

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



## **EXECUTIVE SUMMARY**

### PARTNERING TO DRIVE ENVIRONMENTAL OUTCOMES

"The Project is proud to be working together with Papua New Guinean communities, suppliers and our many government and non-government stakeholders to implement programs that lead to good environmental outcomes."



- Decie Autin, Project Executive, Esso Highlands Limited

The Papua New Guinea Liquefied Natural Gas (PNG LNG) Project (the Project) is increasingly working with its stakeholders, including local suppliers, on programs intended to deliver good environmental outcomes. For example, the LNG Plant site boosted its recycling capability with the appointment of a second approved Papua New Guinean scrap metal recycler.

This is the fourteenth PNG LNG Quarterly Environmental and Social Report, which provides updates about the Project's environmental, construction, safety, health, security and social progress. Esso Highlands Limited, a subsidiary of Exxon Mobil Corporation, is responsible for the Project's construction and operation and 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.

#### Environmental performance

Contractor waste management practices are achieving high standards across Project sites. This is the result of sharing lessons learned and using innovative reuse and recycling options, such as the patented Ecoflex system, which recycles end-of-life tires in road base, erosion control and retaining walls. While the Project aims to recycle materials and minimize waste, in some instances this is not possible. In these cases, the Hides Waste Management Facility is also beginning to realize its potential as the focal point for non-recyclable waste. During this quarter, the Project began to transfer non-recyclable waste from temporary storage to the Hides Facility for appropriate disposal, with more than 75 tonnes of stored waste received at the Facility so far.

The Project's strong commitment to protecting native fauna and flora was the focus of a multi-stakeholder meeting during this quarter to review and fine tune the Biodiversity Strategy. The meeting brought together representatives from the Project, the Papua New Guinean Government

and the University of Papua New Guinea, along with other stakeholders, to discuss the progress of the Project's biodiversity offset program. It was the last formal consultation to be undertaken by the Project as part of the development of the Biodiversity Offset Delivery Plan. The Project is now finalizing the Plan.

To minimize the construction footprint in the remote Homa Ridge area, during this quarter, the Project implemented innovative teleferic pipeline installation techniques. These techniques enable pipes to be carried uphill on a metal cable high above the ground. Teleferic installation is used in areas where there are steep hills or ridges, or where the terrain impedes vehicular access. The process minimizes the Project footprint because it allows a narrower Right of Way (ROW) width due to the reduced number of construction vehicles needing access to these areas.

In areas where the Project footprint has disturbed native vegetation, we are implementing a program of reinstatement works. With completion of construction at Komo Airfield, the contractor's focus was on reinstatement activities, with more than 29 hectares of land reinstated by the end of the quarter. In addition, 192 kilometres of the onshore pipeline ROW has been reinstated.



The Hides Waste Management Facility is the focal point of waste management activities

#### Construction

A milestone was achieved with drilling of the first production well complete. Another key achievement was the start of pipeline welding on the Hides gas gathering pipeline system.

## 1<sup>st</sup> production well completed

Key construction highlights are outlined in Table 1.

Table 1 - Contracts and construction highlights

Contract	Contractor	Major activities during the second quarter 2013
LNG Plant and Marine Facilities (EPC3)	Chiyoda and JGC Joint Venture	Commissioning activities progressed on Train 1. Pneumatic testing completed on both LNG tanks. First water produced from the LNG Plant site's permanent desalination unit.
Hides Gas Conditioning Plant and Hides Wellpads (EPC4)	CBI and Clough Joint Venture	Completed construction of all storage tanks.  Received and set multiple oversized equipment loads from Komo air operations.
Onshore Pipeline (EPC5A)	SpieCapag	Completion of over 320 kilometres of mainline welding, 231 kilometres of pipeline hydrotesting and 192 kilometres of ROW reinstatement.  Commenced pipeline stringing and welding on the Hides gas gathering pipeline.
Komo Airfield (EPC5B)	McConnell Dowell and Consolidated Contractor Group Joint Venture	Air operations commenced.  Commenced construction demobilization activities.
Associated Gas Development	Various	Completed commissioning of the second triethylene glycol unit at the Kutubu Central Processing Facility.  Commenced commissioning on the new triethylene glycol unit at the Gobe Production Facility.
Drilling	Nabors Drilling International Limited	Completed drilling on the first of eight production wells.
Permanent Facilities Compound	Leighton (PNG) Limited	Progressed earthworks in preparation for construction of the permanent compound offices and associated service facilities.



Drilling of the first of eight production wells is complete at Wellpad B

#### Safety, health and security

The LNG Plant site achieved a record 48 million hours worked between the first quarter 2012 and the second quarter 2013 without a Lost Time Incident. Much of this success is attributed to the site's Incident and Injury-Free® (IIF®) program, which achieved its own milestone with the graduation of the 13,000th worker during this quarter. The IIF® program was introduced in the first quarter 2012 to provide workers and supervisors with insights and tools to better understand how their own attitudes and actions, as well as the attitudes and actions of others, impact safety in the workplace.



IIF® event held at the LNG Plant site

Another safety milestone was recorded during the quarter with the 1,300<sup>th</sup> worker completing the Project's Safety Champions initiative. This initiative continues to prove successful, attracting high levels of interest among workers from various teams and contractor management alike. For example, nearly 300 contract security workers have participated in the initiative, representing over 20 percent of the Safety Champions across the Project.

The Hides Area Traffic Safety Committee proposed two community development initiatives to help pedestrians cross a busy intersection adjacent to the entrance of the Hides Gas Conditioning Plant site. These initiatives involve a dedicated walkway and barriers to separate people and vehicles, and will also help prevent children from accessing the roadway.

During this quarter, the Project sponsored a second World Health Organization malaria microscopy slide-reading course, following the success of the course conducted in the first quarter 2012. A World Health Organization specialist conducted the five-day course for microscopists the Project either employs or uses. Twelve participants achieved a World Health Organization accreditation.

The international Independent Scientific Advisory Board and the Lender Group's Independent Environmental and Social Consultant conducted two independent reviews this quarter. These reviews were on the Project's integrated Community Health Impact Mitigation Management Program. Two major partners, the Papua New Guinea Institute of Medical Research and Population Services International implemented this Program. Both reviews concluded the Program exceeded expectations and provided a good platform for the future development of baseline health data in Papua New Guinea.

#### Workforce development

With the completion of construction at some worksites, workforce numbers continue to decrease. By the end of the quarter, the total Project workforce was just under 19,300, compared with 20,270 workers in the first quarter 2013.



Operations and Maintenance trainee Elsie Digwaleu learning on-thejob at the LNG Plant

## ~19,300 people make up the total Project workforce

The Project is preparing the Papua New Guinean workforce for demobilization across all worksites through an ongoing program involving publications, toolbox presentations and community engagements.

Drama performances are used to help highlight the processes that Landowner Companies (Lancos) will follow to demobilize their workforces and what workers can do to proactively prepare for demobilization.



Transition training is providing workers with necessary knowledge to help obtain meaningful employment after leaving the Project

#### Growing Papua New Guinean businesses

By the end of this quarter, the Enterprise Centre had assisted over 15,200 entrepreneurs through its various programs. The Centre had also provided the equivalent of more than 8,300 training days and over 1,200 advisory and mentoring days to Papua New Guinean businesses.

Lancos remain the focus of the Project's mentoring and business development activities. To date, the Project has spent more than 2 billion Kina (US\$956 million) on Lanco services. Of this, 398 million Kina (US\$182 million) was spent in this quarter alone.

In addition to Lancos, the Project contracts other Papua New Guinean businesses for support services such as camp rental and equipment hire.

# 9+ billion Kina spent in Papua New Guinea to date

Together, Lanco services and additional services brought the total in-country in-Kina spend to more than 9 billion Kina (US\$4 billion) for the Project-to-date.

#### Social development

Komo villagers are reaping the benefits of a new community market facility along with a new Bank South Pacific (BSP) branch, which were both officially opened on June 9.

The new Komo community market facility was inspired by the growing interest of local community members who had completed the Project's Personal Viability training and wanted an avenue to generate income in their community. The market was built in partnership among the community, the Government and the Project.

The Komo community market is already proving successful with helping to empower women to improve their financial status and economic profile through the sale of baked products.

During the second quarter, more than 180 women opened savings accounts in Hides and Komo to deposit funds from the sale of produce at the market.



Traditional performers assist with the official opening of the Komo community market facility

A Personal Viability 'train the trainer' program was also introduced in Komo. Five local women and one man were selected for the training, which will enable them to deliver the program in Komo and surrounding areas.

Personal Viability training is intended to empower communities to drive their own development and help individuals manage their changing lifestyles. To date, more than 1,300 people have completed the training.

# **1,300**<sup>+</sup> participants in Personal Viability training to date

Since construction began in 2010, the Project has provided ongoing support to schools in the Project area.

This includes the ExxonMobil Science Ambassador Program, upgrading school infrastructure, ongoing donations of school desks and educational materials, and the 'Box of Books' school library program.

During this quarter, the Science Ambassador Program was implemented in Port Moresby International School and Redscar High School.

The Program involves the use of science kits to provide students with a fun way to learn about science in the petrochemical industry.



Science Ambassador Program materials being used to teach science at Redscar High School

Work also began on infrastructure development projects in the Tugupawi, Malanda, Juni, Idauwi and St. Paul's primary schools in Hides, with a water tank installed in Idauwi Primary School during the quarter.

The Project committed over one million Kina (US\$457,000) during the first quarter 2013 to upgrade classrooms and student amenities at the selected schools. These schools were selected because they continued to provide consistent education services to their communities despite the deteriorating condition of their infrastructure.

#### Stakeholder and community engagement

The Project is maintaining a strong community engagement program to keep communities well informed and involved in Project-related activities.

During this quarter, over 250 formal engagements were conducted with more than 650 recorded participants in 45 communities within the Project area. This brings the total number of formal engagements to over 1,250, with more than 29,500 recorded participants for the Project so far.

Another 47 communities were reached through 295 informal engagements this quarter, bringing the total number of informal engagements to more than 1,650.

Topics discussed included safety during pipeline construction and commissioning activities, as well as traffic and pedestrian safety.

The then Prime Minister of Australia, the Prime Minister of Fiji, the Governor-General of Australia, Papua New Guinean national and provincial government representatives, and numerous Heads of Foreign Missions were among more than 170 dignitaries who attended 14 advocacy workshops and LNG Plant site visits during this quarter.



Julia Gillard, then Prime Minister of Australia, talking with Operations and Maintenance trainees

For the year-to-date, about 1,000 people from community groups, representative stakeholder bodies and government departments have participated in educational sessions, site tours and advocacy tours of the LNG Plant. These tours share messages of the Project's environmental and social stewardship and offer a contextual understanding of the work being undertaken.

# More than **29,500** participants in formal engagements to date

By working together with communities, government, Papua New Guinean suppliers and other key stakeholders, the Project is continuing to set benchmarks across many of its activities.



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