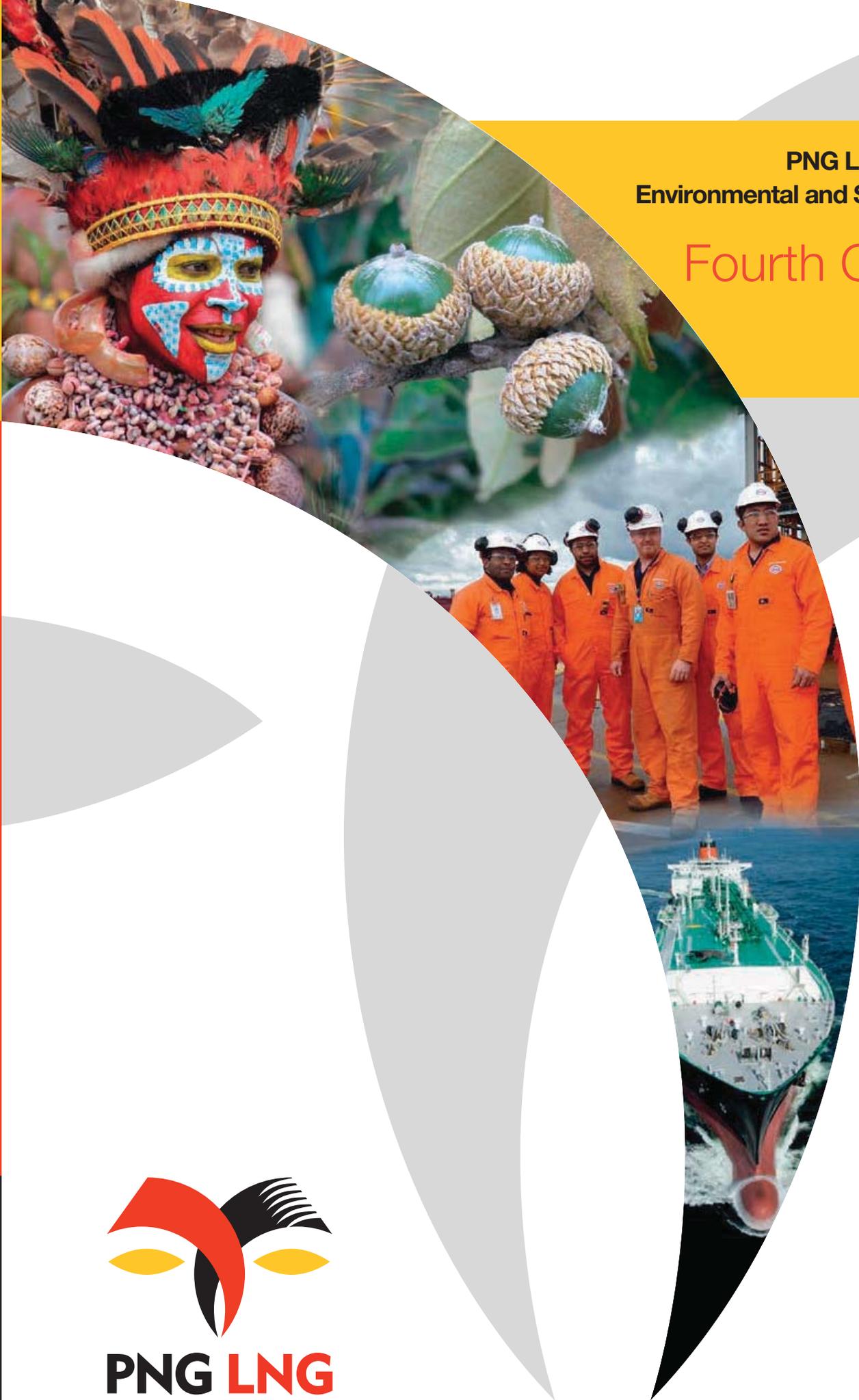


PNG LNG Quarterly  
Environmental and Social Report

Fourth Quarter

2013



**PNG LNG**

*Energy for the World. Opportunity for Papua New Guinea.  
Eneji Bilong Wol. Luksave Bilong Papua Niugini.*



## SAFETY IS KEY TO PROJECT PERFORMANCE

**“As we draw closer to production, the world will continue to assess our Project’s performance, and safety will remain a critical success factor.”**

- Decie Autin, Project Executive, ExxonMobil PNG Limited



The Papua New Guinea Liquefied Natural Gas (PNG LNG) Project (the Project) had its safest quarter to date, achieving 31 million hours without a Lost Time Incident. The Project and its contractors continued to emphasize the importance of safety through the introduction of a ‘Finish Strong’ safety campaign. The campaign aims to remind workers to keep themselves and their colleagues safe during the final stages of construction so that *Nobody Gets Hurt*.

This is the sixteenth PNG LNG Quarterly Environmental and Social Report. It provides progress updates about the Project’s construction, safety, health, security, social and environmental performance during the fourth quarter 2013.

ExxonMobil PNG Limited<sup>1</sup>, a subsidiary of Exxon Mobil Corporation, is responsible for the Project’s construction and operation. ExxonMobil PNG Limited is developing the Project with co-venturers: Oil Search Limited, National Petroleum Company of PNG (Kroton) Limited, Santos Limited, JX Nippon Oil and Gas Exploration Corporation, Mineral Resources Development Company Limited and Petromin PNG Holdings Limited, and their affiliates.

### Construction

The Project achieved many significant construction milestones during this quarter. These included the completion of: Train 1 processing unit and associated facilities at the LNG Plant site; the 22-inch gas pipeline from the Hides Gas Conditioning Plant (HGCP) to Wellpad B; the fifth and final horizontal directional drill on the 293-kilometre main onshore pipeline; drilling for both Wellpad C gas wells; the 8-inch condensate pipeline from the HGCP to the Kutubu Central Processing Facility; and the introduction of natural gas to the HGCP from the Kutubu Central Processing Facility.

## LNG Plant Train 1 and associated facilities complete

Other construction highlights are outlined in Table 1.



A ‘Finish Strong’ gathering at the LNG Plant site in December

<sup>1</sup> Formerly known as Esso Highlands Limited (name change effective January 2014).

**Table 1 – Contracts and construction highlights**

Contract	Contractor	Major activities during the fourth quarter 2013
LNG Plant and Marine Facilities (EPC3)	Chiyoda and JGC Joint Venture	Completed Train 1 and associated facilities, including the LNG jetty, north and south LNG tanks, utilities and permanent buildings. Start-up of the remaining six gas turbine generators. Navigation lights energized in Caution Bay.
Hides Gas Conditioning Plant and Hides Wellpads (EPC4)	CBI and Clough Joint Venture	Commissioning gas arrived at the HGCP and start-up of Gas Turbine Generator A. Warehouse and administration buildings handed over to the Production organization.
Onshore Pipeline (EPC5A)	SpieCapag	Completed the 109-kilometre condensate pipeline from the Kutubu Central Processing Facility to the HGCP. Completed construction, hydrotesting and drying of the 22-inch natural gas pipeline from the HGCP to Wellpad B.
Komo Airfield (EPC5B)	McConnell Dowell and Consolidated Contractor Group Joint Venture	Komo Airfield scope of work completed. Project passenger and light cargo flights continued.
Associated Gas Development	Various	Gas wells commissioned. Triethylene glycol unit and thermal oxidizer commenced operation.
Drilling	Nabors Drilling International Limited	Completed drilling of both wells on Wellpad C. Drilling Rig 703 relocated to Wellpad G.
Permanent Facilities Compound	Leighton (PNG) Limited	Completed substructure civil works for the administration building. Steel erection commenced on the administration and support services buildings.



**Completing final walk-through of Train 1 prior to handover to the Production organization**

## Safety, health and security

Through its ongoing safety focus, the Project achieved a 48 percent reduction in its Total Recordable Incident Rate during 2013 compared to 2012.

With commissioning gas introduced into HGCP work areas, new sections of the pipeline and the LNG Plant, the Project has shifted the focus of safety education from construction-related hazards to working with energized facilities and hydrocarbons. To date, more than 1,700 workers have participated in Hydrocarbon Awareness sessions.

Other safety programs continue with: over 1,500 workers trained through the Safety Champions initiative; over 13,500 workers trained in the LNG Plant site's Incident and Injury Free® program; more than 800 supervisors completed First Line Supervisor training; and over 700 people trained in the Work Management System.

In preparation for the first LNG shipment, a series of community safety engagements began this quarter to raise awareness with Project communities about the presence of shipping vessels in Caution Bay and safety precautions around LNG operations. Drama was used to highlight safety messages to almost 1,200 teachers and students from primary and high schools in Lea Lea, Papa, Boera and Porebada villages.

An emergency response drill was conducted at the HGCP during this quarter to test the effectiveness of communications between departments and to assess emergency response times. Lessons learned will be integrated into the Production organization's emergency response procedures.

In December, the Project announced that it would donate US\$3.1 million for a two-year program to improve maternal health and reduce child mortality rates in Papua New Guinea. The initiative is led by the Houston-based Texas Children's Hospital and its partner, Baylor College of Medicine. It involves supporting Papua New Guinean medical practitioners with specialist training in pediatrics and public health. The Project funding supports the deployment of pediatric and public health specialists to the University of Papua New Guinea School of Medicine and Health Sciences. These doctors will provide teaching support to strengthen the education and training of current and future health care professionals.

The Project-supported National Infectious Disease Diagnostic and Research Laboratory, located in the University of Papua New Guinea's School of Medicine and Health Sciences, became fully operational during the quarter and began analyzing infectious food, water-borne and vector-borne illnesses including norovirus, tuberculosis, shigella, salmonella, malaria and dengue.

The skills of Papua New Guinean citizens are being developed to prepare them for long-term roles with the Production organization's Security team. In December, another two former expatriate security roles were transferred to Papua New Guinean employees, adding to the two allocated in August 2013.

## Workforce development

Throughout 2013, the total Project workforce continued to decline, reflecting the completion of construction activities at many worksites and the subsequent demobilization of workers at these locations.

During this quarter, the total Project workforce was just over 14,700. Papua New Guineans comprise 38 percent of the total Project workforce, which remains consistent with 40 percent recorded at the same time last year and 38 percent in the third quarter 2013.

To date, the Project has delivered more than 2.13 million hours of training to workers through 11,550 training courses and activities. During 2013 alone, the Project delivered almost 540,000 hours of training across 4,721 training activities.

## 2.13+ million hours of worker training completed

The second and final intake of 76 Operations and Maintenance trainees returned to Papua New Guinea in December after completing almost a year of Advanced Skills training in Malaysia. The Project provided a welcome home celebration for the trainees and their families.

While on their overseas placement, the trainees, including 21 women, received hands-on technical training in their choice of either production operations, electrical, maintenance, mechanical or instrumentation disciplines. They will join the first group of 61 Operations and Maintenance trainees as part of the Production team from January 2014.

The Project continues to support construction workers through a voluntary transition training program, which helps develop life skills that will enable these workers to transition to other potential job opportunities once Project construction is complete. The four-day transition training program covers topics such as skills assessment, resume building, job search planning and job interview skills. To date, more than 1,000 workers at the LNG Plant site have completed the training.

## Growing Papua New Guinean businesses

Project spending on Landowner Company (Lanco) services continues to grow, with almost 218 million Kina (US\$90 million) spent during this quarter. To date, the Project has spent more than 2.48 billion Kina (US\$1.02 billion) on Lanco services.

In addition to Lancos, other non-Lanco Papua New Guinean businesses provide services to the Project. By the end of the quarter, the Project had spent more than 600 million Kina (US\$248 million) on Lanco services and these additional services. The total in-country spend for the Project-to-date has reached 10.31 billion Kina (US\$4.25 billion).

By the end of 2013, the Enterprise Centre had assisted over 16,700 entrepreneurs through its business support programs. To date, the Centre has provided the equivalent of more than 9,300 training days to Papua New Guinean businesses.

Many one-day workshops were offered to Lancos this quarter. They covered topics such as: conflict management and resolution techniques; negotiation skills; budget and cash flow; bookkeeping and accounting. The Enterprise Centre is also actively providing its services to other corporate clients. For example, a six-month Frontline Management course is being delivered to an international consulting company.

## 10.31 billion Kina spent in Papua New Guinea to date



Operations and Maintenance training program trainees at their welcome home celebration

## Environmental performance

Significant progress was made with reinstatement at the LNG Plant and Marine Facilities site this quarter. Joint site inspections were held by the contractor and Project to agree reinstatement activities for the temporary facilities, including the sedimentation ponds and several laydown areas. Reinstatement using stored topsoil and local plant species was completed at some facilities.

By the end of this quarter, reinstatement activities were completed from Homa to Paua in the Upstream area, while reinstatement preparations began at the HGCP site, with works scheduled to start as construction winds down. The Project is increasingly replacing temporary erosion and sediment control measures with permanent measures as part of reinstatement works.



***Erosion control and slope stabilization along the pipeline***

The Hides Waste Management Facility is now operating as the primary provider of waste disposal services to the Upstream area. The Facility is taking waste from across Project worksites, including materials that have been stored since the Project began. Extensive waste consolidation and distribution to appropriate disposal sites was undertaken across onshore pipeline construction areas this quarter.

The Project engages external independent consultants, in addition to its own internal reviews, to assess impacts of construction activities. For example, an independent marine survey was conducted to assess the impact of dredging works in the Omati River this quarter. The results of the survey were shared with Project contractors.

## Social development

As onshore pipeline construction moves north, the Project is supporting communities with the development of much needed infrastructure. For example, during the quarter the Project assisted with the construction of water shelters and tanks in Angore, and provided solar panels, batteries and lighting to the Benaria medical clinic, maternity ward and women's guesthouse.

The Project also refurbished classrooms and staff housing, and provided water tanks and toilet facilities to Juni, Idauwi, Tugupawi, Mananda and St. Paul's primary schools in the Hides, Angore and Komo areas.

A key infrastructure project completed this quarter was the refurbishment of staff housing at the health center in Hiwanda Village. The center provides support to Angore communities. The new staff housing will provide the ability for medical practitioners to be close to the center at all times.

During the quarter, the Project donated more than 90,000 Kina (US\$37,170) to refurbish the Buk Bilong Pikinini children's library in the Koki market area. The funds were used to replace floorboards, paint the building, provide water tanks, repair doors and windows, and install insect screens to improve the safety and overall functioning of the library. A team of more than 40 Project volunteers from the Operations Technical team conducted the refurbishment works.

Students from Boera, Lea Lea and Papa primary schools, as well as Redscar High School, received a timely present before their annual exams this quarter with the Project's donation of 20 school desks to each of the schools. The new desks provide students with a more comfortable seating arrangement, from three students per desk to two students sharing a desk. To date, 180 desks have been donated to schools in the LNG Plant site villages. In addition, more than 1,300 desks have been donated to schools throughout the Upstream area, with 60 of these delivered during this quarter.

Students from ten primary schools and teachers from 20 elementary schools in Komo, Hides, Angore and Juha also received a boost to education with the donation of approximately 2,500 portable solar lamps. Considering that many students and teachers do not have access to electricity in their homes, the lamps will enable the students to complete homework and reading at night. They will also enable teachers to complete marking of student work in the evening.

In support of building the capacity of women in Papua New Guinea, the Project is an advocate of the Global Women in Management conference. This conference aims to strengthen women's management, leadership and technical skills to enhance opportunities and develop women business leaders and entrepreneurs. The combined support of the Papua New Guinean Government and the Project has resulted in Papua New Guinea hosting the 59<sup>th</sup> Global Women in Management conference in March and April, 2014. The country-specific conference will bring together 26 women from throughout Papua New Guinea to network and build their managerial skills. It is the first time the global program has been held in Papua New Guinea.

The Project continues to assist Papua New Guinea's Department of Works with emergency repairs to the Highlands Highway.

During this quarter, Project engineering and supervisory support was provided to help repair severe damage caused to the Highway in the Eastern Highlands Province following extensive rain in the area.

As a result of the combined support of the Papua New Guinean Government and the Project, in 2013 the Highlands Highway was open for traffic 95 percent of the year, compared to an historical average of around 70 percent.

## Stakeholder and community engagement

A significant milestone in efforts to promote revenue transparency was reached on December 11 when the Department of Treasury, on behalf of the Papua New Guinean Government, formally submitted the country's application for candidacy in the Extractive Industries Transparency Initiative (EITI). This followed the formalization of the Papua New Guinean EITI multi-stakeholder group, and the signing of a Memorandum of Understanding between the group's members on November 1.

The EITI is a voluntary initiative to improve governance in resource-rich countries through disclosure and verification of company payments and government revenues from oil, gas and mining. ExxonMobil PNG Limited is among 21 representative organizations that are members of the Papua New Guinean EITI multi-stakeholder group.

More than 100 dignitaries attended eight advocacy workshops held at the LNG Plant site during the quarter. The advocacy program is proving valuable in enabling the Project to keep government departments and agencies, foreign missions, the media and international donor agencies informed about the progress of commissioning activities. In 2013, almost 1,100 government, media and stakeholder representatives attended workshops and visited the LNG Plant site as part of the program.

The Project is maintaining active engagements with communities. During the quarter, more than 7,700 people participated in over 180 formal engagements conducted in 36 communities. Another 114 informal engagements were conducted this quarter, reaching over 1,700 people across 20 communities. Throughout 2013, 790 formal community engagements were conducted with more than 38,000 individuals from 84 communities, while some 900 informal engagements were held in over 60 communities with almost 20,000 attendees.

**38,000+** participants in  
**790 formal engagements**  
**in 2013**



*A commissioning and pipeline safety awareness session in Koare*

As the Project works steadily towards production, it has the potential to make a significant positive impact for Papua New Guinea through a long-term partnership with the Government and the people to build future economic development opportunities for the nation.





**PNG LNG**

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