

PNG LNG Quarterly
Environmental and Social Report

Fourth Quarter

2014



PNG LNG

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



EXECUTIVE SUMMARY



STEADY STATE OPERATIONS ACHIEVED

“To see a project of this magnitude come together and safely achieve steady state operations within a few short years and ahead of schedule is something for which ExxonMobil can be truly proud. Personally, I feel fortunate to have had the opportunity to work with the inspiring and talented group of people who made this happen.”

- Peter Graham, Managing Director,
ExxonMobil PNG Limited

ExxonMobil PNG Limited (EMPNG) has safely achieved steady state operations with all facilities online, almost 4 million tonnes of LNG produced, and 55 LNG cargoes delivered by the end of the fourth 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 facilities on behalf of its 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.

This PNG LNG Quarterly Environmental and Social Report provides information about the progress of production, as well as safety, health, security and environmental activities.

Production

EMPNG production facilities, including the LNG Plant and the Hides Gas Conditioning Plant (HGCP), have achieved steady state operations. There was a significant increase in production this quarter and a record production week was achieved in December. By the end of 2014, 55 LNG cargoes were delivered with 25 cargoes loaded during this quarter alone. Celebrations were held at EMPNG worksites to commemorate the 50th cargo of LNG loaded in December.



The 50th cargo of LNG being loaded at the LNG Plant Marine Terminal

The first custom-built EMPNG LNG carrier, named *Papua*, also began sea and gas trials during this quarter. The ship, which was built in China, will arrive in Papua New Guinea in February 2015 to commence operations.

Safety, health and security

EMPNG finished 2014 with a strong safety performance. By the end of December, all worksites achieved a combined 23 million work hours without a Lost Time Incident for the year. Since July 2013, more than 48 million work hours have been completed without a Lost Time Incident.

23 MILLION HOURS

worked in 2014 without a Lost Time Incident

Key safety activities conducted in the quarter included: a 'Finish Strong' year-end safety campaign that emphasised the need for workers to recognise and mitigate hazards; safety leadership training for 128 workers including managers and supervisors; and a Contractor Safety, Security, Health and Environment Leadership Workshop, which involved 75 attendees from over 15 companies that contract services to EMPNG.

EMPNG is implementing production workforce health programs, and fine-tuning contractor health services delivery, performance monitoring and reporting, across the three primary health management areas of: medical; public health; and industrial hygiene. This quarter, the Lender Group's Independent Environmental and Social Consultant reported that EMPNG's occupational health program was a "best practice" system.

World Acquired Immunodeficiency Syndrome (AIDS) Day was commemorated during the quarter with three days of activities to raise awareness about Human Immunodeficiency Virus (HIV) and AIDS. The activities, held from 29 November to World AIDS Day on 1 December, included health talks, a video night and a candlelight vigil in memory of people who had died from HIV and AIDS.



Residents at Moro B Camp wearing red shirts in support of World AIDS Day

An average of 3,000 training hours is being delivered each quarter as part of a comprehensive training and mentoring program to develop the skills of Papua New Guinean security personnel. The training emphasises workplace safety and adherence to the Voluntary Principles on Security and Human Rights. Security workers also continue to receive training in the Safety Champions initiative, with 449 workers trained to date.

Environment

EMPNG aims to reduce the use of raw materials and continues to implement waste reuse initiatives at its facilities. Among its many reuse initiatives, the company is using processed drill cuttings as cover material at the Hides landfill. More than 1,500 cubic metres of treated drill cuttings were reused as landfill cover in the fourth quarter.

Over 100 tyres were donated to the PNG Ports Corporation Limited for reuse as wharf fenders during this quarter. Additionally, 19 cubic metres of lead-acid batteries that were previously stored in Kopeanda, along with 32,300 litres of waste drilling oil, were sent to approved recycling facilities in Lae.



Waste reuse initiatives are being applied throughout EMPNG worksites, such as Hides Wellpad F

Results from post-construction freshwater ecology monitoring indicate the river systems surrounding EMPNG facilities have recovered from any short-term impacts caused by construction. For example, the diversity of macro-invertebrates, which is an indicator of watercourse conditions, and levels of sedimentation in the Timalia River downstream of the HGCP, indicate these systems have recovered from construction activities.

Substantial flowering of *Nothofagus* sp. was discovered in an Upstream forest area this quarter, with seedlings found on the pipeline Right of Way (ROW) at Hides Ridge. Flowering of *Nothofagus* sp. is sporadic and unpredictable so this event was a positive ecological indicator, as the establishment of seedlings on the ROW was not expected to occur so soon after reinstatement.

To reinforce the PNG LNG Project's 'no spill' culture, 26 spill response drills were conducted across worksites during this quarter. They covered scenarios such as a condensate spill, chemical leak and diesel release. Some scenarios were enacted as desktop exercises, while others involved field-based discussions, full equipment deployment, and practical execution of spill response methods.

Workforce development

At the end of December, the production workforce reached 2,178, of which 1,537 were Papua New Guineans.

Three engineers from the graduate training development program began their full-time roles at the LNG Plant in December. One of the participants is working as a Surveillance Engineer; another is a Machinery Engineer, and the third is an Integrity Engineer.

A newspaper advertising campaign was launched this quarter to recruit 30 candidates for the third intake of Operations and Maintenance trainees. Successful applicants will begin the training program in 2015. Like their predecessors, they will complete Basic Skills and Advanced Skills training, as well as on-the-job training where they will learn about personal and team safety procedures, how to work in a team environment, and working with complex equipment for the production of LNG. More than 95 percent of Operations and Maintenance trainees from the first intake have achieved Technician Level 1, while the second trainee intake has almost completed their Technician Level 1 training requirements.

EMPNG is delivering ongoing workforce training programs to build the skills and knowledge of Papua New Guinean workers. During the quarter, more than 23,000 hours of training were delivered to almost 1,800 EMPNG and contractor employees through 854 courses. Two thirds of these workers were Papua New Guineans.

Training courses delivered to EMPNG employees focused on the development of graduate engineers, Operations and Maintenance trainees, and technical training for production workers. Contractor-provided training courses are specific to their scope of work and this quarter included topics such as cultural awareness, driving safety, working at heights, hearing conservation and hazard identification.

23,000+ HOURS

of worker training provided

Work is progressing on the refurbishment of camp amenities to meet the needs of the production workforce. For example, a new potable water system was installed at the LNG Plant camp during this quarter. Work also began on refurbishing the LNG Plant camp kitchen. Newsletters were introduced to both camps to keep residents informed about camp updates and activities.

Supporting Papua New Guinean businesses

Papua New Guinean businesses provide valuable services to EMPNG such as equipment hire and camp rental services. Landowner companies (Lancos) in particular provide services such as catering, security, light vehicle maintenance, heavy equipment rental, hire services and spare parts supply. In the fourth quarter, the company's total in-country spend with Lancos and non-Lanco services was more than 245 million Kina (US\$94.4 million), of which approximately 97 million Kina (US\$37.4 million) was spent on Lanco services.

To date, EMPNG's total in-country spend has reached more than 11.37 billion Kina (US\$4.38 billion), with 4.52 billion Kina (US\$1.74 billion) spent on Lanco services.

11.37+ BILLION KINA

spent in Papua New Guinea to date

The Enterprise Centre, which was established in 2010 to support the development of Papua New Guinean businesses, continues to build sustainable operations through contracts with EMPNG and external organisations. During the quarter, the Centre secured contracts from government agencies such as the Department of Defence, Department of Justice, and Department of Labour and Industrial Relations. The Centre also signed a contract with the United Nations Development Programme and renewed its contract with EMPNG for another three years to provide business assessment and support services to Papua New Guinean businesses.

Eighty-seven entrepreneurs sought assistance through the Centre this quarter. Since its establishment the Enterprise Centre has provided services to 17,291 Papua New Guinean entrepreneurs. More than 13,500 days of training have also been provided through the Centre to date, with 1,587 training days delivered during this quarter alone.

Social development

Donations of food and gifts from EMPNG made Christmas Day brighter for 15 young patients and their guardians in the Kikori Rural Hospital children's ward. EMPNG workers delivered the gifts and shared a Christmas cake with the children, their parents, guardians and hospital staff to celebrate Christmas.

Twenty boxes of medical supplies were provided to nine health clinics in communities near EMPNG facilities during this quarter through a partnership between EMPNG, the Papua New Guinea Tribal Foundation and Project C.U.R.E. The medical kits each contained 5,000 Kina (US\$1,930) of basic medical supplies such as towels, wipes, bandages, saline water bottles, tongue depressors, skin dressing kits and adhesive bandages.

The Texas Children's Hospital's teaching physician delivered more than 104 lectures and 470 mentoring hours to 148 University of Papua New Guinea School of Medicine and Health Science students, as well as to physicians and nurses at the Port Moresby General Hospital. The Texas Children's Hospital team also provided training on severe acute malnutrition management for 53 health workers from 15 hospitals across the country.

In addition to their teaching commitments, the doctors are currently managing the care of more than 200 children with severe acute malnutrition.

In partnership with Buk Bilong Pikinini children's libraries, EMPNG provided books for a new library at Lake Kutubu Primary School in the Southern Highlands Province this quarter. The donation included eight boxes of assorted reading books and 50 books from the Toea children's adventure series.

Infrastructure work has been completed at Tugupawi Primary School with the re-opening of the school's fully refurbished recreation hall. Works progressed at Tari Secondary School; Dauli Teachers College; Idauwi, Mananda and Baguale primary schools; and Inu and Omati elementary schools.



Graeme Hunt, Hides Operations Superintendent, EMPNG, handing over the fully refurbished recreation hall to Sister Jessie Joseph, Head Teacher of Tugupawi Primary School

At Redscar High School, maintenance works were completed on classrooms, the library, the staff room and sporting facilities. A group of 120 Grade 10 students were the first to sit for their national examinations in the refurbished classrooms.

Eighty laptops previously used for EMPNG trainees were donated to three tertiary institutions this quarter. Female students from Don Bosco Technical College received 30 laptops for their night studies. This donation means the students have no need to venture out to the common computer laboratory at night.

Another 40 laptops were donated to the Papua New Guinea University of Technology's four engineering departments. The remaining ten laptops were given to the University of Papua New Guinea's School of Medicine and Health Sciences to be used as teaching resources.

A three-year, EMPNG funded, Barging Route Waterways Memorandum of Understanding Scholarship Program was completed during this quarter. The Program was part of the Memorandum of Understanding between EMPNG and the eight barging route waterways landowning tribes along the Kikori River. Over the past three years, the scholarship has funded 22 students from barging route waterways communities to attend tertiary studies.

The LNG Plant site food and agriculture program continues to deliver farm supplies and planting materials to farmers. To date, 13,932 crop seedlings and cuttings, and 1,646 tools, such as spades, digging forks, watering cans and sharpening tools, have been distributed to farmers across the four LNG Plant site villages. Women account for more than 60 percent of the farmers involved in the program, with 238 female farmers registered by the end of 2014.

In Caution Bay, fish catch landing surveys were conducted to assess the impact of company activities on fishing in LNG Plant site communities. Following agreement with the Lender Group, no further surveys are required. EMPNG is finalising the fourth quarter catch landing survey data and will compile a close-out report for all Caution Bay fisheries surveys, including fish catch landing surveys, in-village vessel surveys and mangrove use surveys. The report will be completed in early 2015.

The 295 EMPNG volunteers who gave more than 1,500 participant hours in 13 activities to help local communities during 2014 were recognised at a luncheon held this quarter. Some of the many volunteer activities conducted this year included: packing and sorting books for the Buk Bilong Pikinini children's library program; painting the Port Moresby Nature Park fences and City Mission classrooms; giving a face lift to the Port Moresby General Hospital children's playground; cleaning up the Moro market and roadside; and handing out water bottles to those who participated in the annual Walk Against Corruption in Port Moresby. Since 2010, some 1,200 EMPNG volunteers have donated more than 20,500 participant hours to support 30 community activities.

EMPNG provides annual support to the Coalition for Change, a leading non-profit advocate on the issue of gender based violence in Papua New Guinea. During this quarter, the company contributed 20,000 Kina (US\$7,700) to support the Coalition's programs, which included a White Ribbon Day fundraising breakfast on 25 November to commemorate the International Day for the Elimination of Violence Against Women.

Papua New Guinea's First Lady, Lynda Babao-O'Neill, was the guest of honour at the annual Project C.U.R.E. First Lady luncheon held in Denver, Colorado, in November.



Papua New Guinea's First Lady, Lynda Babao-O'Neill raises awareness of her country's health care needs at the annual Project C.U.R.E. First Lady luncheon held in Denver, Colorado

From left: Meg O'Neill, Vice President Asia Pacific, ExxonMobil Production Company; Jeannie Ritter, Mental Health Ambassador, Mental Health Center of Denver; Frances Owens, Community Relations Director, Arc Thrift Stores; Michelle Hau'ofa, Director of Operations, Papua New Guinea Tribal Foundation; Lynda Babao-O'Neill, First Lady of Papua New Guinea; Dr. AnnaMarie Jackson, Founding First Lady of Project C.U.R.E.; and Anne Trujillo, Denver Channel 7 Anchor



Up close:

New Managing Director for EMPNG

EMPNG has announced that its new Managing Director, Andrew Barry, will commence his appointment in February 2015.

Andrew Barry has 20 years' international experience in the oil and gas industry, most recently as President of ExxonMobil Canada. In this capacity he has been responsible for ExxonMobil's production, development and exploration activities across Canada. Andrew has previously held several engineering, operational and planning positions associated with oil and gas production from Bass Strait, Australia. He has also been the Global Energy Advisor and Upstream Strategy Advisor for Exxon Mobil Corporation, and was Vice President of LNG Sales for ExxonMobil Qatar Inc., as well as Operations Manager for numerous onshore and offshore projects in the Gulf of Mexico, Texas, Louisiana, Colorado and Alabama. Andrew Barry holds a Bachelor of Civil Engineering degree, with First Class Honours from the Queensland University of Technology, Australia and a Masters of Business Administration from the University of Melbourne, Australia.

Andrew replaces EMPNG's current Managing Director, Peter Graham, who will retire at the end of January 2015. Peter Graham has worked in senior roles with Exxon Mobil Corporation for more than 27 years. He spent the past ten years with the PNG LNG Project, initially as Managing Director of Esso Highlands Limited, which transitioned to his current role as Managing Director, EMPNG.



Andrew Barry, new Managing Director of EMPNG

Over 1,800 people attended the event, which raised more than 4 million Kina (US\$1.5 million) for much needed medical supplies for Papua New Guinea. EMPNG provided 259,400 Kina (US\$100,000) sponsorship for the luncheon.

Stakeholder and community engagement

The level of engagement with communities remains high to keep people informed about production and drilling activities. During the quarter, more than 14,350 attendees from 160 communities participated in some 730 formal community engagements and 1,430 informal engagements.

~2,160 ENGAGEMENTS

conducted in 160 communities

During these engagements, clans involved in caretaking activities along the pipeline ROW were given information about caretaking strategies, and Clan ROW Maintenance Agreements were signed with participating clans.

The EMPNG 2014 advocacy program concluded in December, with almost 100 dignitaries participating in more than ten advocacy workshops during the quarter.

Since the start of 2014, EMPNG has hosted some 900 officials from government departments, foreign embassies and the media in more than 40 workshops. To date, over 1,000 advocacy workshops have been conducted, involving more than 6,000 government and media representatives.

An EMPNG workshop and LNG Plant site tour were held during this quarter for local media to discuss the current status of production with EMPNG executives. At the end of the quarter, EMPNG hosted a media *bung* or 'gathering' where the company's executives mingled with media representatives and PNG LNG Project suppliers. During the *bung* Peter Graham introduced his successor, Andrew Barry.

The completion and successful safe start-up of EMPNG's facilities have demonstrated what can be achieved in partnership with stakeholders in Papua New Guinea, and has now set the stage for future investments in this resource-rich nation.



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PNG LNG is operated by a subsidiary of
ExxonMobil in co-venture with:



Oil Search



National Petroleum Company
Papua New Guinea

Santos

We have the energy.



JX Nippon Oil & Gas Exploration



