

**PNG LNG Quarterly  
Environmental and Social Report**

**Second Quarter**

**2014**



**PNG LNG**

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





## EXECUTIVE SUMMARY



### FIRST LNG CARGO

**“The first cargo of LNG is a proud and historic moment for Papua New Guinea. This resource-rich nation, with its talented and dedicated people, is uniquely placed to deliver natural gas to meet the growing demands of Asia Pacific markets for many years to come.”**

**- Peter Graham, Managing Director,  
ExxonMobil PNG Limited**

At 11:00am local time on May 25, the first cargo of LNG produced at the completed ExxonMobil PNG Limited facilities departed Caution Bay on the *Spirit of Hela* for delivery to The Tokyo Electric Power Company Inc. in Japan. The first delivery arrived on June 2.

The departure of the first cargo was an historic moment for Papua New Guinea and for the tens of thousands of people who contributed to the development of the US\$18.8 billion Papua New Guinea Liquefied Natural Gas (PNG LNG) Project (the Project).

Over its estimated 30 years of operation, the Project is expected to produce 250 billion cubic metres of gas for customers throughout the Asia Pacific region.

This is the eighteenth and final PNG LNG Quarterly Environmental and Social Report and provides updates on the Project's construction phase for the second quarter 2014. During the production phase, reporting will continue on a bi-annual basis until mid-2015 and then move to annual reporting.

Construction and operation of the Project is managed by ExxonMobil PNG Limited, a subsidiary of Exxon Mobil Corporation. The Project was 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.



*The Spirit of Hela completed ExxonMobil PNG Limited's first LNG cargo delivery on June 2*

### Workforce development

The Project is providing ongoing demobilization support to the construction workforce while, at the same time, delivering training and transition support to the incoming Production team.

Project workforce numbers declined this quarter as construction contractors continued to demobilize. By the end of the quarter, the total workforce was just over 2,250 compared to almost 7,800 in the previous quarter. Papua New Guineans comprise 58 percent of the current workforce, compared to 44 percent recorded in the first quarter 2014.

## 55,000 WORKERS

helped build the PNG LNG Project

Since the start of construction, the Project has employed over 55,000 workers, which peaked at 21,220 in 2012.



***"I am proud that this is my Project. I am Papua New Guinean, and I feel very proud to be part of this team."***

**- Jenny Pisimi, Drilling Engineer, ExxonMobil PNG Limited**

To date, the Project has also delivered more than 2.17 million hours of worker training in approximately 13,000 training programs. As part of the Project's commitment to training, two purpose-built facilities were established to meet the training needs of construction workers. These facilities are the Juni Construction Training Facility in the Upstream area, and the Port Moresby Construction Training Facility.

In May, the Juni Construction Training Facility was officially transferred to the Hela Provincial Government to provide ongoing vocational training opportunities for Papua New Guinean citizens. During construction, this Facility was used to train Project workers in areas such as carpentry, civil construction and concreting.

The Port Moresby Construction Training Facility, which provided internationally accredited training in construction-related trades, will be handed to the Papua New Guinean Government in July 2014.

## Construction

On April 23, the Project started LNG production ahead of schedule. With the start of production, the Project's construction phase has ended. During this quarter, all completed facilities were handed to the Production organization.

Construction highlights are outlined in Table 1.

**Table 1 – Contracts and construction highlights**

Contract	Contractor	Major activities during the second quarter 2014
LNG Plant and Marine Facilities (EPC3)	Chiyoda and JGC Joint Venture	First LNG production and shipment to Japan.
Hides Gas Conditioning Plant and Hides Wellpads (EPC4)	CBI and Clough Joint Venture	Completed final construction works and transferred all permanent facilities to the Production organization.
Onshore Pipeline (EPC5A)	SpieCapag	Remaining minor works completed.
Associated Gas Development	Various	Construction completed at the Gobe Production Facility and Kutubu Central Processing Facility.
Drilling	Nabors Drilling International Limited	Six production wells at Hides completed.
Permanent Facilities Compound	Leighton (PNG) Limited	Administration building and support services building structure near completion.

## Safety, health and security

The impressive Project safety record continues, with 47 million hours worked without a Lost Time Incident since July 2013.

## ~200 MILLION HOURS

of work expended on the Project's construction

Teams across all Project sites are concentrating on the safe completion of their scopes of work and demobilization activities. During this process, the Project continues to focus on best practice safety performance.

In April, 59 health professionals from Papua New Guinean and international organizations, along with ExxonMobil PNG Limited representatives, participated in a one-day National Department of Health workshop to review health initiatives in Papua New Guinea.

During the workshop, attendees discussed results from the Integrated Health and Demographic Surveillance System, along with the Papua New Guinea Institute of Medical Research's tuberculosis study and maternal and child health study. Government representatives determined that this research would be used to help drive actions in health policy in Papua New Guinea. Workshop attendees agreed that ongoing health education was needed in schools, churches and the media on topics such as tuberculosis and sexual health awareness.

In recognition of World Malaria Day on April 25, the Project held a series of presentations and distributed mosquito bed nets to raise worker awareness about the prevention of vector-borne illnesses. Since 2011, 4,300 bed nets have been distributed to Project workers.

As part of the Project's partnership with Texas Children's Hospital, two Baylor College of Medicine doctors provided training on pediatric care to 25 Tari Hospital health care workers this quarter. More than 45 medical students at the University of Papua New Guinea School of Medicine and Health Sciences also received practical clinical instruction in general pediatrics, critical care, malnutrition, tuberculosis, Human Immunodeficiency Virus and inpatient and outpatient pediatrics.





**Operations and Maintenance trainees Esther Kila and Isabella Mogia at the LNG Plant site ready for working at heights activities**

The two-year Texas Children's Hospital program, conducted in collaboration with its partner the Baylor College of Medicine, is the result of US\$3.1 million (7.5 million Kina) Project funding. This program aims to improve maternal health and reduce child mortality rates in Papua New Guinea.

A Baylor College of Medicine pediatrician continues to support the Port Moresby General Hospital, with more than 100 pediatric patient visits each week as part of this commitment.

Since the start of construction, the Project has supported non-government organizations, such as Population Services International (PSI), in their delivery of health programs in Project communities. During this quarter, PSI completed health education with communities in the Hiri and Hides areas as part of the Enhanced Community Health Program. This was the final scope of work for the Project-supported Program, which included initiatives such as the Water, Sanitation and Hygiene (WASH) Program, the Marital Relationships Training course and the Sexually Transmitted Infection prevention initiative 'Seif Draiva' (Safe Driver). The partnership between the Project and PSI has delivered wide-ranging health benefits for communities within the Project area, with flow-on effects for the general Papua New Guinean population.

## Environmental performance

To commemorate World Environment Day on June 5, a Piku turtle (Pig-Nosed Turtle *Carettochelys insculpta*) display was opened at the Port Moresby Nature Park. The Project continues to support the Park, with 670,000 Kina (US\$276,040) donated to date for education and biodiversity programs.

The Project has also been working with Kikori communities and marine conservation experts since 2012 to protect the Pig-Nosed Turtle. Project funding contributes to ongoing research and conservation of the turtle, in particular the appointment of Papua New Guinean research Masters student, Yolarnie Amepou, who will lead the research on a full-time basis.

The Project is progressing implementation of its Biodiversity Strategy. During this quarter, construction began on a resource center for the use of the Lake Kutubu Wildlife Management Area Committee and local communities. The Committee previously identified a need for the resource center to support its operations in protecting the Lake Kutubu Wildlife Management Area.



**Lake Kutubu Wildlife Management Area Committee members following signing of the resource center agreement**

A post-construction survey was undertaken in Caution Bay to assess the Project's impact on water quality and ecology, and measure the effectiveness of mitigation initiatives in the area. Based on a preliminary assessment of the 2014 results, the nature of the reef and marine ecology is consistent with findings of the Project Environmental Impact Statement and pre-construction surveys, which means Project construction has caused minimal impact to the area.

A weed identification training package for Upstream area workers was provided to drivers this quarter. The training aims to raise worker awareness of the Project's Weed Management Strategy and help train field officers in the monitoring of Priority 1 weeds. The Project's fifth weed audit was completed in May and included an assessment of weeds at the Permanent Facilities Compound in Port Moresby. The audit showed that the overall abundance and diversity of weeds across the Project area remained stable. All weeds found in the Project area were known to occur in Papua New Guinea prior to construction.

The Project's fifth reinstatement audit was also completed, with 76 sites assessed across a range of environments. The audit found that Project reinstatement works were completed to a high standard, with few sites requiring any form of remediation, and that reinstatement practices are delivering expected results.

The Hides Waste Management Facility incinerator reached steady state operating conditions during this quarter, with stack emissions testing completed. The high temperature incinerator is working to design specifications and has been transferred to the Production organization.



**Monitoring of reinstatement structures along the Right of Way continues**

## Growing Papua New Guinean businesses

Throughout construction, the Enterprise Centre and the Project's Business Development team have enabled businesses to capitalize on opportunities both within and outside of the Project.

Landowner companies (Lancos) have provided the Project with services such as labor supply, light vehicle maintenance, heavy equipment rental, hire services and spare parts supply. To date, the Project's total Lanco spend has grown to more than 2.72 billion Kina (US\$1.12 billion).

Non-Lanco Papua New Guinean businesses have also provided services to the Project in the form of training services, equipment hire and camp rental services. By the start of production, the Project had spent nearly 11 billion Kina (US\$4.53 billion) on combined Lanco and non-Lanco services.

## ~11 BILLION KINA

spent in Papua New Guinea to date

The Enterprise Centre has assisted more than 17,000 Papua New Guinean entrepreneurs since it was established in April 2010. The Centre is a joint venture between ExxonMobil PNG Limited and the Papua New Guinea Institute of Banking and Business Management. By the start of production it had also delivered the equivalent of more than 10,000 training days and completed 322 business assessments for Papua New Guinean businesses.

## Social development

Since 2010, the Project has supported communities through more than 240 completed community development support projects and another 21 that are still in progress. In this quarter alone, classroom infrastructure upgrades were completed at: Juni Primary School in Hides; Bisi, Veiru and

Veraibari schools in the Kikori region; and LNG Plant site village primary schools in Boera, Papa, Lea Lea and Porebada.

As part of its commitment to schools, the Project distributed 2,400 portable solar lights to students from Redscar High School, and Boera, Papa, Lea Lea and Porebada Primary Schools in the LNG Plant site villages. This is in addition to 2,500 solar lights provided to elementary school students and teachers from ten schools in the Upstream area in the first quarter 2014. The lights enable students who live in areas without access to electricity to read and complete their homework in the evenings.



**Redscar High School students receive their solar lights**

In addition to donations made during this quarter, the Project has provided more than 1,400 desks to schools throughout the Upstream area and 60,000 books and activity packs from the Toea children's book series to more than 100 schools in the Project area. The Toea series is based on the adventures of fictional character Toea as he travels through different areas of Papua New Guinea. The series has helped deliver important safety, health and cultural messages to school-aged children while encouraging literacy.

Another Project-led literacy initiative resulted in the official launch of a book written by Papua New Guinean primary school children this quarter. The book, titled *Kastom Stori Sene Gori* (traditional stories), is a collection of handwritten stories and illustrations by students that reflect traditional stories from local villages. It was launched at the Buk Bilong Pikinini children's library in June and is being distributed to schools throughout the Project area.

At the end of this quarter, the Project hosted an event in Kikori to signify the closing of the Barging Route Waterways Memorandum of Understanding between ExxonMobil PNG Limited and eight tribes from villages along the Kikori River.

The Project donated eight 7-metre banana boats with motors and fishing equipment to representatives from each of the eight tribes. The boats will be used for fishing and transportation activities.





**Launch of the Kastom Stori Sene Gori book in Moro**

Since the start of construction, the Project has conducted quarterly fish catch landing surveys with communities surrounding Caution Bay and the Omati River to determine the impact of construction activities on fishing in these areas. The results of these surveys indicate that Project construction has not significantly impacted fishing in these communities.

## Stakeholder and community engagement

A total 245 formal engagements and 290 informal engagements were conducted with over 14,200 individuals from 101 communities in the Project area this quarter. To date, the Project has completed over 4,500 community engagements involving more than 165,000 participants.

# 165,000+ ATTENDEES

in community engagements to date

Players from Papua New Guinea's premiere rugby league team, the Kumuls, helped the Project deliver messages to schools about the importance of navigation aids and safety at sea. More than 1,300 students and teachers from five primary and high schools in the LNG Plant site villages participated in navigation and safety at sea awareness sessions. Another 600 residents from LNG Plant site villages, as well as members of women's groups, fishing groups and other community organizations, were informed about the Project's LNG shipping operations.

The Project also conducted 12 advocacy workshops to usher in production this quarter. Since early 2010, the Project has held over 360 advocacy workshops and hosted visits to the Hides Gas Conditioning Plant and LNG Plant for some 6,000 dignitaries from various government departments, representative stakeholder organizations, schools and community groups.



***"There are so many things to be proud of with this Project. The key to its success is the fact that everyone has come together as one team, with one clear goal and a shared commitment to achieving a positive result for the Project and for Papua New Guinea."***

**- Decie Autin, Project Executive, ExxonMobil PNG Limited**

The Project's construction phase has been an extraordinary journey of highs and lows, challenges and triumphs. More importantly, for many, it was an unforgettable experience in which new work skills were developed and lifelong friendships forged. The start of production now begins a new era for the Project and its people.







**PNG LNG**

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