

ExxonMobil



PNG LNG Environmental and Social Report – First Half 2015

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





Executive summary



“Our first year of production demonstrates the successful partnership between EMPNG and the Government and people of Papua New Guinea.”

Andrew Barry, Managing Director, ExxonMobil PNG Limited

ExxonMobil PNG Limited (EMPNG) achieved many milestones in the first half of 2015, including safely completing one year of production on 29 April. This was followed by loading of the 100th LNG cargo on 15 June. By the end of June, the amount of LNG delivered reached more than 7.5 million tonnes.

EMPNG is a subsidiary of Exxon Mobil Corporation and manages the production of 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 Environmental and Social Report – First Half 2015, provides a progress update on production activities from 1 January to 30 June 2015.

Production

EMPNG achieved financial completion of the PNG LNG Project after concluding the 120-day

Lenders Operational Completion Test in January 2015.

In February, the *Papua*, the first of two custom-built EMPNG LNG carriers delivered its first cargo. By the end of June, 104 LNG cargoes were safely loaded for delivery to customers in Asia.

Since EMPNG’s export operations began, an LNG carrier has been loaded, on average, every three or four days with continuous operational excellence.

The Permanent Facilities Compound was nearing completion at the end of June. When completed, it will consist of an administration office, cafeteria and worker facilities such as *haus bungs* or ‘places of gathering’.

EMPNG has signed a Memorandum of Understanding with the Papua New Guinean Government to supply up to 20 million cubic feet a day of domestic natural gas for 20 years for electricity production.

The first supply of electricity from the LNG Plant was delivered on 2 July 2015, in time for the start of the Pacific Games in Papua New Guinea.

104
LNG cargoes
loaded



Papua New Guinean Prime Minister, the Honourable Peter O'Neill; Petroleum and Energy Minister, the Honourable Nixon Duban; Chairman of PNG Power, Larry Andagali; and other dignitaries witness the first supply of power from the LNG Plant

Safety, health and security

EMPNG's strong safety performance continued throughout the first half of 2015, now with 700 consecutive days worked without a Lost Time Incident. The company continues to focus on: institutionalising a culture of active caring and safety leadership; understanding hazards and reducing risk tolerance; managing higher risks; and applying lessons learned from other ExxonMobil organisations.

To commemorate World Tuberculosis Day on 24 March and World Malaria Day on 25 April, EMPNG held information sessions across worksites. More than 1000 workers received tuberculosis screening as part of tuberculosis prevention efforts.

Four laboratory technicians completed World Health Organisation recertification for malaria microscopy during the first half. One of the technicians achieved Level I classification – the highest level attainable.

New diagnostic technology has been introduced to enable site clinics to quickly and accurately diagnose common respiratory, gastrointestinal and blood pathogens.

EMPNG's investment in a partnership with the Texas Children's Hospital and the Baylor College of Medicine continues to benefit local communities. More than 390 undergraduate students from the University of Papua New Guinea School of Medicine and Health Science are receiving lectures from two Baylor College of Medicine doctors, who are also supervising 16 medical student research programs. In addition, 42 doctors and nurses at the Port Moresby General Hospital are receiving lectures on current health practices, while another 36 health professionals have received mentoring. Meanwhile, almost 500 children have received

treatment through a comprehensive program that was developed to diagnose, manage and document acute malnutrition in children.

To date, EMPNG has invested PGK8.5 million (USD\$3.1 million) in the Texas Children's Hospital and Baylor College of Health program.

In May, the Lender Group's Independent Environmental and Social Consultant reported that EMPNG was maintaining best practice in its occupational health program.

EMPNG's security teams continue to work closely with Village Liaison Officers to reduce security risks. Royal Papua New Guinea Constabulary personnel also maintain law and order in areas around EMPNG facilities and, like contracted EMPNG security personnel, must complete Voluntary Principles on Security and Human Rights training. In the first half of 2015, five Voluntary Principles on Security and Human Rights training sessions were conducted for Constabulary officers at the Police Training Centre in Port Moresby.

Environment

EMPNG's Biodiversity Strategy aims to protect biodiversity in the PNG LNG Project area by outlining how terrestrial biodiversity will be managed for the long-term. The Biodiversity Monitoring Plan, focused on EMPNG's Upstream area, defines performance indicators for each objective of the Biodiversity Strategy.

In February, work began on the Biodiversity Surveys element of the Strategy when a team of eight national and international biodiversity specialists spent 30 days surveying 10 sites to confirm selection of three long-term Biodiversity Assessment Areas. One of the Assessment Areas, along the Hides Ridge, represents high altitude ecosystems and contains six monitoring transects. The two other Assessment Areas are near Moro, representing medium altitude ecosystems and consist of four monitoring sites.



Elvis Tamtiai, a researcher with the New Guinea Binatang Research Centre checking for moths from an insect sample

700
consecutive days
worked without a
Lost Time Incident

In June, the first Biodiversity Survey was conducted in the long-term Assessment Areas using rapid assessment methodology.

Also during the first half, the New Guinea Binatang Research Centre, a Papua New Guinea-based scientific research organisation that specialises in tropical rainforest research, conducted regeneration monitoring. Early observations show that Right of Way regeneration is progressing well, with a range of desirable forest plant species providing good vegetation cover.

EMPNG continues to implement waste reuse initiatives at its facilities with more than 28 tonnes of scrap metal and 3 tonnes of waste wood sent to a Papua New Guinean recycling facility during the first half of 2015. An additional 30 tonnes of used lead-acid batteries were sent to an approved recycling facility in Lae and more than 42,000 litres of waste oil were sent to another approved facility for reuse.

The company is maintaining its proactive focus on spill prevention, with 55 spill response drills conducted across worksites in the first half. Spill prevention and response was also covered in toolbox talks, site inductions and individual coaching of workers to reinforce the mandatory use of drip trays and absorbent pads on worksites. Regular inspections of spill kits occurred at all worksites.

EMPNG joined community and government volunteers in multiple World Environment Day activities held in the National Capital District, Hela and Central provinces on 5 June. More than 850 people were involved in these activities.



EMPNG workers join volunteers from government agencies, schools and the PNG Hunters football team in support of World Environment Day

Workforce development

At the end of June, the production workforce, including both EMPNG employees and contractors, reached more than 2600. Of these, over 2100 were Papua New Guinean citizens who comprised 80 percent of the workforce.

More than 65 percent of the production workforce is employed through third party contractors, with 90 percent of the contract workforce being Papua New Guinean.

Since January 2015, more than 23,800 hours of training have been delivered through 1012 courses. Eighty-three percent of the EMPNG employees and contractors trained were Papua New Guinean citizens, of these, 32 percent were women.

The third intake of 40 Operations and Maintenance trainees was selected and began training in April. They are completing nine months of Basic Skills training before commencing the Advanced Skills training program in 2016. The new trainees will also receive on-the-job training, with a focus on personal and team safety procedures, working in a team environment and working with complex equipment for gas and condensate production.

Trainees from the first intake of the Operations and Maintenance training program have qualified as Technician Level 1 workers, while trainees from the second intake are completing their training for Technician level.

EMPNG is sponsoring two engineering students to complete their final year of studies at the University of Technology in Lae. A third student graduated from the University of Technology and has started work as an electrical engineering contractor with EMPNG. All three students were participants in a summer vacation work experience program held at the LNG Plant early this year.

The company is also sponsoring three employees to complete university studies under the ExxonMobil Education Assistance Program.

Three engineers who joined EMPNG's graduate program in December 2014 attended a Production Engineering Overview training course in Melbourne during May. The five-day course covered topics including: exploration and drilling; hydrocarbon properties and behaviour; crude oil processing; and water treatment.

Supporting Papua New Guinean businesses

EMPNG contracts six Landowner companies (Lancos) to provide services such as labour hire, maintenance, container freighting and vegetable supplies; and another 190 non-Lanco Papua New Guinean businesses for services including transportation of personnel, security, freight and logistics, food supply, medical services and construction material testing.

23,800+
hours spent
on training

80%
of the production
workforce is
Papua New
Guinean

In the first half of 2015, EMPNG's total in-country spend was more than PGK332 million (USD\$121 million). Of this, more than PGK127 million (USD\$46 million) was spent on Lanco services.

Since the start of production, EMPNG has spent more than PGK664 million (USD\$242 million) on Papua New Guinean services. More than PGK303 million (USD\$110 million) of this was spent with Lancos.

EMPNG sponsored 24 workers from its contractor Laba Holdings Limited to attend the Enterprise Centre's two-day customer service training course in May. The company also sponsored another worker from this Lanco to complete the Centre's Introduction to Supervision training course.

The Enterprise Centre provided business assessments to 58 companies in the first half of 2015, with 44 of these sponsored by EMPNG. The Centre also provided more than 4400 days of training on topics such as human resource management, customer service, bookkeeping/accounting and employee and industrial relations.

More than 340 entrepreneurs were assisted in the first half through information workshops, the use of workstations and business meetings. The Centre has supported more than 17,700 Papua New Guinean entrepreneurs to date.

Social development

More than 820 students from schools in Port Moresby, LNG Plant site communities and the Upstream area participated in ExxonMobil's Science Ambassador Program in the first half of 2015. The students participated in hands-on lessons about rocks and geology, and oil and gas.



Students from Papa Primary School participating in a practical experiment during a Science Ambassador Program lesson

Construction of a new double classroom and a teacher's house at Tari Secondary School was completed in March.



Hides Gas Conditioning Plant Superintendent, Martin Sagayaraj, officially opening the new buildings constructed for Tari Secondary School

A double classroom and refurbished dormitory at Dauli Teachers College and infrastructure upgrades at Idauwi and Mananda primary schools, were also completed. The construction was funded by EMPNG.

A new community centre and market were opened in Angore in April with funding from EMPNG. The centre was constructed by a Lanco and will provide a meeting place for Angore communities. It includes a water tank for better community access to clean drinking water.

EMPNG sponsored three women to attend a Global Women in Management (GWIM) workshop in Washington DC from 18 May to 12 June. At the workshop the women learned coaching styles, how to strengthen communication skills and how to network effectively to increase the reach and impact of their work.

EMPNG is supporting GWIM alumni with a PGK145,000 (USD\$52,800) donation to the Advancing PNG: Women Leaders Network, an organisation formed by the alumni following the 2014 GWIM conference in Port Moresby.

During the first half of 2015, Ginisegana Solien, an analyst with EMPNG's Public and Government Affairs team, became the first recipient of the Decie Autin Engineering Scholarship for Women. The Scholarship, named after PNG LNG Project Executive, Decie Autin, was launched in 2014 by the Business and Professional Women's Club of Port Moresby. It aims to encourage young Papua New Guinean women to undertake engineering studies.

The landmark 2015 Papua New Guinea Women's Forum held in March brought together many of the nation's most important female leaders and laid the groundwork for ongoing improvements to national policy affecting women.

PGK332m
spent in-country in
the first half

More than 500 participants attended the three-day Forum, which was hosted by the US Embassy and Papua New Guinea's Department for Community Development. Senior EMPNG female managers were among the participants and the company provided a PGK55,000 (USD\$20,000) contribution to the Forum.

The Forum addressed topics including: women's empowerment and education; leadership; and opportunities for women to participate in business. Recommendations from the Forum will help shape future government policy in Papua New Guinea.

Almost 400 farmers in villages around the LNG Plant site have benefitted from the LNG Plant site food and agriculture program since its inception in mid-2012. Since January 2015, EMPNG has provided more than 2000 fruit tree seedlings and over 430 training and mentoring sessions to farmers regarding crop production and new farming techniques. With the dry season approaching, farmers are being taught the importance of moisture conservation, mulching, and fire management to prevent fruit tree and food crop loss.

In May, an independent third party audit was conducted to assess EMPNG's implementation of its Resettlement Framework. The audit concluded that EMPNG had substantially and materially complied with relevant International Finance Corporation Performance Standards. The auditor confirmed that, providing remaining corrective actions were completed and verified by the Lender Group's Independent Environmental and Social Consultant at their next site visit in October 2015, the current land acquisition, resettlement and Livelihood Restoration Program could be considered complete.

EMPNG is engaging with landowning clans to finalise remaining compensation payments, in accordance with requirements of the *Oil and Gas Act 1998*.

Stakeholder and community engagement

In the first half of 2015, EMPNG conducted more than 780 formal community engagements in 78 communities and more than 3000 informal engagements in 77 communities, involving almost 20,000 attendees.

In Upstream areas, engagements focused on safety along the pipeline Right of Way, as well as road and traffic safety.

More than 6140 students from 27 primary and elementary schools in Hides, Komo, Angore and Moro participated in an EMPNG 'Always Be Careful' road safety campaign. The campaign consisted of posters featuring Toea from the children's adventure book series. Safety messages were translated into Huli to ensure greater understanding among the students. In communities near the LNG Plant site, more than 2460 students from seven schools participated in road and pedestrian safety awareness programs.



An 'Always Be Careful' road safety campaign session being conducted at Komo Catholic Elementary School

In early 2015, Papua New Guinea's Prime Minister, the Honourable Peter O'Neill, attended the signing of an agreement between EMPNG and the National Airports Corporation to enable commercial flights at Komo Airfield.

The 2015 advocacy program began in February, with Papua New Guinean Department of Petroleum and Energy senior managers receiving a briefing from EMPNG representatives about the status of production activities. By the end of June, more than 95 dignitaries had attended advocacy workshops at the LNG Plant, including Australia's Minister for Trade and Investment, the Honourable Andrew Robb.

EMPNG continues to build on the partnerships formed with the community and government during the construction phase, with the aim of achieving sustainable growth and long-term economic prosperity for the people of Papua New Guinea.

~20,000
attendees at
community
engagements

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