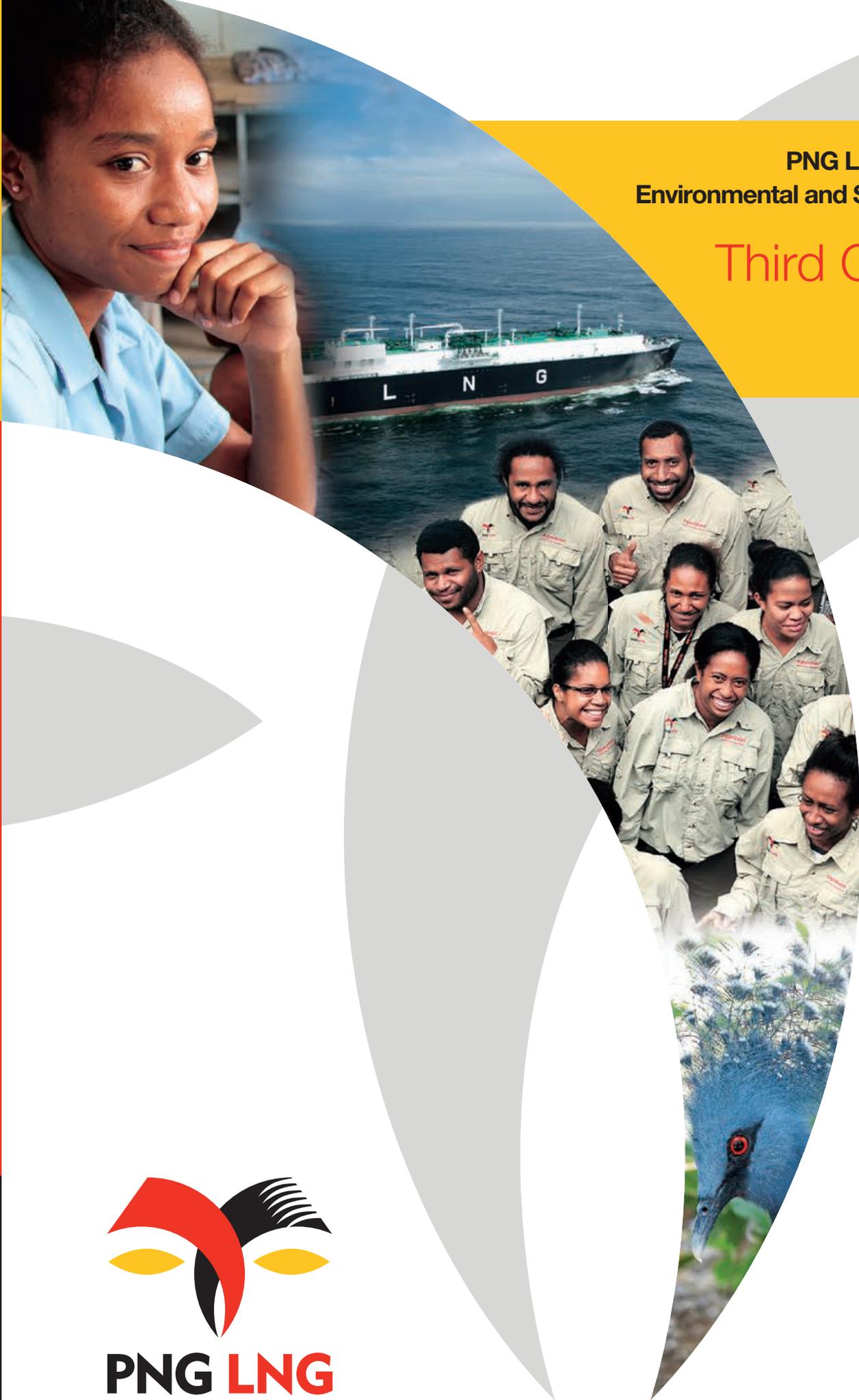


PNG LNG Quarterly  
Environmental and Social Report

Third Quarter

2014



**PNG LNG**

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





## EXECUTIVE SUMMARY



### ANOTHER PRODUCTION MILESTONE ACHIEVED

**“ExxonMobil PNG Limited has safely achieved another production milestone with over two million tonnes of LNG produced to date. The smooth transition from construction to production is a credit to our dedicated workforce.”**

- Peter Graham, Managing Director,  
ExxonMobil PNG Limited

ExxonMobil PNG Limited (EMPNG) has safely achieved another production milestone, with two million tonnes of LNG produced and the 30<sup>th</sup> LNG cargo delivered to customers in Asia since production began. A total of 1.6 million tonnes of LNG was produced in the third quarter alone. EMPNG also received the LNG Innovation Asia Pacific Award, presented at the sixth annual World LNG Series Asia Pacific Summit in September, for the successful start-up of both trains ahead of schedule.

This is the first EMPNG Environmental and Social Report for the production phase. It provides information about safety, health, security, environmental and social activities during production operations in the third quarter 2014.

EMPNG is a subsidiary of Exxon Mobil Corporation and is the operator of the Papua New Guinea Liquefied Natural Gas (PNG LNG) Project. The PNG LNG Project facilities were developed with co-venture partners: 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.

### Production

During this quarter, six wells on the Hides Wellpads achieved steady state operations, while drilling of the produced water disposal well and Hides Wellpad G wells were completed.



*Rig 703 at Hides Wellpad G*

The LNG Plant and the Hides Gas Conditioning Plant (HGCP) successfully completed 72-hour performance tests, with all performance criteria achieved. The supply of associated gas from the Oil Search Limited Gobe Production Facility also began and the first tanker shipment of some 9,500 tonnes of naphtha was completed.

**1.6 MILLION TONNES**  
of LNG produced this quarter



Up close:

## EMPNG receives innovation award

EMPNG has received the LNG Innovation Asia Pacific Award for the successful start-up of both trains ahead of schedule.

The award was presented on 24 September at the sixth annual World LNG Series Asia Pacific Summit in Singapore. EMPNG was selected from a prestigious group of six nominees.

Senior PNG LNG Project Manager, Yow-Yeen Lee, said the company's success was attributed to the many people who made the construction of the facilities possible, from the co-venture partners to the people of Papua New Guinea.

"EMPNG has established many pacesetting achievements, such as building strong community relationships, environmental management initiatives, completion and start-up, and production uptime after start-up – all in a frontier area," Yow-Yeen said.

"We are honoured to have been recognised for these achievements by our peers in the LNG industry," he said.



Senior PNG LNG Project Manager Yow-Yeen Lee (right) receives the LNG Innovation Asia Pacific Award



Produced gas compression trains at the HGCP

Construction of the Permanent Facilities Compound in Port Moresby continues, with interior works and façade installation on the administration and support services buildings started this quarter.

## Safety, health and security

During the third quarter, EMPNG construction and production organisations reached a combined 18 million work hours for the year-to-date without a Lost Time Incident.

# 18+ MILLION HOURS

worked in 2014 without a Lost Time Incident

The company continues reinforcing its core values and safety culture through the Culture by Design initiative. This initiative focuses on: creating a safety leadership environment; identifying hazards and reducing risk tolerance; and managing higher risks. The company also continues to deliver its Safety Champions training program, which provides workers with the skills needed to promote a safety culture within the complex EMPNG operational work environment. Participants are selected based on their ability to directly contribute to the development of a safety culture within the workplace and in the local community. More than 200 production workers have completed training through the Safety Champions initiative to date.

Safety engagements continue in communities surrounding EMPNG facilities. During the quarter, a targeted road safety awareness campaign was conducted with nine schools in communities near the LNG Plant. More than 2,000 students participated in the campaign, which included visual aids, interactive games and songs that provided key messages about road safety.

The transition of workforce health programs to the production phase was completed this quarter.

A clinical educator role has been established to provide training to health workers and ensure skills are maintained across clinical support teams.

An outbreak of measles affected communities across the Hela Province this quarter, with many patients presenting at the Tari General Hospital for treatment. In response to the urgent medical assistance needs of affected communities, EMPNG donated medical supplies to assist hospital staff with treating large numbers of patients. The donated supplies included three vaccine refrigerators, syringes, antibiotics, and more than 60 mattresses. EMPNG also offered measles vaccinations to over 2,000 workers in the Hides area who did not have immunity.

EMPNG continues to provide support through a more than 2.2 million Kina (US\$900,000) commitment to the work of the Texas Children's Hospital, and its partner the Baylor College of Medicine, in Papua New Guinea.

To date, this support has enabled two Texas Children's Hospital doctors to mentor more than 24 Masters of Medicine students, and provide lectures to another 65 students from the University of Papua New Guinea School of Medicine and Health Sciences.

Through the Texas Children's Hospital partnership, a comprehensive program has also been developed to diagnose, manage and document acute malnutrition in children at Port Moresby General Hospital. Ninety children have been treated through this program to date.

The annual EMPNG security workshop was held in Port Moresby this quarter, with the theme 'Consolidating Security Support to Operations'. The workshop focused on developing core skills of Papua New Guinean security personnel, sharing lessons learned from the construction phase and building the long-term production security organisation.

## Environment

On 6 September, a newly constructed Lake Kutubu Wildlife Management Resource Centre was officially transferred to the Lake Kutubu Wildlife Management Area Committee. The Centre contains office space and amenities, and will be fitted with solar panels for power. The Resource Centre is now the base of the Committee's activities to provide supervision and conservation of biodiversity in the Lake Kutubu region.



**A traditional welcome for guests at the official opening of the new Lake Kutubu Wildlife Management Resource Centre**

With support from EMPNG, the Centre was constructed over three months by a local landowner company (Lanco), and provided employment for seven youths from Lake Kutubu communities. Completion of the Resource Centre is an important achievement for EMPNG's partnership approach to supporting biodiversity management through implementation of the Biodiversity Offset Delivery Plan.

EMPNG is also partnering with local communities to monitor the pipeline Right of Way (ROW) as part of a Clan ROW Maintenance Agreement. In addition to monitoring conducted by EMPNG, the clans will report any identified

erosion issues and monitor and control vegetation along the ROW. They will also report the presence of unauthorised vehicles and structures on reinstated sites. The Agreement provides an opportunity for EMPNG and landowning clans to strengthen relationships and work toward a common goal of protecting the environment along the ROW.

During this quarter, the company donated an additional 998,000 Kina (US\$402,000) for research into the protection of the rare *Piku* 'Pig-Nosed Turtle *Carettochelys insculpta*'. This grant brings total funding provided for the research since 2011 to 2.4 million Kina (US\$967,200). The funding will also support two Papua New Guinean Masters students to lead community outreach research programs in the Kikori Delta.

EMPNG continues to apply waste reduction and reuse protocols developed during the construction phase. For example, the Hides Waste Management Facility is receiving treated drill cuttings to be used as landfill cover.

The company continues implementing plans and conducting workforce training and drills to reduce the likelihood and consequences of emergency situations. This includes hydrocarbon spill prevention and response.

The Drilling organisation reinforces its 'no spill' culture through spill awareness initiatives that include drills and training specific to non-aqueous drilling fluid transfers and transport. During this quarter 13 drills were conducted with scopes ranging from field-based discussions on appropriate responses through to simulated practical responses.

Production spill response drills were conducted at both the HGCP and LNG Plant on five occasions at each location. They covered a variety of scenarios with some enacted as desktop exercises, while others involved full equipment deployment and practical execution of spill response methods.

## Workforce development

The production workforce is approaching steady state numbers, with the majority of construction personnel demobilised. At the end of September, the production workforce reached approximately 2,100, with Papua New Guinean citizens comprising approximately 70 percent of production workers.

EMPNG is committed to building the skills of Papua New Guinean citizens through ongoing training. During this quarter, EMPNG provided more than 10,000 hours of training to 777 workers through 618 courses. More than half of the training recipients were Papua New Guinean citizens. Contractors also delivered an additional 7,500 hours of training.

**17,500+ HOURS**  
of worker training provided

Production training sessions conducted during the quarter primarily focused on the development of graduate engineers and Operations and Maintenance trainees, as well as technical training for production personnel.

By the end of September, almost one quarter of EMPNG's Operations and Maintenance trainees had achieved Technician Level 1 and were working alongside senior technicians. A new intake of 30 Operations and Maintenance trainees will join the training program in 2015. Like their predecessors, these trainees will complete Basic Skills and Advanced Skills programs, as well as on-the-job training.

Ongoing cultural awareness training sessions are being conducted at production worksites to help workers better understand the diverse range of Papua New Guinean cultures. Enabling workers to understand the history, values, belief systems and behaviours of their fellow workers provides more effective cross-cultural communication in the workplace and has a direct impact on employee safety.

Worker accommodation at the HGCP camp was refurbished this quarter, while work commenced on upgrading LNG Plant camp rooms, with this work expected to be complete in 2015. Camp Committees have been established to monitor, provide feedback and lead improvements in all aspects of camp life including menus, recreation activities and facilities.

## Supporting Papua New Guinean businesses

EMPNG uses Lancos to provide catering, security, light vehicle maintenance, heavy equipment rental, spare parts supply and hire services. During this quarter, almost 81 million Kina (US\$32.6 million) was spent on Lanco services.

Non-Lanco Papua New Guinean businesses are also engaged to provide services such as port services, accommodation, catering, event coordination, office supplies, office cleaning and travel services. Since the start of construction, EMPNG's total in-country spend with Lancos and non-Lanco services is 11.1 billion Kina (US\$4.5 billion).

The Enterprise Centre assisted 42 entrepreneurs during this quarter. To date, more than 17,000 Papua New Guinean entrepreneurs have been supported by the Centre, which was established in 2010 to provide training and business assessments for Lancos and other Papua New Guinean businesses.

## Social development

EMPNG contributed more than 62,000 Kina (US\$25,000) to the Department of Education in support of National Literacy Week activities from 8-12 September. The donation was used to help highlight the importance of literacy in education.

A further 62,000 Kina was donated to Leadership Papua New Guinea for the Emerging Pacific Dialogue conference to be held in October 2014. The two-week conference involves a Pacific Regional Commonwealth leadership study program and is expected to attract 120 emerging leaders from 21 Pacific countries. The EMPNG donation will be used to support Pacific island participants coming to Papua New Guinea as part of the study program.

Young leaders were also supported with a 49,600 Kina (US\$20,000) donation to the annual Mike Manning Youth Democracy Camp, which hosted 30 high school students at a two-week leadership camp in Lae this quarter. The Camp provides a forum for school-age children to discuss issues affecting Papua New Guinea, and hear from national corporate and civil society leaders.

Another 47,100 Kina (US\$19,000) was donated to two cultural festivals that coincided with Independence Day celebrations in September: the Hiri Moale Festival and the Kutubu Kundu and Digaso Festival. The annual Hiri Moale Festival, held along Ela Beach on September 15 and 16, celebrated the traditional Hiri trade between the Gulf and Central provinces. It began with the arrival and welcoming of the *lagatoi* a 'sailing canoe' and ended with the crowning of the Hiri Queen. The Kutubu Kundu and Digaso Festival, held on September 19 and 20, showcased the unique Digaso oil extraction method, along with sago production, tapa cloth making and other important livelihood traditions unique to people in the Kutubu region. Cultural groups from Hela, Samberigi, Kikori and other Highlands areas also attended.



**Rebecca Arnold, Lead Media and Communications Adviser, enjoying Independence Day celebrations**

A team of 25 EMPNG volunteers donated their time during September to visit two children's wards at Port Moresby General Hospital and read stories from the Toea children's book series to young patients. They used this time to help the children find comfort in books and encourage them to use the children's ward library at the Hospital.

More than 390 farmers from the four LNG Plant villages have participated in the community-led Agricultural Development Plan since it began in early 2013. EMPNG continues to assist these farmers by providing plant seedlings and technical advice on cultivation methods. The African yam species introduced to farmers at the start of this initiative has proven successful, with farmers already harvesting their yams.

The second phase of the Livelihood Restoration Survey was completed in September. The survey assessed the livelihood status of a randomly-selected sample of economically displaced households from the Project area. Early survey results indicate a general improvement in the livelihoods of people who were economically displaced by Project construction activities.

## Stakeholder and community engagement

With the transition to production completed this quarter, engagements significantly increased to inform communities about production activities and LNG shipments.

More than 1,880 engagements were conducted in 135 communities surrounding EMPNG facilities during this quarter. Of these, some 460 were formal engagements and over 1,400 were informal engagements. More than 12,680 attendees were present at stakeholder engagements during the quarter.

# 1,880 ENGAGEMENTS

conducted in 135 communities

More than 80 dignitaries from government, foreign missions and international organisations participated in advocacy workshops and LNG Plant visits in the third quarter. Hela Province Governor, the Honourable Anderson Agiru, was among the first to see LNG tanker *Gigira Laitebo* berth at the LNG Plant Marine Terminal.

Advocacy workshops and LNG Plant visits provide a valuable forum for stakeholders to understand EMPNG's operations and witness the LNG production process. The workshops also provide participants with updates about other company activities, such as community development programs and national content initiatives.

The people and the government of Papua New Guinea have spent many years working with partners such as EMPNG to drive sustainable development for communities. Now that EMPNG facilities are operational, revenues derived from production will provide a long-term financial basis to support the nation's development plans.



*Vele Rupa, Government Relations Adviser, EMPNG with Hela Province Governor, the Honourable Anderson Agiru, at the LNG Plant Marine Terminal where the LNG tanker Gigira Laitebo is berthed*





**PNG LNG**

**[www.pnglng.com](http://www.pnglng.com)**

Port Moresby - Project Headquarters  
ExxonMobil PNG Limited  
Lawes Road, Munidubu Street  
GPO Box 118  
Konedobu, Port Moresby  
Papua New Guinea

Email: [pnglngproject@exxonmobil.com](mailto:pnglngproject@exxonmobil.com)

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