About This Report

Recent safety, construction, health, environment and social management activities for the Papua New Guinea Liquefied Natural Gas Project are reported in this PNG LNG Quarterly Environmental and Social Report – First Quarter 2014. This Report demonstrates the progress made each quarter and is a commitment by the Project to ensure the citizens of Papua New Guinea, interested non-government organizations and other stakeholders are kept well informed.

This Report is on the Project website, www.pnglng.com. Printed copies are also available.
TRANSITIONING TO PRODUCTION

“I am proud to be part of this industry. Our world-class PNG LNG facilities coming into production are testament to the outstanding efforts of our people.”

- Decie Autin, Project Executive, ExxonMobil PNG Limited

The Papua New Guinea Liquefied Natural Gas (PNG LNG) Project (the Project) is nearing completion as commissioning and start-up activities progress and production begins at key facilities such as the Hides Gas Conditioning Plant (HGCP).

This is the seventeenth PNG LNG Quarterly Environmental and Social Report, which provides progress updates about the Project’s construction, safety, health, security, social and environmental performance. This Report covers the progress of activities during the first quarter 2014.

ExxonMobil PNG Limited, a subsidiary of Exxon Mobil Corporation, is responsible for the Project’s construction and operation. ExxonMobil PNG Limited 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.

Safety, health and security

Another quarter of exemplary safety results was achieved, with 41 million hours worked without a Lost Time Incident since July 2013.

The LNG Plant site, in particular, has accomplished a record 72 million hours worked without a Lost Time Incident from the first quarter 2012 to the end of this quarter. The LNG Plant also reported over 100 days without a recordable injury. Much of this success is attributed to the site’s Incident and Injury Free® program. The 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 impact safety in the workplace.

The Project continues to use its ‘Finish Strong’ safety campaign to remind workers to keep themselves and their colleagues safe during the final stages of construction. The Project has also shifted the focus of safety education from construction-related hazards to working with energized facilities and hydrocarbons.

A key initiative undertaken this quarter was a joint Safety, Security, Health and Environment Leadership Workshop between the Construction and Production organizations. The workshop was held to transfer knowledge, experience and lessons learned to the Production team. More than 110 Project, Production organization, and contractor representatives participated in the event, which addressed themes such as preventing higher potential incidents, avoiding complacency, and planning for safe demobilization. The 2013 safety awards were also presented at the workshop.

Maintaining health systems and controls in camps and worksites during the transition to production was the focus of health activities this quarter.
The Project participated in awareness-raising activities for World Tuberculosis Day on March 24 by providing workers with information about tuberculosis prevention, symptoms and treatment. Information was provided through fact sheets, posters and presentations delivered during toolbox talks, lunch-and-learn sessions and site meetings.

The Project has also launched a joint community tuberculosis awareness-raising campaign with World Vision PNG. During the quarter, the Project facilitated a workshop in which findings from the Papua New Guinea Institute of Medical Research Integrated Health and Demographic Surveillance System were presented.

Support for community health services continues, with two doctors from the Texas Children’s Hospital working with health practitioners in Papua New Guinea to improve maternal and child health care. During this quarter, they conducted health education, which included providing biomedical equipment training to Tari Hospital technicians in the Hela Province.

The transition of security services to the Production organization continues, with two expatriate security positions transferred to Papua New Guinean employees, adding to the four allocated in 2013.

Construction

The Project has completed all pipelines, and achieved other significant milestones with the initiation of Hides gas wells flowing to the HGCP, completion of the first delivery of condensate from the HGCP to the Kutubu Central Processing Facility, and the introduction of gas from the HGCP to the LNG Plant.

**PIPELINES COMPLETE**

and start of gas production at the HGCP

Construction highlights are outlined in Table 1.

<table>
<thead>
<tr>
<th>Contract</th>
<th>Contractor</th>
<th>Major activities during the first quarter 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG Plant and Marine Facilities (EPC3)</td>
<td>Chiyoda and JGC Joint Venture</td>
<td>Gas from the HGCP introduced to Train 1 and drying (defrosting) of the plant commenced. Train 2 completed and handed over from the contractor to the Project.</td>
</tr>
<tr>
<td>Hides Gas Conditioning Plant and Hides Wellpads (EPC4)</td>
<td>CBI and Clough Joint Venture</td>
<td>Start of Hides gas wells production through the HGCP resulting in gas transport to the LNG Plant and condensate transport to the Kutubu Central Processing Facility.</td>
</tr>
<tr>
<td>Onshore Pipeline (EPC5A)</td>
<td>SpieCapag</td>
<td>Completed all onshore pipeline construction and reinstated the pipeline Right of Way.</td>
</tr>
<tr>
<td>Associated Gas Development</td>
<td>Various</td>
<td>Construction at the Gobe Production Facility and Kutubu Central Processing Facility neared completion.</td>
</tr>
<tr>
<td>Drilling</td>
<td>Nabors Drilling International Limited</td>
<td>Drilling Rig 702 completed drilling operations at Wellpad D and relocated to commence drilling at the produced water disposal wellpad. Drilling Rig 703 continues drilling operations at Wellpad G.</td>
</tr>
<tr>
<td>Permanent Facilities Compound</td>
<td>Leighton (PNG) Limited</td>
<td>Structural steel, the ground floor concrete slab and block work for the support services building completed.</td>
</tr>
</tbody>
</table>

Workforce development

The total Project workforce stands at almost 7,800 as work scopes were completed. Papua New Guinean citizens represent 44 percent of the total workforce, compared with 38 percent recorded in the fourth quarter 2013.

Since construction began, the Project has provided more than 2.16 million hours of training through 12,400 programs. In this quarter alone, more than 30,200 hours of training was delivered to workers.

**2.16 MILLION HOURS**

of worker training completed

The second intake of Operations and Maintenance trainees began on-the-job training at Project worksites this quarter. The first intake continues on-the-job training in preparation for the Project’s start-up and the production phase. The trainees have had the opportunity to play key roles in the Project’s commissioning activities.
To support construction workers through the demobilization process, contractors are identifying opportunities where some workers can be retained for tasks such as reinstatement works. This approach is providing those workers with longer-term employment on the Project and enabling them to develop more diverse skills.

Growing Papua New Guinean businesses

Project spend on landowner company (Lanco) services reached almost 160 million Kina (US$66 million) this quarter. To date, the Project has spent more than 2.64 billion Kina (US$1.09 billion) with Lancos.

Non-Lanco Papua New Guinean businesses also provide services to the Project. By the end of this quarter, more than 400 million Kina (US$165 million) was spent on Lanco services and these additional services. The total in-country spend for the Project-to-date has reached more than 10.71 billion Kina (US$4.42 billion).

More than 260 entrepreneurs sought assistance through the Enterprise Centre during this quarter, bringing the total number of people the Centre has assisted to almost 17,000. The Centre has provided the equivalent of more than 9,700 training days to Papua New Guinean businesses to date.

The Enterprise Centre’s new PNG Employment and Supplier Database became operational this quarter, replacing the original PNG Supplier Database, which is being decommissioned. The new Database helps connect job seekers with job opportunities, and businesses with business opportunities, outside of the Project.

10.71+ BILLION KINA spent in Papua New Guinea to date

Environmental performance

The LNG Plant and Marine Facilities contractor has conducted joint inspections with the Project to determine reinstatement activities for temporary facilities, including several laydown areas and the concrete batching plant. Also during this quarter, final reinstatement and permanent erosion control works were completed along the onshore pipeline Right of Way.

Permanent reinstatement works are stabilizing areas that previously needed erosion and sediment control measures.

At the HGCP, reinstatement works are enabling effective permanent sediment control. Temporary silt fences and erosion control measures will remain until reinstatement is completed.

During high rainfall at the LNG Plant site in February, erosion and sediment was effectively controlled through permanent structures.

In January, the Project met with representatives from Conservation International, the Wildlife Conservation Society and The Nature Conservancy to allocate tasks for Protected Area Planning in the Kikori River Basin and to begin the stakeholder consultation process for the biodiversity offset program.

A Program Coordinator was engaged for the biodiversity offset program’s Component 4 – Lake Kutubu Enhancement – and a meeting was held in Tugiri to introduce the Program Coordinator to local stakeholders and plan activities for 2014.

Ambient air quality monitoring was undertaken during hydrocarbon flaring events this quarter. Monitoring results were well below the Project’s approved criteria.

A review of the Hides Waste Management Facility was also undertaken to assess landfill space used to date, conduct an audit of expected demobilization wastes, and determine incinerator efficiency compared to forecast requirements. The review concluded that the Hides Waste Management Facility has more than sufficient capacity to manage waste from construction, demobilization and production activities.

Recycling and reuse of waste is used across Project sites in preference to landfill disposal. For example, during this quarter, 1,168 tonnes of scrap metal from the LNG Plant site was recycled through approved third party suppliers. The Onshore Pipeline contractor is also sorting scrap metal to be recycled at an approved third party facility.

Social development

Papua New Guinea hosted its first Global Women in Management (GWIM) conference during this quarter. The conference, held in March, brought together 26 women from across the country to network and discuss how they could contribute to advancing their communities. The Centre for Development and Population Activities conducts the GWIM program. It aims to nurture management, leadership and technical skills in women so they can better contribute to the development of their communities.
To date, the Project has supported 49 Papua New Guinean women with participating in GWIM events, including international conferences held in Jakarta and Washington DC.

During this quarter, the Project also co-sponsored the first Papua New Guinean Women’s Forum. United Nations Women, an organization dedicated to gender equality and the empowerment of women, organized the Forum, which was facilitated by the US Embassy. Key Papua New Guinean Government agencies also supported this Forum. More than 300 women in business, politics and community development in Papua New Guinea attended the event. Also during this quarter, the Project was allocated a board position with the newly established Business Coalition for Women. An initiative of the International Finance Corporation, the coalition works with Papua New Guinean businesses to improve workplace policies for women.

As part of its commitment to advancing women in Papua New Guinea, the Project partnered with the Women in Energy Network to celebrate International Women’s Day on March 8. Guest speakers at a breakfast in Port Moresby, and a lunch held at the LNG Plant site, advocated for the elimination of all forms of violence against women.

The Project has donated a generator and committed 287,000 Kina (US$118,500) to the Port Moresby Nature Park. The donation will be used to support excursions for some 10,000 school children who are expected to visit the Park during 2014. It will also help with the development and maintenance of animal exhibits, including the main walkthrough bird exhibit, which was built in the early 1990s. Additionally, the funding will help develop a private animal research and breeding center for animals such as long-beaked echidnas and birds-of-paradise.

Through the support of a Project contractor, LNG Plant site villagers can now job search, build a résumé and directly email prospective employers at the new Laba Business Centre, which opened in February. The Centre is located in a facility the LNG Plant and Marine Facilities contractor donated near the Bank South Pacific branch at the LNG Plant site. It offers access to the internet, as well as résumé building, photographic, printing, photocopying, laminating and document scanning services.

The Project continues livelihood restoration activities, with the delivery of rations for resettled households completed during this quarter. The Project also completed standard of living evaluations for all physically displaced households and livelihood restoration surveys of economically displaced people. Early indications from data collected across all Project areas shows a general improvement in the standard of living and livelihood restoration of displaced people.

In February, ExxonMobil PNG Limited Managing Director, Peter Graham, was bestowed one of the highest honors from Her Majesty The Queen, when he was made a Commander of the British Empire for his services to the petroleum industry and the community through supporting social development initiatives in Papua New Guinea. Peter travelled to Buckingham Palace, London, to receive his award from His Royal Highness Charles, Prince of Wales.

Stakeholder and community engagement

On March 19, the Extractive Industries Transparency Initiative (EITI) Secretariat in Oslo, Norway, officially accepted Papua New Guinea as a candidate country. This followed the submission of the nation’s application to the EITI in December 2013.
The Papua New Guinea EITI multi-stakeholder group, which was formed in November 2013, has begun working on a scoping study terms of reference, in coordination with the World Bank, to identify future revenue transparency challenges and solutions.

During this quarter, the Project conducted 80 formal community engagements with over 2,600 people in 26 communities. In addition, 184 informal engagements were conducted with over 7,400 individuals from 32 communities. Since construction began in 2010, the Project has successfully completed more than 4,000 community engagements, with almost 152,000 attendees.

Messages delivered during this quarter focused on safety near the pipeline Right of Way, road safety and updates about commissioning, start-up and construction demobilization activities.

As part of community engagement activities, the Project distributed 3,800 Toea children’s books to elementary schools throughout the LNG Plant site villages as reading resources for students.

A team of more than 30 Project volunteers sorted books at the Buk Bilong Pikinini children’s library this quarter. The Project also provided volunteer support at the Papua New Guinean Women’s Forum and at the GWIM conference. Since 2012, the Project has contributed more than 3,000 volunteer hours, involving more than 500 employees who have participated in 11 engagements with not-for-profit organizations such as City Mission, Buk Bilong Pikinini children’s library, the Port Moresby Nature Park and Transparency International.

Decie Autin, Project Executive, ExxonMobil PNG Limited, was among the volunteers sorting books in support of the Buk Bilong Pikinini children’s library.

In March, Papua New Guinea’s new Department of Petroleum and Energy Minister, the Honorable Nixon Duban, received a briefing from senior Project representatives about the status of Project activities.

The Department of Petroleum and Energy is progressing clan vetting activities to identify beneficiary clans in Project-impacted areas and determine the appropriate distribution of benefits. The Project has supported the Department with these activities in all Project License Areas.

Also during this quarter, the Project hosted Australian Prime Minister, Tony Abbott, and Fijian President, Ratu Epeli Nailatikau, at the first of its advocacy workshops for 2014. This year’s advocacy program is supporting the Project’s transition from construction to production by engaging members of the Production team with senior government officials and regulators.

~152,000 ATTENDEES
in community engagements to date

The PNG LNG Project is demonstrating to the world – particularly the investment world – exactly what Papua New Guinea is capable of delivering. The success of this Project will help to usher in a new era of economic and social development for this diverse and strategically located nation.
With the Project more than 95 percent complete, commissioning and start-up activities are on track for the first LNG deliveries in the second quarter 2014.

This is the seventeenth PNG LNG Quarterly Environmental and Social Report. It provides progress updates on the Project’s construction, safety, health, environmental and social management activities during the first quarter 2014.

The $US19 billion Project involves the construction of gas production and processing facilities in Papua New Guinea’s Southern Highlands, Hela and Western provinces. It includes liquefaction and storage facilities located north-west of Port Moresby on the Gulf of Papua. When construction is complete, these facilities will have a capacity of 6.9 million tonnes per year.

More than 800 kilometres of pipelines will connect the facilities.

Some 250 billion cubic metres of gas are planned to be produced and sold during the life of the Project. This will provide a long-term supply of LNG to Asia Pacific region customers, including: the China Petroleum and Chemical Corporation (Sinopec); The Tokyo Electric Power Company Inc.; Osaka Gas Company Limited; and CPC Corporation, Taiwan. The location and elements of the Project are shown in Figure 1.1. Appendix 1 details how the contracts for Phase 1 of the Project are divided.

In addition to being published online, printed copies and translated summaries of this Report are provided for Papua New Guinean citizens who may have limited access to the internet. Previous PNG LNG Quarterly Environmental and Social Reports are also available on the Project’s website.

All 292 kilometres of the onshore pipeline are now complete.

Celebrating the final onshore pipeline weld
FIGURE 1.1
PROJECT ELEMENTS

LEGEND
- Major Town
- Existing Facility
- Facility Nearing Completion
- Completed Project Facility
- Onshore Pipeline
- Existing Oil Pipeline
- Offshore Pipeline
- Highlands Highway
CONSTRUCTION OVERVIEW

The Project completed all pipelines, initiated flow from the Hides gas wells to the HGCP, completed the first delivery of condensate from the HGCP to the Kutubu Central Processing Facility and introduced gas from the HGCP to the LNG Plant this quarter.

2.1 Highlands area

2.1.1 Hides Gas Conditioning Plant and Hides Wellpads

A significant milestone was achieved in March with the start of production at the HGCP and the opening of the production wells at Wellpad B. The introduction of gas to the HGCP was marked with the lighting of the flare. The HGCP has started producing gas for transport to the LNG Plant and condensate for transport to the Kutubu Central Processing Facility.

The HGCP process area and Wellpad C were handed over to the Production organization this quarter, while the construction of Wellpads D and G progressed.
2.1.2 Komo Airfield

Reinstatement monitoring continues while the Airfield is accepting flights for both construction and production personnel.

2.1.3 Drilling

Drilling Rig 702 completed drilling operations at Wellpad D and commenced drilling at the produced water disposal wellpad. Drilling Rig 703 continues to drill two production wells on Wellpad G.

2.2 Onshore Pipeline

All pipeline construction and reinstatement of the Right of Way (ROW) were completed this quarter. The Onshore Pipeline contractor has only some minor works to complete. Refer to Case Study – Onshore pipeline ready for production for further information.

2.3 LNG Plant and Marine Facilities

During this quarter, HGCP gas was introduced into Train 1 at the LNG Plant. This enabled start-up and drying (defrosting) of the plant. Defrosting began on the common inlet facilities, acid gas removal unit, fractionation unit and LNG tank transfer lines.

Train 2 reached a significant milestone in March with mechanical completion and handover from the contractor to the Project.

2.4 Associated Gas Development

Construction at the Gobe Production Facility and Kutubu Central Processing Facility is nearing completion, with the exception of three pumps that are being installed on the triethylene glycol units.
On January 23 at 5:10pm, the final 32-inch pipeline tie-in weld was safely completed at Kilometre Point 104 near Lake Kutubu. The pipeline, which rises to 2,100 metres above sea level in some areas, will be used to transport gas from the HGCP to the Omati River, where it connects to the already completed offshore pipeline and to the LNG Plant. The pipeline is internally coated for flow enhancement and is buried along the entire route to enhance safety and integrity.

ExxonMobil PNG Limited Onshore Pipeline Project Manager, Suresh Batra, said construction of the pipeline took four years and involved a dedicated team of over 5,000 Papua New Guinean workers who worked a total 28 million hours to complete the pipeline on time.

“The team has worked in challenging conditions including remote locations, steep terrain, high rainfall, flooding and large areas of wetlands to build this pipeline,” Suresh said.
2.5 Development support execution, logistics and aviation

Freight movements along the Highlands Highway are reducing, with most materials being transported from the HGCP to Lae as contractors begin to demobilize from Hides.

2.6 Permanent Facilities Compound

Earthworks at the Permanent Facilities Compound are complete and steel erection continues on the administration building, with concrete bases poured for three of the four floors. Structural steel, the ground floor concrete slab and block work for the support services building are complete, while wall paneling and insulation works have commenced.

At the community center building, work has started on the footings and block work retaining walls, while all security fencing is complete.

2.7 Pre-construction surveys

All pre-construction surveys are now complete. Since the start of construction, 219 pre-construction surveys have been completed for the development of the Project.
By meeting obligations outlined in its environmental, social, safety and health management plans, the Project demonstrates its commitment to protecting the health and safety of workers, local communities and the environment surrounding Project facilities.

### 3.1 Approach

The Construction Environmental and Social Management Plan (ESMP) details the Project’s approach to environmental and social management activities during the construction phase.

Discipline-specific plans were developed from the Project’s Environmental Impact Statement to support the ESMP. These plans (as shown in Figure 3.1) are available on the Project website.

EXPLORE THE PLANS AT www.pnglng.com/commitment

The Construction ESMP is complemented by the Project’s Security, Health and Safety management plans, and its Regulatory Compliance Plan.

During 2014, the Project is introducing its Production ESMP, which details ExxonMobil PNG Limited’s approach during the production phase.

For further information refer to Case Study – Project introduces new Environmental and Social Management Plan.

### 3.2 Security

The Project is finalizing the transition of security stewardship to the Production organization. A key component of the transition process is developing the skills of Papua New Guinean security personnel. In early 2014, two expatriate security positions were transferred to Papua New Guinean employees, adding to the four allocated during 2013.

### 3.3 Revenue management

On March 19, the EITI Secretariat in Oslo, Norway, officially accepted Papua New Guinea as a candidate country. This followed the submission of the nation’s application to the EITI in December 2013. The Papua New Guinea EITI multi-stakeholder group, which was formed in November 2013, has begun working on a scoping study terms of reference, in coordination with the World Bank, to identify future revenue transparency challenges and solutions.

ExxonMobil PNG Limited is among 21 representative organizations that are members of the EITI multi-stakeholder group. Other members include: key Papua New Guinean Government agencies; the Business Against Corruption Alliance; the Consultative Implementation and Monitoring Council; the Institute of National Affairs; the Papua New Guinea Council of Churches; Transparency International Papua New Guinea; the Papua New Guinea Mining Watch Group Association; the EcoForestry Forum; the Papua New Guinean Chamber of Mines and Petroleum; Barrick Niugini Limited; Morobe Mining Joint Ventures; Newcrest Mining Limited; Oil Search Limited; and Talisman Energy Niugini Limited.

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**FIGURE 3.1**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

- **MONITORING**
  - Environmental Monitoring
  - Environmental Performance Indicators

- **Biodiversity**
  - Ecology
  - Weed, Plant, Pathogen and Pest
  - Reintroduction
  - Induced Access
  - Quarantine
  - Biodiversity Strategy*

- **Resource Management**
  - Raw Materials
  - Erosion and Sediment Control
  - Acid Sulfate Soils

- **Pollution Prevention**
  - Air Emissions
  - Waste
  - Water
  - Noise and Vibration
  - Spill Prevention
  - Hazardous Material
  - Dredging
  - Hydrotest
  - Project Standards

- **Cultural Heritage**
  - Cultural Heritage
  - Chance Finds Protocol
  - Salvage Protocol

- **Landscape**
  - Resettlement
  - Resettlement Policy Framework
  - Resettlement Action Plans*

- **Community Impacts**
  - Impacts
  - Health and Safety (Contractor)
  - Health, Safety and Security (Company) Infrastructure

- **Community Engagement**
  - Community Stakeholder

- **Community Support**
  - Strategy
  - Action Plan*
  - Development Support*
  - National Content*

- **Human Resources**
  - Labour and Worker Conditions
  - Camp
  - Procurement and Supply

* Milestone Schedule Commitment documents (and not part of the ESMP)
The EITI is a voluntary initiative that aims to improve governance in resource-rich countries through disclosure and verification of company payments and government revenues from oil, gas and mining. ExxonMobil has served continuously on the EITI board since its inception in 2002.

3.4 Management of Change

When changes are required to the Project Development Plan, the Project applies its Management of Change procedure. This procedure considers health, safety, security, social and environmental management, maintenance and operability, regulatory and cost, and scheduling requirements before changes can be made. Classifications are applied to all changes, with Class I changes requiring Lender Group review prior to implementation. Class II changes require notification in the PNG LNG Quarterly Environmental and Social Report.

During the first quarter, there was one Class II Management of Change request related to the transfer of construction camps to third party agencies, including the Federal and Provincial governments of Papua New Guinea. The camps were previously planned for demobilization and land reinstatement. This change was in response to requests received from third party organizations for the camps to remain in place and be put to beneficial use.

ExxonMobil PNG Limited is working with the third party organizations to identify, avoid and/or mitigate potential environmental and social impacts associated with the transfer of the camps.

3.5 Environmental and Social Milestone Schedule

By the end of the quarter, the Project had completed all milestones outlined in the Environmental and Social Milestone Schedule.
As part of ExxonMobil’s commitment to conducting business in a manner that protects and promotes the safety and health of workers and surrounding communities, the Project is introducing its Production ESMP before the first LNG deliveries later this year.

Throughout the Project’s development, the Construction ESMP has provided an overview of potential environmental and social impacts associated with construction activities, and outlined mitigation actions and monitoring requirements.

In the past year, extensive work has been conducted with Project stakeholders to develop the Production ESMP, which is being phased in during 2014.

Construction Safety, Security, Health and Environment (SSHE) Manager, Michael Bigler, said potential environmental impacts associated with production were initially identified and evaluated as part of the Environmental Impact Statement for the Project, which was submitted to Papua New Guinea’s Department of Environment and Conservation in January 2009. “While development of the Production ESMP was based on this early work, the original impacts and mitigation strategies were reviewed and augmented to take account of Project experience during the construction phase. This involved workshops and consultations with key stakeholders, including the Department of Environment and Conservation and the Lender Group’s Independent Environmental and Social Consultant (IESC),” he said.

Production SSHE Manager, Dennis Vidmar, said: “The Project used ExxonMobil Corporation’s Operation Integrity Management System requirements, and the International Finance Corporation Performance Standards, as guides to the development of the ESMP.

“A review process was also conducted to secure the necessary internal approvals, as well as those from external stakeholders, such as the IESC and the Department of Environment and Conservation,” he said.

To rationalize the number of social and environmental plans needed for effective implementation of the Production ESMP, the ESMP structure is based on two Environmental Management Plans and seven Social Management Plans, as shown in Figure 3.2. The Environmental Management Plans align geographically to production facilities, while the Social Management Plans cover key social themes.

The Production ESMP, and its supporting management plans, apply to normal operating conditions, start-up and shutdown, and reasonably foreseeable abnormal operating conditions or emergency situations. Achievement of the ESMP objectives will be stewarded through environmental performance indicators. Monitoring of compliance with the ESMP will also occur throughout production. In collaboration with Project stakeholders, and in accordance with a best practice approach, the Production ESMP will be updated periodically to meet the ongoing operational needs of ExxonMobil PNG Limited and of Papua New Guinea’s environment.

The Production ESMP is publicly available on the Project website at www.pnglng.com.
To help local businesses take advantage of opportunities both within and outside of the Project, the Business Development team and Enterprise Centre provide training and capacity building assistance.

4.1 Supplier development

The Project uses Lancos for services including labor supply, light vehicle maintenance, heavy equipment rental, hire services and spare parts supply. During the first quarter, almost 160 million Kina (US$66 million) was spent on Lanco services. To date, the Project’s total spend with Lancos is more than 2.64 billion Kina (US$1.09 billion).

Lanco Buria ReaRea Caution Bay Limited provided workers to complete landscaping for several areas around the LNG Plant site.

Non-Lanco Papua New Guinean businesses also provide services to the Project in the form of training services, equipment hire and camp rental services.

With Lancos and these additional services, the Project’s total in-country in-Kina spend was more than 400 million Kina (US$165 million) this quarter. This brings the total for the Project-to-date to more than 10.71 billion Kina (US$4.42 billion).

4.2 Enterprise Centre

More than 260 entrepreneurs sought assistance through the Enterprise Centre during this quarter, bringing the total number of people the Centre has assisted to almost 17,000. The Centre has provided the equivalent of more than 9,700 training days to Papua New Guinean businesses to date.

4.2.1 Business assessments and training

As Project construction winds down, the Enterprise Centre is doing fewer Project-related business assessments.

One assessment was conducted during the quarter, as shown in Figure 4.1:

The equivalent of 400.5 training days were delivered to businesses during this quarter, as shown in Figure 4.2.

Approximately 30 percent of these training days were provided to Lancos. Courses conducted this quarter included the International Organization for Standardization Quality Management System course.
4.2.2 PNG Employment and Supplier Database management

The new PNG Employment and Supplier Database became operational this quarter, replacing the original PNG Supplier Database, which is being decommissioned. The new Database helps connect job seekers with job opportunities and businesses with business opportunities outside of the Project.

It expands the services offered by the previous PNG Supplier Database through the inclusion of automated email notification of job vacancies and business opportunities, the automated generation of résumés, personal and company profiles, and the ability to quickly and easily submit multiple job applications.
The Project is maintaining its commitment to work with communities and non-government organizations on health, safety and local business initiatives, as well as infrastructure, to deliver long-term community benefits.

5.1 Structure and relations

Interaction with communities is managed through a series of targeted community impact and engagement management plans as shown in Figure 3.1.

5.1.1 Community grievance management

During this quarter, 49 grievances were registered and categorized, in addition to seven grievances that were carried over from the previous quarter. As shown in Figure 5.1, 43 grievances were closed, with 86 percent of them closed within the 30-day target timeframe.

<table>
<thead>
<tr>
<th>Number of Grievances</th>
<th>Closed</th>
<th>Open (&lt;30 days)</th>
<th>Outstanding (&gt;30 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Security</td>
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<td></td>
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<td>Government</td>
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<tr>
<td>Other</td>
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<td>1</td>
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</tr>
<tr>
<td>Social</td>
<td>1</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

The number of land-related grievances decreased from 26 in the previous quarter to 18, however, land-related grievances continue to be the primary area of concern for communities. Most of these concerns related to claims for damaged trees and plants.

Other grievances, representing 22 percent of grievances during the quarter, related to requests for upgrades to existing roads and concerns regarding the status of compensation payments.

Economic concerns accounted for 18 percent of grievances this quarter. Grievances raised were primarily with regard to employment opportunities and requests about community investment projects.

Environment-related grievances are declining, representing 10 percent of grievances during this quarter compared to almost 25 percent in the fourth quarter 2013.

Reinstatement activities in communities along the pipeline ROW were the primary subject of environment-related grievances.

By the end of March, 77 percent of grievances were closed, leaving 13 grievances to be carried over for closure in the next quarter.

5.1.2 Project Induced In-Migration

During this quarter, the Project Induced In-Migration Procedure was revised to make it more applicable to the production environment, particularly with regard to requirements for ongoing monitoring and evaluation of in-migration activities in Project communities. The Procedure addresses key demographic, economic, infrastructure and health indicators linked to Project Induced In-Migration and provides guidance for the Production team on community engagement.

Many of the Project Induced In-Migration indicators are collected, assessed and monitored through the Papua New Guinea Institute of Medical Research (IMR) Integrated Health and Demographic Surveillance System (iHDSS).

5.1.3 Fisheries

At the beginning of this quarter, the Project held a workshop to familiarize fisheries assistants with the fisheries survey questionnaire and to address any challenges the assistants may face during their survey work.

By the end of the quarter, more than 910 kilograms of fish catch was recorded by the fisheries assistants from interviews they conducted with over 120 fishers from the LNG Plant site villages. Catch landing surveys for the Omati River are scheduled to begin in April 2014.

5.1.4 Social considerations for logistics activities

During this quarter, the Project completed the refurbishment of Ero Hall and transported building materials for infrastructure projects at Bisi, Veiru and Veraibari schools to Kikori. Construction of the school projects is scheduled to begin in the second quarter 2014.

5.2 Infrastructure, services and resources

The Project’s commitment to infrastructure support continued this quarter with the signing of agreements for projects such as: a new resource center for the Lake Kutubu Wildlife Management Committee at Tugiri Village; maintenance of the Juni, Para, Mananda and Idauwi health clinics; and maintenance works at Para Primary School and Waru Elementary School.
The Project also committed to providing a new classroom for the Mananda Flexible Learning Centre. These works are scheduled to begin during the second quarter 2014.

In addition, the Project has signed community agreements for the maintenance of classrooms and sports facilities for primary schools in the LNG Plant site villages.

Maintenance work is progressing on teacher housing and the installation of a 300-metre perimeter fence at Juni Primary School in Hides.

Through the support of a Project contractor, LNG Plant site villagers can now job search, build a résumé and directly email prospective employers through the new Laba Business Centre, which opened in February.

The Laba Business Centre is located in a facility the LNG Plant and Marine Facilities contractor donated near the Bank South Pacific branch at the LNG Plant site. It offers access to the internet, as well as résumé building, photographic, printing, photocopying, laminating and document scanning services. The new Centre means that small business operators, students and job seekers no longer need to travel to Port Moresby to access these business services.

Daniel Onzem, Business Development Supervisor, ExxonMobil PNG Limited and Raho Kevau, Laba Holdings Limited Chairman officially opened the Laba Business Centre on February 20

Boera Primary School head teacher Tessie Tima, the first customer at the Laba Business Centre with Karua Baru, Laba Holdings Limited Information Technology Specialist

Laba Holdings Limited also became the sole manager of a convenience store located near the LNG Plant this quarter. The Project assisted with the transition of the business from a joint venture between RH Trading Limited and four Lancos to a business solely owned and operated by Laba Holdings Limited. The newly named Laba Minimart opened its doors in January.

Minimart Supervisor, Fatima Temelloso, stocking the shelves of the Laba Minimart

5.3 Verification, monitoring, assessment and audit

The Project undertakes monitoring to ensure its activities comply with commitments made in the six key social management plans of: Community Engagement; Community Health and Safety; Community Impacts; Community Infrastructure; Camp Management, and Labour and Worker Conditions.

During this quarter, three monitoring events were conducted across the Project, as shown in Figure 5.2. They were undertaken at the HGCP and LNG Plant site camps, with two related to camp management and one verifying implementation of the Labour and Worker Conditions Management Plan.
Three reporting tools are used to track the Project's conformance with social management plans. These are non-conformances, field observations and positive field observations.

Non-conformances are situations that are not consistent with social management plan commitments and require corrective action. Field observations involve an observation, intervention and/or corrective action that is required to prevent a non-conformance. If not corrected in a timely manner, field observations can escalate to non-conformances. Positive field observations are identified as excellent performance against social management plan commitments.

Monitoring this quarter revealed that high camp standards and operational management were maintained at the HGCP and LNG Plant, with several activities identified as best practice. There were no field observations or non-conformances reported during the quarter.

Three positive field observations related to site rehabilitation, camp community relations, and recreation and health program management, were recorded this quarter as shown in Figure 5.3.

5.4 Community health

The Project’s integrated Community Health Impact Mitigation Management Program is the foundation for many community health initiatives conducted in partnership with organizations such as the IMR and Population Services International.

The Program, and its related health initiatives, are intended to mitigate potential Project-related health impacts, while forming part of the Project’s commitment to develop sustainable health services through partnerships with local organizations. Based on a framework developed by the International Petroleum Industry Environmental Conservation Association (IPIECA), the Program complies with the International Finance Corporation’s guidance notes on Performance Standard 4 – Community Health, Safety and Security and aligns with ExxonMobil’s corporate citizenship objectives.

5.4.1 Integrated Health and Demographic Surveillance System

The iHDSS was established by the IMR through the ‘Partnership in Health’ program with the Project. The System is used to compare population and household-level data collected from key Project areas in Hiri and Hides, with two control sites at KarKar Island and Asaro Valley. Data collected over the past three years is providing a useful baseline of health indicators for the Papua New Guinean Government and researchers.

The National Infectious Disease Diagnostic and Research Laboratory (also known as the Partnership in Health Laboratory) is increasing its scope of testing for infectious diseases such as tuberculosis, dengue and chikungunya. The Project-supported laboratory is also testing for a wide number of viruses and bacteria to identify the primary causes of illness and diarrhea in communities located in the four iHDSS sites.

5.4.2 Tuberculosis

Active tuberculosis surveillance was completed in Hiri during this quarter, while surveillance commenced in KarKar Island. Active surveillance involves health practitioners visiting communities to interview household occupants and collect sputum samples from individuals showing tuberculosis symptoms. The sputum is analyzed in the Partnership in Health Laboratory in Port Moresby for tuberculosis bacteria. In Hiri, 370 samples were analyzed during the study, with the resulting data indicating a high prevalence of tuberculosis in the villages around the LNG Plant site. Levels of multi-drug resistant tuberculosis in Hiri are at about 6 percent.

Passive tuberculosis surveillance continues at all four iHDSS sites and in Kikori. Passive surveillance involves the collection of sputum samples for analysis when patients attend medical clinics with tuberculosis-type symptoms.
During the tuberculosis study, the IMR surveyed some 1,100 people aged over 15 years in Hiri, Asaro and KarKar Island to understand the community’s awareness of the causes of tuberculosis. The results indicate there is a widespread lack of knowledge about tuberculosis and the way it can be transmitted. Ongoing tuberculosis education is being provided by the Project and its contractors during toolbox talks and at worksite inductions. The Project’s medical provider also delivers tuberculosis education through clinics in the Project area.

5.4.3 Support to non-government organizations

With support from the Project, Population Services International continues to deliver health initiatives as part of the Enhanced Community Health Program.

During this quarter, ‘helti man’ (healthy man) and ‘helti meri’ (healthy woman) ambassadors, as well as Interpersonal Communications Officers, were used to deliver health education in Hiri and Hides. The education focused on the prevention of respiratory illnesses such as tuberculosis, as well as nutrition and the behaviors needed to achieve a healthy lifestyle.

5.5 Community safety

To ensure the safety of people around Project facilities, engagements are continuing with communities throughout the Project area. During these engagements, communities are provided with Project updates and information about safe behaviors near worksites and on roads.

Some of the topics covered at the LNG Plant site this quarter included safety awareness during Train 2 construction, demobilization, commissioning and flaring activities. Communities were also provided with updates about safety precautions during shipping operations.

As part of these engagements, local leaders were invited to visit the HGCP site.

5.5.1 Community Development Support Plan

Key components of the Project’s Community Development Support Plan include Strengthening Social Resilience, Local Economic Development, and Community Capacity Building and Partnerships. During this quarter, programs delivered under the Plan supported schools, youth groups and women’s groups.

Strengthening Social Resilience

Papua New Guinea hosted its first GWIM conference during this quarter. The conference, held in March, brought together 26 women from across the country to network and discuss how they could contribute to advancing their communities.

The Centre for Development and Population Activities conducts the GWIM program. It aims to nurture management, leadership and technical skills in women so they can contribute to the development of their communities.

To date, the Project has supported 49 Papua New Guinean women with participating in GWIM events, including international conferences held in Jakarta and Washington DC.
Janet Sape, Founder of Women in Business with Decie Autin, Project Executive, ExxonMobil PNG Limited at the first GWIM conference in Papua New Guinea

As part of its commitment to advancing women in Papua New Guinea, the Project partnered with the Women in Energy Network (WEN) to celebrate International Women’s Day on March 8.

Guest speakers at a breakfast in Port Moresby, and a lunch held at the LNG Plant site, to commemorate the day were Lady Winifred Kamit (founding Chairperson for the Coalition for Change, Papua New Guinea), Florence Bunari (alumni of the GWIM program), and Megan Taueka (Commodore of the Royal Papuan Yacht Club and owner of M2T Limited).

Addressing this year’s theme, Inspiring Change, the guest speakers advocated for the elimination of all forms of violence against women and answered questions from the audience, made up equally of men and women.

Eleven youth sports groups from Hides and Komo received basketball and volleyball equipment from the Project this quarter. The Project also supported the sports groups with installation of new basketball boards and upgrades to sporting facilities.

Local Economic Development

The Himbura Seventh Day Adventist Women’s Group in Pureni, the Maria Christian Brotherhood Church Women’s Fellowship Group in Koroba and the Koroba Catholic Grassroots Training Centre each received a drum oven and planting materials from the Project during this quarter.

The Project is arranging additional drum ovens and food processing training for the three groups to enable their members to earn incomes from the sale of baked goods.

Eleven youth sports groups from Hides and Komo received basketball and volleyball equipment from the Project this quarter. The Project also supported the sports groups with installation of new basketball boards and upgrades to sporting facilities.
Delivering more than 11,700 planting materials and seedlings and more than 700 tools to communities, the Plan is achieving success for new farmers, including many women who are successfully growing crops in their communities.

The Agricultural Development Plan builds upon knowledge acquired in other learning opportunities provided by the Project, including Personal Viability training.

Also during this quarter, the Project was allocated a board position with the newly established Business Coalition for Women. An initiative of the International Finance Corporation, the coalition works with Papua New Guinean businesses to improve workplace policies for women.

Thirty women from the Kikori region graduated from sewing training provided through the Project-funded World Bank Women’s Self Reliance Program this quarter. The Women in Mining and Petroleum Gender Desk, part of the Chamber of Mines and Petroleum, organized the training. Since 2012, 240 women from Project communities have completed the training.

ExxonMobil PNG Limited has donated a generator to the Port Moresby Nature Park to maintain a consistent power supply to the Park. The Park’s old industrial generator, obtained in the 1990s, was not able to accommodate the additional energy requirements of new facilities that included a cafe, souvenir shop, flower shop and administrative offices.

Community Capacity Building and Partnerships

The Project is working with the Hiri District Education Office to support training for head teachers, principals and administrators from schools in the LNG Plant site villages. Project representatives are working with Hiri District Education officials to conduct the board of management training during the second quarter 2014.

5.6.2 Strategic community investments

The Project co-sponsored the first Papua New Guinean Women’s Forum held in March. United Nations Women, an organization dedicated to gender equality and the empowerment of women, organized the Forum, which was facilitated by the US Embassy. Key Papua New Guinean Government agencies also supported this Forum. More than 300 women in business, politics and community development in Papua New Guinea attended the event.

Port Moresby Nature Park General Manager, Michelle McGeorge, said staff would sometimes go without air conditioning, lights and their computers, just so the computer server and cafe refrigerators could operate.

“Obtaining this additional power source means that we’ll be able to carry out business without too much disruption, even during power outages,” Michelle said.

As well as the generator, the Project has committed a 287,000 Kina (US$118,500) donation to the Park. The donation will be used to support excursions for some 10,000 school children who are expected to visit the Park during 2014.
The Project donation will also help with the development and maintenance of animal exhibits, including the main walk-through bird exhibit, which was built in the early 1990s. Additionally, the funding will help develop a private animal research and breeding center for animals, such as long-beaked echidnas and birds-of-paradise.

Meanwhile, the Project continues to support health services in Papua New Guinea. For example, two doctors from the Texas Children’s Hospital are working with health practitioners in Papua New Guinea to improve maternal and child health care. During this quarter, they continued to support health education in Papua New Guinea, including providing biomedical equipment training to Tari Hospital technicians in the Hela Province.

The Project and World Vision PNG launched a joint tuberculosis awareness campaign this quarter. As part of the campaign, the Project helped facilitate a workshop, which presented tuberculosis study findings from the iHDSS.

5.6.3 Volunteer programs

During the quarter, more than 30 Project volunteers sorted books at the Buk Bilong Pikinini children’s library. The Project also provided volunteer support at the Papua New Guinean Women’s Forum and the GWIM conference.

Since 2012, the Project has contributed more than 3,000 volunteer hours, involving more than 500 employees who have participated in 11 engagements with not-for-profit organizations such as City Mission, Buk Bilong Pikinini children’s library, the Port Moresby Nature Park and Transparency International.
In accordance with the *Oil and Gas Act 1998*, the Project pays compensation to households and individuals for physical and economic displacement caused by Project activities. Livelihood restoration and standard of living indicators are used to measure the success of the Livelihood Restoration Program and monitor physical and economic displacement impacts.

### 6.1 Compensation

During the first quarter, 71 Clan Agency Agreements were signed and 44 compensation payments executed for land access covering the Komo Airfield, Hides Wellpads, onshore pipeline ROW and various access roads. For the HGCP, one compensation payment remains outstanding pending resolution of an internal clan issue.

In Angore, Clan Agency Agreements have been signed for 76 percent of the wellpads and access roads. The Socioeconomic team continues to work with clans to complete Clan Agency Agreements along the final 66 kilometres of the pipeline ROW.

To date, 90 percent of Annual Deprivation Payments have been made. The remaining payments will be finalized this year.

### 6.2 Resettlement

The delivery of rations for resettled households was completed during this quarter. The Project also completed standard of living evaluations for all physically displaced households, with early indications showing a general improvement in their standard of living. Livelihood restoration work continues throughout the Project area.

#### 6.2.1 Milestones and progress

The completion of rations deliveries to resettled households was the key resettlement milestone achieved this quarter.

In the final stages of construction, the only resettlement programs occurring are the Livelihood Restoration and Monitoring and Evaluation programs.

#### 6.2.2 Highlights, achievements and lessons learned

Key activities during this quarter included:

**Livelihood restoration:** Some 30,000 cuttings of virus-free sweet potato varieties were supplied to 112 economically and physically displaced households across nine upstream locations. Of these cuttings, 65 percent were provided to households in Komo and near the Hides Waste Management Area. Another 1,070 cassava cuttings were supplied to 52 resettled households, mainly in Komo.

The Project provided support to 58 households from 11 upstream locations with training and outreach services for poultry production. Another 93 resettled households were provided with information and training about food and cash crop programs.

Since mid-2011, the Project has distributed more than 244,000 cuttings of 12 different pathogen-tested or virus-free sweet potato varieties. Some 45 percent of these have been provided to resettled households in upstream locations. During the same period, the Project has distributed 13,400 pineapple suckers to local communities, with 67 percent received by resettled households. The balance of any plant materials is supplied to community groups, service providers or farmers who have requested further livelihood services.

**Komo and HGCP:** Crop distribution and food processing training continue as part of livelihood restoration activities. During the quarter, an assessment of standard of living indicators of resettled homes was completed in Komo and Hides. A livelihood restoration survey of economically displaced households followed the assessment. The results of this survey determine the effectiveness of the Project’s resettlement program.

**Pipeline ROW and wellpad access roads:** Standard of living indicators of resettled households was completed along the pipeline ROW and wellpad access roads.

Early indications from data collected across all Project areas shows a general improvement in the standard of living and livelihood restoration of displaced people.
As demobilization activities continue, the Project is helping transition Papua New Guinean workers through training and support.

7.1 Development

The total Project workforce stands at almost 7,800 as work scopes were completed.

As shown in Figure 7.1, Papua New Guinean citizens represent 44 percent of the total Project workforce, compared with 38 percent recorded in the fourth quarter 2013.

Case Study – Building opportunities in production outlines how one contractor is developing its workforce for the production phase.

7.2 Workforce training

The Project continues to build the skills of Papua New Guinean citizens through targeted training opportunities.

7.2.1 Construction training

During this quarter, more than 30,200 hours of training was delivered across Project worksites.

To date, the Project has provided over 2.16 million hours of training through some 12,400 training programs.

Project-provided training

The Project continues to provide voluntary transition training to LNG Plant site workers.

The training, which is offered to workers prior to demobilization, provides valuable skills that will enable them to seek new opportunities once Project construction is complete. It covers topics such as: writing an attractive résumé and cover letter, where and how to search for jobs, and how to prepare for a job interview.

Figure 7.1

PROJECT WORKFORCE NUMBERS

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Papua New Guineans</th>
<th>Foreign Nationals</th>
</tr>
</thead>
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<tr>
<td>1Q14</td>
<td>2,392</td>
<td>4,392</td>
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<tr>
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<td></td>
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</tr>
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</tr>
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</tr>
<tr>
<td>2Q14</td>
<td>7,670</td>
<td>11,628</td>
</tr>
</tbody>
</table>

Goata Isaiah and Pune Taumaku working at the Consolidated Contractors Company Asphalt Plant

Contractor-provided training

The final group of 32 Project drivers completed a three-month computer training course during this quarter. The training is enabling drivers to diversify their skill sets and provides them with information technology competency certificates. Since the program began in 2013, 84 Project drivers have completed this training.
7.2.2 Graduate programs

The first two intakes of ExxonMobil PNG Limited graduate engineers are fully immersed in the start-up of the HGCP and LNG Plant. At the HGCP, they have been working alongside more experienced engineers to ensure the equipment is functioning properly, as well as identifying opportunities to optimize the Plant’s operation.

At the LNG Plant, graduate engineers are conducting technical monitoring that involves analyzing trends of equipment performance and taking necessary actions to ensure that temperatures, pressures and flows remain within their normal ranges.

The third intake of graduate engineers is scheduled to join the Operations Technical team in the coming months.

7.2.3 Operations and Maintenance training

The second intake of Operations and Maintenance trainees began on-the-job training in Papua New Guinea this quarter. The first intake also continues on-the-job training in preparation for the Project’s start-up and the production phase. The trainees have had the opportunity to play key roles in the Project’s commissioning activities.

Up close:

Employment planning lands a new career

LNG Plant site worker Willie Mell’s proactive approach to securing long-term employment has resulted in a new career at Telekom PNG.

Aware that his job as a Business Development Officer at the LNG Plant would inevitably finish, Willie proactively searched for potential job opportunities before his Project team was demobilized.

His tenacity paid off when he landed the position of Team Leader in Business Expansion with Telekom PNG.

Willie said he will take the skills he gained with the Project and apply them to his new role. In particular, he believes the work safety awareness he gained on the Project will be beneficial to his new employer.
7.2.4 Above Field workforce training

Women working across the Project’s operations are gaining new skills and insights through the WEN Mentoring Program.

In 2014, mentoring workshops are covering topics such as: work-life balance; corporate culture; career development and training; personal wellbeing; networking; time management; and communication styles and techniques.

The Program gives workers an opportunity to learn from executive mentors including Project Executive Decie Autin, LNG Plant Manager Dan Callens, Lawyer David Prest, Production Controller Mike Upton, SSHE Supervisor Marny Elton, Safety Specialist Mike Davillier and Biodiversity Advisor Jane Mogina.

Participants at the WEN Mentoring Program session in Port Moresby

In February, a workshop was held to develop the complex decision-making abilities of senior members of the Project’s above field workforce. Workshop participants responded well to the training, which focused on developing confidence and skill in making complex decisions, and provided tools that attendees could use in the decision-making process.

Payroll and tax education sessions were held with 147 Papua New Guinean employees this quarter. The sessions covered topics such as: salary and wages; tax; salary packaging (for school fees and housing); NASFUND; pay day and the payroll cycle; and how to make vacation requests. Employees said they gained more knowledge about their salary calculation and how to achieve income tax benefits.

7.3 Health management

Maintaining health systems and controls in camps and worksites during the transition to production was the focus of health activities during the quarter.

Routine contractor health program assessments continue, with Figure 7.2 illustrating the number of health activities completed this quarter.

7.3.1 Camp and contractor health support

The Project continues to support the mobilization of new drilling camps in Hides, with emphasis placed on the provision of food, potable water, emergency response and clinical operations.

As shown in Figure 7.3, all health programs are meeting Project standards.

7.3.2 Leading and lagging indicators

Both leading and lagging indicators are used to monitor the effectiveness of the Project’s health programs.
Leading indicators assess proactive programs such as the Malaria Control Program, which is designed to reduce the risk of malaria in the worker population. Lagging indicators record actual cases of illness.

**Malaria and tuberculosis**

During this quarter, there were nine malaria cases involving semi-immune\(^1\) personnel. There have been no cases of malaria contracted by non-immune\(^2\) Project workers in Papua New Guinea since October 2011.

Seven Tuberculosis Index Cases (community-acquired) in Papua New Guinean workers were recorded this quarter. To minimize the risk of transmission, each of these cases was managed with isolation and referral off-site for appropriate treatment. To date, no tuberculosis cases have been transmitted in the Project work environment.

**Malaria**

The Project continues to use the Australian Army Medical Institute for quality assurance with malaria diagnosis.

Compliance with the Malaria Control Program has improved, from 94 percent recorded in the fourth quarter 2013 to 96 percent this quarter.

**Tuberculosis**

The Project participated in awareness-raising activities for World Tuberculosis Day on March 24. Project workers were provided with information about tuberculosis prevention, symptoms and treatment through fact sheets, posters and presentations. Messages were delivered during toolbox talks, lunch-and-learn sessions and at site meetings.

The Project continues to maintain its focus on tuberculosis prevention and on the early detection of active cases. Active tuberculosis cases are isolated and referred off-site for treatment in accordance with Papua New Guinean health guidelines.

GeneXpert diagnostic equipment remains valuable for the early detection of tuberculosis and QuantiFERON testing also continues to be used to diagnose tuberculosis infection.

Tuberculosis Control Program implementation remained at a high standard of 97 percent this quarter.

**Food and water safety**

Improvements in food and potable water safety procedures were observed this quarter. Food safety compliance increased to 95 percent, while potable water safety compliance rose to 97 percent.

**Camp hygiene and sanitation**

Close monitoring of sanitation and hygiene standards across Project camps resulted in a compliance rating of 96 percent; an increase from 95 percent in the fourth quarter 2013.

**Vector control**

Vector surveillance and control program implementation remained high at 99 percent this quarter.

**Clinical operations**

As the Project transitions to production, a number of smaller clinics have demobilized, with medical equipment and records transferred to larger operating clinics. This process will continue until the remaining construction camps are closed, leaving the production and drilling camps operational.

Implementation of clinical operations achieved 98 percent compliance this quarter.

**Industrial hygiene**

The Project is maintaining a high industrial hygiene compliance level of 95 percent. Workforce assessments and training continue to focus on the potential health risks of working in operating areas of the Project.

**General illness events**

During this quarter two dengue cases were reported, one by the Project and another by the Production organization. Investigations revealed both cases were community-acquired. The Project issued employee communications about precautions to minimize the risk of contracting dengue.

The Health team also raised worker awareness about measles following a number of cases reported in Port Moresby.

**Medevacs and medical transfers**

Ten medevacs were completed during the quarter with five of these related to work activities. The other five medevacs were for personal health conditions unrelated to work. Of the 103 medical transfers during this quarter, two were due to work-related injuries. The remaining transfers were for personal health concerns.

7.3.3 Other strategic initiatives

The Health team is progressing transition plans to support Project camp closures and workforce demobilization, while also managing health programs for the incoming production workforce.

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1 A semi-immune individual is a person who was born and raised (at least to the age of five years) in a location with malaria exposure.
2 A non-immune individual is a person who was not born and raised (at least to the age of five years) in a location with malaria exposure.
7.4 Safety management

The Project had another quarter of exemplary safety results, achieving 41 million hours worked without a Lost Time Incident since July 2013.

The LNG Plant site in particular has achieved a record 72 million hours worked without a Lost Time Incident from the first quarter 2012 to the end of this quarter. The LNG Plant also achieved over 100 days without a recordable injury. Much of this success is attributed to the site’s Incident and Injury Free program. The 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 impact safety in the workplace.

Toea Sale from Boera (center) is recognized for his commitment to safety at an LNG Plant site Incident and Injury Free event

As teams across all Project sites concentrate on finishing their scopes of work, the Project is using its ‘Finish Strong’ safety campaign to remind workers to keep themselves and their colleagues safe during the final stages of construction.

The Project also continues to build upon its successes toward best practice safety performance, while systematically applying lessons learned from incidents. As part of this approach, high impact training and awareness-raising initiatives are used with both construction and production teams to achieve a work environment where Nobody Gets Hurt.

Some of the Project’s many safety initiatives include:

- SSHE leadership workshops.
- Thorough analysis of higher potential incidents to identify trends and areas for improvement.
- The Incident and Injury Free program with 14,100 workers trained-to-date.
- The Safety Champions initiative with more than 1,550 workers trained-to-date.
- First Line Supervisor training delivered to more than 1,900 supervisors to date.
- Work Management System training for over 800 workers to date.

Starting LNG production safely

The commitment to Nobody Gets Hurt continues during the transition to production.

The Production team has already achieved over one million work hours without a Lost Time Incident, including no high potential severity incidents in 2013 or this quarter.

To prepare for the production phase, the Production team has:

- Safely introduced commissioning and feed gas to the LNG Plant, HGCP and the associated pipelines.
- Reviewed the Project’s identified risks and assigned those that are appropriate to the production phase.
- Deployed a Work Management System, which includes Safe Work Practices and Life Saving Actions.
- Revised the Emergency Preparedness and Response system to make it applicable to production.

In addition to implementing a comprehensive safety management program, ExxonMobil PNG Limited has implemented 12 other critical Operation Integrity Management System elements to address potential SSHE risks during production. One of these ensures production workers are appropriately trained and authorized for their scope of work, with significant time spent meeting ExxonMobil Operations Competency Assurance Standards. To date, 285 production workers have participated in 20,000 units of training, equating to an average of 70 training subjects per person.

With safety programs and procedures developed, knowledgeable and skilled people in place and supported by the world-class facilities constructed by the Project, the Production team is well positioned to deliver LNG safely.

With hydrocarbon gas introduced into HGCP work areas, the pipeline and the LNG Plant, the Project has shifted the focus of safety education from construction-related hazards to working with energized facilities and hydrocarbons.
A key initiative undertaken this quarter was a joint SSHE Leadership Workshop between the Construction and Production organizations, which aimed at transferring SSHE knowledge, experience and lessons learned to the Production team.

More than 110 Project, Production organization, and contractor representatives participated in the interactive workshop, covering themes such as preventing higher potential incidents, avoiding complacency, and planning for safe demobilization. The 2013 safety awards were also presented at the workshop.

Presentation of the 2013 Project Executive SSHE Award to the LNG Plant and Marine Facilities contractor for their outstanding SSHE performance

SSHE Supervisor, Marny Elton discusses safety plans at the SSHE Leadership Workshop

7.4.1 Leading indicators

The Project continues to exceed target participation levels for core safety processes, such as Job Safety Analysis, and Observation and Interaction, as shown in Figures 7.4 and 7.5 respectively.

To date, over 2.3 million Job Safety Analyses and more than 2.1 million Observations and Interactions have been conducted.

7.4.2 Lagging indicators

Incident trends are improving, as shown in Figure 7.6, with more than 193 million work hours expended on the Project-to-date. Project work hours are declining each quarter as worksites continue to demobilize, which is shown in Figure 7.7.

NOTE: Project-to-date work hours totalled 193,791,986.
7.5 Worker welfare and conditions

The Project is delivering high standards of worker welfare and conditions, and meeting commitments made under the Labour and Worker Conditions Management Plan and the Camp Management Plan.

7.5.1 Camps

With Project construction nearing completion, some worker camps are demobilizing as worksites are handed over to the Production organization. The remaining worker camps continue to provide social and recreational activities to maintain high worker morale. For example, the Camp Lifestyle team at the LNG Plant site provides coordinated sporting events such as volleyball, boxing, dance lessons and fun runs. Camps are also offering cultural celebrations to recognize multiple nationalities, movie nights, talent shows, band nights and discos.

Project camps continue to cater to the needs of many different religious groups.

7.5.2 Labor and worker conditions

To support workers through the demobilization process, contractors are identifying opportunities where some workers can be retained for tasks such as waste management and environmental remediation. This approach is providing those workers with longer-term employment on the Project and enabling them to develop more diverse skills.

For workers who are demobilized, contractors are providing certificates of service and training courses for further skill development, as well as references and farewell ceremonies.

The National Workers Committee, which was formed in 2011 to provide the LNG Plant site's Papua New Guinean workers with a forum to share their concerns and ideas, held its final meeting this quarter.
An estimated 500 people will be employed in the next five years through Production organization supplier Wood Group PSN.

Wood Group PSN (WGPSN) is just one of the service providers that will offer employment during the production phase.

The company is providing engineering, procurement, construction and maintenance services to support ExxonMobil PNG Limited’s operations at both the HGCP and LNG Plant. Their contract with ExxonMobil PNG Limited makes WGPSN one of the largest operations and maintenance services providers in Papua New Guinea.

WGPSN is a global provider of pre-operations, commissioning, operations and maintenance, engineering, construction, project management, training and decommissioning services to the energy industry. The company employs over 30,000 people in more than 35 countries.

In Papua New Guinea, WGPSN currently employs ten people, including three male and two female Papua New Guinean citizens, but is growing rapidly and, with recruitment support from Lancos, anticipates the workforce will reach more than 200 employees by the end of this year.

Approximately 70 percent of these positions are likely to be filled by Papua New Guinean citizens. In the next five years, WGPSN estimates that 500 people will be employed, with many from Papua New Guinea.

Ken Ede, WGPSN Business Manager for Papua New Guinea, said 10 percent of these positions would be contract management and administration roles including human resources, finance and local business development. Another 30 percent would be construction trades such as field engineers, welders and laborers, while the remaining 60 percent were likely to be in maintenance trades including electrical technicians and mechanics.

“Many of these roles will be assigned to workers who had gained experience working on the construction phase of the Project. Prior learning and demonstrated safe behaviors that align with ExxonMobil PNG Limited’s and WGPSN’s core values will be sought after by our recruitment team,” he said.

“We will also be seeking individuals who have the potential to step into more senior positions and can further develop within the WGPSN organization.”

WGPSN Local Business Development Officer, Frank Pani, said that being part of the multi-national WGPSN company would enable him to expand his skills across different countries, languages, cultures and customs.

Maintenance General Administrator, Garia Morea, said working with WGPSN presented great opportunities for skills development and the experience of working within an international company.

Wood Group PSN employees Darwins Beasio, Neimole Waninara, Garia Morea and Frank Pani look forward to their new production roles.
The Project uses verification, monitoring, assessments and audits to ensure its activities conform to environmental commitments detailed in the ESMP.

8.1 Verification

During the transition to production, construction waste management, reinstatement, water quality and spill prevention works, as well as the demobilization of construction sites, are the focus of verification activities.

8.2 Monitoring

The Project and its contractors continue to monitor their compliance with the ESMP. Results of monitoring conducted in the first quarter are outlined in the following sections.

8.3 Assessments and audits

Assessments and audits continue throughout the Project. For example, weekly environmental inspections of drilling operations, and joint walkthroughs by the Project and the Onshore Pipeline contractor to discuss and inspect permanent erosion control measures, were among site assessments conducted this quarter.

The IESC also completed their eleventh site visit and audit in February. The IESC's report from their previous visit in October 2013 is publicly available on the Project website.

8.4 Incidents, non-conformances and corrective action

8.4.1 Incident summary

As shown in Figure 8.1, the Project classifies incidents by Severity Level. During this quarter, 31 environmental incidents were recorded, with 30 of these classified as Severity Level <0. All of these incidents related to hydrocarbon or chemical spills.

The Project notified the Department of Petroleum and Energy of an incident involving a spill of 65 barrels of drilling fluid when a discharge line valve was found to be inadvertently open at a drilling site. The contractor immediately shutdown the pump and secured the well. Spill response and clean up was immediately initiated and all fluid released and affected soil was removed. The cause of the incident was found to be human error, so the contractor increased worker awareness through toolbox talks and provided additional supervisor training to minimize the risk of reoccurrence.

The Project investigated the causes of all incidents and near misses recorded, with the results shown in Figure 8.2. Thirty near misses were also recorded during this quarter.

8.4.2 Non-conformance and field observation performance

Non-conformances and field observations are used to verify the Project’s environmental performance. Field observations require intervention and/or corrective actions to prevent them from becoming non-conformances. A non-conformance is a situation inconsistent with ESMP requirements. Good environmental practices are recorded as positive field observations.

During this quarter, 20 positive field observations were recorded, with many related to erosion and sediment control measures.
Waste management and spill prevention and response were the primary reasons for 40 field observations recorded by the Project. The number of field observations is decreasing compared with previous quarters as more worksites demobilize. There were no non-conformances raised during this quarter.

Figure 8.3 shows the field observations recorded for the quarter. The closure status of field observations is shown in Figure 8.4.

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**FIGURE 8.3**

NUMBER OF ENVIRONMENTAL NON-CONFORMANCES AND FIELD OBSERVATIONS DURING THE FIRST QUARTER BY SEVERITY LEVEL

- Severity Level III
- Severity Level II
- Severity Level I
- Field Observation
- Positive Field Observation

---

**FIGURE 8.4**

NUMBER OF ENVIRONMENTAL FIELD OBSERVATIONS DURING THE FIRST QUARTER BY CLOSURE STATUS

- Closed
- Open

Field Observation: 34

Field Observation: 6
The Project implements proactive measures to prevent pollution from worksites, and conducts ongoing monitoring to assess the effectiveness of these measures.

9.1 Air emissions

Project air emissions can be caused by factors such as dust from exposed soils and equipment movement; exhaust fumes from construction equipment and incinerators; and greenhouse gas emissions from fuel combustion and flaring during commissioning and start-up activities.

As large areas are reinstated with vegetation, and hard surfaces replace temporary construction pads, the need for dust suppression is reducing across worksites. During the first quarter, approximately 1,728 tonnes of processed drilling cuttings, which can be a potential source of dust, were successfully transported to the Hides Waste Management Facility for use as a covering layer within the landfill.

The Project’s greenhouse gas emissions are calculated based on direct fuel use. Indirect sources, such as purchased electricity, are not included. During this quarter, onshore and aviation fuel use equated to a greenhouse gas emissions value of 31,379 tonnes of carbon dioxide equivalent. Greenhouse gas emissions from flaring during the quarter reached approximately 67,700 tonnes of carbon dioxide equivalent.

Figure 9.1 shows the Project’s direct greenhouse gas emissions.

![Figure 9.1: Greenhouse Gas Emissions](image)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Onshore (Tonnes)</th>
<th>Commissioning (Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Q14</td>
<td>31,379</td>
<td>67,700</td>
</tr>
<tr>
<td>4Q13</td>
<td>57,005</td>
<td>24,817</td>
</tr>
<tr>
<td>3Q13</td>
<td>49,744</td>
<td>10,981</td>
</tr>
<tr>
<td>2Q13</td>
<td>54,821</td>
<td></td>
</tr>
</tbody>
</table>


The Project also trained three environmental interns during the quarter in the use of air monitoring equipment and procedures.

9.2 Noise and vibration

The Project Environment Permit criteria for noise monitoring applies to permanent facilities and steady state operations, but not temporary construction facilities or commissioning activities. However, the Project continues to monitor noise to assist in identifying and managing potential impacts.

Scheduled construction noise monitoring at the LNG Plant site this quarter showed levels were well below the Project’s environmental criteria.

Flaring occurred at the LNG Plant site as part of commissioning and start-up activities. Noise monitoring was undertaken, and peak noise measurements associated with the defrosting and cool-down of the larger process vessels and equipment were monitored.

Ambient air quality monitoring of sulfur dioxide and nitrogen dioxide levels was undertaken during hydrocarbon flaring events. Monitoring results were well below the Project’s approved criteria.

Scheduled quarterly air quality monitoring continued at four designated locations around the LNG Plant site. As in all previous sampling events, results were well below the Project’s emissions criteria.
Noise measured at the HGCP during this quarter also complied with the Project’s requirements.

There were no unresolved noise grievances recorded this quarter.

9.3 Waste management

A review of the Hides Waste Management Facility was undertaken this quarter to assess landfill space used to date, conduct an audit of expected demobilization wastes, and determine incinerator efficiency compared to forecast requirements. The review found the first landfill cell had reached nearly 70 percent capacity, as planned at this stage of construction. The second and larger cell is ready to receive demobilization waste. The review concluded the Hides Waste Management Facility has more than sufficient capacity to manage waste from construction, demobilization and production activities.

Much of the waste generated during this quarter was associated with the demobilization of temporary construction facilities and associated reinstatement works. Waste materials stored during construction and generated from demobilization activities were consolidated, segregated and disposed at Project landfills or other approved recycling or reuse destinations.

The predominant waste types generated this quarter are illustrated in Figure 9.2. Solid waste by disposal method used is shown in Figure 9.3.

Waste segregation and the removal of stockpiled waste materials for disposal is the focus of waste activities at the HGCP. Along the onshore pipeline, the only waste areas that remain in operation are at the Kopi Logistics Base, Moro Camp 5 and a temporary recyclable waste accumulation area at Wellpad A.

Concrete from foundations has, in some cases, been reused for flow control and erosion prevention in drains and culverts. The LNG Plant site landfill is at 45 percent capacity, which demonstrates the LNG Plant and Marine Facilities contractor’s successful approach to waste minimization through reuse and recycling where possible.

Recycling and reuse of waste is used across Project sites in preference to landfill disposal. For example, at the LNG Plant site chemical containers are returned to their supplier for recycling and reuse. Containers are a mix of heavy-duty plastics varying in size from large bulk containers holding 1,000 litres to smaller 5-litre and 20-litre drums. During this quarter, 1,168 tonnes of scrap metal from the LNG Plant site was sent for recycling through approved third party suppliers. The Onshore Pipeline contractor is also sorting scrap metal to be sent for recycling at an approved third party facility.

The Project is continuing to use two local entities for the reuse of waste oil. Individual contractors are batch transferring waste oil to either a sugar factory, where the oil is used to fire a furnace, or a chicken processing facility to fire kilns that heat boilers. During this quarter, more than 400,000 litres of waste oil were successfully delivered to these entities. Meanwhile at drilling sites, more than 2,180 barrels of base oil was recovered from oil based drill cuttings. The recovered oil was reused to manufacture new mud.

9.3.1 Wastewater

Wastewater treatment plants continue to be monitored and managed when any fluctuations are detected. The treatment plants are also undergoing consolidation and decommissioning as temporary construction sites are demobilized.
During this quarter, the Onshore Pipeline contractor desludged, cleaned and decommissioned a number of wastewater treatment facilities. Sludge removed from the plants was bagged and dried before being incinerated. Selected treatment units were moved to other Project locations for reuse.

For example, sheeting was reused for spill prevention under fuel tanks during hydrotesting of the onshore pipeline.

Preparing the wastewater treatment plant at Moro Camp 5 for demobilization by removing, bagging and drying sludge for incineration

Moro Camp 5 incinerator operator disposing of dried sludge bags

Spill prevention training continues, with the Onshore Pipeline contractor conducting a desktop drill during this quarter. Spill kits were also replenished at sites such as the HGCP. Routine inspections of spill kits occurs across worksites, with a tagging system confirming spill kit contents are present and have been inspected. A spill kit register is kept on record within the site’s environment office.

9.6 Dredging and offshore trenching

No dredging or offshore trenching activities were undertaken during this quarter.

9.4 Hazardous materials

The Project aims to avoid the use of hazardous materials, particularly those subject to international bans or phase-outs. During this quarter, no hazardous materials were reported on Project worksites.

9.5 Spill prevention and response

The onshore pipeline fuel storage bund at Awatangi Quarry Camp 7 was decommissioned during the quarter. The decommissioning involved checking the area was clean of liquid, then removing the impervious sheeting and conducting earthworks to reinstate the landscape. Depending on the condition of bund sheeting, it is either disposed at the Hides Waste Management Facility or reused elsewhere on the Project.

Rolling of liner for reuse during decommissioning of the fuel storage bund at Awatangi Quarry Camp 7
The Project recognizes the high conservation value of Papua New Guinea’s biodiversity resources and implements measures to avoid or minimize impact to them.

10.1 Ecological management

Worker education on biodiversity management is continuing. During the first quarter, the Hides Gas Conditioning Plant and Hides Wellpads contractor provided awareness-raising sessions for the earthworks crew at Angore, while the Onshore Pipeline contractor emphasized to pipeline workers the environmental requirements for the Hides Wellpad Access Road.

No trapped animals or notable fauna sightings were recorded on onshore pipeline work sites during the quarter. An unknown species of snake was found on a road by the HGCP. The contractor released the snake into surrounding vegetation.

10.2 Quarantine management

As construction nears completion, the amount of cargo imported by contractors is decreasing. The Project continues to work with the National Agriculture Quarantine and Inspection Authority to minimize the level of re-fumigations required on cargo entering Papua New Guinea. During this quarter, 237 Project consignments arrived in Papua New Guinea, with 36 percent inspected and 7 percent re-fumigated.

10.3 Weed, plant pathogen and pest management

Weed management undertaken by the LNG Plant and Marine Facilities contractor this quarter included the application of herbicide for the Priority 1 weeds Kangaroo Grass Themeda triandra, Forest Blue Grass Bothriochloa erwartiana, Cloncurry Buffel Cenchrus pennisetiformis, Guinea Grass Megathyrsus maximus and Butterfly Pea Clitoria ternatea.

Manual control of Anglestem Willow Primrose at Awatangi Quarry Camp 7

10.4 Induced access

The Onshore Pipeline contractor did not construct any new roads this quarter. Roads that will not be used during the production phase were reinstated, with berms erected to prevent vehicular access. Lockable boom gates were installed on permanent access roads that will be used by the Production team. Security checkpoints are being maintained at the Hides Wellpad Access Road, Kikori River Bridge, and Mubi River Bridge. Worker inductions and site identification cards continue to be used to control access to the Hides Wellpad Access Road.

10.5 Reinstatement

The LNG Plant and Marine Facilities contractor conducted joint inspections with the Project this quarter to determine reinstatement activities for temporary facilities, including several laydown areas and the concrete batching plant.

Final reinstatement and permanent erosion control works were completed along the onshore pipeline ROW. Reinstatement was completed within the Lake Kutubu Wildlife Management Area (WMA) wetland, and at the Awatangi Quarry Camp 7 helipad, Awatangi Quarries 1 and 2, the Kaimari River pontoon bridge, the quarry and pipe storage area at Kilometre Point 87, and the Homa Ridge from Kilometre Point 44 southwards.
10.6 Biodiversity Strategy

The Project is progressing implementation of its Biodiversity Strategy, as well as the biodiversity offset program, which forms part of the Biodiversity Offset Delivery Plan. Development of the Biodiversity Monitoring Plan continues.

Reinstatement of the Dagia River crossing

Members of the Lake Kutubu WMA Committee, who manage the protected areas, have been issued with new uniforms to mark their status as conservation champions in the region.

The Project provided the uniforms this quarter through its commitment to supporting the enhancement of Lake Kutubu WMA.

Committee Chair, Lawrence Kage, said, “These uniforms give the Committee members an identity and pride within the community. The uniforms also reinforce our authority and that the Committee members are conservation representatives within our villages.”

The Project also completed building design, and endorsed a community agreement, for construction of a Lake Kutubu WMA Resource Centre in Tugiri Village.

Conservation of the 24,057 hectare Lake Kutubu WMA is vital to local communities who depend on its resources to support their livelihoods. The WMA contains plant and animal species of high social, cultural, and economic importance. Several localities in the WMA have religious and spiritual significance, including burial sites, or contain other unusual features of aesthetic significance.

The Project’s involvement in protecting the Lake Kutubu WMA is part of ExxonMobil PNG Limited’s Biodiversity Offset Delivery Plan.

Following a workshop held in the fourth quarter 2013, in January the Project met with representatives from Conservation International, the Wildlife Conservation Society and The Nature Conservancy to allocate tasks for Protected Area Planning in the Kikori River Basin and to begin the stakeholder consultation process.
A Program Coordinator was engaged for the biodiversity offset program’s Component 4 – Lake Kutubu Enhancement – and a meeting was held in Tugiri to introduce the Program Coordinator to local stakeholders and to plan activities for 2014.

![Lake Kutubu](image)

Also during this quarter, a Course Coordinator began work on the Strengthening Conservation Capacity Program (Component 3 of the biodiversity offset program), which is building Papua New Guinea’s long-term capacity for conservation activities. This Component is being implemented through the University of Papua New Guinea, and managed by the Mama Graun Conservation Trust Fund.
The Project aims to sustainably manage its use of natural resources, such as quarry materials, timber, water and soil, acknowledging their ongoing social, economic and cultural value to Papua New Guinea.

11.1 Water management

11.1.1 Usage

The Project uses water for activities such as dust suppression, vehicle washdowns, and for domestic use in worker camps. During the quarter, approximately 113,663 kilolitres of freshwater was extracted from ground and surface water sources across Project worksites. At the LNG Plant site, another 409,781 kilolitres of seawater was extracted to supply the desalination plant, which generates freshwater for the LNG Plant site.

The Project’s water extraction volumes remained within permitted limits.

Water volumes from each extraction source are shown in Figure 11.1 with water use by type illustrated in Figure 11.2.

11.1.2 Quality

The Project continues to monitor the quality of ground, sea and surface waters near its facilities to detect changes that could result in environmental impacts.

At Angore, weekly surface water monitoring of creeks and streams during works such as the installation of a culvert, found that turbidity levels were normal.

Baseline monitoring of surface waters around drilling sites is conducted before drilling activities in accordance with the Drilling Environmental Management Plan. In-situ weekly sampling is also undertaken to determine any anomalies during rig activities. Daily monitoring of surrounding waterways is performed to detect the presence of drilling foam.

During this quarter, surface water monitoring was completed in areas including Wabi, Tindano, Begeria, Hungi, Koare, Tumbi, Tugu, Timalia, Yogora, and Akara. Monitoring found that drilling operations were complying with the Drilling Environmental Management Plan criteria.

At the LNG Plant site, passivation and degreasing water from Train 2 commissioning activities was treated, tested and discharged to a sediment pond in accordance with the site’s waste management plan. The water was further diluted through conmingling with other wastewater streams and surface run-off from a heavy rainfall event before discharge within the site boundary.

All onshore pipeline hydrotesting was completed during this quarter.
11.2 Raw materials

The Project aims to use existing (either operating or previously abandoned) third party quarries to source construction materials, rather than open new quarries. During this quarter, all material for the Project was sourced from pre-existing quarries, with no new quarries opened.

Extracted materials from quarries are reducing as the Project nears completion. For example, in the first quarter 2013, a total 616,539 cubic metres of material was extracted. During this quarter a total 51,155 cubic metres was extracted from quarries as shown in Table 11.1.

Table 11.1 – Quarries in use and extracted volumes during the first quarter

<table>
<thead>
<tr>
<th>Area/quarry name</th>
<th>Volumes extracted (cubic metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG Plant site</td>
<td>20,420</td>
</tr>
<tr>
<td>Onshore Pipeline</td>
<td>30,735</td>
</tr>
</tbody>
</table>

No timber was purchased this quarter. However, Project-approved timber sources are maintained on record for any future requirements.

11.3 Erosion and sediment control

Permanent reinstatement works are progressively stabilizing areas that previously needed erosion and sediment control measures. Monitoring and maintenance of temporary structures continues.

At the HGCP, reinstatement works are enabling effective sediment control. Temporary silt fences and erosion control measures will remain until reinstatement is completed. During this quarter, no sediment was observed in stormwater flowing from the HGCP site. Maintenance of drains on site roads continues.

During high rainfall at the LNG Plant site in February, erosion and sediment was effectively controlled through permanent structures. In addition to the completion of reinstatement works, permanent drains are in place and are effectively controlling run-off.

11.4 Acid sulfate soils

No soils with a potential to produce acid sulfate were disturbed during this quarter, so no monitoring was required.
Cultural heritage protection remains a priority on active worksites, with contractors continuing to deliver training on procedures such as the Chance Finds Protocol. During the first quarter, some 300 workers received cultural heritage training from the LNG Plant and Marine Facilities contractor.

12.1 Pre-construction surveys

Pre-construction surveys are conducted before construction commences to identify potential cultural heritage sites that may require preservation, or develop mitigation measures in partnership with local landowners. With the reduction in construction activities, a limited number of assessments were undertaken this quarter, and no cultural heritage sites were identified.

12.2 Salvage excavations

No salvage excavations were conducted during this quarter.

12.3 Incidents of disturbance to known cultural heritage sites

No incidents of Project-related disturbance to known cultural heritage sites were reported this quarter.

12.4 Chance finds

Before ground disturbance activities commence, the Project conducts inspections to identify the presence of chance finds. No chance finds were recorded during the quarter.

Since Project construction began, approximately 2,000 artifacts have been recovered. These include stone mortars, pestles and waisted axes. One example is a stone pestle measuring 12 centimetres long and 8 centimetres wide, which was found exposed at the southern end of a laydown pad in Hides.

The stone pestle recovered from Hides during construction

Ceremony breaks ground on drill site

A ground-breaking ceremony with traditional leaders from Hides was held at Wellpad G before the start of drilling activities this quarter.

Wellpad G is on a site formerly used for hunting. The Huli people consider the Mount Gigira area (known as ‘Gigira Lai Tebo’) a sacred site. One set of beliefs is that there is an everlasting fire (‘lai tebo’) hidden in Mount Gigira and one day the fire will light up the entire Hela region and the universe.

The ground-breaking ceremony, which involves sacrificing a pig and letting its blood run onto the ground, was held to honor the site before drilling activities commenced. It was attended by clan elders from the Kulu Village, Iruka Honia and Andiria Halepange, as well as Tajenda Pore who is the principal landowner for Wellpad G. The Project respects Huli beliefs and has supported ground-breaking ceremonies throughout construction.

Iruka Honia, Pepe Bele clan elder and Andiria Halepange, Pina clan elder
The Project is actively engaging with communities and other key stakeholder groups to keep them informed of Project activities during the transition to the production phase.

13.1 Government

Through engaging with officials, such as Papua New Guinea’s new Department of Petroleum and Energy Minister, as well as provincial and district leaders, the Project is keeping all levels of Government updated on transition and commissioning activities.

13.1.1 People processes

The Papua New Guinean Government continues to expedite visas and work permits for non-national Project workers. This includes Restricted Employment Facility visas, which enable workers with specialized technical skills unable to be found in-country, to work in Papua New Guinea for up to 30 days.

13.1.2 Materials and tax

Papua New Guinean Customs Service audits confirm that the Project continues to comply with import duty requirements. These ongoing audits are not delaying the clearance of Project cargo into the country.

13.1.3 Infrastructure and Government support

During the first quarter, the Project committed to assisting the Papua New Guinean Department of Works with repairs and maintenance to the Highlands Highway through to 2015. The Project is also supporting the Hela Provincial Government with engineering design and construction supervision of new bridges in Tari and Benaria, which are located close to the onshore pipeline.

13.1.4 Advocacy

In March, Papua New Guinea’s new Department of Petroleum and Energy Minister, the Honorable Nixon Duban, received a briefing from senior Project representatives about the current status of Project activities.

Also during this quarter, the Project hosted Australian Prime Minister, Tony Abbott, and Fijian President, Ratu Epeli Nailatikau, at the first of its advocacy workshops for 2014.

This year’s advocacy program is supporting the Project’s transition from construction to production by engaging members of the Production team with senior government officials and regulators. To date, more than 3,000 dignitaries from various government departments, representative stakeholder organizations, schools and community groups have participated in the Project’s advocacy workshops and attended LNG Plant site tours.

13.1.5 Benefits assurance delivery

Papua New Guinea’s Department of Petroleum and Energy is progressing clan vetting activities to identify beneficiary clans in Project-impacted areas and determine the appropriate distribution of benefits. The Project has supported the Department with these activities in all Project License Areas.

Also during this quarter, the Papua New Guinean Government endorsed a procedure developed by its Department of Planning to streamline the implementation of Infrastructure Development Grants and High Impact Infrastructure Projects.

13.2 Communities

The Project is continuing to engage with communities to keep them updated on the completion of construction, upcoming commissioning activities and the transition to the production phase.
13.2.1 Engagement activities

During this quarter, 80 formal engagements were conducted with over 2,600 people in 26 communities. In addition, 184 informal engagements were conducted with over 7,400 individuals from 32 communities. Since construction began in 2010, the Project has successfully completed more than 4,000 community engagements, with almost 152,000 attendees.

Messages delivered during this quarter focused on safety near the pipeline ROW, road safety, and updates about commissioning and construction demobilization activities.

Communities at Hides were advised of the arrival of the first gas, and provided with advice about safe behavior near the HGCP site.

As part of community engagement activities, the Project distributed 3,800 Toea children’s books to elementary schools throughout the LNG Plant site villages as reading resources for students.

Issues identification

Social issues have increased to 48 percent, making it the most common issue category for the quarter as shown in Figure 13.1. The majority of social issues raised related to engagement concerns, such as requests for additional information and questions about community programs, with almost 60 percent of these issues closed within a day. Other social issues were in relation to worker conditions and behavior.

There was a 13 percent decrease in economic issues received this quarter. The issues concerned community infrastructure support and programs, as well as employment. This decrease was expected, due to the increased community awareness of demobilization activities as the Project nears the end of construction.

Feedback received from community engagements indicates that individuals are generally happy with the level of engagement and appreciative of the Project’s assistance to their communities.

13.2.2 Media

Esso Highlands Limited changed its name in January to ExxonMobil PNG Limited, to better represent its Papua New Guinean operations. The Project website, www.pnglng.com, was updated to reflect the name change and incorporate information relevant to the production phase. The website continues to be a key source of information for many stakeholders.

In February, ExxonMobil PNG Limited Managing Director, Peter Graham, was bestowed one of the highest honors from Her Majesty The Queen when he was made a Commander of the British Empire for his service to the petroleum industry and the community through supporting social development initiatives in Papua New Guinea. Peter travelled to Buckingham Palace, London, to receive his award from His Royal Highness Charles, Prince of Wales.

Peter’s monthly columns, published in the Post Courier, The National and Wantok Nius newspapers, discussed the safety aspects of the Project, and the GWIM conference, held in Papua New Guinea for the first time in March.
Completion of the onshore pipeline and a visit to the LNG Plant site by Australian Prime Minister, Tony Abbott, attracted international and local media attention during the quarter.

The sixteenth PNG LNG Quarterly Environmental and Social Report, which reported on activities that occurred in the fourth quarter 2013, was also published on the Project’s website. Printed versions of the Report were made available to Project stakeholders who had limited access to the internet.

The Report’s Executive Summary was published in the Post Courier and The National in English, as well as in Tok Pisin in the Wantok Nius.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EITI</td>
<td>Extractive Industries Transparency Initiative</td>
</tr>
<tr>
<td>ESMP</td>
<td>Environmental and Social Management Plan</td>
</tr>
<tr>
<td>GWIM</td>
<td>Global Women in Management</td>
</tr>
<tr>
<td>HGCP</td>
<td>Hides Gas Conditioning Plant</td>
</tr>
<tr>
<td>IESC</td>
<td>Lender Group’s Independent Environmental and Social Consultant</td>
</tr>
<tr>
<td>iHDSS</td>
<td>Integrated Health and Demographic Surveillance System</td>
</tr>
<tr>
<td>IMR</td>
<td>Papua New Guinea Institute of Medical Research</td>
</tr>
<tr>
<td>Lanco(s)</td>
<td>Landowner company (companies)</td>
</tr>
<tr>
<td>LNG</td>
<td>Liquefied Natural Gas</td>
</tr>
<tr>
<td>PNG</td>
<td>Papua New Guinea</td>
</tr>
<tr>
<td>ROW</td>
<td>Right of Way</td>
</tr>
<tr>
<td>SSHE</td>
<td>Safety, Security, Health and Environment</td>
</tr>
<tr>
<td>WEN</td>
<td>Women in Energy Network</td>
</tr>
<tr>
<td>WGPSN</td>
<td>Wood Group PSN</td>
</tr>
<tr>
<td>WMA</td>
<td>Wildlife Management Area</td>
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</table>
## Table A1.1 – Summary of contractors and work scopes

<table>
<thead>
<tr>
<th>Contract</th>
<th>Description of work scope</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upstream Infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td>Clough and Curtain Brothers Joint Venture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Infrastructure upgrades supporting main construction activities in the Gulf Province and Southern Highlands Province.</td>
</tr>
<tr>
<td></td>
<td>• Camps to support construction activities.</td>
</tr>
<tr>
<td></td>
<td>• Construction of a landfill site at Hides.</td>
</tr>
<tr>
<td></td>
<td>• Bulk earthworks for the HGCP and Hides Wellpads.</td>
</tr>
</tbody>
</table>

| **LNG Plant Early Works** |  |
| Curtain Brothers Papua New Guinea Limited |  |
|  | • Upgrade of existing road from Motukea Island to LNG Plant site. |
|  | • New Bypass Road (re-routing of existing public road, which transects with the LNG Plant site). |

| **Telecommunications** |  |
| TransTel Engineering |  |
|  | • Installation of a telecommunications system to support construction and production. |

| **Offshore Pipeline** |  |
| Saipem |  |
|  | • Construction and installation of the offshore pipeline from Omati River landfall to LNG Plant landfall site. |
|  | • Pipeline tie-in at Omati River landfall and shore crossing at the LNG Plant landfall site. |
|  | • Installation of near-shore Fiber Optic Cable in the Omati area. |

| **Offshore Fiber Optic Cable** |  |
| Alcatel-Lucent Submarine Networks |  |
|  | • Installation of the offshore Fiber Optic Cable from the Omati delta to the LNG Plant landfall. |

| **LNG Plant and Marine Facilities** |  |
| Chiyoda and JGC Joint Venture |  |
|  | • LNG facility engineering and construction, including LNG process trains, condensate storage tanks, LNG storage tanks, utilities, accommodations, heliport, and telecommunications. |
|  | • Marine facilities including the jetty and LNG/condensate export berths. |

| **Hides Gas Conditioning Plant and Hides Wellpads** |  |
| CBI and Clough Joint Venture |  |
|  | • Engineering and construction of the HGCP processing facilities and associated wellpads, including accommodation and maintenance facilities. |

| **Onshore Pipeline** |  |
| SpieCapag |  |
|  | • Installation of the onshore gas and condensate pipelines, and associated valve and metering stations. |
|  | • Installation of the pipelines for the Hides gathering system including flowlines, spineline, utility lines, and associated power and telecommunications cables. |

| **Komo Airfield** |  |
| McConnell Dowell and Consolidated Contractor Group Joint Venture |  |
|  | • Airfield and supporting infrastructure. |

| **Associated Gas Development** |  |
| Various |  |
|  | • Upgrades and modifications to Kutubu Central Processing Facility and Gobe Production Facility including gas dehydration, metering, and condensate handling. |

| **Nabors Drilling International Limited** |  |
|  | • Drill and complete 11 wells. |

| **Permanent Facilities Compound** |  |
| Leighton (PNG) Limited |  |
|  | • Construction of offices and associated service facilities. |

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ExxonMobil

Oil Search

NPCP

Santos

JX Nippon Oil & Gas Exploration

MRDC

PETROMIN