opportunities for its workforce.

3.1 Composition

EMPNG remains firmly focused on building the capacity of its Papua New Guinean workforce.

In 2024, the PNG LNG workforce consisted of 3509 workers, as shown in Figure 3.1. This includes 3155 Papua New Guinean citizens who represent 90 percent of the workforce. It encompasses EMPNG employees, staff contractors and personnel from 26 third-party contractor organisations working on production-related work scopes.

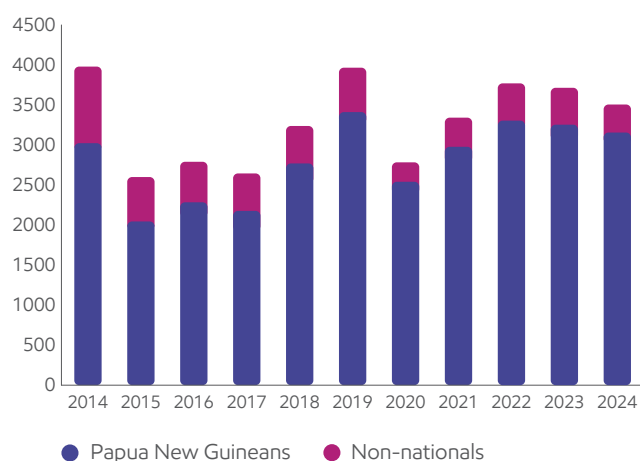


Over the past decade, contractors have played an important role in supporting PNG LNG operations

From 2024, the LNG Plant Central Control Room was fully operated by skilled Papua New Guinean workers. Papua New Guinean women account for 19 percent of the Papua New Guinean workforce and also represent 96 percent of all women working at PNG LNG facilities.

Figure 3.1 – Production workforce

NUMBER OF WORKERS BY YEAR



Forty Papua New Guineans, including 16 women, held roles within EMPNG of a supervisor level or higher at the end of the year. This includes eight Papua New Guineans who moved into the role in 2024.

Forty-eight percent of the total PNG LNG workforce is based in the Upstream area while 32 percent is based at the LNG Plant site. The rest of the workforce is based in other locations, such as ExxonMobil Haus in Port Moresby.

HIGHLIGHT

JOACHIM KEEPS QUALITY IN CHECK

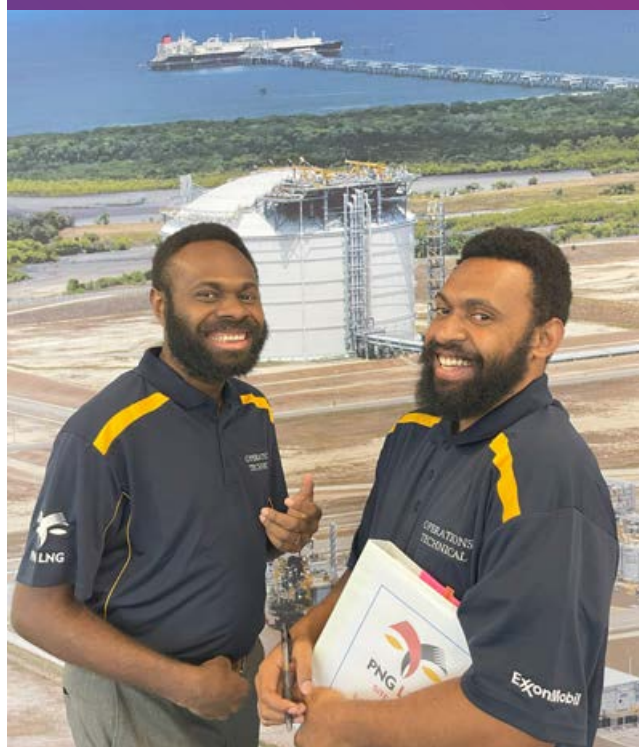
EMPNG Laboratory and Measurement Engineering Supervisor, Joachim Kiliu from East New Britain Province, has a key role managing laboratory quality control and assurance systems, as well as petroleum measurement risk and requirements compliance for the LNG Plant and Hides operations. At the same time, he is responsible for helping to drive the culture of EMPNG.

Joachim leads a multi-disciplinary team of 27 workers, including laboratory technicians and measurement engineers. He also leads internal and external measurement reporting relationships such as with co-venturers and regulators. As well as these core responsibilities, Joachim leads the Culture for EMPNG, which aligns with ExxonMobil's 'We Are ExxonMobil' and the *Em pasin bilong ExxonMobil PNG* programs.

Joachim was appointed to his current position after achieving success as an Instrumentation and Control Systems Engineer with EMPNG. In his supervisor role, Joachim said the biggest day-to-day challenge was maintaining the reliability of the cargo and production offtake measurement and quality systems, which is the responsibility of his team.

He said he enjoyed the opportunities EMPNG had provided and looked forward to developing his leadership skills and taking on new challenges in the future.

"But the greatest reward is seeing the people who I lead become more confident and technically competent – and being able to really live the 'We Are ExxonMobil' values," Joachim said.



EMPNG Laboratory and Measurement Engineering Supervisor, Joachim Kiliu with team member Measurement Technician, Joshua Solato



EMPNG’s Public and Government Affairs team based at ExxonMobil Haus

Workers are recruited from areas near production facilities wherever possible, with 39 percent of Papua New Guinean workers of local origin located close to PNG LNG operations, 24 percent of regional origin from provinces where PNG LNG operates, and 37 percent from other areas of Papua New Guinea.

As shown in Figure 3.2, Papua New Guinean employees and staff contractors include: 112 professionals in discipline-specific roles such as engineers, administrative professionals or accountants; 178 senior professionals such as supervisors and team leaders; 100 in senior skilled roles such as Level 3 operations and maintenance technicians; and 180 skilled workers, such as electricians and Level 1 and Level 2 operations and maintenance technicians. Another 134 workers hold semi-skilled positions in roles such as drivers, security officers, radio operations, and apprentices, while two are senior leaders in general management roles.

Figure 3.2 – Position types

NUMBER OF PAPUA NEW GUINEAN EMPNG EMPLOYEES AND STAFF CONTRACTORS BY POSITION TYPE



3.2 Training and development

EMPNG provides opportunities for professional and personal development to help build the skills and capabilities of workers.

In-house and external training courses, as well as mentoring, employee networks, development forums, and short-term broadening assignments are offered on an ongoing basis.

Workforce training and development programs are also provided to third-party contractors relevant to their scopes of work.

In 2024, EMPNG and its contractors delivered training to 10,500 participants over the equivalent of 254,600 hours through some 2120 courses. Training was provided through both face-to-face and online methods. Papua New Guinean citizens accounted for 92 percent of training participants, of whom 23 percent were women.

Since the start of production, the equivalent of more than 1.3 million hours of training has been delivered to more than 136,000 course participants.

3.2.1 EMPNG workforce training and development

EMPNG employees and staff contractors received the equivalent of 188,575 hours of training during 2024. Of this, 84 percent was spent on trade and craft training followed by 10 percent on safety, security, health and environment (SSHE) training with the remainder spent on: technical and professional courses; administrative, basic and induction training; and leadership training.

More than 3500 participants completed 1572 different courses, which was an average of 206 hours per person during the year.

Thirty-two percent of training participants were located at Upstream area worksites, and 36 percent at the LNG Plant site, with the remainder at ExxonMobil Haus or other areas in Papua New Guinea. Papua New Guinean citizens comprised 77 percent of course participants. Of these, women accounted for 30 percent.

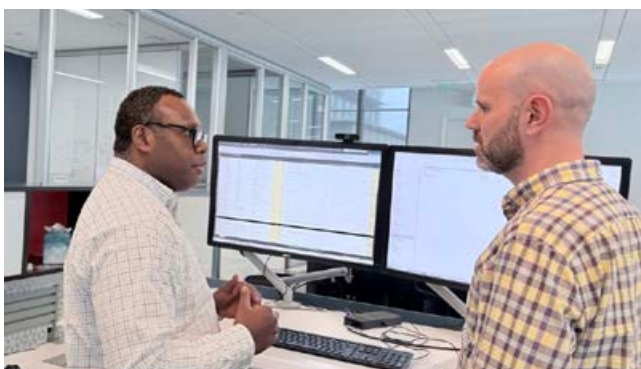
More than 673,100 hours of training has been provided to EMPNG employees and staff contractors since production began.

Twenty-one workers received Supervisor Foundation Training during the year to provide them with leadership skills and tools to support effective decision-making.



Supervisor Foundation Training participants

Papua New Guinean employees are given the opportunity to enhance their career development with overseas expatriate assignments. During 2024, Olema Uru and Stephen Marinjembi both commenced expatriate assignments in Texas, United States. Olema is working as the Operations Shift Supervisor for ExxonMobil's Golden Pass LNG Project, while Stephen is Upstream Planning and Stewardship Advisor with ExxonMobil Global Business Solutions.



Upstream Planning and Stewardship Advisor, Stephen Marinjembi with Upstream Planning Coordinator, Adam Ostridge, in the ExxonMobil Global Business Solutions offices in Houston, United States

Rodney Camilus, Appollonia Nabo and Noah Pingin remained on expatriate assignments as Operations Advisors in the United States, while Alma Gaso continued working as a Negotiator, Marketing in Singapore.

Development Planner, Gerard Schulze, who began his expatriate assignment with the ExxonMobil Global Projects office in Houston, United States in 2021 remained on assignment throughout 2024.

Nonnie Eri returned to Papua New Guinea in August following an expatriate assignment in Singapore as LNG Marine Coordinator, which she commenced in May 2023.

During the year, EMPNG transitioned current competency assurance and verification programs to align with ExxonMobil's revised best practices to confirm the required knowledge and skills to safely operate and maintain facilities, with a focus on critical safeguards for higher consequence scenarios, continues to be in place. Implementation training was delivered across worksites and included foundational skills, facility specific training, critical task competence, and procedure excellence.

Graduate programs

Papua New Guinean university and college graduates are recruited by EMPNG for full-time employment and given on-the-job training to help them develop their careers with the company. Three annual programs: the Graduate Engineering Program, Intern Engineering Program and Graduate Management Development Program are used to recruit candidates.

Through the Graduate Engineering Program, graduate engineers are selected for career opportunities in technical disciplines that include process surveillance, electrical power systems, instrumentation and controls, computer networks and systems, civil, geotechnical, machinery, mechanical integrity, and pipelines.

Engineers who participate in this program also complete the Engineers in Operations program, where engineering graduates shadow operations and maintenance technicians for four to six weeks at the LNG Plant to learn operations and maintenance processes. The graduates then undertake a 90-day onboarding program to help them transition to permanent assignments.

In 2024, nine new graduate engineers were recruited through the Graduate Engineering Program. The recruits consisted of two civil and integrity engineers, one surveillance engineer, two machinery engineers, one instrumentation engineer, two electrical engineers, and one measurement engineer.

Third-year university engineering students are also recruited through EMPNG's Intern Engineering Program. These students receive on-the-job training at PNG LNG facilities during their internship. Once they complete their internship and graduate from university, they can join EMPNG through the Graduate Engineering Program. Eight interns joined the Intern Engineering Program in 2024.

The Graduate Management Development Program selects graduates with degrees in human resources, accounting, business, law and public policy, IT, journalism, and science. These employees rotate through several different support services departments during the three-year program to obtain a broad understanding of EMPNG's business. EMPNG currently has 14 workers who are part of the Graduate Management Development Program and eight who have graduated to date. For further details refer to [Case Study: Kagl and Samantha kickstart their careers with EMPNG](#).



Graduate Management Development Program participants (front to back): Belinda Gisoba, Rosalie Kasi, Dorcas Aula, Dianne Rose Iavia and Samantha Kuase

During the year, EMPNG established application centres in the Upstream area to help local community members apply for the company's graduate and Operations and Maintenance training programs.

Operations and maintenance

Eleven Papua New Guinean citizens, comprised of eight men and three women, have become the 10th intake of Operations and Maintenance training program participants who started their training at the Kumul Petroleum Academy in 2024. Six of these trainees are completing the mechanical discipline, while the remaining five are studying the operations discipline.

In October, 17 trainees from the ninth intake began working as Junior Technicians at EMPNG worksites, which brings the total to 248 Operations and Maintenance training program graduates currently employed by EMPNG. Of these, 58 percent are based at the LNG Plant and 35 percent at the HGCP.

The other seven percent are working at ExxonMobil Haus or in roles at other sites or outside of Papua New Guinea.

There are currently 122 Operations Technicians. Under the maintenance discipline, 26 are Mechanical, 31 are Instrumentation, 21 are Electrical Technicians, nine are Maintenance Planners and Schedulers, and one is involved in integrity execution. The remaining 38 are either working in supervisor roles, are on broadening assignments or have transitioned to other roles outside of their operations and maintenance disciplines.

Eleven Operations and Maintenance training program graduates undertook broadening assignments during the year. They consisted of: Nicholas Kassman, Barbara Kipak, Leon Omoa and Alisha Onno as Personnel Safety Management System Champions; Douglas Taiyabu as Instrument and Controls Engineering Technician; Kylie Kevau as International Production Enterprise System Coordinator; Gabriel Kila and Sidney Isaiah as Marine Loading Masters; Victoria Kamila as Shipping and Export Coordinator; Steven Lewu as OIMS Technician; and Isaac Maima as the LNG Plant Safety and OIMS Supervisor.

The Operations and Maintenance training program has enabled many workers to transition to management, professional and/or technical roles with other departments within EMPNG. To date, ten graduates have transitioned into roles outside of their operations and maintenance disciplines or are undertaking expatriate assignments.

EMPNG provides a structured progression plan for operations and maintenance technicians, which starts at Junior Technician level and progresses through to Technician Levels 1, 2 and 3. Technicians can progress further to Lead Technician Level 4 and/or supervisory level and beyond.



Graduates from the ninth intake of the Operations and Maintenance training program at their graduation ceremony

HIGHLIGHT**SAREA JOINS MILESTONE INTAKE OF OPERATIONS AND MAINTENANCE TRAINING PROGRAM**

Sarea Epavea from the Gulf Province became part of a milestone intake for EMPNG's Operations and Maintenance training program when she joined the 10th training intake in 2024. Sarea has a National Certificate 3 in Maintenance, Fitting and Machining from Port Moresby Technical College and decided to pursue an operations and maintenance opportunity with EMPNG in 2024. She is among six mechanical and five operations training participants who joined the latest training intake in October.

"I really enjoy the Operations and Maintenance training program because of the hands-on practical aspects and the safety focus of the trainers. When I finish my training, I want to feel confident in my abilities as a Mechanical Technician, ready to take on challenges and solve problems on-the-job. My main goal is to learn as much as I can, not just the technical skills but also how to work safely and effectively in the field. I'm excited about contributing to the team and putting what I've learned into practice to make a real difference."

Sarea said her long-term career goal was to achieve a leadership role where she could help others to learn and succeed.

"I want to keep improving myself by learning new skills and staying up-to-date with changes in the industry. I want to have a career where I'm not just working but really making an impact and enjoying what I do."



Sarea Epavea (right) with fellow trainee Elwin Akia (centre), and Mechanical Trainer, Korey Hulape (left) at the Kumul Petroleum Academy

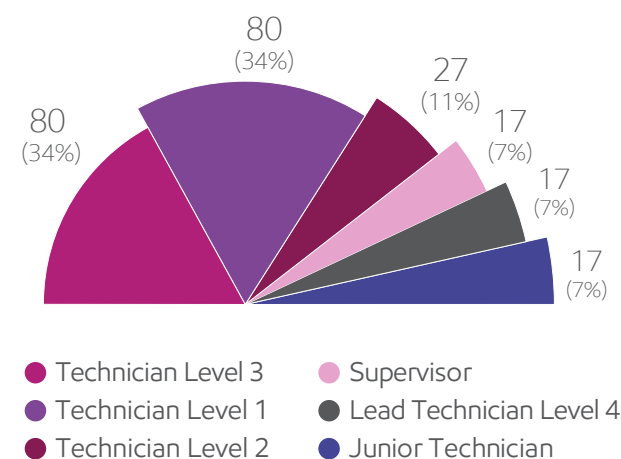
In 2024, 32 percent of operations and maintenance technicians progressed to the next technician level. Figure 3.3 shows the current levels of operations and maintenance technicians.

Of the 17 Operations and Maintenance training program graduates in supervisor roles, six were promoted to Supervisor positions during the year.

Priscillah Pora and Lydia Tarabu both transitioned from Operations Technician Level 2 to become Safety and OIMS Supervisor and Terminal Assistant Manager respectively. Operations Technician Level 2 Ben Keith Junior became the LNG Plant Production Supervisor, while Integrity Planner Caspar Kokoani was promoted to HGCP Warehouse Supervisor. Operations Well Technicians Manuel Dorum and Benjamin Petrus both became Well Operations Supervisors.

Figure 3.3 – Operations and maintenance technicians

NUMBER AND PERCENTAGE BY TECHNICIAN LEVEL



Operations and Maintenance training program graduates comprise approximately 46 percent of all EMPNG field operations leadership roles, with four of these positions occupied by women.

Operations and maintenance technicians, at a minimum of Technician Level 3 and progressing to Lead Technician Level 4, can be selected by their supervisors to become qualified as a Competency Verifier. At the end of 2024, 45 of the 61 qualified Competency Verifiers were Papua New Guinean citizens, of whom eight were women.

3.2.2 Contractor training and development

The equivalent of 66,038 hours of training was delivered by all EMPNG contractors during 2024. Almost 7000 participants were involved in approximately 550 training sessions in 2024, which equates to an average of 25 hours of training per person across the contractor workforce.

Since the start of production, contractors have provided almost 106,560 PNG LNG worker participants with the equivalent of 656,900 hours of training.

Of the number of training participants in 2024, 60 percent were in the Upstream area, 33 percent were at the LNG Plant, and the remaining seven percent at contractor offices and other off-site locations. Forty-nine percent of contractor training participants were employed from local communities, 20 percent were from a province in which EMPNG operates, and 31 percent were from elsewhere in Papua New Guinea.

Seventy-eight percent of contractor training hours during 2024 focused on SSHE topics, while nine percent was on technical and professional training and eight percent was on trade training.

For example, contractor Falck delivered five days of live fire training at the Wood Fire Training Facility in New Zealand for its workers based at the LNG Plant, HGCP and Komo Airfield. The training included scenarios such as an aircraft fire incident, a building fire and motor vehicle accident that involved using the Jaws of Life to conduct a rescue. The team also participated in an advanced air rescue using vertical rescue equipment during a man overboard drill simulation at the LNG Plant Marine Terminal during the year.



Fiona Simon joined the Falck Fire and Rescue team in 2020 as their first female Firefighter

In addition, contractor Smit Lamnalco and EMPNG jointly sponsored two Papua New Guinean Second Engineers in 2024 to attend Papua New Guinea Maritime College training to upgrade their licence to become Chief Engineers. They are both now working as Chief Engineers at EMPNG facilities.

Administrative, basic and induction training comprised five percent of training hours. The remaining training hours were spent on leadership and management training.

2024 PERFORMANCE HIGHLIGHTS

WORKFORCE

3155 PNG citizens

comprise 90% of the PNG LNG workforce*

254,600 hours

of training delivered through some 2120 EMPNG and third-party contractor courses in 2024

248 graduates

of the Operations and Maintenance training program employed by EMPNG

11 trainees

joined the 10th intake of the Operations and Maintenance training program

39 percent

of Papua New Guineans in the PNG LNG workforce* were recruited from areas of local origin proximate to PNG LNG operations

* PNG LNG workforce includes: EMPNG employees for PNG LNG; staff contractors employed through recruitment agencies; and contractors, meaning other third-party contractor personnel.

CASE STUDY

KAGL AND SAMANTHA KICKSTART THEIR CAREERS WITH EMPNG

Kagl Korugl and Samantha Kuase have started a solid career pathway with EMPNG through the three-year Graduate Management Development Program.

Kagl, who completed the program in 2024, is now OIMS Coordinator with EMPNG's SSHE team.

A high school graduate from Papua New Guinea, Kagl studied a Bachelor of Arts degree majoring in economics and finance with James Cook University in Australia.

Upon completing his degree, Kagl was accepted into the Graduate Management Development Program where he began his first assignment as an Operations Expenditure Analyst. His second assignment was as a Supply Chain Analyst before being assigned to the role of OIMS Coordinator, where he has continued on a permanent basis. Kagl said that, in his current role, he has learned how integral SSHE teams are in supporting the entire business and the importance of OIMS in how we work at EMPNG.

"This has been an amazing opportunity because my role has given me exposure to the broader EMPNG business and it's been great to learn about the company's processes and controls."

"The graduate program has given me the ability to understand EMPNG and PNG LNG operations. It has allowed me to enhance my knowledge and skills, while working within various functions."

"It has also grown my professional network within EMPNG and the broader ExxonMobil organisation. With the interactions I've been lucky to have with colleagues from different functions, not just the ones I've been a part of, it presented me with a clear map of my career path within the company."

Samantha Kuase graduated with a Bachelor of Economics and Development Studies from the Institute of Business

Studies University in 2020. During her studies she completed a short internship with EMPNG. In 2021, Samantha was engaged as a contractor to EMPNG and in 2023 was accepted into the Graduate Management Development Program. Her first assignment was as an Operations Accounting Analyst. In 2024, she was assigned to a Supply Chain Analyst role for her second year of the program.

Samantha said EMPNG was a fast-paced environment that provided opportunities to learn new things every day.

"I really value the comprehensive structure of the graduate program, which provides diverse learning opportunities."

"It allows us to explore various aspects of the business, build technical and leadership skills, and gain exposure to different teams and functions. The support from mentors and managers, combined with the chance to work on impactful projects, makes the experience both challenging and rewarding."

The Graduate Management Development Program recruits university graduates with degrees in human resources, accounting, business, law and public policy, IT, journalism and science and develops their skills for above field roles across EMPNG. These employees rotate through several support services departments within their first three years of employment to obtain a broad understanding of EMPNG's business. Workplace assignments and mentor opportunities help these workers develop leadership capabilities and technical skills, as well as enable them to build their own global network of colleagues. They are introduced to key aspects of EMPNG's operations through worksite visits and lectures from various departments such as gas marketing, geoscience, and construction.



Samantha Kuase and Kagl Korugl with EMPNG Operations Support Manager, Rieski Dewi

4



EMPNG actively encourages the important role of Papua New Guinean businesses in driving economic and social development through capacity building and growth opportunities for local suppliers.

4.1 Procurement and suppliers

EMPNG engages Papua New Guinean businesses in production-related work scopes and supports their capacity building so they can become self-sustaining enterprises.

Lancos, each representing a geographic area within the PNG LNG area of operations, are engaged for services such as road maintenance, civil and construction works, transportation of personnel, fuel distribution, security, camp maintenance and catering, vehicle maintenance, labour hire and other services. Other Papua New Guinean businesses are also engaged to supply accommodation, civil works, transportation of personnel, security, catering and food supply, maintenance, surveying, inspection and testing, medical services, and waste management.



Driver, Emmanuel Haibaku from Black Swan International, operating one of EMPNG's fleet vehicles

In 2024, EMPNG engaged 11 Lancos and 248 other Papua New Guinean businesses for production-related work scopes. In-country spend with Papua New Guinean businesses was almost PGK1.4 billion (USD355 million) in 2024 compared to almost PGK883 million (USD221 million) during 2023. Almost 26 percent of this spend was for Lanco services, which equates to approximately PGK366 million (USD91 million) compared to PGK358 million (USD89.5 million) spent on Lanco services in 2023.

EMPNG has spent almost PGK8.1 billion (USD2.05 billion) on Papua New Guinean services since the start of production.

Of this, PGK2.6 billion (USD654 million) was spent on Lanco services.

4.2 Capacity building

Five EMPNG contractors were recognised at the 10th annual contractor SSHE Forum held in March. Awards for SSHE performance and national content were presented at the event. Refer to [Case Study: Contractors awarded for outstanding performance](#).



Laba Security Services Limited representatives receiving the Best SSHE Performance Contractor of the Year award

In July, EMPNG sponsored the Papua New Guinea Chamber of Resources and Energy (PNG CORE) for its inaugural Papua New Guinea Resources Week. The week included the second annual Community Affairs and National Content Conference and Exhibition (CANCONEX), the PNG Resources Summit, PNG Resources Career Fair and a Resources Summit Dinner. The theme for the week was 'Building on our Legacy: PNG resources and energy'.

Some 2000 representatives from government, project operators, businesses, academia, and landowning communities across the various oil, gas and mining projects in the country participated in Papua New Guinea Resources Week events, which were hosted at the University of Papua New Guinea campus in Port Moresby.



Company representatives at the EMPNG booth at CANCONEX

The three-day CANCONEX event included local business development discussions and presentations on land, community affairs and national content experiences with knowledge sharing encompassing various social programs implemented in local communities. EMPNG Operations Manager, Justin Chichester, provided a PNG LNG operations update and EMPNG National Content Manager, Sam Koyama, delivered a presentation on the PNG LNG experience and national content benefits over the past 10 years of production. In addition, EMPNG facilitated two experts from DAI Global to speak on global national content best practice. Michael Hackenbruch, Executive Director of Development Solutions, presented on global perspectives on national content and Louise Flynn, Technical Director of the Sustainable Business Group, shared perspectives on the oil and gas industry in Guyana.

The accompanying exhibition provided an opportunity for resource companies, Lancos and other Papua New Guinean businesses to showcase their services.



EMPNG representatives celebrate receiving the Best Dressed Booth award at CANCONEX



EMPNG Human Resources Advisor, Damaris Wakip, presenting to tertiary students at the PNG Resources Career Fair

In August, the Papua New Guinea Institute of Business and Banking Management Incorporated together with the Enterprise Centre launched a new Bisnis PNG website with a Supplier Management Portal. The portal provides a gateway to connect business opportunities, access capacity building programs and initiate business engagements. Papua New Guinean businesses can now use the portal to register their credentials as a supplier. By the end of 2024, more than 3000 Papua New Guinean suppliers were registered.

EMPNG submitted its annual Employment, Training and Development Report and Local Business Development Report to the Department of Petroleum and Energy during the year.

In October, EMPNG National Content Manager, Sam Koyama, presented the reports to key national content stakeholders such as the Department of Petroleum and Energy and other government agencies, PNG LNG co-venturers including Kumul Petroleum Holdings Limited and MRDC, and industry groups like PNG CORE, the Papua New Guinea Institute of Banking and Business Management Incorporated and the Enterprise Centre. Forty attendees shared national content progress, including an update on the Government's National Content policy, and the establishment of a National Content Committee within PNG CORE.

2024 PERFORMANCE HIGHLIGHTS

SUPPLIERS

PGK1.4 billion

spent in-country with Papua New Guinean businesses in 2024

PGK8.1 billion

spent in-country with Papua New Guinean businesses since the start of production

248 local businesses

working on PNG LNG, including 11 Lancos

PGK366 million

spent with Lancos in 2024

PGK2.6 billion

spent with Lancos since the start of production

CASE STUDY

CONTRACTORS AWARDED FOR OUTSTANDING PERFORMANCE

Five EMPNG contractors were recognised at the 10th annual contractor SSHE Forum held in March.

Contractors were awarded based on their overall performance for the full 2023 year across worker competency, field management and leadership, equipment quality and condition, quality assurance, management of subcontractors, regulatory compliance, and commercial and administrative compliance.

Oceaneering International Services Limited and Lanco Laba Security Services Limited were both recognised for contractor interface prioritisation, demonstrating their firm commitment to SSHE objectives. Cameron Services International Proprietary Limited received an honourable mention.

National content awards were also presented at the SSHE Forum for contractors that diligently championed national content objectives across:

- workforce development through the employment and training of Papua New Guinean citizens
- supplier development in providing opportunities for Papua New Guinean businesses to provide goods and services for contractors and
- strategic community investment through supporting community development initiatives.

Smit Lamnalco, received the National Content Award for its dedication across workforce development, supplier development and strategic community investment.

Among its achievements, Smit Lamnalco initiated multiple programs to develop its local Papua New Guinean

workforce including appointing Papua New Guinean citizens to chief engineer roles, providing upskilling opportunities for women, donating marine safety equipment to the Papua New Guinea Maritime College, and engaging Papua New Guinean suppliers for services such as logistics, storage, fuel and food. Smit Lamnalco's first vessel *SL Jamba* was also fully staffed by Papua New Guinean engineers.

Nares Engineering Limited also received an honourable mention for its commitment to national content objectives.

The SSHE Forum helps to reinforce alignment between the safety cultures of EMPNG and its third-party contractors and also provides an opportunity to share best practices in championing national content objectives.

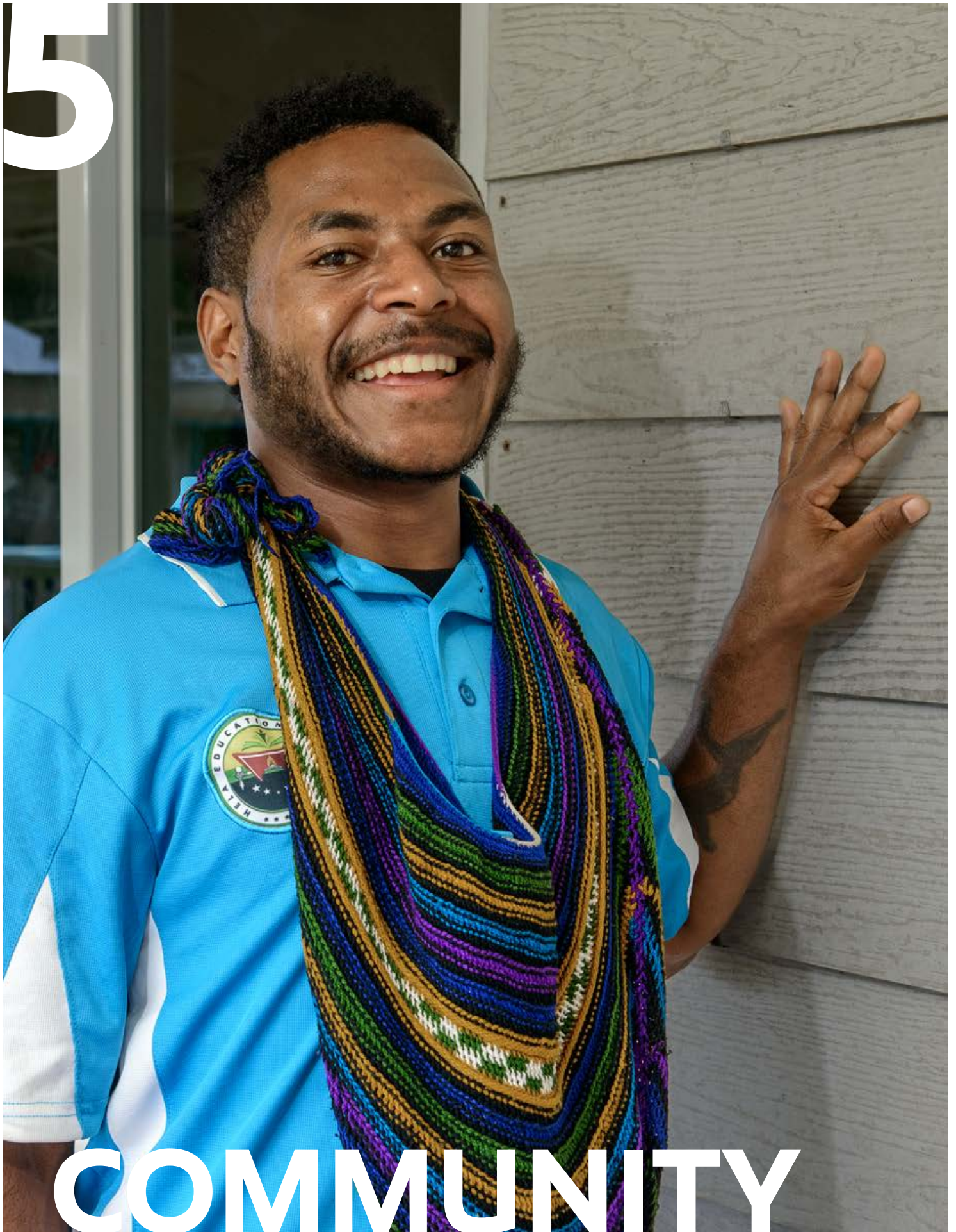


Members of Smit Lamnalco's Papua New Guinean workforce



EMPNG personnel and awarded contractor representatives at the 10th annual SSHE Forum

5



COMMUNITY

In collaboration with government, non-government organisations and local communities, EMPNG supports inclusive, long-term initiatives that help build empowered communities.

5.1 Strategic community investment

EMPNG implements strategic community investment programs to help achieve positive, long-term economic and social development in Papua New Guinea. These programs encompass education, health, environment awareness, livelihood support, key infrastructure improvements, law and justice, and community-based initiatives. Each program is conducted according to its relevant geographic area:

- local area programs in communities impacted by PNG LNG
- impacted provinces – programs that support provincial level initiatives, and are aligned with provincial and local-level governments and development partners
- national programs that involve broader scale capacity building projects and support at both provincial and local levels.

EMPNG invested PGK26.9 million (USD6.7 million) in community programs during 2024 through sponsorships, community contributions, in-kind support, and local projects. Another PGK152.8 million (USD38.2 million) of funding was made available to support construction of public infrastructure through the Papua New Guinean Government's infrastructure tax credit (ITC) projects.

5.1.1 Local area programs

Local area programs are conducted with community members and provincial and local-level governments to help build community resilience. They include training and business development opportunities for women, education for school students, and community-based health and wellbeing initiatives.

Upstream area and pipeline Right of Way

Numerous Upstream area schools have received new infrastructure funded by EMPNG. Double classrooms were officially opened in Juni and Hupikini primary schools, and staff houses constructed by Lanco HGDC Energy Services Limited for Undupi and Para primary schools were also handed over to local communities in 2024. St John's Tugapawi Primary School received a new staff house during the year.



EMPNG Maintenance Superintendent, Brady Matherne with a student from St John's Tugapawi Primary School at the handover ceremony for the school's new staff house

HIGHLIGHT

COMMUNITY INITIATIVE CREATES A SCHOOL FOR UNDUPI

Undupi Primary School in the Hela Province has rapidly grown from a community initiative to a fully operational primary school with approximately 300 students. The School was born from a local community initiative where everyone came together to source materials and build classrooms. Soon after it was officially registered with the Hela Education Directorate, Undupi Primary School opened its doors to the first students in 2018.

The School continues to grow through community support and corporate donations. Over the past few years, EMPNG has provided four staff houses, a handwash station, basketball court, perimeter fencing and stationery and textbooks to support the school's growth.

Undupi Primary School is already undergoing further expansion and is quickly progressing to become a large catchment school for the Angore community.



Students, parents and teachers of Undupi Primary School gather to celebrate the handover of the School's newest staff house, constructed in 2024

Biame Elementary and Primary School gained handwash stations and a basketball court, and St Paul Komo Primary and Secondary schools received stationery and textbook donations from EMPNG in 2024.



EMPNG's stationery donations for St Paul Komo Primary and Secondary schools

Homa Village has a new basketball court with volleyball stand funded by EMPNG, with a second basketball court under construction for the Kekero community.

An existing aid post at Homa Village has been refurbished with new perimeter fencing and a new staff house built for the onsite medical worker through EMPNG funding. The aid post provides healthcare services to almost 4000 residents of local communities.



The refurbished Homa aid post

Two water catchment structures funded by EMPNG were constructed for Panguale Village during the year. Each structure includes two large rainwater tanks to provide communities with access to clean drinking water and an open-air shelter for meetings and social gatherings.

EMPNG's Upstream Community Affairs team continues to support weekly fresh produce markets at Hides, Komo and Angore.



Local farmers showcasing their produce at the Komo Station market in Hela Province

In 2024, approximately 100 local vegetable farmers sold their produce to the HGCP and Angore camp caterers and earned additional income from sales to community members. Seventy-six markets were held during the year, generating more than PGK237,200 (USD59,300) in income for communities from the sale of produce to EMPNG catering contractors for use in camp kitchens.

Upstream area community markets were originally established in 2016 as part of EMPNG's Community Livelihood Improvement Program. To date, these markets have generated more than PGK1,471,200 (USD367,800) of income for local communities.

Financial literacy and commercial spice training was provided to 160 women from 10 Upstream area communities in January. Following the training, the women were able to successfully cultivate crops such as ginger, turmeric and parsley to generate income at Upstream area markets. The training was provided through EMPNG's livelihood capacity building program in partnership with Niugini Organic Spice and local financial institutions.



Participants at one of the commercial spice training courses held with Upstream area communities

Sewing training has also been provided to 20 women from 18 Lake Kutubu Local-Level Government wards by Advancing PNG: Women Leaders Network Incorporated (APNGWLN) using new sewing machines donated by EMPNG.

The sewing training is helping women, including widows and orphans, to gain skills in manual sewing machine care and maintenance, pattern tracing and material cutting skills so they can sew clothes to generate income through local markets. The women will also use the new sewing machines to help train others in their communities.



Trainers and participants of sewing training held at Daga Village in Pimaga Station

More than 220 solar lamps were distributed by EMPNG to communities in villages along the pipeline Right of Way (ROW) during the year to help provide night lights for residents' homes.



Solar lamps presented to communities along the pipeline ROW

Rugby league serves as a powerful tool for community engagement and youth development in Upstream area villages. During 2024, EMPNG provided funding to support rugby clubs in Komo and Angore.

A Queenpads awareness and distribution program was piloted in 2024 with young women from Komo, Angore and Hides communities. The program, funded by EMPNG, was implemented over six days across 14 schools and 15 women's groups. It provided women with accurate and age-appropriate information about menstruation and best hygiene practices, and also provided access to menstrual materials, and treatment for menstrual disorders.

EMPNG continued its annual gift drive by presenting gifts to sick children at Tari Hospital in January 2025. A team of EMPNG volunteers visited nine wards at the hospital to distribute more than 300 gifts to the children.

LNG Plant site

A new school administration office and double storey classroom funded by EMPNG and constructed by Lanco Laba

Holdings Limited were handed over to Porebada Primary School in 2024. The new classroom replaces a building that was destroyed by a cyclone during 2023.



The new double storey classroom at Porebada Primary School

Lea Lea Primary School has received a three-bedroom staff house and double classroom with a computer laboratory funded by EMPNG. The school is being transitioned into a technical high school for the Hiri and Koairi communities.

The staff house and classroom will accommodate additional students and staff as the school grows.



Official opening of the new staff house at Lea Lea Primary School



Tari Hospital staff and EMPNG volunteers with donated gifts for distribution to Hospital patients

Papa Junior High School also received a double storey classroom with a computer laboratory and three-bedroom staff house constructed by Lanco Laba Holdings Limited and funded by EMPNG in 2024.



Chairman, Board of Governors, Papa Junior High School, David Morola; Head Teacher, Papa Primary School, Doriga Kila; Teacher-in-Charge of the Preparatory Sector, Papa Primary School, Puro Bisia; and Principal, Papa Junior High School, Michael Akim, outside the new double storey classroom at Papa Junior High School



The newly constructed three-bedroom staff house at Papa Junior High School

Boera Primary School received a double classroom with a dedicated computer laboratory during the year. All classrooms and staff accommodation handed over in 2024 were fully furnished with funding support from EMPNG.



New double classroom at Boera Primary School

Papa Village has a new courthouse funded by EMPNG. It will provide a place for Papa Village to conduct law and justice, which was previously undertaken under the shade of trees in the village. The courthouse has been furnished by the Hiri Special Purpose Authority.



The new courthouse at Papa Village

Public address systems were also installed at Papa, Porebada, Boera and Lea Lea villages to support EMPNG's stakeholder engagement activities and help improve communications in these communities.

EMPNG also provided schoolbags and stationery for end-of-year awards to nine schools in the LNG Plant site villages in 2024.



EMPNG donates school bags to Lea Lea Elementary School

5.1.2 Provincial programs

The Hiri Moale Festival celebrated its 50th anniversary in March with PGK350,000 (USD87,500) funding from EMPNG.

The festival is held every year to honour the traditional trade voyages that took place over 300 years ago between the Motu and Koitabu people of the Central and Gulf provinces. It includes cultural celebrations, the *Vanagi Heau Helulu* or 'canoe race', the arrival of the traditional *lagatoi* (a traditional double-hulled sailing watercraft) and crowning of Miss Hiri Hanenamo. Henao Heni of Elevala Village was honoured with this title in 2024.



The lagatoi arriving at the Hiri Moale Festival



2024 Hiri Hanenamo, Henao Heni

EMPNG also provided PGK100,000 (USD25,000) funding for the inaugural Hiri-Koiari Trade and Cultural Festival held in Boera Village in September. The three-day festival celebrated the rich heritage of the Hiri and Koiari people through markets, a trade show for Papua New Guinean businesses, art exhibitions and a music festival. The event was organised by Edai Township representatives and Laba Holdings Limited.

During 2024, EMPNG provided PGK59,400 (USD14,850) for 18 women from Boera Village to participate in a pilot Entrepreneurial Community Gardening Program. The women completed the 14-month training program in horticulture and market management to give them the knowledge and skills to cultivate community gardens.



Brendah Gaiva from the Tubumaga clan and Muraka Ganiga from the Taurama clan with produce from the Entrepreneurial Community Gardening Program

The program was facilitated by the Centre for FutureNau Incorporated and involved hands-on training focused on growing resilient gardens, gaining financial and community literacy, and achieving family wellbeing. Women who completed this program also hosted a market booth at the Hiri-Koiari Trade and Cultural Festival.

EMPNG donated PGK88,500 (USD22,125) during the year to the Vabukori Women's Development Association to support the association's work in helping women from Vabukori Village and surrounding communities learn skills in sewing, knitting, gardening, floriculture and design to improve their livelihoods.



Members of the Vabukori Women's Development Association with EMPNG representatives

5.1.3 National programs

A new Ambulance Education Centre was opened in Port Moresby in September through collaboration between the National St John Ambulance Service and EMPNG, which provided PGK250,000 (USD80,000) funding for the facility. The Centre's first group of 25 ambulance service recruits graduated in November. An ambulance was also donated by EMPNG to the ambulance service.



Opening of the new Ambulance Education Centre in Port Moresby

In October, former EMPNG Chairperson and Managing Director, Tera Shandro, visited the newly established Metoreia Urban Health Centre in Hanuabada, Central Province where EMPNG helped to set up an ambulance standby post for the Motu Koita people. A new ambulance was donated by EMPNG to the centre.



Former EMPNG Chairperson and Managing Director, Tera Shandro hands over the keys to the new ambulance for the Metoreia Urban Health Centre to Chief Executive, Commissioner of the National St John Ambulance Service, Matthew Cannon and Chairman of the Motu Koita Assembly, Dadi Toka Jr

A 25-seater bus was also donated to Kwikila Interim Hospital in the Central Province. The hospital will use the bus for child and maternal health community visits, including antenatal and postnatal care, and immunisation clinics.

EMPNG is helping the Papua New Guinea Tribal Foundation build future leaders with a PGK172,350 (USD43,088) grant for the foundation's Senisim PNG and Live2Lead programs. These programs provide leadership development and values-based education to Papua New Guinean citizens, including school-based training for students and teachers. Live2Lead leadership events were held in March and November, and were attended by representatives from government, industry and non-government organisations.



EMPNG participants with stakeholders at the second Live2Lead leadership event in Port Moresby



Speakers at the second Live2Lead leadership event in Port Moresby

In 2024, EMPNG donated PGK270,000 (USD67,500) for Buk bilong Pikinini's Literacy Week activities, teacher training and other educational programs, including a nutrition education program that was implemented during the year. The nutrition program aimed to teach children about healthy eating habits.



Buk bilong Pikinini students read one of the new publications supporting the nutrition education program – *Superheroes Tru & Kai unlock the secret powers of superfoods*



Students and personnel from Buk bilong Pikinini with representatives from sponsors, partners and supporters of the nutrition education program



Buk bilong Pikinini students participate in a nutrition education program lesson held during Literacy Week

Buk bilong Pikinini has supported the educational needs of Papua New Guinean children through its libraries and programs since it was established in 2007. For example, the Buk bilong Pikinini teacher training is equipping teachers with current digital tools and techniques to enhance classroom engagement, particularly for students with learning difficulties.

Since 2011, EMPNG has donated more than PGK2 million (USD500,000) to Buk bilong Pikinini for educational toys, the Buk bilong Pikinini digital app launch, teacher training and volunteer support for Literacy Week activities.

The APNGWLN has received PGK170,000 (USD42,500) from EMPNG for their 10-year strategy workshop and to support organisational governance and management. APNGWLN was formed by women who were alumni from the Global Women in Management (GWIM) program facilitated by the ExxonMobil Foundation.



Participants at the APNGWLN 10-year strategy workshop

GWIM was introduced to Papua New Guinea in 2014 and has helped to build the leadership capabilities of many local women. In 2024, Jacqueline Phil from the Western Highlands Province and Nancy Prikia from Kubalia in the East Sepik Province were both selected to participate in the 2024 GWIM program in Washington DC, United States during September.



Former EMPNG Chairperson and Managing Director, Tera Shandro (centre) with GWIM program participants, Jacqueline Phil (left) and Nancy Prikia

Nancy owns and manages Kunai Oasis Trading, which helps vanilla farmers to achieve high standards of vanilla production and sales. As part of her business, Nancy supports female vanilla farmers to cultivate and commercialise vanilla in Papua New Guinea through facilitating access to international markets and providing training on sustainable farming practices.

Jacqueline is Country Manager for the non-government organisation PROMotion Incorporated, a capacity building group that focuses on organisational development. Her company builds the capacity of emerging and established non-government organisations, community-based organisations and social enterprises in Papua New Guinea. Jacqueline is renowned for her collaborative approach, visionary thinking and commitment to empowering local civil society enterprises.

A total 215 students received Business and Professional Women's Association PNG LNG In-Country Scholarships for Higher Education in Papua New Guinea during 2024 through a PGK3 million (USD750,000) donation from EMPNG. Eighty-six of these scholarships were awarded to vocational education students.



Vocational education recipients of the 2024 Business and Professional Women's Association PNG LNG In-Country Scholarships Program for Higher Education board a flight for the Kumul Training Institute in Lae

HIGHLIGHT

ALEXANDERIA CREDITS SCHOLARSHIP FOR STARTING HER CAREER

Alexandria Mamai Gabriel from Hela Province has completed a Bachelor of Civil Engineering degree through the Papua New Guinea University of Technology with support from the Business and Professional Women's Association PNG LNG In-Country Scholarships Program for Higher Education in Papua New Guinea funded by EMPNG.

Growing up in the rural mountainous region of Papua New Guinea, having access to education and other vital services was challenging for Alexandria. In search of a better education, she travelled to another province to attend school and, through hard work and determination, secured an opportunity to study Civil Engineering at the University of Technology.

In 2023, Alexandria was awarded the Scholarship and, in 2024, was accepted into EMPNG's Intern Engineering Program. After completing her studies at the end of 2024, Alexandria joined the EMPNG Graduate Engineering Program as a Civil and Integrity Engineer with the Operations Technical team.

Alexandria said the Scholarship helped her to realise her dream of becoming an engineer.

"Scholarship funding has played a major role in my career. If it wasn't for the Scholarship, I would have struggled to attain my degree and be where I am today," she said.



EMPNG Civil and Integrity Engineer, Alexandria Mamai Gabriel at the HGCP

The scholarships program, which helps high school and tertiary students with the costs of education, has now been extended beyond the Central and Hela provinces to include students from the Juha region. Since EMPNG began working with the Business and Professional Women's Association in 2019, 405 students have been funded through these scholarships.

Some 150 students from universities across Papua New Guinea attended a business planning and entrepreneurship training program funded by EMPNG in June.

The one-week Beyond Textbook Training Program provided participants with practical and interactive exercises in industrial analysis, organisational structures and staffing, legal requirements and business evaluation, marketing and sales, and financial planning. Since 2021, EMPNG has contributed PGK212,000 (USD53,000) to support this annual program.

EMPNG also donated 86 refurbished laptops to LiteHaus International and 171 network drives to Divine Word University in 2024 to support their educational programs.



EMPNG and LiteHaus International representatives during the donation of 86 refurbished laptops

EMPNG continues to work with Transparency International Papua New Guinea Incorporated to empower youth leaders in Papua New Guinea through the annual Mike Manning Youth

Democracy Camp, which involved 29 young people aged between 17 and 21 years from 14 provinces in 2024.

Participants are selected from secondary schools to attend the two-week camp because they have been identified as potential leaders in their respective communities. Marginalised youth who do not attend school but have active leadership roles within their communities are also invited to attend. The Camp involves activities and talks by representatives from government and civil society agencies to help enhance participants' knowledge and skills in addressing corruption. The students learn about their roles and responsibilities as citizens, the functions of government, state agencies and civil society organisations, and the principals of democracy. The 2024 camp theme was 'Rise to the Occasion'.

During 2024, EMPNG celebrated 10 years of support for the Port Moresby Nature Park. In the past decade, EMPNG has invested PGK3.45 million (USD862,500) in helping to transform the park into a major national educational and tourist attraction, which has enabled vital research such as the park's 'Breed-for-Release' program for the endangered pig-nosed turtle (*Carettochelys insculpta*), or *piku* and supported conservation efforts for the long-beaked echidna and bird-of-paradise species. More than 30,000 students participated in educational excursions at the park during the year.

Papua New Guinea's 49th Independence Day was commemorated in September with cultural celebrations across all EMPNG worksites. During the celebrations, Arthur Somare, former Public Enterprises Minister and son of the late Grand Chief Sir Michael Somare, shared his perspective on the LNG history in Papua New Guinea and commended EMPNG for its contribution to the nation's success.



Upstream area Clinician, Judith Opu, speaking on the history of the New Guinea Islands region during Independence Day celebrations at the HGCP



EMPNG and TotalEnergies E&P PNG Limited volunteers with Boera Women's group volunteers ready to plant mangrove seedlings around Boera Village

5.2 Volunteering

During 2024, more than 300 EMPNG employees volunteered over 720 hours to support community-based activities in Papua New Guinea.

In June, 250 EMPNG volunteers participated in World Environment Day activities with local communities. The theme was 'The Journey to a Greener Future.' In the Upstream area, 25 EMPNG volunteers were joined by 56 Komo Youth for Change volunteers to clean up rubbish and plant new trees at various locations around Komo.



EMPNG Senior Field Superintendent, Jason Coben, receives a tree seedling from a Hela girl during the World Environment Day clean-up and tree planting activity in Komo

More than 100 volunteers committed three days for World Environment Day activities, which included planting of some 1000 mangrove seedlings mainly around Boera Village in partnership with TotalEnergies E&P PNG Limited. In addition, 20 EMPNG volunteers joined Papa Primary School students and teachers in planting trees around their school yard.

The volunteers took time to educate students about the importance of protecting the environment.



EMPNG volunteer, Shadrach Jaungere, presents an environmental awareness session to Papa Primary School students as part of World Environment Day activities

In August, 10 EMPNG volunteers continued planting mangroves in Boera Village, and cleaned a stormwater drain that had a build-up of sediment, which was impacting water flow.

Fifteen EMPNG volunteers, joined more than 2000 people in Port Moresby for the Sir Anthony Siaguru Walk Against Corruption in June. The 3.7-kilometre walk was organised by Transparency International PNG to raise awareness about corruption.

In September, 13 volunteers supported Buk bilong Pikinini with annual Literacy Week activities. The volunteers spent more than three days serving healthy lunches to children to teach them about good nutrition and helped them practice financial literacy through 'Market Day' activities.

Market day develops literacy and numeracy skills in children by exchanging play money for food and craft items at market stalls housed in mini traditionally built *kunai* or 'grass' thatched huts. The children also learn how to withdraw money from a pretend automatic teller machine.



EMPNG volunteers with children during the Buk bilong Pikinini Literacy Week

Twenty-four EMPNG volunteers, including seven members of the company's leadership team, took part in the annual Bel Isi PNG End Violence Against Women Walk in November. The walk aims to raise community awareness about preventing family violence, especially violence against women, and encourages support for survivors of violence in all its forms.

EMPNG volunteers also supported events such as Remembrance Day, Independence Day, International Women's Day, Financial Expos, and lunch-and-learn sessions throughout the year.

The ExxonMobil Science Ambassador Program was phased out to make way for new science, technology, engineering and mathematics education programs that will be implemented across ExxonMobil's global operations from 2025.

2024 PERFORMANCE HIGHLIGHTS

COMMUNITY

PGK26.9 million

of contributions, sponsorships, in-kind support and community projects in 2024

>PGK152 million

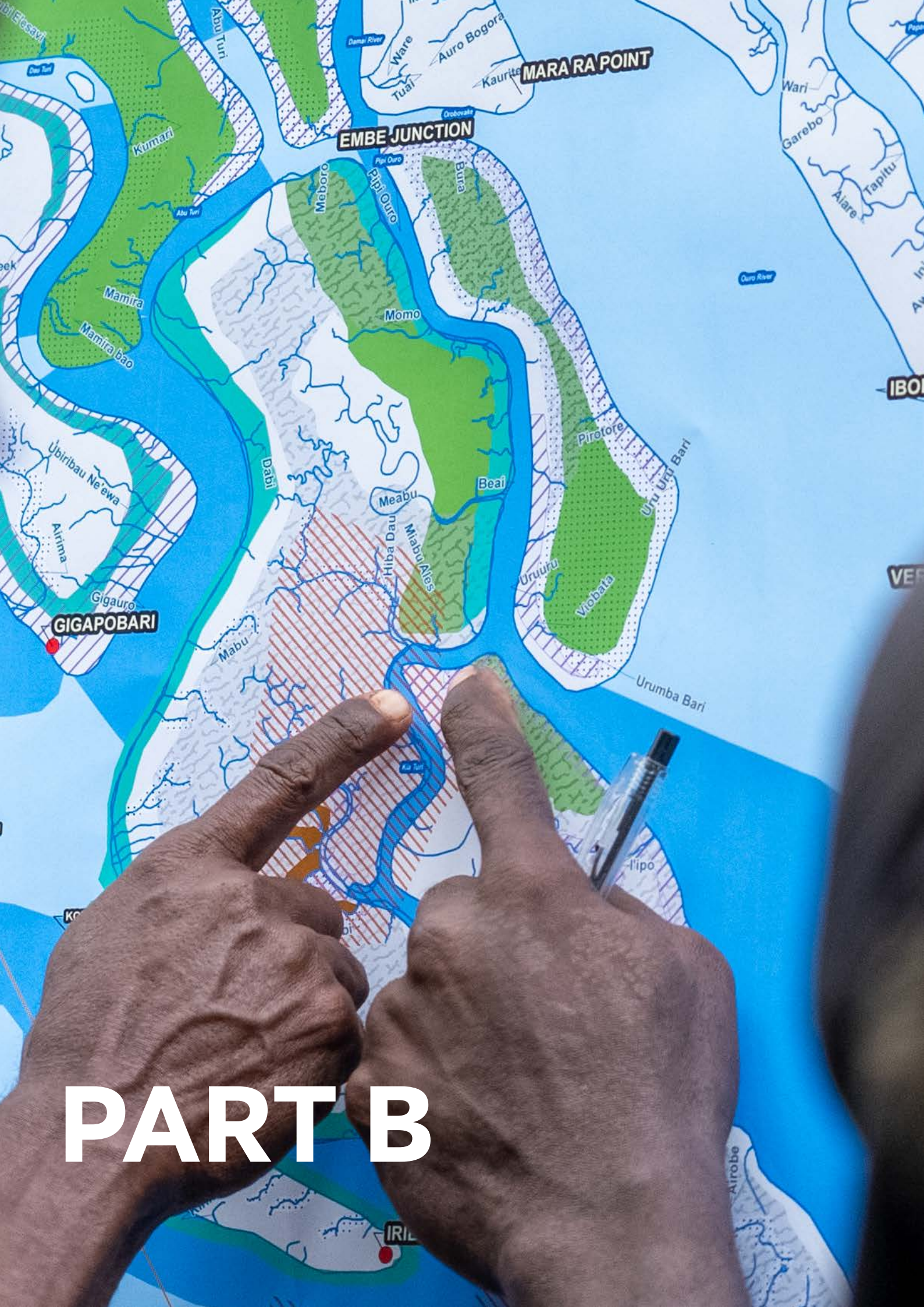
spent on infrastructure tax credit projects in 2024

300+ volunteers

spent over 720 hours in 2024 on volunteer activities

215 scholarships

awarded as part of the Business and Professional Women's Association PNG LNG In-Country Scholarships for Higher Education in Papua New Guinea during 2024 through a PGK3 million donation from EMPNG



PART B



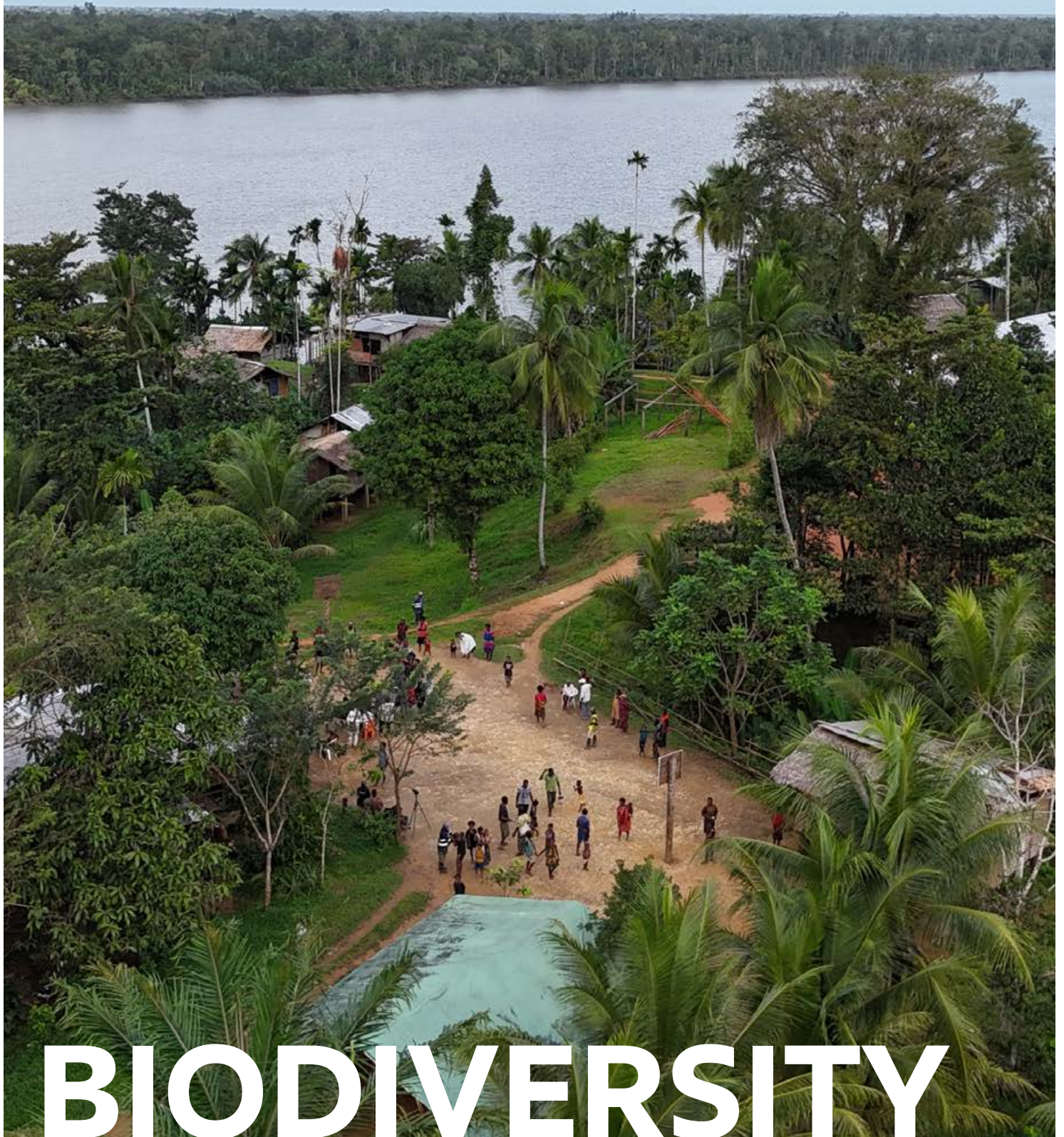
ENVIRONMENT

EMPNG's Biodiversity Strategy and Environmental Management Plans aim to preserve the unique biodiversity of Papua New Guinea and mitigate environmental impacts.

The Biodiversity Strategy outlines how potential impacts to biodiversity will be assessed and managed in the long term. It also describes how EMPNG will offset residual impacts associated with the PNG LNG footprint with equivalent biodiversity gains.

EMPNG's three Environmental Management Plans demonstrate the company's approach to managing air, noise, water and waste impacts, as well as its aim of preserving cultural heritage, managing invasive plant and pest species, controlling access to sensitive areas and reinstating native vegetation.

6



BIODIVERSITY

EMPNG works with relevant stakeholders to deliver commitments outlined in the Biodiversity Strategy with the aim of preserving the unique biodiversity values of Papua New Guinea.

The Biodiversity Strategy has two components: a Biodiversity Offset Program, and a Biodiversity Implementation and Monitoring Program. Four Programmed Monitoring Activities (PMAs) form part of the monitoring program to help verify the achievement of the strategy's objectives:

- PMA1 – Remote Sensing of Broad-scale Land Cover
- PMA2 – Condition Surveys of Focal Habitats and Significant Ecological Features
- PMA3 – Biodiversity Surveys
- PMA4 – Efficacy of Biodiversity Offsets.

6.1 Biodiversity Offset Program

EMPNG's Biodiversity Offset Program outlines how biodiversity activities are to be conducted. The Biodiversity Offset Program consists of five components as shown in Figure 6.1.

Components 1, 2 and 3 form the foundation of the program by recognising that consistent conservation outcomes can only be achieved through capacity building at national and regional levels. These foundation components are collectively called 'enabling activities'.

Built upon this foundation is enhancing the protection of existing conservation areas or establishing new protected areas, which is intended to achieve 'conservation outcomes on the ground' as outlined in Components 4 and 5 of the program.

Enabling activities

Component 1 enabling activities were completed in 2017 when the *Protected Area Planning for the Kikori River Basin* report, developed in collaboration with the Wildlife Conservation Society, was published.

Component 2 enables EMPNG's Biodiversity Offset Program to support the Papua New Guinean Government's National Biodiversity Strategy and Action Plan.

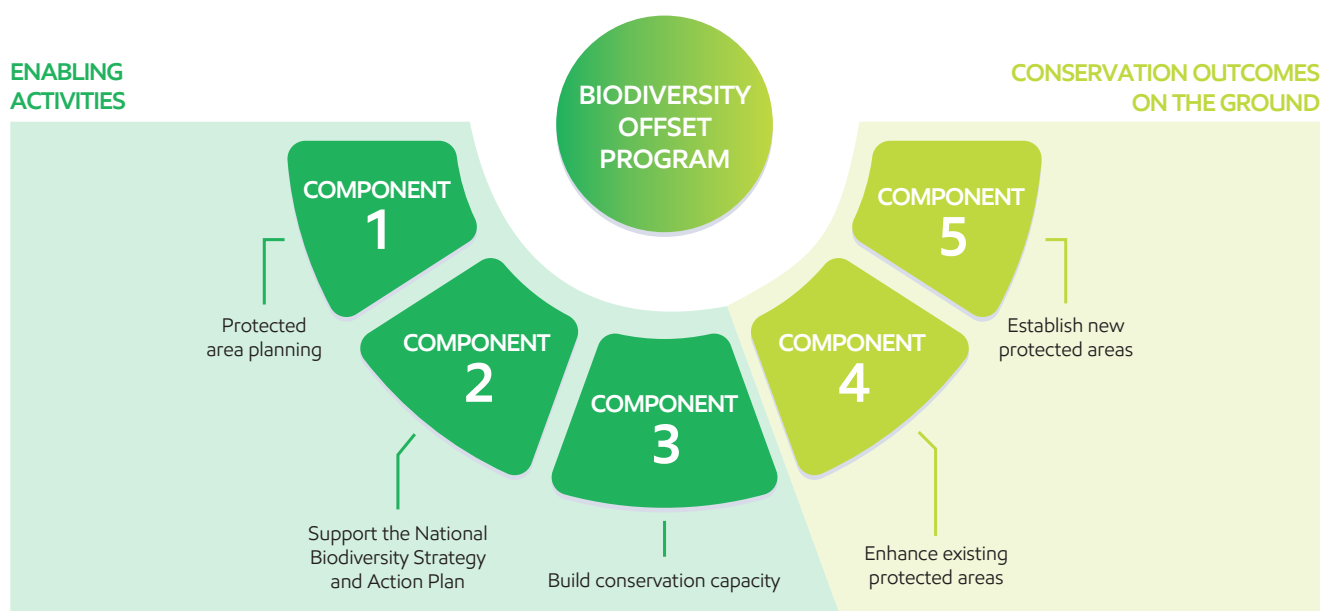
EMPNG continues to engage with stakeholders to confirm annual program activities are completed and align with objectives of the strategy and action plan. For example, under this component EMPNG facilitated a meeting with key stakeholders such as the World Heritage Secretariat representative in the Conservation and Environment Protection Authority (CEPA), World Wildlife Fund Incorporated, and the United Nations Educational, Scientific and Cultural Organization during 2024 to write a Terms of Reference to establish a World Heritage Committee, with the aim of identifying and establishing newly listed World Heritage sites in Papua New Guinea. The Terms of Reference will also support the establishment of a national board to deliberate on eight existing World Heritage sites, along with the new potential sites.



Participants of the EMPNG-facilitated meeting to write the Terms of Reference to establish a World Heritage Committee

To build the technical capacity of conservation professionals and enhance community conservation capacity, Component 3 involves working with the New Guinea Binatang Research Centre to deliver the Enhancing Conservation Capacity Program. It involves training students for their Master's and PhD degrees, as well as providing short training courses for biologists and community conservation practitioners.

Figure 6.1 – Biodiversity Offset Program components





Part of the Lake Kutubu WMA

In April, two Master's degree students who were supported through this program completed their studies at the Papua New Guinea University of Technology. One of these students, Shen Sui, is currently the Deputy Director of the New Guinea Binatang Research Centre. The other student, Samson Hege, is a lecturer at Pacific Adventist University. To learn more about how Samson has benefitted from Component 3 of the Biodiversity Offset Program, refer to [Case Study: Samson leads a new generation of conservation scientists](#). Another two PhD students progressed their studies at the University of South Bohemia in the Czech Republic during 2024 under the program.

The New Guinea Binatang Research Centre conducted a three-week ranger training course from October to November sponsored by EMPNG. Twenty Papua New Guinean community conservation practitioners participated in the course. Eleven of the participants were from Lower Kikori region communities that signed conservation deeds in 2023 to commit land for conservation.

Conservation outcomes on the ground

Under Component 4, EMPNG works with the Lake Kutubu Wildlife Management Area (WMA) Committee to enhance the management effectiveness of the Lake Kutubu WMA.

In 2024, the Lake Kutubu WMA Committee held its first stakeholder engagement meeting regarding development of the Lake Kutubu WMA Management Plan. Stakeholders who attended the two-day meeting included representatives from local-level, provincial and national government agencies, industry, and non-government organisations. A framework of the Lake Kutubu WMA Management Plan was discussed, with further engagements continuing to work toward finalising the plan.



Attendees at the first Lake Kutubu WMA Management Plan stakeholder workshop

The Lake Kutubu WMA has received a Biodiversity Climate Fund grant, which will be used to conduct training and capacity building for Lake Kutubu WMA Committee members. The Biodiversity Climate Fund is an independent conservation trust fund established to support biodiversity conservation and climate resilience in Papua New Guinea. Lake Kutubu WMA Committee Chair, Lawrence Kage, attended a two-day workshop through the fund on proposal writing for grant funding.

More than 1310 community members participated in engagement activities undertaken in June, July and November across the Lower Kikori. The June and July engagements were conducted by EMPNG and supported by CEPA and Gulf Provincial Administration representatives over a 15-day period with 12 communities.



Goare Island community members gathered following an engagement in June

During these engagements, four communities completed resource mapping, and 13 Management Effectiveness Tracking Tool assessments were conducted. These assessments set a baseline measurement to compare future management effectiveness.



Kerowo clans during a Management Effectiveness Tracking Tool assessment discussion at Goare Island

CEPA representatives were involved in reading and explaining the assessment questionnaire to community members to emphasise the importance of the tool. This Tool will help local communities monitor potential biodiversity risks and values over time and help improve the management of local resources.

November engagements involved eight communities and 13 conservation groups, including women and youth, to continue resource mapping and discuss the potential extension of the current Neiru WMA boundary to incorporate more land for conservation. EMPNG is facilitating conversations with CEPA and those communities that have shown interest in committing their land to conservation.

In the proposed Wau Creek conservation area, communities reviewed and verified with EMPNG the required documentation for final submission to CEPA to officially declare the area to be a Community Conservation Area under the new Protected Area Policy.

In addition, EMPNG continued biodiversity engagements throughout the year with nine montane area communities, of which the Warabia-Urunia and Pela-Talipe clans participated for the first time in 2024.

Engagement activities with Hides community members remain challenging due to ongoing tribal conflicts in the area, however, progress has been made with communities living southwest of the HGCP.

During 2024, EMPNG engaged with the Paraja and Warabia-Unaria clans of Andira Village, and the Honaga and Mugago clans of Para Village to discuss the importance of local biodiversity.



Wau Creek community members confirming boundary locations on a map on the banks of Rue Creek, which is within the proposed Wau Creek conservation area where the pig-nosed turtle (*Carettochelys insculpta*) or *piku* is known to nest



Honaga clansmen standing in front of their *hausman* or 'house for man' during biodiversity engagements in Hides

More than 500 people, including women and youth, actively participated in these engagements.



Community members preparing to verify boundaries of the proposed Wau Creek conservation area with EMPNG representatives



Montane forest on Gigira Ridge, which is often referred to as an island in the sky

EMPNG appointed two new biodiversity team members during 2024. Biatius Bito, who has been engaged as a Senior Biodiversity Advisor, brings more than 20 years of expertise doing conservation work in Papua New Guinea.



EMPNG Senior Biodiversity Advisor, Biatius Bito (top), and Biodiversity Advisor, Evangelista Apelis (bottom), interviewing community members at Goare Island for the Management Effectiveness Tracking Tool assessment

New Biodiversity Advisor, Evangelista Apelis, has strong marine conservation experience. Biatius and Evangelista will both focus their efforts in Kikori.

A new independent third-party environmental lawyer was also engaged to work with communities in Kikori to help ensure compliance with environment and conservation laws and to help protect community interests.

6.2 Biodiversity Implementation and Monitoring Program

Four PMAs are being implemented as part of the Biodiversity Implementation and Monitoring Program. They consist of:

- PMA1 – Remote Sensing of Broadscale Land Cover uses remote sensing imagery to identify broadscale changes to land cover because of natural or anthropogenic processes, including the direct and indirect residual impacts of PNG LNG.
- PMA2 – Condition Surveys of Focal Habitats and Significant Ecological Features. Field surveys are conducted to determine the condition of focal habitats and significant ecological features that were avoided during PNG LNG construction.
- PMA3 – Biodiversity Surveys involve documenting trends in flora and fauna species diversity and abundance to confirm the intactness of the Upstream area and retention of long-term biodiversity values.
- PMA4 – Efficacy of Biodiversity Offsets. The progress of each Biodiversity Offset Program component is monitored to confirm whether Objective 4 of the Biodiversity Strategy, to identify, measure and offset significant residual impacts, is being achieved.

PMA1 – Remote Sensing of Broadscale Land Cover

Remote sensing imagery is used to identify broadscale changes to land cover because of natural or anthropogenic processes, including direct and indirect residual impacts from PNG LNG. Ground-truthing supports verification of broadscale monitoring to help EMPNG determine if any changes are directly related to PNG LNG activities.

No broadscale changes were identified during 2024.

PMA2 – Condition Surveys of Focal Habitats and Significant Ecological Features

Twenty sites located close to PNG LNG infrastructure and the pipeline ROW are monitored to identify if there have been any changes to focal habitats or ecological features. Eighteen of these sites were monitored in 2024. Conditions of focal habitats remained intact and large overgrowth of vegetation is now preventing access to many of the monitoring sites.



Photo by S.J. Richards

Forest canopy at the summit of Gigira Ridge, which has been monitored during PMA3 surveys since 2015

PMA3 – Biodiversity Surveys

Biodiversity surveys provide information on trends in species diversity and abundance in the Upstream area to detect changes that may be associated with the development of PNG LNG infrastructure.

In 2024, field monitoring surveys encompassed frogs, non-volant mammals and volant mammals, including a rodent pathogen study. Monitoring methods used were consistent with previous years, except for plants where a team of botanists and plant survey specialists measured 18 standard 20- by 20-metre plots (nine near Moro and nine at Hides Ridge), and long-term bird recording that was established during the 2024 survey. Bird recording aims to monitor calls from 18 species of birds such as birds-of-paradise and range restricted birds located on Hides Ridge.

EMPNG continues to implement the largest camera trapping survey in Papua New Guinea, with 80 cameras deployed to monitor ground dwelling fauna including mammals, birds, reptiles, frogs, rodents and other species of fauna.

Visual and audio encounter surveys for frogs were not conducted during 2024 because of logistical and security challenges, however, the field team successfully deployed

bioacoustics recorders at 33 locations across 11 transects in biodiversity assessment areas.



Photo by S.J. Richards

One of the island of New Guinea's largest snakes, the Amethystine python (*Simalia amethystina*), encountered during the PMA3 survey on Iagifu Ridge near Moro, where it was digesting a recent meal, most likely a large bandicoot or small wallaby

HIGHLIGHT

NEW SPECIES DESCRIBED

A new species of treefrog, discovered during the 2017 biodiversity survey, was scientifically described in 2024.

Two specimens of the new species, named the Gigira Ridge treefrog (*Litoria skeliphros*), were found at a single site on Gigira Ridge, a limestone spur in the Hela Province.

Genetic data shows that the new species is closely related to the torrent-breeding frog species *Litoria angiana*. It is easily distinguished by its slender body and limbs, relatively long forelimbs, and mottled green and brown appearance.



Photo by S.J. Richards

Gigira Ridge treefrog (*Litoria skeliphros*), a species discovered at Gigira Ridge



Biodiversity team members set up a camera trap in the Upstream area

Since the commencement of PMA3 Biodiversity Surveys in 2015, more than 18,000 camera trap photographs, almost 24,000 sampling days and over 100 vertebrates have been documented.



A small insectivorous bat (*Nyctophilus* sp.) observed by the survey team on Gigira Ridge during the PMA3 survey

Survey results from the 2024 surveys will be published in 2025.

PMA4 – Efficacy of Biodiversity Offsets

All Biodiversity Offset Program components and monitoring activities are continually tracked against key performance indicators listed in the Biodiversity Implementation and Monitoring Program, which is published on the PNG LNG website.

www.pnglng.com

In 2024, EMPNG was tracking well against Biodiversity Implementation and Monitoring Program key performance indicators.

2024 PERFORMANCE HIGHLIGHTS

BIODIVERSITY

4 students

supported to complete Master's and PhD studies through a commitment to build the technical capacity of conservation professionals

1 new species

of treefrog formally recognised with a species description published in a peer-reviewed journal assigning it the scientific name of *Litoria skeliphros*

>1310 people

from 20 communities and 13 conservation groups participated in engagement activities across the Lower Kikori

5 components

in EMPNG's Biodiversity Offset Program – Components 1, 2 and 3 are collectively called 'enabling activities'; Components 4 and 5 are intended to achieve 'conservation outcomes on the ground'

CASE STUDY

SAMSON LEADS A NEW GENERATION OF CONSERVATION SCIENTISTS

One of the first recipients of an EMPNG biodiversity scholarship, Samson Hege from Eastern Highlands Province, graduated with a Master of Philosophy in Applied Chemistry degree from the Papua New Guinea University of Technology in April 2024. He is now teaching the next generation of Papua New Guinea scientists as a researcher and lecturer in organic chemistry at the Pacific Adventist University.

Samson is one of the first two Master's students to receive an EMPNG scholarship that aims to build the technical capacity of conservation professionals as part of Component 3 of EMPNG's Biodiversity Strategy. This component involves working with the New Guinea Binatang Research Centre to deliver the Enhancing Conservation Capacity Program through training students in courses such as Master's and PhD degrees.

Samson is now working toward his PhD degree in 'Chemical Engineering of Petrochemicals and Biomass for Sustainable Development' while lecturing at Pacific Adventist University. He said his interest in chemistry started in primary school when he became curious about the use of pesticides and insecticides to control pests.

His focus on chemistry led Samson to complete an undergraduate degree in Natural Science and a Bachelor of Science (BSc) with Honours before being accepted into the Master of Philosophy study program in Applied Chemistry. Samson's Master's studies included attending the University of South Bohemia in the Czech Republic in Central Europe.

"EMPNG enabled me to complete my Master's study program successfully. It was so supportive in terms of research, logistics, accommodation and stipends for both field research, which I conducted in the dense tropical rainforest of Madang Province, and laboratory work."

Samson said there were countless applications of chemistry to support conservation efforts in Papua New Guinea.



Scholarship recipient, Samson Hege undertaking research in the chemistry laboratory

"In relation to biodiversity in the region, chemistry has played an important role in ecology. Plant chemistry is one of the most important factors in biochemical and ecological research studies for biodiversity conservation."

"If we can understand plant chemistry and the layers of interaction between plants and animals in our environment, we can explain the environment around us with ease and make thoughtful decisions to conserve biodiversity."

Samson believes it is important to nurture the next generation of scientists now emerging in Papua New Guinea.

"The modernisation of a nation depends on research, science, technology and engineering. Papua New Guinea is a developing nation and needs more skilled technocrats, such as scientists and engineers, to contribute immensely to the development of science and technology."

"It is my aim to contribute to the development of science and technology in my home country. As a research chemist, I aspire to induce developmental changes through scientific research with interest, fairness and honesty."



Samson Hege graduating from his Master of Philosophy in Applied Chemistry degree at Papua New Guinea University of Technology



ENVIRONMENT MANAGEMENT

As part of its commitment to effective environmental management, EMPNG is focused on maintaining continuous improvement across all facilities.

7.1 Air

During 2024, air quality and greenhouse gas awareness sessions were provided to LNG Plant and HGCP workers. Optical gas imaging camera training was also conducted at these worksites.

EMPNG continues its plans to implement measures to mitigate flaring and greenhouse gas emissions intensity. In 2024, this included the installation of the low-pressure fuel gas compressor at the LNG Plant to reduce wet flare and the installation of energy efficient LED lighting at several Upstream facilities and the LNG Plant.

Across all worksites, PNG LNG facilities generated approximately 2040 kilotonnes of carbon dioxide equivalent emissions during the year. Most emissions were generated from gas turbine fuel consumption at the LNG Plant and HGCP. Hydrocarbon flaring volumes totalled approximately 726 million standard cubic feet for the year.

Gross flaring volumes and total greenhouse gas emissions were higher in 2024 than the previous year. This was primarily due to an unplanned Train 1 trip in January and Train 1 liquification trip in October, and subsequent re-start activities at the LNG Plant.



The EMPNG team who installed new energy efficient lighting to help reduce emissions at the LNG Plant and HGCP

7.2 Noise

EMPNG recorded zero noise-related incidents or near misses at PNG LNG facilities in 2024.

As required by EMPNG's Environmental Management Plans, biannual noise monitoring continued in the Upstream area and LNG Plant site during both daylight and evening hours. All monitoring events showed noise levels had remained within Environment Permit criteria.

7.3 Water

The volume of water extracted from groundwater, seawater, and surface streams for EMPNG operations is monitored to confirm it remains within permitted extraction limits.

HIGHLIGHT

ROBERTHA APPOINTED AS SENIOR AIR AND GREENHOUSE GAS ADVISOR

Robertha Leo from Port Moresby was appointed as Senior Air and Greenhouse Gas Advisor for EMPNG in April, in recognition of her extensive experience both within Papua New Guinea and across Asia Pacific.

Robertha completed a Bachelor of Business and Environmental Science degree at James Cook University, Singapore campus. She started her career as a community engagement officer with Solar Solutions PNG Limited in 2018 before joining EMPNG as an Environmental Advisor in 2019. During her university studies and early career, Robertha lived and worked in six Asia Pacific countries including Papua New Guinea, Singapore, Fiji and Australia. In 2024, she was assigned to her current role, which involves ensuring timely and accurate reporting of air, greenhouse gas and noise emissions data, and working with teams to reduce emissions across all worksites.

Robertha said she enjoyed working with EMPNG because it brought together people from diverse backgrounds who were excellent at their roles.

"The opportunity to interact with this team and learn about different disciplines on a daily basis is rewarding. EMPNG inspired me to specialise in the field of air and greenhouse gas management in Papua New Guinea.

"The discipline of managing air and greenhouse gas emissions is a fast-evolving area globally. It's fulfilling when I see how my role addresses global and corporate targets.

"I have a lot more to learn and am grateful for the opportunity to hone my skill set under great mentors at EMPNG and in the wider ExxonMobil community."

Robertha said great strides had been made in environmental services with EMPNG's focus on national content in areas such as waste management and she looked forward to seeing further participation of Papua New Guinean citizens in environmental management.



EMPNG Senior Air and Greenhouse Gas Advisor, Robertha Leo

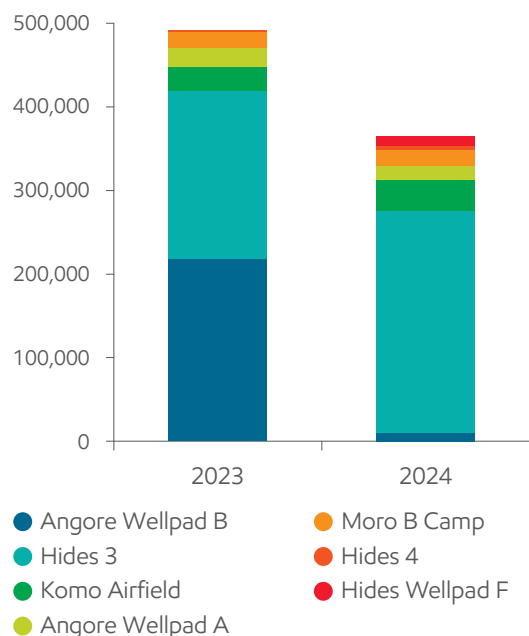
Discharges to water, surface water quality, and groundwater quality are also monitored to verify conformance with relevant Environmental Management Plan and Environment Permit criteria.

7.3.1 Consumption

EMPNG primarily uses water for operations, drilling, worker camps, maintenance activities, dust suppression, safety showers and firewater systems. In the Upstream area, freshwater from approved groundwater sources and a permitted volume of surface water are extracted for production activities. Freshwater volumes taken from each Upstream area groundwater extraction source in 2024 are shown in Figure 7.1. Desalinated water is used for operations at the LNG Plant.

Figure 7.1 – Groundwater extraction

VOLUME (KILOLITRES) BY EXTRACTION SOURCE (WATERBORE)



More than 364,900 kilolitres of groundwater was extracted for use in the Upstream area during the year. This compares to 491,409 kilolitres extracted in 2023. The decrease was primarily due to the demobilisation of worker camps in Angore. Water extraction in Hides increased compared to 2023 because of increased personnel at the HGCP Camp to support Angore demobilisation works, as well as re-filling of the HGCP firewater tank.

In July, groundwater extraction began to support the Hides Wellpad F Camp, with 10,850 kilolitres of water used for the camp by the end of the year. Groundwater extraction for Moro B Camp operations remained consistent with the previous year. A leak in a water pipe at Komo Airfield that occurred between October and November was detected and fixed in November. As a result, groundwater extraction for Komo Airfield was higher in 2024 than in 2023. Approximately 370 kilolitres of water was extracted from surface streams for pipeline works during 2024, which decreased from almost 1900 kilolitres extracted in 2023 mainly due to the reduction of drilling activities at Angore.

The LNG Plant site extracted around 439,270 kilolitres of seawater for the desalination plant in 2024. Extracted seawater was used to generate almost 69,000 kilolitres of treated water for production use.

7.3.2 Monitoring

Regular monitoring and testing are conducted on wastewater retention systems and treatment units to maintain optimal operational performance and identify if corrective adjustments are required. In situations where variations or exceedances are detected, non-conformances are raised to track identified issues through to resolution.

Four low-level water quality-related non-conformances, classified as Severity Level I, were recorded during 2024. One of the non-conformances was an exceedance of total suspended solids at the LNG Plant wastewater treatment plant due to excess solids build-up from clogged filters. Immediate corrective actions were taken to replace the filters and increase the frequency of cleaning.

Another non-conformance was an ammonia-nitrogen exceedance recorded at the HGCP wastewater treatment plant caused by a clogged sludge pump that delayed the removal of concentrated sludge. Immediate corrective actions were taken to clean the pump and return it to operation. For both non-conformances, subsequent monitoring showed that the wastewater was within the discharge limit and complied with Environment Permit criteria.



LNG Plant Field Environment Specialist, Firman Aiyale, undertaking water sampling at the LNG Plant site mixing pit

The remaining two non-conformances were recorded at the new Hides Wellpad F wastewater treatment plant for exceedances of ammonia-nitrogen in October and December when the sludge dewatering plant was offline for maintenance, requiring a manual sludge removal process until the plant's reinstatement.

Groundwater monitoring is conducted by EMPNG every six months. Results of monitoring conducted at the LNG Plant in 2024 showed that groundwater quality either remained within Environment Permit criteria or reflected naturally occurring fluctuations. All other groundwater wells within the LNG Plant site and around the landfill area were within Environment Permit criteria.

Monitoring of groundwater at the HGCP showed that results were within Environment Permit criteria and reflective of background levels. At the Hides Waste Management Facility in Kopeanda, groundwater monitoring results either remained within Environment Permit criteria or reflected naturally occurring fluctuations.



Field Environmental Advisors, Vincent So-on and Murithi Sari, conduct groundwater monitoring at the LNG Plant

7.4 Materials management

To support responsible resource use, sourcing of raw materials for production-related work scopes is regularly reviewed.

In 2024, EMPNG purchased and used some 80,510 cubic metres of aggregate, 440 cubic metres of road base, 268 cubic metres of rock and 232 cubic metres of sand for production-related activities. These volumes represent an overall decrease of approximately 50 percent in the use of raw materials compared to 2023 primarily due to the completion of reinstatement works along the pipeline ROW for the Angore Project.

Raw materials used in the Upstream area for Angore, ongoing earthquake recovery works, pipeline activities, road pavement repairs and drainage improvements are sourced from approved Lanco-operated quarries operating under their own environment permits.

7.5 Waste management

In 2024, EMPNG remained committed to continuously improving long-term waste management solutions across all worksites. This commitment was reflected in a range of activities to review and improve methods for waste management practices, promote reduction, recycling and reuse, and engage employees and local communities in waste awareness campaigns.

At the LNG Plant site, EMPNG Fuel and Waste Management Coordinators, in collaboration with waste management contractor TWM PNG Limited (TWM), conducted waste awareness campaigns with onsite work teams. The focus was on segregation of various waste streams and proper waste disposal practices.

In the Upstream area, the EMPNG Biodiversity Advisor led training sessions with the Drilling, Security, and Camps and Catering teams at their work locations. These sessions focused on the waste management hierarchy, including avoiding and reducing waste, treatment methods, and proper disposal practices. A total of 150 personnel, including supervisors and coordinators, attended the training.

Several site clean-up activities were conducted in Hides and Angore during the year and involved multiple EMPNG teams, as well as third-party contractors.



Workers conduct a clean-up of the ROW and worksite at Kilometre Point 86

Across all worksites, good progress was made in 2024 to reduce the amount of non-restricted operational waste sent to landfill. There was more than a 40 percent reduction in the amount of non-restricted waste sent to landfill from 10,002 tonnes in 2023 to 5894 tonnes of non-restricted in 2024, primarily due to the scaling down of drilling activities at Angore and through recycling with third-party facilities and, where possible, implementing reuse initiatives.

At the LNG Plant site, some 214 tonnes of non-restricted waste was recycled and reused during the year. This included 153 tonnes of scrap metal, of which 6 tonnes were empty metal drums sent to third-party contractor Atlas Steel PNG Limited for fabrication into rubbish bins. The remaining scrap metal was sent to appropriately qualified Papua New Guinean businesses for recycling. More than 24 tonnes of empty plastic bottles were returned to the supplier. Around 36 tonnes of wood waste was reused at EMPNG worksites, with more than 23 tonnes of wood returned to the freight company for reuse. More than 14 tonnes of e-waste and approximately 50 tonnes of amine waste from the LNG Plant were exported during the year to appropriately qualified overseas waste facilities for recycling and treatment.

At the Hides Waste Management Facility, 67 tonnes of construction and demolition materials were reused instead of being sent to landfill. In March, the first 16 tonnes of used oil from the HGCP was transferred to Carbon Recycling PNG in Lae for recycling following an assessment of this facility in 2023. By the end of 2024, 31 tonnes of used oil was recycled, with the transfer of the oil from the HGCP to the waste facility conducted in compliance with a new CEPA process for the management and movement of hazardous waste oils and sludges.

Additionally, 1 tonne of used printer toner cartridges from the HGCP was returned to the supplier in Port Moresby for recycling, and more than 1 tonne of empty chemical containers were returned to the supplier in Port Moresby for reuse. More than 1 tonne of expired activated carbon from the LNG Plant site was sent to TWM's Roku facility to be reused to treat flue gases and remove pollutants from the facility's incinerator.

In addition, 10 tonnes of scrap metal from the Upstream area was sent to appropriately qualified Papua New Guinean businesses for recycling in 2024.

Waste scaling removed from the HGCP monoethylene glycol regeneration plant was tested, and the presence of Natural Occurring Radioactive Material was confirmed for less than 1 cubic metre of the waste. EMPNG is actively working to help ensure proper handling, storage, and disposal of this restricted waste is in compliance with regulatory requirements and International Atomic Energy Agency guidelines.

Wastewater from equipment washdown at the HGCP is treated through a carbon filtration unit and secondary treatment via the Hides Waste Management Facility vetiver grass reed bed system. Approximately 18 tonnes of wash water was treated using this process in 2024.

The medical waste incinerator at the Hides Waste Management Facility was not operational during the year due to a mechanical issue, so waste has been safely stored until replacement parts arrive and the incinerator can be repaired. TWM's Roku facility received approximately 83 tonnes of food waste and 1 tonne of medical waste from the LNG Plant, and more than 12 tonnes of food waste from ExxonMobil Haus, for incineration in 2024.

Approximately 5340 tonnes of non-restricted waste was sent to the Hides Waste Management Facility landfill for disposal during 2024 compared to some 9750 tonnes in 2023. The decrease was due to a reduction in drill cutting waste following completion of drilling operations at Angore. Approximately 1770 tonnes of drill cuttings were sent to landfill with some used as a substitute for soil as day cover material. Another 332 tonnes of spent molecular sieve from the LNG Plant was used as a cover for Landfill Cell C, with only 250 kilograms of soil extracted to cover the landfill. Landfill Cell C was used to dispose 516 tonnes of non-restricted waste from the LNG Plant and 2 tonnes of waste from other projects at the site. This landfill was also used to dispose 33 tonnes of non-restricted waste from ExxonMobil Haus and almost 1 tonne of non-restricted waste collected from local villages following World Environment Day clean-up activities.

EMPNG received approximately 296 tonnes of waste from Santos Limited worksites in the Upstream area during the year, and 506 tonnes of waste from EMPNG's Moro facilities was received and treated by Santos Limited as part of a reciprocal waste services agreement. Of the 506 tonnes, approximately 434 tonnes was food waste that was incinerated at the Santos Limited Iagifu Ridge site, with 11 tonnes of ash from the incinerated food waste returned to EMPNG for landfill.

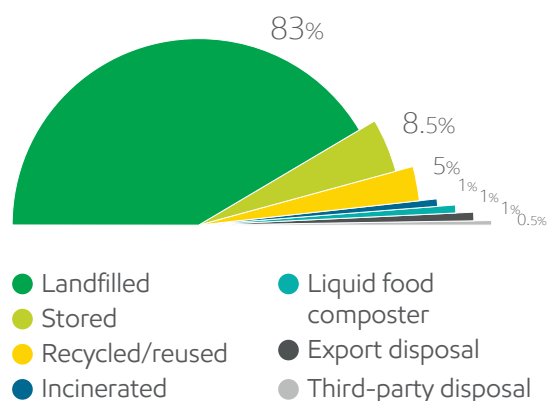
Almost 1 tonne of non-restricted waste from Papua New Guinean Government facilities, including police barracks at the HGCP site and Hides Wellpad C, was received and sent to landfill at the Hides Waste Management Facility.

Liquid food composters are used to process HGCP and LNG Plant food waste. These fully enclosed automatic commercial bio-digesters compost solid and liquid food waste within 24 hours and turn it into greywater that can be safely released into the wastewater system for further treatment and disposal. In 2024, the HGCP liquid food composter processed approximately 27 tonnes of food waste, and the LNG Plant composter processed 65 tonnes.

Disposal methods for non-restricted waste generated during the year are shown in Figure 7.2.

Figure 7.2 – Waste disposal

PERCENTAGE BY DISPOSAL METHOD



7.6 Spill prevention and response

EMPNG and its contractors have procedures and processes in place so that, if a spill occurs, a rapid and appropriate response is taken to minimise potential environmental impacts.

Spills are monitored and recorded across all worksites to reduce the risk of a significant spill event. Near misses are also monitored. These are incidents where chemicals or hydrocarbons are released from primary containment such as a pipe or tank that is intended to store them but are fully contained in secondary containment or on an impermeable surface, so the substances do not penetrate the ground or reach water.

In 2024, 41 Severity Level <0 spill incidents were recorded during the year. These consisted of one wastewater spill, 39 hydrocarbon spills and one spill of a solution used in drilling operations. The wastewater spill involved a release of approximately 10 litres from a crack in the underground sewage line at the LNG Plant Camp lift station.

Eight of the hydrocarbon spills involved 1 to 5 litres of biodegradable hydraulic fluid and were due to factors such as a burst hose from a skid steer, a main fan line leak, a pipe layer machine hose rupture and other hydraulic hose line leaks. Two hydrocarbon spills of 2 litres each involved spills of non-biodegradable hydraulic fluid from a leaking park break line and an unsecured container.

At Kilometre Point 76 along the onshore pipeline ROW, a damaged hydraulic hose resulted in a 10-litre spill of biodegradable hydraulic fluid to ground. Drip trays and absorbent pads were used to clean-up spills and contaminated soil was collected and disposed appropriately. The remaining 28 hydrocarbon spills were less than 1 litre.

The spill of a solution used in drilling operations occurred at the Hides Waste Management Facility in Kopeanda when some 80 litres was spilled during a theft incident. This solution is a multipurpose, solids-free packer fluid additive containing a corrosion inhibitor, bactericide, and oxygen scavenger used in drilling activities. The spill to ground was rectified by using absorbent pads and collecting and disposing of the contaminated soil appropriately.

All Severity Level <0 spills were contained within worksite boundaries and all Environment Permit freshwater discharge criteria were met during surface water monitoring at the receiving environment.

A Severity Level 1 incident occurred when diesel fuel leaked from an underground pipe at the Hides diesel fuel farm heavy vehicle refuelling bay and seeped into the soil over time. A clean-up was conducted including recovery of impacted soil, repairing the broken pipe and implementing sedimentation controls.

In addition, there were 13 near misses recorded in 2024. EMPNG and its contractors continue to hold regular spill prevention toolbox talks with the aim of preventing spills and near-misses and to share lessons learned.

Workforce training is also conducted on the types of spill response equipment and the appropriate application of each type of equipment on land or water. This gives workers the necessary skills to reduce the incidence of spills and respond appropriately if a spill occurs.

The training, which involves response strategies, methods and practical exercises, is provided to emergency response workers, engineers, operations and maintenance, safety, and environment teams.

7.7 Reinstatement, erosion and sediment control

Six earthquake recovery projects and the completion of reinstatement works on the Angore pipeline ROW were the focus of EMPNG's reinstatement activities in 2024. Four of the earthquake recovery projects, the Angore pipeline reinstatement, and emergency remediation after a natural landslide that occurred at Kilometre Point 98.5 were all completed during the year. Recovery and reinstatement works included a combination of micropiling, grouting and berm constructions to manage water runoff and stabilise slopes, in addition to general maintenance and topsoil piling.

Jute mats were used to reduce topsoil erosion and allow for natural revegetation and restoration of disturbed sites. Sediment control measures such as silt fence installations, drainage diversions to reduce silt formation, and coir logs to prevent silt draining into waterways were also used.

French drains were installed where there was a requirement to drain water accumulation to maintain the structural integrity of the pipeline and prevent water-related issues such as soil erosion or pipe corrosion.

While most reinstatement, erosion and sediment control projects were conducted on land, two projects involved crossing the Mandali and Adju rivers. These works required river channelling, micropiling and riprap installation to stabilise riverbanks, as well as the installation of concrete block armouring across both rivers.



As part of earthquake recovery works, after the installation of primary and anchor micropiles, tie-rods are installed to hold the micropiles together so they can protect the pipeline during unforeseen earth movement. Topsoil from the site is then reinstated and berms are constructed to control surface water run-off. Finally, jute mats are used to prevent soil erosion during heavy rainfall and to support natural revegetation



Progressive works on erosion, sediment control and reinstatement at the Mandali River crossing

7.8 Ecology

A number of ecological sensitivities were identified in pre-construction surveys conducted during the PNG LNG construction phase. To avoid and otherwise mitigate identified impacts, site-specific mitigation and management measures were implemented. These included regular inspections to monitor the condition of sensitive ecological features and determine the significance of any changes.

In the production phase, EMPNG has strict workplace rules and procedures in place. For example, workers are prohibited from disturbing or harassing wildlife and migratory species habitats, hunting fauna, possessing hunting and fishing equipment, gathering firewood and plants or bush foods, and possessing wildlife products.

EMPNG's wildlife management policy and Environment Permit conditions that prohibit hunting, and the collection of flora or fauna are also reinforced through worker education.

During 2024, reptile monitoring at the LNG Plant site recorded sightings of 204 snakes. Of these, 171 were caught and safely relocated, consisting of 20 highly venomous snakes, 61 mildly venomous snakes and 88 non-venomous snakes. The remainder were unable to be identified.

7.9 Invasive species, pests and plant pathogens

Preserving the intactness of biodiversity in the Upstream area involves limiting the spread of invasive species.

In accordance with the Environmental Management Plan for invasive species, pests and plant pathogens, EMPNG monitors and controls invasive weeds and cane toads. EMPNG's invasive species management program continues to provide training and job opportunities for community members involved in the monitoring and control of invasive species.

In 2024, logistics teams involved in the movement of the drilling rig from Angore to Hides completed invasive species training. A card system was also established so that only clean and inspected materials were allowed to move to Hides. Trucks were inspected and cane toad inspection forms were completed at Angore.



Completion of Angore pipeline ROW reinstatement

After inspection, pink cards were issued and then shown to security before the vehicles entered a fenced quarantine zone just outside the washdown area at Hides Ridge. A second inspection was conducted and a green card issued to the driver to access Hides Ridge. Security personnel were trained to help ensure this process was effective.

Results of the 2024 annual invasive weed monitoring survey confirmed that *Piper aduncum* was still the main invasive weed species of concern in the Upstream area, while *Ludwigia leptocarpa* and *Mikania micrantha* were most common in the lowlands and foothills. These invasive plants occur more along the pipeline ROW and edges of the forest and have not encroached on the primary forest.

Monthly inspections by the EMPNG Environment and Biodiversity Field Specialists have identified areas where Priority 1 weeds such as *Piper aduncum* and *Desmodium sequax* proliferate. The Vector Control contractor is regularly engaged to control these Priority 1 weeds to prevent them from entering primary forest.

7.10 Regeneration monitoring

An analysis of the 2023 biennial regeneration survey was completed in 2024 and showed that ecological succession was gaining momentum, and regeneration, especially of mid-elevation plots, was on track.



Botany team member, Samuel Japi from the New Guinea Binatang Research Centre measures the diameter of a tree stem during field surveys



The New Guinea Binatang Research Centre Regeneration Survey team monitors a regeneration plot located near Gobe



New Guinea Binatang Research Centre Entomology team member, George Dahl, collects insect samples in primary forest using sweep nets

The biennial survey takes between six and eight weeks to complete and is conducted by Papua New Guinean scientists and research technicians, along with EMPNG Biodiversity team members. A group of nine botanists and five entomologists were involved in collecting and analysing the survey results during 2024.

Regeneration of mangroves located on the pipeline ROW at the LNG Plant site has progressed significantly since concrete blocks were installed in 2020 to prevent vehicular access to, and harvesting of, the mangroves. EMPNG continues to educate communities about the importance of mangroves to the local ecosystem. Workers and communities at all EMPNG worksites also receive vegetation

management awareness training during community engagements and worksite inductions.

Apart from the common mangrove (*Avicennia marina*), two more mangrove species, *Rhizophora stylosa* and *Lumnitzera racemosa*, were observed fruiting in 2024.



Red-fingered marsh crabs (*Parasesarma erythodactylum*) and giant mangrove whelks (*Terebralia palustris*) around common mangrove (*Avicennia marina*) pneumatophores, or breathing roots

More intertidal crustacean species of red-fingered marsh crabs (*Parasesarma erythodactylum*), barnacles, giant mangrove whelks (*Terebralia palustris*) and shellfish were also observed. The presence of more fauna on the pipeline ROW is a positive sign that the regenerated mangrove area is recovering and becoming a healthier and more resilient ecosystem.

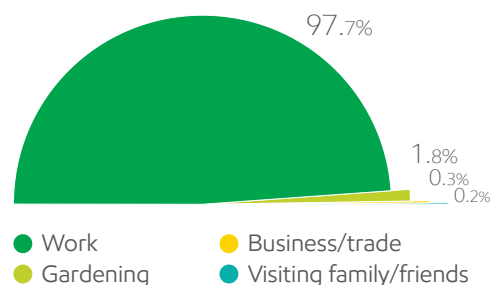
7.11 Access control

EMPNG collects data at manned security checkpoints to monitor the movement of vehicles that use EMPNG-controlled roads. Information is also collected on reasons for road usage.

During 2024, most vehicles accessed EMPNG roads for work purposes as shown in Figure 7.3.

Figure 7.3 – Purpose of access

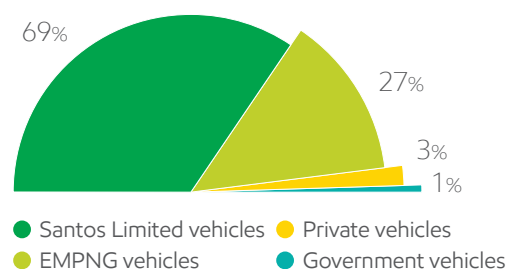
PERCENTAGE OF TRAFFIC USING EMPNG-CONTROLLED ROADS BY PURPOSE



Santos Limited, EMPNG and third-party contractors working within the region were the primary users of access roads, as illustrated in Figure 7.4.

Figure 7.4 – Vehicle types

PERCENTAGE USING EMPNG ACCESS POINTS



Visual inspections on unmanned access control sites (boom gates) during 2024 showed that gates in areas of high biodiversity value such as Homa-Benaria Ridge and Hides Ridge were maintained and locked in accordance with Environmental Management Plan requirements.

7.12 Quarantine management

EMPNG and its contractors comply with National Agriculture Quarantine and Inspection Authority standards for all freight that is imported into Papua New Guinea. In 2024, a total of 1384 shipments were received, compared to 1528 shipments in 2023. This decrease is due to major maintenance activities conducted during 2023, necessitating more material imports that year. Of the shipments received in 2024, 37 were inspected, and 10 required re-fumigation to meet the Authority's standards. Vendors handled the re-fumigations at the place of origin.

Since production began, 19,675 shipments have been received with 6359 inspected by the National Agriculture Quarantine and Inspection Authority, and 896 requiring re-fumigation. In 2024, there was a slight decrease in re-fumigation, however, the overall trend since the start of production shows a downward trajectory in the number of shipments requiring re-fumigation.

7.13 Cultural heritage

Cultural heritage considerations are integral to how EMPNG conducts its business and are incorporated in engagements with communities and the workforce.

The valuable cultural identity, oral histories and traditional knowledge of Papua New Guinea are maintained through relationships with, and the use of, land and natural resources.



Honaga clansmen, Tom Kupiawi and Lai Mokola, showcasing their headdresses outside their *hausman* or 'house for man' during community conservation engagements

Cultural heritage is often expressed through waterholes, trees, caves, and many other environmental and habitat features that are intertwined with biodiversity.

In 2024, cultural heritage assessments were completed for additional workspaces and laydown areas required for earthquake recovery works in the Upstream area. During excavations, an archaeologist was onsite full time to implement EMPNG's Chance Finds Protocol. Ten chance finds were discovered during the recovery works and consisted of waisted tang blades, a polished stone axe and fossilised shell. These chance finds will be given to the Papua New Guinea National Museum and Art Gallery.

During community conservation engagements, the EMPNG Biodiversity team shared images taken during biodiversity surveys to document the connection that Hides Ridge communities have with the forest. One community, the Honaga clansmen, have a formal cultural group registered with the Investment Promotion Authority and actively showcase their culture at community events.

By making EMPNG's biodiversity survey data and images available to local communities, they can link a photo to totems, plants and animals of significance to their cultural heritage, which helps encourage the sharing of oral histories for future generations.

2024 PERFORMANCE HIGHLIGHTS

ENVIRONMENT MANAGEMENT

439,270 kilolitres

of seawater was extracted in the year, which was used to generate almost 69,000 kilolitres of treated water

364,900 kilolitres

of groundwater was extracted for use in the Upstream area

1384 shipments

were received in 2024 with 37 of the shipments received inspected and 10 requiring re-fumigation

4 non-conformances

of Severity Level I recorded in 2024. No Severity Level II or III non-conformances were recorded

41 incidents

of Severity Level <0 and one Severity Level 1 incident were recorded in 2024

13 near misses

recorded during 2024

Environmental incidents: are classified by Severity Levels of <0, 0, 1, 2, or 3. Severity Level <0 has no significant impact, while Severity Level 2 or 3 require notification to the Lender Group's IESC, or relevant government authority.

Environmental non-conformances: are situations that do not meet ESMP requirements and are classified according to three Severity Levels. Severity Level I involves no damage or reasonable expectation of damage progressing through to Severity Level III, typically including observed significant damage or a reasonable expectation of significant damage.



PART C



SOCIAL

EMPNG supports active engagement on initiatives that aim to return the value derived from LNG production back to local communities.

The well-being of workers and communities in and around production facilities is maintained through the implementation of Social Management Plans that encompass health, safety, security, emergency preparedness, labour and working conditions, land access, resettlement and livelihood restoration.

8



WORKER WELFARE

Through procedures that promote the safety, health and wellbeing of workers, and fair and equitable labour practices, EMPNG actively encourages a safe and healthy workplace.

8.1 Safety

In 2024, EMPNG achieved its safest year since production began with zero Lost Time Incidents, and zero Tier 1 or Tier 2 process safety events. Hides Alliance Group Limited also celebrated 10 years without a Lost Time Injury and the HGCP Ground Transport team reached two years without a motor vehicle accident while driving in challenging terrain in the Upstream area.

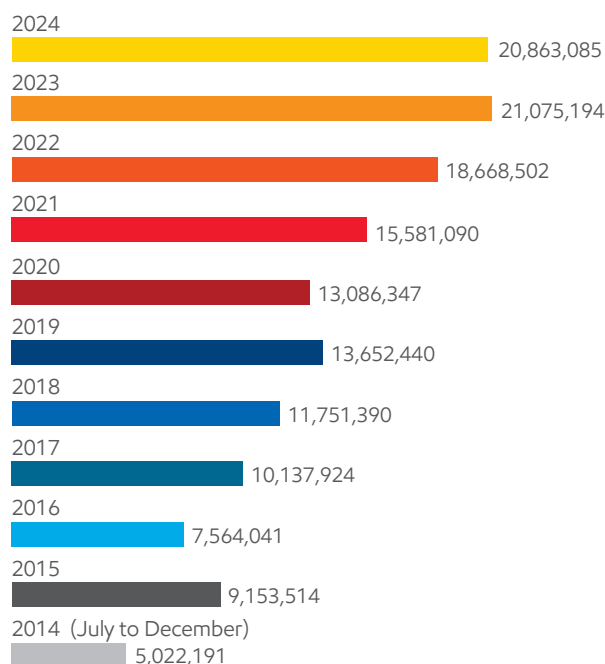


Hides Alliance Group Limited celebrates 10 years of work without a Lost Time Injury

More than 146 million hours have been worked since the start of production as shown in Figure 8.1. Of these, 20.8 million hours were worked in 2024.

Figure 8.1 – Production work hours

NUMBER REPORTED BY PERIOD FOR THE TOTAL PNG LNG WORKFORCE



During the year, EMPNG commenced implementation ExxonMobil's new corporate Personnel Safety Management System, which is based on OIMS combined with behavioural science, best industry practices and EMPNG's own field experience to create a new safety standard. The System involves a framework where the leadership team drives organisational changes through specific behaviours by role to deliver safe performance and desired results across every task, every day. The System Framework is comprised of Leadership, Contractor Engagement, Safety in the Moment, Safety Capacity, and streamlined activities for non-life altering injury work supporting 'Nobody Get Hurt' as shown in Figure 8.2.



Figure 8.2 – ExxonMobil's Personnel Safety Management System Framework

Under this model, safety is not just the absence of incidents but also the strength of safeguards combined with leadership effectiveness. EMPNG has introduced the system as part of its focus on eliminating fatalities and life altering injuries while delivering industry-leading safety performance. Worksites also continue to reinforce key safety focus areas of: 'Do It Right, Every Time', 'Focus Despite Distractions', and 'I've Got Your Back'.

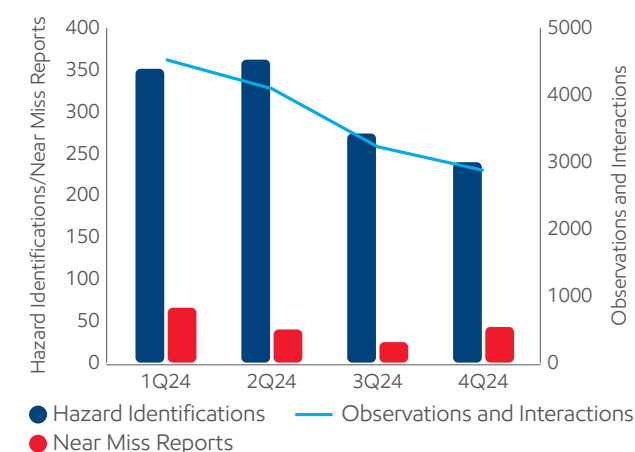
Core safety programs and processes

OIMS is used to define EMPNG's core safety programs and processes. Leading and lagging indicators determine the health of safety systems. Leading indicators such as Observations and Interactions, Near Miss Reports, and Hazard Identifications are used to measure the effectiveness of EMPNG's safety programs.

As shown in Figure 8.3, there was a slight decrease in the performance of leading safety indicators with a yearly total of 16,180 'Nobody Gets Hurt' cards submitted, including 14,767 Observations and Interactions and 182 Near Miss Reports. The number of Hazard Identifications also declined, with 1231 identifications submitted in 2024 compared to 1722 in 2023. This decrease was attributed to demobilisation of the Angore Camp.

Figure 8.3 – Core safety processes

NUMBER REPORTED BY QUARTER



Lagging indicators record actual incidents, consequences and overall safety performance. These include the Lost Time Incident Rate, Total Recordable Incident Rate and the number of Tier 1 and Tier 2 process safety events as defined by IPIECA, the global oil and gas industry association.

In 2024, EMPNG recorded a Lost Time Incident Rate of 0.00, which was an improvement from 0.009 recorded in 2023. The Total Recordable Incident Rate remained the same as 2023 at 0.03.

Safety initiatives

EMPNG's leadership team and workforce had a sharpened focus on the highest risks and managing critical safeguards during the year. The application of safety tools and systems to identify risks and capture lessons learned also matured.

In 2024, 12 EMPNG workers were trained as trainers and coaches to roll-out the new Personnel Safety Management System to the broader workforce. By the end of the year, almost 120 supervisors were trained in the system and almost 150 leadership team members were provided with leadership reset training. Roll-out of the Personnel Safety Management System will be completed early 2025.



EMPNG supervisors undertake training of the new Personnel Safety Management System

The Short Service Worker program is provided to every new field-based worker. As part of safety onboarding, new hires wear a green construction hat and then graduate to a white construction hat once they have achieved six months of field experience. In 2024, a total 44 new hires from the LNG Plant site and 12 new hires in the Upstream area completed the program.

Seventy-six Upstream area workers and 53 LNG Plant workers were recognised as Safety and Fair Play Champions in 2024. This program encourages and rewards demonstrated safe behaviours to help build a safety culture across all worksites.

Operations Technicians Linnah Lovare and Michael Nauot were recognised for excellence in work management during the year for detecting a malfunctioning barring gear assembly at the LNG Plant. Their early detection of the issue, while conducting scheduled monitoring, prevented further damage to the compressor due to rapid communication with the Control Room team who were able to quickly start the shut-down sequence.

8.2 Health

EMPNG provides high quality medical, public health, and industrial hygiene programs to maintain the health and wellbeing of workers across all worksites.

During 2024, health activities focused on continued implementation of the Culture of Health program.

Medical

More than 11,060 patient consultations were conducted at camp clinics during the year. Of these, some 6920 were in the Upstream area and over 4140 consultations were at LNG Plant site clinics.

A total 739 tuberculosis screening tests were completed as part of EMPNG's tuberculosis awareness and prevention program. One community-acquired tuberculosis case was detected and referred for further treatment. There was no workplace transmission of tuberculosis in 2024.

Biometric screening and healthy physical activities are provided for all workers through the Culture of Health program. During 2024, more than 2450 workers participated in biometric screening to identify potential underlying health issues. Testing included blood pressure, weight, vision, and blood sugar screening.

Culture of Health program blood drives were also hosted at the LNG Plant site and ExxonMobil Haus during the year, with more than 330 bags of blood donated to Port Moresby General Hospital.

HGCP and LNG Plant site workers continue regular perimeter walks of their worksites. ExxonMobil Haus workers participated in the Lead Country Manager Cup touch football competition as part of the Culture of Health program.

Seven medical evacuations were conducted from EMPNG worksites in 2024. All of these were for personal medical conditions, with none related to workplace activities.

Public health

Low numbers of community acquired semi-immune malaria cases are being maintained, with 49 cases diagnosed at worksite clinics in 2024. All of these cases were treated at site clinics.

EMPNG's health programs are supported through daily toolbox talks. A total 772 health-related toolbox talks were delivered across worksites during the year.

Industrial hygiene

An industrial hygiene program is implemented by EMPNG to protect the workforce through the assessment, control, and communication of potential health hazards in the workplace.

ExxonMobil's global Industrial Hygiene exposure assessment strategy, which was implemented in 2023, continued to be used in 2024. The strategy involves the use of both local and global data in exposure ratings and assessments. It provides a fit-for-risk approach to how exposure assessments are conducted, ensuring effective controls are in place and validated as required.

More than 300 workplace health inspections were completed during 2024 to help ensure health requirements were met for food, water, public health, chemical and respiratory protection. Thirteen personal exposure monitoring samples were collected and analysed to identify potential worker exposure to factors such as noise, benzene, and gasoline.

Following a re-assessment survey for Naturally Occurring Radioactive Material completed in 2023, nine workers completed Radiation Safety Officer training during 2024.

The Industrial Hygiene team supported risk reduction activities during the year by recommending quieter grinding discs to reduce noise levels at worksites.

Other strategic initiatives

Toolbox talks and lunch-and-learn sessions were held throughout the year to commemorate internationally recognised days such as World Mental Health Day, R U OK? Day, World Tuberculosis Day, World Malaria Day, World Diabetes Day, World Cancer Day, and World AIDS Day.

A week of Culture of Health program activities was held in October, starting with expert talks about prioritising mental health in the workplace for World Mental Health Day. The week also covered lifestyle, nutrition and physical activities, cooking demonstrations, and cancer education sessions for Pinktober.



Dr Mathias Sapuri, Senior Consultant Obstetrician and Gynaecologist from the Pacific International Hospital delivers a session on two of the most prevalent cancers in women in PNG – cervical and breast cancer



Dr Suresh Raghunath, Oncology Super-Specialist from the Pacific International Hospital speaking on general cancers and the importance of early detection and preventive care

8.3 Camps

The HGCP Camp continues to support operations and maintenance personnel as well as projects and drilling rotators. A new workforce camp was built and commissioned at Hides Wellpad F in 2024 to support drilling operations. Angore Wellpad A Camp and Angore Wellpad C Camp were demobilised following the conclusion of Angore drilling and construction activities. The Moro B Camp continues to support earthquake recovery workers and also accommodates other EMPNG and Santos personnel as part of facilities sharing agreements.

HGCP Camp upgrades in 2024 included new laundry dryers, refurbishment of common ablution blocks, epoxy flooring in the kitchen area, covered walkways, refurbishment of the Joint Operations Centre, and installation of a new heating, ventilation, and air conditioning system for the camp kitchen. New kitchen equipment was also purchased, including a combination oven, dishwasher, pot wash, smoker, and juicers. Older gym equipment including elliptical and stationary bicycles were replaced, and TV points were installed in Laitebo Hall to enable workers to watch sporting events.

Additionally, new ergonomic chairs and desks have been installed in the HGCP Administration Building, and a Supply Chain Coordination Centre was established to monitor logistics activities.

Camp works at Upstream sites were undertaken by Lancos and Papua New Guinean businesses, such as Turra Holdings Limited, TWM Group, and Hides Energy Services Limited.

The HGCP Supply Chain team collaborated with the Upstream Community Affairs team on a community project in which students from Hewate vocational education school in Tari were paid to construct handmade wooden cabinets for the camp management changing room and accommodation rooms.

The LNG Plant Camp provided support for base operations, maintenance campaigns, visitors for the Papua LNG Project and other site activities during 2024. LNG Plant Camp upgrades included new kitchen equipment such as combination ovens and a dishwasher, repair of the fire alarm and detection system, and perimeter fence repairs.



LNG Plant Camp accommodation drainage improvements

The Camp Maintenance team was provided with a new workshop during the year. Maintenance works at the LNG Plant site were undertaken by Lancos and Papua New Guinean businesses, such as Laba Holdings Limited, Turra Holdings Limited, TWM Group, and Atlas Steel PNG Limited. Projects included new concrete walkways, drainage remediation, and repairs on 13 kilometres of fencing. Camp furniture that was no longer required was donated to local communities.

Lancos Hides Alliance Group Limited joint venture and Laba International joint venture have won catering contracts for the HGCP and LNG Plant camps respectively following the first competitive bidding process since the start of production. All camps have also begun using biodegradable packaging to replace single-use plastics for packed meals.

OneLogistics travel technology introduced to worker camps in 2023 was significantly enhanced during 2024 to provide better functionality and traceability for workers, including new features for ground transport shuttles, cargo requests, and shipments. The technology is also supporting other process workflows for ordering packed meals, site mobilisation and badge access to improve organisational efficiency.

The HGCP Family Market continued to be held fortnightly throughout 2024 with local suppliers invited into the HGCP Camp so that workers could buy local produce. Camp caterer Hides Alliance Group Limited spent more than PGK216,000 (USD54,000) on produce from suppliers such as Paija Iba Women's Group, the Komo Youth for Change Association, Teni Angore Loose Particle Youth Group, and Tupi Arawi Investment Limited to supply meals for both the HGCP and Angore camps throughout the year. From 2024, LNG Plant Camp residents began visiting Edai Town Market on Saturdays to buy produce from the local community.



Hides Alliance Group Limited Chef, Casper Timothy using locally sourced produce

8.4 Labour and working conditions

During 2024, employee resource groups such as the Women in Energy Network and Wanwoks Initiative delivered multiple information sessions, awareness programs and fun events to help Papua New Guinean employees engage, interact and develop personally and professionally. These programs were complemented by EMPNG's employee and supervisor

development forums that support career development while reinforcing company policies and procedures.

Throughout the year, multiple celebrations were held across all worksites to mark the 10th anniversary of PNG LNG production.



EMPNG Marine Supervisor, Geua Gau, EMPNG Marine Loading Master, Sidney Isaiah, and former EMPNG Chairperson and Managing Director, Tera Shandro, cut the 10-year anniversary cake at one of the LNG Plant site celebrations



Former EMPNG Chairperson and Managing Director, Tera Shandro, speaking at an anniversary celebration at the HGCP



A traditional headdress worn by a performer at one of the LNG Plant site 10-year anniversary events

International Women's Day was commemorated across all worksites in March with presentations, panel sessions, a morning tea and photo booth arranged by the Women in Energy Network. All events aligned with the 2024 theme of 'Count Her In: Invest in Women. Accelerating Progress'.

The Women in Energy Network also supported the inaugural Introduce A Girl to Engineering Day. Refer to [Case Study: Building a new generation of women in engineering](#) for more information.



EMPNG workers celebrating International Women's Day at ExxonMobil Haus

In August, the Wanwoks Initiative held a Financial Literacy Expo at ExxonMobil Haus. The Expo provided EMPNG employees with access to local financial institutions and information about how to manage their finances through savings and investment opportunities for future financial security. It included a three-day program with sessions on financial planning and management, understanding savings, loans and investment products, and home ownership. Employees were able to liaise directly with representatives from financial institutions, which helped to achieve a speedy resolution of their queries and finance applications.



An EMPNG worker opens an account with BSP Financial Group Limited at the Financial Literacy Expo

The Eda Wanwoks Toastmasters Club continues to help workers fine-tune their public speaking, communication, and leadership skills through regular practice. During 2024, the club celebrated its 10th anniversary with 16 new members and the launch of an orientation program for new members. The club was also recognised as a Distinguished Club by Toastmasters International.



Eda Wanwoks Toastmasters Club President, Yolande Helberg (fourth from left) with Best Prepared Speech Winner, Benjamin Manimbi (third from left), Best Impromptu Speech Winner, Raylance Mesa (second from left), and other club members during a toastmasters meeting

As part of EMPNG's induction process, all new employees and staff contractors receive Standards of Business Conduct training, while the existing workforce receives periodic refresher training. The training covers subjects including ethics, conflicts of interest, anti-corruption, alcohol and drug use, equal employment opportunity, and workplace harassment. During the training, EMPNG's open door communication procedures are shared to encourage workers to ask questions, voice concerns, escalate issues to senior management as needed, and make appropriate suggestions about the company's business practices.

In addition, EMPNG's senior management team holds regular ongoing engagement sessions with employees. During these sessions workers can ask questions and raise any concerns directly with the executive team.



Former EMPNG Chairperson and Managing Director, Tera Shandro responding to questions raised during a question and answer session held as part of a worker forum

Performance recognition

More than 30 EMPNG employees were recognised at the seventh annual Lead Country Manager Awards in 2024. For the first time, numerous awards were presented for work teams, such as a Teamwork delivering Excellence Award for the Production Optimisation team that exhibited exemplary behaviours in taking initiative and ownership of optimisation projects, which resulted in more than USD130 million (PGK520 million) of added value in operations.

The Lead Country Manager Awards acknowledge outstanding employee behaviours that are consistent with EMPNG's core values of *Em pasin bilong ExxonMobil PNG*, or 'The way we work at ExxonMobil PNG'. Refer to [Case Study: Acknowledging outstanding employees](#).

8.5 Security

EMPNG continues to provide accredited training courses to develop the skills of Papua New Guinea's national security personnel. During 2024, two Papua New Guinean security personnel received international accreditation as Security Officers for Port Facilities after they completed a course in Melbourne, Australia. Their certification is compliant with International Maritime Organisation requirements.

Two Papua New Guinean Unmanned Aerial Systems (drone) pilots have graduated from Readiness Level 3 to Readiness Level 2, which provides the pilots with the ability to conduct complex assignments in the LNG Plant site area. This includes photogrammetry tasks in live operational areas, flare inspections and aerial monitoring of the LNG Plant Marine Terminal.

Another eight Papua New Guinean security personnel completed the Australian-accredited Certificate III in Security Operations during the year. This qualification is designed to provide them with the skills to perform as a Security team leader or supervisor.

Under the Memorandum of Understanding between the Royal Papua New Guinea Constabulary and EMPNG, 314 Constabulary officers and Papua New Guinean Defence Force personnel received Voluntary Principles of Security and Human Rights training in 2024 prior to their deployment to support EMPNG operations. During the year, 933 contracted security personnel received human rights training as part of their induction program.

8.6 Emergency preparedness

EMPNG has plans and processes in place, along with relevant training and emergency response drills, that give responders the knowledge they need to appropriately respond to and mitigate the impact of any emergency.

Response measures followed by emergency responders take into account people, environment, assets and reputation to support effective decision-making and provide a focus on priorities during an emergency.

In 2024, EMPNG's Emergency Response team conducted 116 emergency response drills based on desktop and practical exercises, including equipment deployment and major event scenarios. This included 53 emergency response drills conducted at the LNG Plant, 59 in the Upstream area and four at ExxonMobil Haus. Oil spill response drills conducted at the LNG Plant and in the Upstream area involved deployment of materials and personnel to remote and challenging locations.

In October, an oil spill response drill was completed at the LNG Plant Marine Terminal, with onboard training and the deployment of Smit Lamnalco tugboats. Four tugboats, the *SL Jamba*, *SL Saige*, *SL Korowi* and *SL Logohu*, safely and efficiently completed their 10-year dry dockings, which is a mandatory inspection and maintenance process required by the International Convention for the Safety of Life at Sea.



The tugboat *SL Jamba* during an oil spill response drill

During the year, an unannounced major hazard scenario emergency response drill was conducted at the HGCP. This scenario was based on a monoethylene glycol vent gas incinerator explosion and included a facility muster.

Other scenarios involved: full site mustering; security lock down drills; confined space rescue; a spinline and wellpad oil spill response; a working at heights rescue; a natural disaster drill; and aviation drills. They also included responses to fires and medical emergencies both inside and outside the perimeter fence lines.



Tugboat crews participate in a medical response drill simulating evacuation of an injured person from the LNG Plant to Argo Marine Wharf

Responses to these drills involved processes, systems, and communications across the LNG Plant Marine, Safety, Security and Management teams as well as interface with government agencies, logistics and contractors.



A working at heights rescue drill at the LNG Plant site

At ExxonMobil Haus, emergency response drills covered scenarios such as civil unrest, a transportation stand-down, a desktop building evacuation exercise and cybersecurity awareness training involving the LNG Plant Incident Management team. The drills included testing of emergency communication text notification systems.

After action reviews are conducted following each emergency response drill. These reviews are designed to learn from the drills, discover areas for improvement, and develop appropriate action items to continuously upgrade emergency response capabilities.

In addition to emergency response drills, seven advanced event scenarios were conducted by EMPNG's Incident Management team during the year and 42 team members completed Instructor Lead Incident Command System training at the LNG Plant, HGCP and ExxonMobil Haus.

During 2024, EMPNG's Emergency Support Group members attended a four-day spill management training course in Singapore, which included spill equipment deployment.



EMPNG personnel at the spill management training course in Singapore

This training gave the participants knowledge and understanding about how oil behaves once it is spilled to the environment.

2024 PERFORMANCE HIGHLIGHTS

WORKER WELFARE

0.03 TRIR

recorded for 2024. TRIR stands for Total Recordable Incident Rate

0.00 LTIR

recorded for 2024. LTIR stands for Lost Time Incident Rate

20.8 million

work hours in 2024

11,060 visits

to camp clinics in 2024 with 37.5% of patient consultations held at the LNG Plant and 62.5% at Upstream area clinics

16,180 cards

submitted in 2024 including 14,767 Observations and Interactions, 1231 Hazard Identifications and 182 Near Miss Reports

116 drills

based on desktop and practical exercises, including equipment deployment and major event scenarios

TRIR and LTIR are the frequency rate of incidents within a given period, relative to the number of hours worked in that period by a 200,000 hours constant, representing 100 workers at 8 hours per day for 250 days per year. It is a proxy for safety performance with lower rates indicating better safety performance.

CASE STUDY

BUILDING A NEW GENERATION OF WOMEN IN ENGINEERING

EMPNG is firmly committed to recruiting, training and retaining women in engineering roles. As well as providing training and career development pathways, EMPNG actively engages in science, technology, engineering and mathematics (STEM) related activities and other school-based programs to attract more women into engineering disciplines.

In November, the first Introduce A Girl to Engineering Day was held in partnership with the Women in Energy Network. The event, themed 'Think like an Engineer, Be Innovative, Shape the Future', hosted 75 Grade 9 female students from five Port Moresby schools. It aimed to attract more girls into engineering careers through demonstrations of how engineers shape the world. A team of 36 EMPNG engineering and technical volunteers supported the inaugural event.

The Day included STEM-related activities such as learning how to build a truss bridge, a circuit board, and investigating Newton's laws of motion.



Grade 9 students holding up a model bridge, built during the Introduce A Girl to Engineering Day event

Many of the girls who participated said they enjoyed conducting science and engineering-based experiments and learned a lot about career opportunities for women in engineering.



EMPNG Machinery Engineer, Maryjo Lipu

"We've had many females who have come before us who have opened up the way in STEM for us to be engineers, doctors, scientists and so forth. So, whatever aspirations and goals you have, keep working towards them, work hard, be dedicated to those dreams and you'll achieve them".



EMPNG Integrity Engineer, Eileen Rawali

"At ExxonMobil, we recognise the incredible contribution women engineers are making to the workplace. Our diversity and inclusion programs and support for STEM education are powerful tools to encourage more women to pursue careers in engineering".

Former EMPNG Chairperson and Managing Director, Tera Shandro



Grade 9 students from five different schools around Port Moresby gathered for a fun-filled day of STEM-related activities in November

CASE STUDY

ACKNOWLEDGING OUTSTANDING EMPLOYEES

In acknowledgement of their outstanding contributions to EMPNG, the following workers received Lead Country Manager Awards in 2024.

The Awards are judged across six categories, consistent with the core values of *Em pasin bilong ExxonMobil PNG*, which are: Integrity, Environment, Safety, Security, Excellence and Teamwork.

Integrity Award

- Lina Dawson

Environment Award

- Wally Komon

Safety Award

- Raymond Kumo

Security Award

- Stephen Samuel

Excellence Award

- Joachim Kiliu

Teamwork delivering Excellence Award

- Samuel Maihua
- Sulaiman Salmang
- Roman Bukuru
- Vagi Hekwa
- Moale Bae
- Maryjo Lipu
- Jonah Tokiong
- Isaac Maima
- Mea Vai
- David Knight
- Nathan Levis
- Kimberly Sabarei
- Abraham Koyama
- Elijah Lavai
- Natalie Korokoro
- Emelin Ornelas
- Michael Vines
- Ananda Nagavarapu
- Melanie Wilson

Winner of the Integrity Award, Lina Dawson, has led significant work conducting in-line controls reviews across work processes that have led to improvement in production workflows. She is also a valued contributor in the EMPNG Controls Network as well as a participant in the Unit Internal Assessment process.

"This Award validates the efforts I put into ensuring we achieve an effective controls environment. It's not just a personal achievement but also a recognition of the support and collaboration from my team, which makes it even more special. Moving forward, this Award inspires me to set higher goals and contribute even more in the controls environment."



EMPNG Land and Community Affairs Advisor, Lina Dawson

Wally Komon, winner of the Environment Award, has consistently demonstrated his commitment to high standards in operations, safety and environmental categories. He has worked collaboratively with multidisciplinary work teams to reprocess and dispose of wash water that had been safely stored at the HGCP since the start of production. He has also worked to develop a waste management tracking tool for HGCP operations.

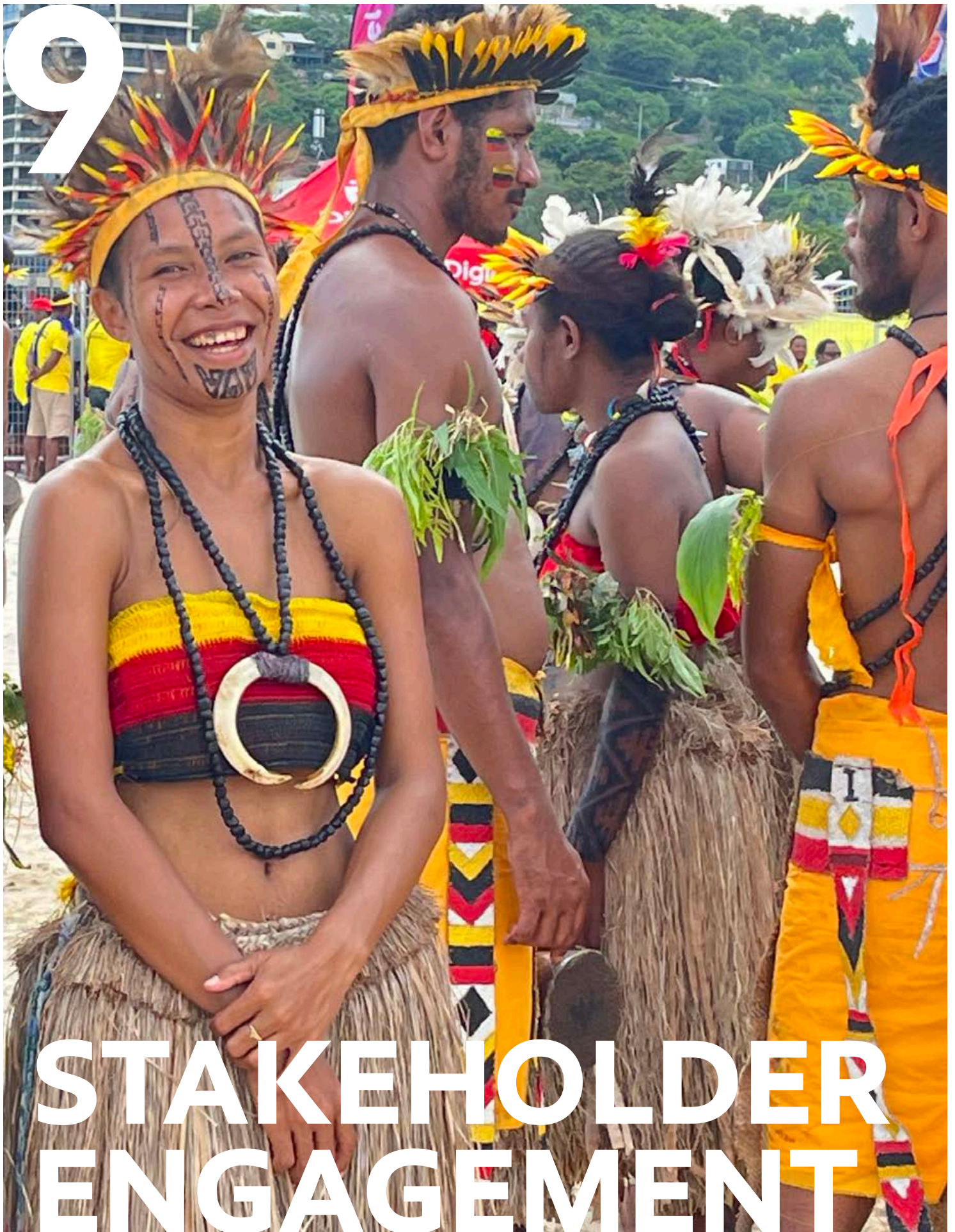


HGCP Lead Operations Technician, Wally Komon

"Your attitude towards your work is key in achieving excellence. Keep asking questions, be curious daily. Be willing to try new things and open to new ideas and most importantly, be consistent."

Award winners received a certificate of recognition and prizes such as vouchers and a customised Kundu coffee cup.

9



Through an ongoing process of inclusive, two-way communication, EMPNG keeps stakeholders informed about production activities, while supporting the sharing and addressing of community issues in a timely manner.

9.1 Community engagement

EMPNG regularly engages with communities, all levels of government and civil society organisations as part of its commitment to supporting positive, long-term relationships and value for stakeholders.

During 2024, EMPNG's Land and Community Affairs team implemented a Clan Caretaking Agreement amendment, which was signed by clans that maintain the pipeline ROW. The amendment included additional work scopes, and a payment rate increase for caretaking clans who are responsible for vegetation control, erosion identification and reporting, and the prevention of encroachment on the pipeline ROW.

EMPNG also conducted educational programs for caretaking clans to inform them about the amendment.



EMPNG Community Affairs Officer, Michael Kele (right) with members of the Yangali clan participating in a Clan Caretaking Agreement amendment educational program

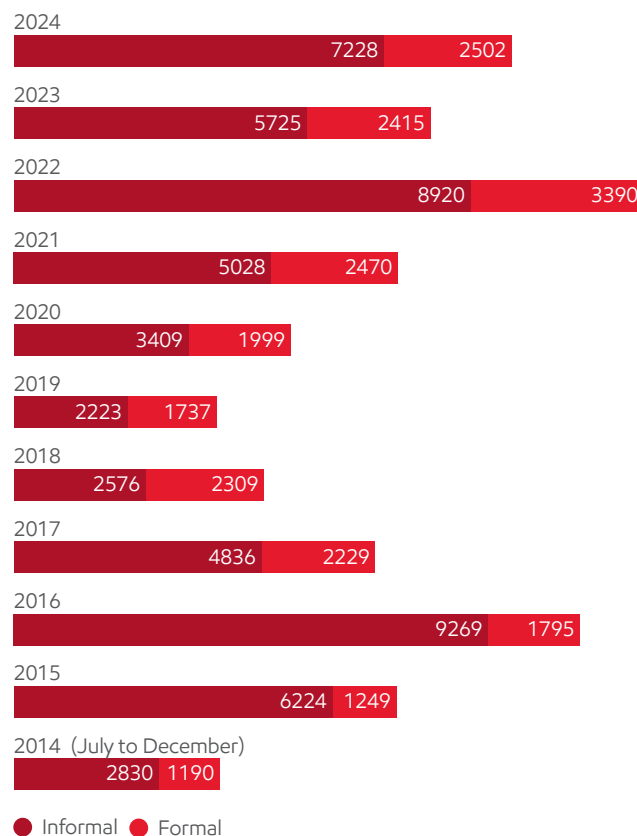


EMPNG representatives delivering a Clan Caretaking Agreement amendment educational program to members of the Tagima, Ibahuli, Hagoni, Wabiago, Tepo, Opeta and Waralopa clans

EMPNG has conducted more than 81,550 engagements since production commenced, as shown in Figure 9.1. This includes 2502 formal community engagements and 7228 informal community engagements in 2024, which were attended by approximately 38,800 stakeholders. This is an almost 20 percent increase in stakeholder engagements compared to 8140 engagements in 2023. The increase was due to the Clan Caretaking Agreement amendment, weekly and fortnightly community markets in the Upstream area, and road safety awareness sessions held with schools and communities along the LNG Plant site access road.

Figure 9.1 – Engagements

NUMBER OF ENGAGEMENTS SINCE THE START OF PRODUCTION



Engagements in the Upstream area and LNG Plant site villages also involved information gathering, alignment with communities on EMPNG activities, community requests and issues management. In addition, engagements in the LNG Plant site villages covered community awareness about grass fires and fire risk. Community engagements in Port Moresby were primarily community development support alignment meetings with contractors. A summary of community engagement activities conducted in 2024, as well as issues and grievances, is shown in Figure 9.2.

9.2 Community issues identification

A community issue, as outlined in the Production ESMP, is a PNG LNG-related question, comment, concern, suggestion, or observation that is presented to EMPNG. Communications regarding issues that are beyond the control of EMPNG, such as government-related enquiries, are also recorded. During regular community liaison and stakeholder engagement, issues are received, monitored, and closed on a daily basis where possible. Complex issues may take more time to resolve and can remain open for a longer period.

In 2024, a total 1633 issues were received and categorised, as shown in Figure 9.3. Most issues recorded were in relation to Clan Caretaking and Clan Agency agreements regarding clan accounts and payments. This was a slight decrease compared to 1835 issues raised in 2023 due to increased engagements by EMPNG's Village Liaison Officers and Community Safety Monitors to help share information and manage community expectations.

Figure 9.2 – Stakeholder engagement summary

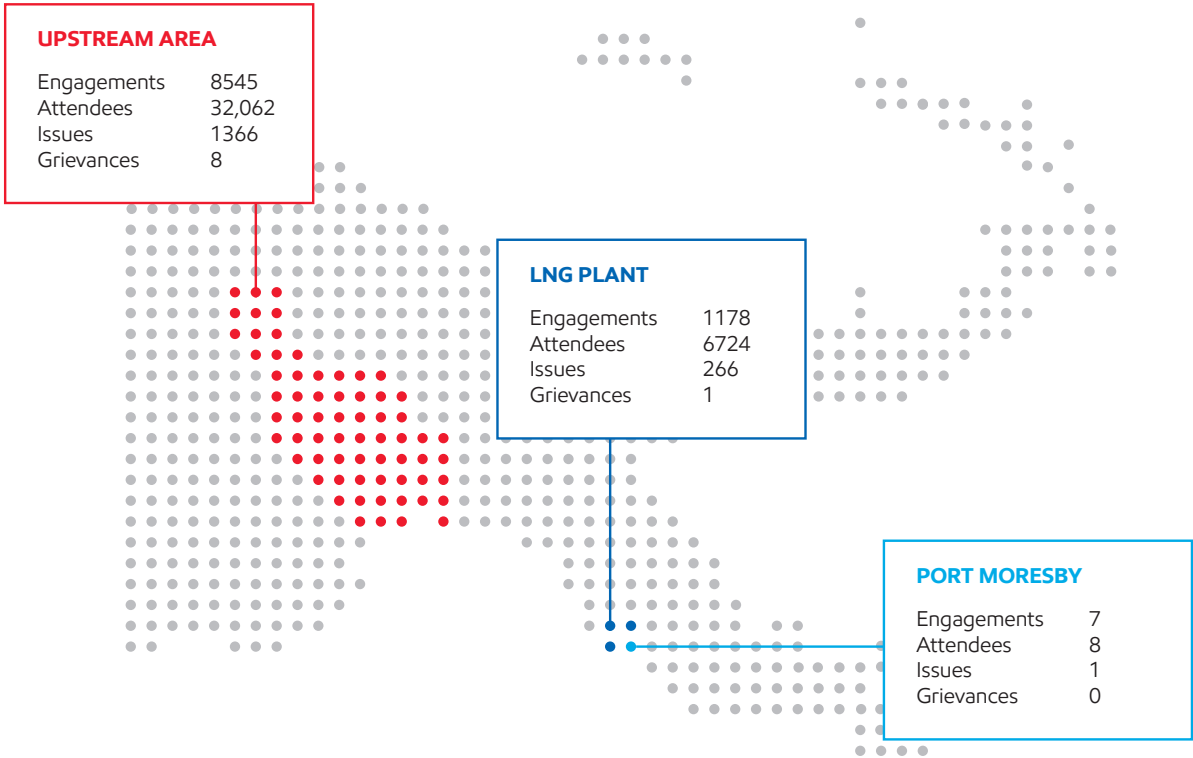
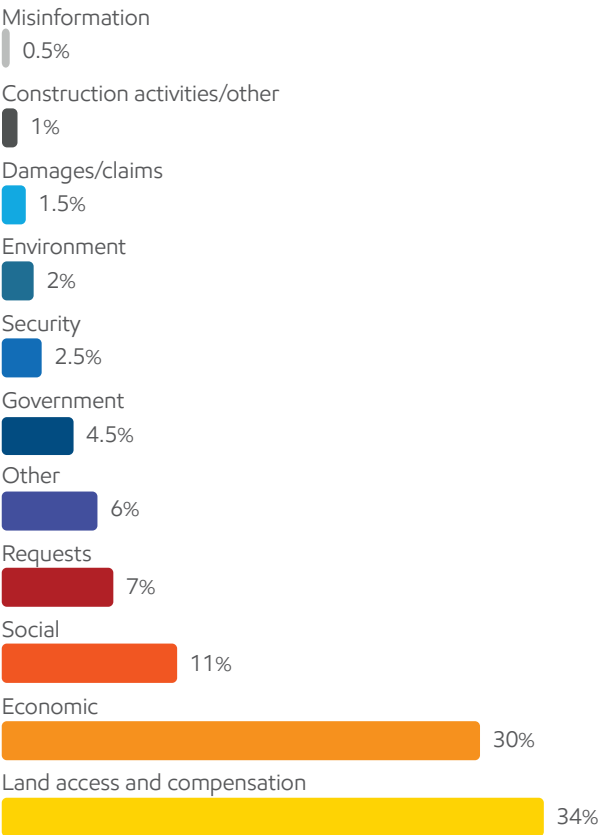


Figure 9.3 – Issues

PERCENTAGE RECEIVED BY CATEGORY



Most issues raised in 2024 regarded land access and compensation, including royalty payments and issues with clan accounts such as dormant accounts and change of account signatories. Economic concerns were the second highest issues reported and regarded employment enquiries

following the demobilisation of Angore worksites. A total 1621 issues that were raised during 2024 were closed by the end of the year. Of the 38 issues that carried over from 2023, all were closed in 2024. EMPNG’s Community Affairs team is working to close the remaining 12 issues from 2024 in 2025.

9.3 Community grievance management

A grievance is defined in the Production ESMP as a PNG LNG-related complaint lodged by an individual, group or community that alleges damage, impact, or dissatisfaction specifically resulting from EMPNG’s actions or inaction. EMPNG has a Grievance Management Process to quickly and fairly receive, assess, respond to, and resolve grievances. During 2024, EMPNG registered and categorised nine grievances. Eight of these were recorded in the Upstream area, and one was from the LNG Plant. This is a 25 percent decrease compared to 12 grievances recorded in 2023 because of the completion of Angore Project construction works. The number of grievances recorded in 2024 by category is shown in Figure 9.4.

Figure 9.4 – Grievances

NUMBER OF GRIEVANCES BY CATEGORY



Damages and unpaid claims accounted for four of the nine grievances received in 2024. Two of these regarded claims that dogs were accidentally fatally injured by EMPNG motor vehicles in the Upstream area, one was for damage to vegetation by machinery and one was a claim for unpaid services at the LNG Plant.

Three grievances regarded land access and compensation. Two of these were about compensation payments for land acquisition during early construction of PNG LNG. The third grievance concerned Clan Caretaking Agreement payments for work along the pipeline ROW.

The two remaining grievances were about wastewater discharge from the HGCP and Hides Quarry 1.

At the end of 2024, six grievances registered during the year were successfully closed, including one that was reclassified as an issue. Three grievances remained open as compensation payment documents were processed. The two open grievances that were carried over from 2023 were closed in January 2024.

9.4 Resettlement

EMPNG aims to avoid resettlement from construction activities, however, where resettlement is unavoidable, the company commits to improve, or at least restore, the standards of living and livelihoods of displaced households. In 2024, one household received compensation after being relocated to accommodate extra workspace required at the Kilometre Point 65.9 river crossing along the pipeline ROW. The extra space was for storing materials that were needed for work at the river crossing and to provide a safe path for machinery access.

A pre-construction survey was conducted along the pipeline ROW at the Kilometre Point 25.2 river crossing during

2024 to assess households in areas identified for pipeline remediation works. Seven households were confirmed as eligible for compensation.

By the end of 2024, four households received compensation, with the remaining three to be compensated in 2025. One of these households will be assessed for eligibility for livelihood restoration support with the evaluation to be completed in 2025.

9.5 Compensation

Five new In-Principle Compensation Agreements were signed with land owning clans during 2024 for initial access to Kilometre Point 25 at Wada Creek, Kilometre Point 61.8 at Mandali River, Kilometre Point 65.9 at Aiyu Creek, the Kilometre Point 76 spoil dump site, and Kilometre Points 98 to 100 between Keno and Moro. This access was needed to support ongoing earthquake recovery works in the Upstream area. Subsequent Clan Agency Agreements are expected to be signed in 2025.

By the end of 2024, 330 out of 377 annual deprivation payments were completed, with 47 payments outstanding due to internal clan disputes. Seventeen clans have remained involved in internal compensation disputes since the start of PNG LNG construction.

Progress continues to be made with Gobe clans toward achieving a resolution, however, clans along the Homa Ridge Access Road remain in dispute.

9.6 Government engagement

EMPNG keeps government representatives informed about production and company activities through ongoing engagement with all levels of government.



Upgrades to the Halimbu-Idauwi Road completed under the ITC program



Upgrades to Halimbu–Idauwi Road



Emergency repairs on the Tigibi Bridge

9.6.1 Infrastructure and government support

The Papua New Guinean Government utilises PNG LNG tax payments to execute public infrastructure projects under the ITC program. This program supports new construction across different sectors as well as upgrades to key roadways.

Starting in December 2023, the ITC program was expanded to support selected power, water, health, education and law and justice related infrastructure, with a focus on helping the Government meet its commitments under the PNG LNG Umbrella Benefits Sharing and License-Based Benefits Sharing agreements. Projects undertaken by the Government through this program provide much needed infrastructure while creating employment opportunities for people from nearby communities and also gives local suppliers the chance to engage in business opportunities associated with the projects. A milestone was achieved in 2024 when the ITC program reached its highest spend to date of more than PGK152.8 million (USD38.2 million) across multiple infrastructure projects.

These included upgrades to the Nogoli to Pupa and Maria to Pori road network and emergency repairs to the Tigibi Bridge in Hela Province. It also included early works for replacement of the Lea Lea footbridge and planning for the Bunu Water Treatment facility upgrade in the Central Province.

In addition, planning and long-lead procurement commenced for the Hides Community Power Project which, once completed, will provide up to 5 megawatts of low-cost power to communities throughout the Upstream area.

9.6.2 Advocacy

Some 570 representatives from national government agencies, provincial-level governments, and co-venturers participated in 43 EMPNG advocacy workshops during 2024. These included a group of Kumul Petroleum Holdings Limited graduates and representatives of the National Agriculture and Quarantine Inspection Authority who participated in advocacy workshops in August.



Kumul Petroleum Holdings Limited graduates visit the LNG Plant site



National Agriculture and Quarantine Inspection Authority representatives attend an advocacy workshop in August



Participants from the Department of Petroleum and Energy with EMPNG representatives during an advocacy workshop in October

Advocacy workshops are a valuable forum for EMPNG to provide information about its current operations, community development work, biodiversity programs, national content initiatives, and financial benefits paid to the Papua New Guinean Government and landowners.

9.6.3 Benefits assurance delivery

In accordance with requirements of the *Oil and Gas Act 1998*, EMPNG makes Development Levy and landowner royalty payments to the Papua New Guinean Government to be paid to impacted provincial and local-level governments.

The Department of Petroleum and Energy deposits these funds into trust accounts held with the Bank of Papua New Guinea, which are managed by the Department of Finance. Upon instruction from the Department of Petroleum and Energy, the funds are distributed by the State-owned MRDC to beneficiaries on behalf of the Government.

In March, the Papua New Guinean Government began Landowner Beneficiary Identification administrative requirements for beneficiary clans in Petroleum Development Licence 1. This process is expected to be completed in 2025 so that royalty payments can be made to these clans.

During 2024, EMPNG paid its 10th Development Levy to the Papua New Guinean Government, as required by the *Oil and Gas Act 1998*. The Levy is held in trust for distribution to impacted provincial and local-level governments to address their developmental needs.

9.6.4 Revenue management

The Extractive Industries Transparency Initiative (EITI) is a voluntary global standard that encourages open and accountable management of revenues generated from the extractive sector. Its purpose is to strengthen government and company systems and processes, inform public debate, and enhance trust among stakeholders. EITI has made significant contributions to improving extractive industry governance in more than 50 countries worldwide including Papua New Guinea, which has been a member nation since 2013. EMPNG is among 21 members of the EITI multi-stakeholder group in Papua New Guinea that also includes representatives from government, civil society and the oil and gas industry. Exxon Mobil Corporation has served continuously on the EITI International Board as either a full or an alternate member since its inception in 2002.

In June, the Papua New Guinea EITI Secretariat published the 2022 Papua New Guinea EITI Report. This is the 10th report published by the EITI but the first report produced by the new Independent Administrator, Kuna Taberia Kiruwi Accountants & Advisors. The report outlines Papua New Guinea's extractive sector, its contribution to the national economy, the fiscal taxation regime, and the accountability and transparency of revenue received and benefits flowing to the Government and impacted communities, and how these benefits were distributed in 2022.

The Papua New Guinea EITI technical cooperation program, which began in 2023 with support and EITI guidance provided by the Japan International Cooperation Agency, has now entered Phase 2 where it aims to sustain the impact of resource related revenue and its management. Phase 2 focuses on strengthening the capacity of the Auditor General's Office and improving Department of Petroleum and Energy data management around license information, production, export and revenue information to assist with timely and systematic disclosure for EITI purposes.

The final version of the Papua New Guinea EITI Commission Bill is in review and will undergo a statutory clearance process for fiscal compliance through both the Finance and Treasury Ministries before going through the legislative process for legal certification. Once this is completed, the Bill will be presented to the National Parliament to be passed as law.

Following the resignation of the Executive Director in October 2024, the EITI Secretariat has been under the oversight of its Deputy Head until a replacement is appointed.

Throughout 2024, the Papua New Guinea EITI Secretariat worked on its third validation process, convened quarterly multi-stakeholder group meetings and maintained sub-national reporting and beneficial ownership disclosure.

PNG LNG distributions

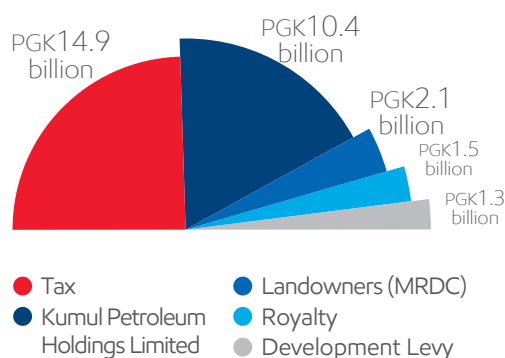
Five primary Government revenue streams are generated by PNG LNG operations. These include equity distributions paid to Kumul Petroleum Holdings Limited and MRDC, which is based on the amount of equity in PNG LNG held by each (19.4 percent¹ and 2.8 percent respectively).

Different types of tax, including company tax, are paid to the Internal Revenue Commission. Development Levy and royalties are paid to the Department of Petroleum and Energy for the benefit of the respective project area provincial and local-level governments and landowner beneficiaries.

Since the start of PNG LNG production, a total PGK30.2 billion (USD8.6 billion²) has been distributed from PNG LNG revenues to the State of Papua New Guinea and its people, as shown in Figure 9.5.

Figure 9.5 – PNG LNG distributions^{3,4}

PRODUCTION-TO-DATE GOVERNMENT REVENUE DISTRIBUTED BY RECIPIENT



¹ Effective 4 November 2024, Kumul Petroleum Holdings Limited acquired 2.6 percent PNG LNG equity interest from Santos Limited.

² The exchange rate used for 2024 is PGK3.9 per USD1; 2021-2023 is PGK3.5 per USD1, while all years prior to 2021 use the exchange rate of PGK3.4 per USD1.

³ Tax provided is an estimate.

⁴ Development Levy paid annually on 31 January for the amount accumulated in the prior year.

9.7 Media

The 10th anniversary of PNG LNG production was the focus of media activities during 2024, with the anniversary campaign officially launched in May. The theme of the campaign was 'Celebrating 10 years of partnership, growth and success'.



Former EMPNG Chairperson and Managing Director, Tera Shandro, at the launch of the anniversary campaign at ExxonMobil Haus

In addition to celebrations held across all worksites, EMPNG hosted two gala events to commemorate the milestone. The first was held to thank the workforce, both past and present, for their achievements in delivering safe and reliable LNG for Papua New Guinea and the world. The second was held with more than 300 government, industry, co-venturer, business and community representatives to thank them for their support over the past decade. At the second gala event, Prime Minister, The Honourable James Marape congratulated and commended EMPNG for its role in starting a new LNG industry in Papua New Guinea and said it had achieved exponential growth of the national economy and improved the lives of thousands of Papua New Guinean citizens.



Papua New Guinean Prime Minister, The Honourable James Marape walks through a PNG LNG timeline wall at EMPNG's 10th anniversary gala event for stakeholders



Former EMPNG Chairperson and Managing Director, Tera Shandro (centre) cuts a ceremonial cake at EMPNG's 10th anniversary gala event for staff with (from left): Wanwoks President, Kagl Korugl; Social Club President, Samantha Kuase; Women in Energy Network Secretary, Louisa Sernay and Vice President of Global LNG Marketing and former EMPNG Managing Director, Andrew Barry

EMPNG held its second Papua New Guinea Power Play Awards in July to recognise the exceptional accomplishments of Papua New Guinean women across the country's LNG and decarbonisation industries.

Papua New Guinea Power Play Awards recipient, Ulato Avei, also received 'The Pioneer' award at ExxonMobil's global Power Play Awards ceremony held in September. Within its first two years of participating in the Power Play Awards, EMPNG has achieved four global category finalists and two global category winners. Former PNG LNG Senior Biodiversity Advisor, Dr Jane Mogina, received the first global award in 2023.



Ulato Avei with 'The Pioneer' award at the global Power Play Awards in Houston, United States

In October, ExxonMobil Senior Vice President of Global LNG, Peter Clarke, delivered a keynote address for the second annual Petroleum and Energy Conference held in Port Moresby.

Mr Clarke's address reaffirmed Papua New Guinea's global reputation for excellence in the LNG industry. The Conference was organised by the Papua New Guinea Ministry of Petroleum and Energy and Kumul Petroleum Holdings Limited. It provided an opportunity for the Papua New Guinean industry to unite and shape the future of the country's energy sector.



Recipients of the 2024 Papua New Guinea Power Play Awards



ExxonMobil Senior Vice President of Global LNG, Peter Clarke, speaking at the 2024 Petroleum and Energy Conference in Port Moresby

In December, EMPNG participated in the 18th Papua New Guinea Resources and Energy Investment Conference and Exhibition held in Sydney, Australia by PNG CORE.



EMPNG Chairman and Managing Director, Dinesh Sivasamboo, speaking at the Papua New Guinea Resources and Energy Investment Conference and Exhibition in Sydney, Australia



The EMPNG exhibition booth at the Sydney Convention Centre for the Papua New Guinea Resources and Energy Investment Conference and Exhibition

At the event, EMPNG showcased its achievements of the past decade.

Throughout the year, EMPNG's Media team regularly engaged with mainstream media agencies as part of the State Benefits Campaign to support transparency in reporting how the Government and local businesses are benefiting from PNG LNG.

These insights were broadcast on national television and published in print media to highlight the contributions of PNG LNG to the nation during the past 10 years.

EMPNG, through PNG LNG, also continued its sponsorship of the PNG LNG Kumuls to support the team's community visits. In October, EMPNG representatives and the PNG LNG Kumuls visited community leaders and youths at Lea Lea Village near the LNG Plant site, to raise awareness about drug and alcohol abuse.



PNG LNG Kumuls and EMPNG representatives with Lea Lea community leaders and youths

For the second consecutive year, EMPNG was naming rights co-sponsor of the PNG National Rugby League Competition's Digicel ExxonMobil Cup.



Former EMPNG Chairperson and Managing Director, Tera Shandro, prepares to present the 2024 Digicel ExxonMobil Cup to the Mt Hagen Eagles after they defeated the Hela Wigmen

The PNG LNG Environmental and Social Report – Annual 2023 was published on the PNG LNG website in May and copies of the report's Executive Summary were published in English and Tok Pisin in the country's two daily newspapers. In addition to the 2023 report, previous Environmental and Social Reports have been published on the PNG LNG website.

www.pnglng.com

Throughout the year, there were 80 EMPNG social media posts, primarily on Facebook, reaching 1.2 million people and resulting in a total engagement rate of 76 percent.

The posts highlighted EMPNG's contributions and celebrated the company's various partnerships over the past 10 years through community investment, building workforce skills and industry engagements.

2024 PERFORMANCE HIGHLIGHTS

STAKEHOLDER ENGAGEMENT

PGK30.2 billion

has been distributed from PNG LNG revenues to the State of Papua New Guinea and its people

10K engagements

conducted with communities in 2024 involving approximately 38,800 stakeholders

~570 people

representing national government agencies, provincial-level governments, and co-venturers participated in 43 EMPNG advocacy workshops held in 2024

1.2 million

people reached through 80 EMPNG social media posts in 2024

Section image captions:

Cover	The logo developed for the 'Celebrating 10 years of partnership, growth and success' campaign
Executive Summary	Former EMPNG Chairperson and Managing Director, Tera Shandro (centre) with some of the EMPNG employees and staff contractors who have worked for PNG LNG for 10 years or more at the launch of the anniversary campaign at ExxonMobil Haus
Chapter 1	Nabors International's <i>Rig 702</i> completing drilling on Angore Wellpad C
Chapter 2	Operations Technician, Charlotte Duks, at the HGCP Control Room
Part A	Women in Energy Network member Kamenna Matmillo, EMPNG Information Technology Customer Experience Advisor
Chapter 3	Sarea Epavea from the 10 th intake of the Operations and Maintenance training program
Chapter 4	Workers from the ExxonMobil Haus catering contractor: Hayden Taraiva, Steward; Emmanuel Lusere, Chef; and George Toto, Head Chef
Chapter 5	A student of St Paul Komo Secondary School
Part B	Community members reviewing a map of the Apeawa proposed conservation area in the Lower Kikori during a resource mapping engagement
Chapter 6	Aerial view of Babaguna Village, located on the banks of Kikori River, during a community meeting with EMPNG
Chapter 7	EMPNG LNG Plant Field Environment Specialist, Firman Aiyele undertaking noise monitoring
Part C	A mother and son from Hibagu Village, Hela Province where the commercial spice training was conducted in January with the Hibagu Women's Group
Chapter 8	EMPNG Operations Technician, Martha Elap carrying out inspections at the live plant area of the HGCP
Chapter 9	Performers at the Hiri Moale Festival 50 th anniversary celebrations

PNG LNG headquarters

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Eneji Bilong Wol. Luksave Bilong Papua Niugini.*