**Esso Highlands Limited** 



# Papua New Guinea LNG Project

# **National Content Plan**

# PGGP-EH-BPZZZ-000013

# CONTENTS

1.0	INTRODUCTION	. 1
1.1	Definitions	1
	Business Venture	3
2.0	THE ROJECT DESCRIPTION	5
	Co-Venture Organization and Company Profiles	555566
2.2	PNG LNG Development Overview	6
	Construction	6 8
2.4	Production	8
3.0	NATIONAL CONTENT PLAN, OBJECTIVES & ORGANIZATION 1	0
3.1	National Content Plan1	0
3.2	Objectives1	0
-	Construction Phase	11
-	Production Phase	12
4.0	WORKFORCE DEVELOPMENT 1	4
4.1	PNG Labour Requirements1	4
4.2	Employment during Construction 1	15
4.3	Employment during Production1	6
4.4	Training for Construction	
2 2 2	<ul> <li>4.1 Training by the EPC3 and EPC4 Contractors</li></ul>	16 18 19
4.5	Training for Production	
	<ul> <li>5.1 Training for Field Positions in Production</li></ul>	
4.6	Workforce Development for Drilling	

4	1.7	Geographic Priority for Selecting Workers	21
2		Recruitment Trainee and Worker Database	
5.0	รเ	JPPLIER DEVELOPMENT	24
Ę	5.1 5.1.1	Introduction Supplier Development Principles	
Ę	5.2	Supplier Development Program	24
	5.2.1		
	5.2.2 5.2.3	1 5	
	5.2.4		
Ę		Supply Base Evaluation	
	5.3.1		
	5.3.2 5.3.3	55	
,			
5	5.4 5.4.1	Procurement Process Opportunity Identification	
	5.4.2		
	5.4.3		
	5.4.4	•	
	5.4.5		
	5.4.6	1	
	5.4.7 5.4.8	I I I I I I I I I I I I I I I I I I I	
Ę		Capacity-Building	
	5.5.1		
	5.5.2 5.5.3		
	5.5.4		
	5.5.5		
Ę	5.6	Representative Lancos Strategy	32
		General Strategy	
	5.6.2	2 Strategy for the Hides Area	34
	5.6.3		
	5.6.4	55	
,	5.6.5 		
		Representative Lanco Strategy during Production	
6.0			
		Strategy and Principles	
ť		Community Investment Program Area	
	6.2.1	Community Investments 2 Tax Credit Arrangements	
6		Social Impact Assessment	
		Primary NGO Relationship	
ť	6.5 6.5.1	Program Summaries and Objectives Health	
	6.5.2		
	6.5.3		

<ul> <li>6.5.4 Cultural Heritage</li> <li>6.5.5 Gender</li> <li>6.5.6 Bio-Physical Environment</li> <li>6.5.7 Public Policy</li> <li>6.5.8 Community Action Plan (CAP)</li> </ul>	40 41 41
6.6 Implementation Strategy	41
6.7 Other EHL Projects outside the Community Investment Program	42
6.8 Contractors' Projects in the Community Investment Program	43
6.9 Budget	43
7.0 STEWARDSHIP	44
<ul> <li>7.1 Monitoring Performance</li></ul>	44 44 44
7.2 National Content Steering Committee	44
<ul> <li>7.3 Public Awareness</li> <li>7.3.1 Overview and Objectives</li> </ul>	45
<ul><li>7.3.2 Employment and Business Opportunities</li><li>7.3.3 Strategic Community Investment</li></ul>	

# EXECUTIVE SUMMARY

The Papua New Guinea (PNG) Liquefied Natural Gas (LNG) Project (Project) is a large and complex operation. The Project proposes to commercialize gas reserves in the Southern Highlands and Western provinces of Papua New Guinea, by processing the gas and transporting it via pipeline from these provinces through Gulf Province and the Gulf of Papua to LNG producing and exporting facilities in Central Province, near Port Moresby. From there LNG will be exported via LNG carriers to international gas markets. Condensate also will be produced and exported.

The diagram below shows the location of major Project components. It illustrates (in red) those facilities that will need to be constructed for the Project and illustrates other facilities (in blue) that already exist as part of current oil operations, but which the Project also will utilize.



Figure 1 – Overview of major Project facilities

Esso Highlands Limited (Company) is the operator of the Project and will construct and operate the Project on behalf of several co-venturers. Construction of the pipelines and gas plants is expected to take approximately four years from 2009 to year end 2013. The Project is expected to begin production around the start of 2014 and will produce LNG for approximately 30 years.

The Project will have a major impact on the PNG economy. The ACIL Tasman 'PNG LNG Economic Impact Study' report of February 2008 estimated that initial capital investment would be approximately K36 billion<sup>1</sup> and operating expenditures over the 30 year Production

<sup>&</sup>lt;sup>1</sup> The ACIL Tasman report assumed a conversion rate of US dollars to PNG Kina at US\$1.00 = K 3.6

period would be approximately K23 billion. PNG gross domestic product would more than double. Direct cash flow to the PNG government and landowners over the 30-year Production period would be approximately K114 billion and the Project would create significant employment and business opportunities for PNG citizens during both the Construction and Production phases.

The broad aims of the National Content Plan are to provide a roadmap for compliance with relevant PNG law and to enhance the benefits of the Project to PNG in the areas of employment and training, business opportunities and standard of living. By delivering real benefits to PNG and its citizens through implementation of the National Content Plan, the Company's goals are to build and maintain good relations with host communities most impacted by the Project and to help generate sustainable benefits to PNG beyond the life of the Project.

The National Content Plan will target sustainable benefits to PNG in three areas – Workforce Development, Supplier Development and Strategic Community Investments.

**Workforce Development** – The Company and its Contractors are bound by PNG's legal requirements relating to the employment of PNG citizens and non-PNG citizens. In addition, the Company aims wherever possible to fill jobs in Construction and Production with qualified PNG citizens.

During Construction, the Engineering, Procurement and Construction Contractors (EPC Contractors) will conform with PNG legal requirements relating to the employment of PNG citizens and will provide jobs for an estimated peak of up to 3,500 PNG citizens. The EPC Contractors will have access to PNG citizens through Representative Lancos during the four-year Construction period, with a focus on employment for people from areas most impacted by the Project. During Production, the Company and Production support contractors will conform with PNG legal requirements relating to the employment of PNG citizens. Initially, a significant proportion of Production workers will be expatriates, but with increasing nationalization of the workforce over time as PNG citizens gain the necessary skills to operate and maintain the complex Production facilities. Once steady state employment is achieved during the Production phase (currently expected in 2016), the Company will employ approximately 550 workers, of whom some 400 are expected to be PNG citizens.

To help reach these Workforce Development objectives, the Company will secure training for PNG citizens at two specially built facilities for Construction training at Pomtech and Juni. Trades training for Construction workers will be provided through Australia's Technical and Further Education (TAFE) system, which will provide graduates with recognized certificated training. The Company will donate the Construction training centers at Pomtech and Juni to the appropriate PNG authorities after their use during Construction, so that PNG will have facilities with qualified instructors to continue to build PNG's skilled workforce.

The training of Operations and Maintenance personnel for the Production phase will be conducted at facilities both inside and outside of Papua New Guinea. Once the initial basic and advanced skills training is completed, facility specific training will be done 'on the job' at the newly constructed facilities either at the Hides Gas Conditioning Plant or at the Liquefied Natural Gas Plant near Port Moresby.

**Supplier Development** – In accordance with the Oil and Gas Act, PNG companies will be used for the supply of goods and services wherever they are competitive with foreign-sourced goods and services. Business opportunities for PNG companies are estimated to be approximately K1.26 billion during the four-year Construction period and approximately K200 million per year for goods and services during the 30-year Production period. The

Company will establish an Enterprise Centre to assess PNG Project-related businesses, help them build their business skills, and facilitate access to finance. This is intended to increase their competitiveness in bidding for work with the Project and eventually with other PNG developments and lead to stronger, better-run and more sustainable businesses in PNG.

**Strategic Community Investments** - These are corporate contributions and other voluntary community investments made in host communities. They are designed to reduce barriers to development, build capacity and improve standards of living through programs targeting health, education, sustainable livelihoods and environment. These investments reflect the priorities identified in PNG's own 10-year Strategic Plan and a Project-sponsored Social Impact Assessment of community needs and aspirations, and elements identified in the United Nations Millennium Development Goals. Together, the Company expects to spend approximately K56<sup>2</sup> million (USD \$20million) on Strategic Community Investments during Construction and approximately K14 million per year (USD \$5million per year) during Production.

Communication of Workforce Development, Supplier Development and Strategic Community Investment programs will be essential to help keep interested parties informed of developments and opportunities arising from the Project. A public awareness program will be developed to provide information and opportunities related to National Content throughout the Project's Construction and Production phases.

Note on statistics: This Report provides current estimates in relation to future employment, expenditure and other economic impacts of the Project. These estimates are bound to vary with time and changing circumstances, so should not be taken as exact figures, nor used as the basis for business planning or decisions.

The ACIL Tasman report of 2008 used a currency conversion ratio of K3.6=US\$1 and this conversion rate applies wherever the ACIL Tasman Report is quoted in this Plan. All other figures in this Plan utilize a K2.8=US\$1 conversion rate.

<sup>&</sup>lt;sup>2</sup> This figure assumes an exchange rate of K2.8:US\$1

# 1.0 INTRODUCTION

# 1.1 Definitions

- ACIL Tasman Report means the *PNG LNG Economic Impact Study* of 6 February 2008 prepared for Company by ACIL Tasman Pty Ltd.
- **Construction** means the main construction phase (Phase 1) of the Project from approximately 2010 through 2013, during which the pipeline and gas plants will be built.
- **Contractor** means a contractor providing services to the Project, including EPC Contractors, the Early Works/Infrastructure contractor, and drilling contractors.
- **Coordination Procedure** documentation provided by the Company to EPC Contract bidders that describes the minimum planning, coordination and reporting requirements for all aspects of the Contractors' work, including sections on Workforce Development (training and hiring) and Supplier Development.
- **EHL** means Esso Highlands Limited in its role as the operator of the Project.
- Enterprise Centre an independent and neutral organization managed initially by an NGO and initially funded by the Company. Its purpose is to foster the capacity building of local businesses by developing business management skills and processes, and facilitating access to financing from PNG financial institutions.
- EPC Contractor means a large international contractor providing engineering, procurement, and construction services during the main phase (Phase 1) of Construction for telecommunications (EPC1), the Offshore Pipeline (EPC2), LNG Plant (EPC3), Hides Gas Conditioning Plant (EPC4) and the Onshore Pipeline (EPC5).
- **HGCP** means the Hides Gas Conditioning Plant.
- Lanco (Land Owner Company) means a company registered in PNG with the intent of doing business, owned by the people of the same clan or clan origin, or owned by a group of clans, who use and/or have title to land in a specific area.
- **Millennium Development Goals** the United Nations Millennium Development Goals focus on eight areas: contributing to poverty reduction; achieving universal primary education; improving maternal health; reducing child mortality; promoting gender equality; combating HIV/AIDS, malaria and other diseases; ensuring environmental sustainability; and developing a global partnership for development.
- **National Content** a coordinated and focused approach to enhancing the economic and social opportunities that are associated with the finding, developing, and producing of oil and gas, which is defined though the following components:
  - **Workforce Development** providing PNG citizens with the technical and professional skills they need for existing and future operations
  - Supplier Development investing time, people and resources to develop PNG business to form a competitive industrial base, as well as the provision of local goods and services
  - Strategic Community Investments supporting programs that assist the development of local capabilities and improve the socio-economic environment.
- **Nationalizing the workforce** refers to the planned increasing percentage of PNG citizen employees in the Company's Production workforce over time.

- PNG business (a Lanco, local contractor or local sub-contractor) means a company, registered in PNG with the intent of doing business, wholly owned by PNG citizens and/or by foreigners with residence in PNG, or a joint venture between a PNG company and foreign firm(s) in which the share of the PNG company is, or is expected to exceed, 50%.
- **Pomtech** means the Port Moresby Technical College.
- **Production** means the production phase of the Project, during which LNG will be produced and sold. Expected to last approximately 30 years from around the start of 2014.
- **Project (the Project)** means the Papua New Guinea Liquefied Natural Gas Project.
- **Project Impact Area** means the area within existing and future Petroleum Development License (PDLs) areas whose gas reserves are dedicated to the Project and areas which are within 5 kilometers of any pipeline or facility physically linked to the pipeline where the pipeline or facility is located outside of the existing and future PDLs.
- **Representative Lanco** means a Lanco which the Company has pre-qualified to supply the Project, with: shareholders representing the broader community in the Project Impact Areas.

# 1.2 Business Venture

# 1.2.1 Project Overview

The Project is a joint venture between the Company and affiliates of Oil Search Limited, Santos Ltd, Nippon Oil Exploration Limited, and companies representing landowners from the Independent State of Papua New Guinea. The State of PNG also will acquire an interest in the Project at Sanction. The Project proposes to commercialize gas reserves in the Southern Highlands and Western Provinces of Papua New Guinea, by processing the gas and then transporting it via pipeline from these Provinces through Gulf Province and the Gulf of Papua to LNG producing and exporting facilities in Central Province.

Natural gas will be produced from gas fields at Hides, Angore and Juha and processed at the Hides Gas Conditioning Plant and the Juha Production Facility; and from a gas field at South East Hedinia along with the existing oil fields via the existing facilities at Kutubu, Agogo and Gobe. The natural gas will then be conditioned and transported from the HGCP to the LNG Plant via the LNG Project Gas Pipeline. The onshore portion of the pipeline will start at the HGCP and go to the Gulf of Papua. The offshore portion of the pipeline will start at the Gulf of Papua and go to the onshore LNG Plant some 20 km northwest of Port Moresby at Caution Bay. There the gas will be liquefied and then exported via LNG carriers to international gas markets. In addition to LNG, the Project will produce condensate at the HGCP and at the LNG Plant which will be exported via condensate carriers.

# 1.2.2 Project Economic Impacts on PNG

<u>Direct Benefits</u> – According to the ACIL Tasman 'PNG LNG Economic Impact Study' report of February 2008, PNG would benefit directly from the Project through:

- capital investment in LNG production and support facilities, upstream gas production and processing development, pipelines, storage and other infrastructure, including a significant level of local spending on support services;
- employment and training;
- direct cash flows to government and landowners in the form of taxes, royalties, development levies and other charges, and returns on equity participation; and
- potential for increased petroleum exploration and production activity in the country.

The ACIL Tasman report further stated that the Project was forecast to deliver direct capital investment of approximately K36 billion<sup>3</sup> in real terms over a 30-year life of the Project. Recurrent operating expenditure was expected to average approximately K750 million per year. Total operational expenditure over the first 30 years after commencement of Production from the Project was estimated to be approximately K23 billion.

The Project would provide a major boost to Gross Domestic Product (GDP) and exports. Under the ACIL Tasman Study Case assumptions, GDP would more than double, rising in real terms from approximately K8.65 billion in 2006 to an average of approximately K18.2 billion per year. Oil and gas exports would increase more than four-fold, with average annual product value from the LNG Project of approximately K11.4 billion, compared to total PNG oil and gas exports of K2.6 billion in 2006.

The Project would provide a large number of jobs for PNG citizens. During the initial Construction period, approximately 12,000 full-time jobs are expected to be created directly, with estimates of up to 3,500 of those jobs to be filled by qualified PNG citizens, assuming

<sup>&</sup>lt;sup>3</sup> The ACIL Tasman report assumed a conversion rate of US dollars to PNG Kina at US 1.00 = K 3.6

the availability of qualified labour. Once the Project moves into Production, around 1,200 positions would be created within the Company and supporting industries. The majority of positions should be held by PNG citizens by around 2016/17.

The direct benefits of the Project would include valuable revenue streams for national and provincial governments and landowners through taxes, royalty payments, levies, and through equity participation in the Project.

The ACIL Tasman Study estimated the total direct cash flow to the PNG government and landowners from the LNG Project at approximately K114 billion over a 30-year life of project. ACIL Tasman also predicted that that net cash flow would reach a maximum of approximately K4.5 billion/year, within a range of K2.5 to K6 billion/year for the Low Case and High Case respectively.

This income would provide the PNG government with the opportunity to maintain a responsible program of expenditure on social programs and productivity-enhancing infrastructure development and maintenance. This in turn could provide long-term improvements in quality of life and economic stability for the people of Papua New Guinea.

Apart from the direct impacts on government and landowners in terms of revenue and jobs, the Project has the potential to boost the country's petroleum exploration and production sector significantly, providing a focus for ongoing involvement by major international players that would help attract investment and development in years to come.

<u>Indirect benefits</u> - The direct benefits outlined above are very significant, however, the true significance of the Project lies in its potential to influence performance throughout the economy indirectly, as a result of flow-on into other industry sectors. Spending by Project participants, employees, government and landowner beneficiaries will lead to 'multiplier effects' as the economic activities associated with the Project impact on the broader economy. Investment in productive physical assets (such as roads and airports) and in social assets (such as improved education and health services) would also generate sustainable benefits for PNG.

One of the significant impacts of the Project will be new opportunities for local businesses to provide the Project with a range of services.

The indirect macroeconomic impacts of the Project were modelled by ACIL Tasman. While their results were only estimates, they pointed to a range of very large impacts, including:

- GDP up 97 to 99%;
- private and public consumption up 85 to 107%;
- aggregate employment up 42 to 45%; and
- foreign currency exports up around 106%.

However, ACIL Tasman's modelling also indicated that growth in demand in the oil and gas sector and high rates of public and private expenditure will put upward pressure on the exchange rate, causing it to appreciate. A stronger kina, together with a tendency for the gas development to draw capital and labour away from the primary production sectors such as agriculture and forestry, would have the potential to reduce the export competitiveness of those sectors. These potential economic stresses would need to be anticipated and effectively managed through government programs to provide direct assistance to these sectors and to facilitate structural adjustment.

# 2.0 THE ROJECT DESCRIPTION

# 2.1 Co-Venture Organization and Company Profiles

Esso Highlands Limited will operate the Project on behalf of a group of co-venturers. The co-venturers and respective ownership percentages mentioned below are those anticipated at Project financial close in late 2009 when the State is expected to join as a Project participant. Once the PNG Government joins the Project after financial close, the co-venturers will be affiliates (32.9% ownership of Project), and affiliates of Oil Search Limited (28.7%), Santos Ltd (13.7%), Nippon Oil Exploration Limited (5.3%) and the Independent State of Papua New Guinea and landowners (19.4% - consisting of Eda Oil Ltd and affiliates of IPBC and MRDC). The Project involves the respective resources of the co-venturers in a number of petroleum development license (PDL) and petroleum retention license (PRL) areas. A brief outline of each co-venturer follows.

# 2.1.1 Esso Highlands Limited

EHL is the Project proponent and operator of the Project. EHL is a wholly owned subsidiary of Exxon Mobil Corporation, the world's largest publicly traded petroleum and natural gas company. ExxonMobil businesses operate in almost 200 countries and territories, principally in:

- oil and gas exploration and production;
- refining, supplying and marketing petroleum products; and
- manufacturing and marketing petrochemicals.

The ExxonMobil group of companies is the largest non-government marketer of equity (own production) natural gas and crude oil in the world. ExxonMobil is a pioneer and leader in LNG. It is one of the longest serving participants in the global LNG industry, with more than 30 years of experience in developing and commercializing LNG. ExxonMobil's LNG experience extends throughout the LNG value chain from upstream production, liquefaction and marine transportation to onshore and offshore regasification and direct marketing.

# 2.1.2 Oil Search Limited

Oil Search is a public company incorporated in Papua New Guinea in 1929. The company became a producer of gas and then oil with the commissioning of production facilities at Hides (1991) and Kutubu (1992). Oil Search is Papua New Guinea's most active oil and gas explorer, holding the largest reserves of both oil and gas. The company is also Papua New Guinea's largest oil and gas producer and was responsible for generating 11% of the country's gross domestic product and 21% of its export revenue in 2007.

# 2.1.3 Santos Ltd

Santos Ltd is a major Australian oil and gas exploration and production company with interests and operations in every major Australian petroleum province, as well as in Papua New Guinea and numerous other countries. The company is Australia's largest domestic gas producer and in 2007 produced 59.1 million barrels of oil. Santos is a proven operator of onshore and offshore oil and gas projects, both in Australia and overseas. The company commenced oil and gas exploration and production in Papua New Guinea in the late 1980s.

# 2.1.4 Nippon Oil Exploration Limited

Nippon Oil Exploration Limited, a 100% subsidiary of Nippon Oil Corporation, is exploring for and developing and producing oil and gas, with activities in Canada, the Gulf of Mexico, the

North Sea, North Africa, Australia, Papua New Guinea and Southeast Asia. It is Japan's largest integrated oil company and is a major oil importer and distributor of petroleum products. The Project is a strategically important project to Nippon Oil, being its third LNG project, which will facilitate a stable supply of energy resources to the company.

# 2.1.5 <u>Mineral Resources Development Company</u>

MRDC is a PNG State-owned company incorporated to hold and manage landowner equity interests in petroleum and mining projects. Projects in which MRDC-managed landowner entities hold an interest include the Kutubu, Gobe and Moran oil developments as well as the OK Tedi gold mine and the Ramu nickel joint venture. Petroleum Resources Kutubu Limited and Petroleum Resources Gobe Limited each hold direct interests in the Project and are both 100% owned subsidiaries of MRDC which holds these interests as a corporate trustee in trust for the Kutubu and Gobe landowners.

# 2.1.6 Eda Oil Limited

Eda Oil Limited is 100% owned by Petromin PNG Holdings Limited, an entity directly owned by the PNG Government to hold its interests in petroleum and mining resource projects. Eda Oil owns a 0.24% interest in the Project derived from its 20.5% interest in the Moran Petroleum Development Project.

# 2.1.7 Independent Public Business Corporation of Papua New Guinea

The PNG State is expected to join as an equity participant after the Project's financial close in late 2009. The nominee for the State of Papua New Guinea will be a wholly owned subsidiary of the Independent Public Business Corporation of PNG (IPBC). Under the *IPBC Act* of 2002, the IPBC is a Statutory Corporation, and is to act as trustee of the General Business Trust, of which the State is the sole beneficiary. The purposes of the General Business Trust include to hold assets and liabilities which have been acquired or assumed by, or vested in, IPBC and to hold the interest of IPBC in ownership or development of assets in conjunction with private-sector investors.

# 2.2 PNG LNG Development Overview

The Project is a large and complex operation that is broadly split into two parts – Construction - which is expected to take place between 2009 and 2013, and Production - which is expected to begin around the start of 2014 and run until around 2044. The two are very different in nature and present different opportunities for PNG citizens and companies.

# 2.3 Construction

# 2.3.1 Main Activities by Area and Timing

Before development can begin, the Project must successfully pass several steps, including a decision by the co-venturers in late 2009 on whether to proceed to development. This would allow financial arrangements to be finalized (Financial Close), followed by detailed engineering design and construction, beginning in early 2010.

The following expands on the various phases of Construction required by the Project. While the majority of Early Works and Construction (Phase 1) will take place from mid-2009 to end-2013, there will be several smaller construction efforts in later years to maintain a supply of gas to the LNG Plant over a long period. The Project will be developed in several phases, with major elements only listed below. Figure 2 is a schematic representation of the various Project components.

# Early Works 2009 Pre Sanction

- Establish Kopi as a Southern route point of entry including wharf, RORO, laydown, camp area and bypass road construction.
- Open up the Southern supply route including bridging the Kikori and Mubi rivers, construct 30km of new road (Gobe airfield to Kantobo) and approximately 3km of bypass roads in the Kutubu area.
- Undertake road and bridge work on the Highlands Highway so that the road is capable of supporting construction logistics. Work is primarily focused on the Mendi to Hides section.
- Construct upgrades to existing roads in the LNG Plant Site vicinity and install LNG Plant Site perimeter fencing.
- Construct the Pomtech and Juni Training facilities

# Phase 1 Initial Development (2010 - 2013 with Production start around 1Q 2014)

- Construct six wellpads, drill six wells, and recomplete two existing wells at the Hides gas field.
- Construct the Hides gathering system to bring gas from the Hides wells to the Hides Gas Conditioning Plant.
- Construct the Hides Gas Conditioning Plant to separate the gas and condensate and condition the gas for use as feed gas at the LNG Plant.
- Construct the LNG Facilities, including the onshore LNG Plant and other onshore and marine facilities and infrastructure.
- Construct the LNG Project Gas Pipeline onshore and offshore sections from HGCP to the LNG Plant.
- Construct the HGCP-Kutubu CDF condensate pipeline.
- Construct the gas treatment modifications at the Kutubu Central Processing Facility and Gobe Production facility.
- Construct the Kutubu and Gobe gas pipeline connections.
- Construct the Komo Airfield.
- Establish the telecommunications system.

# Phase 2 Additional Drilling (~2017)

- Construct one wellpad and drill an additional two wells at the Hides gas field.
- Construct two wellpads and drill two wells at the Angore gas field.
- Construct the Angore gathering system to bring the gas from the Angore gas field to the Hides Gas Conditioning Plant.

# Phase 3 Hides Gas Conditioning Plant Booster Compression (~2019)

• Install additional booster compression at the Hides Gas Conditioning Plant to maintain gas production volumes.

# Phase 4 Juha Gas Field Development (~2020)

• Construct three wellpads and drill four wells at the Juha gas field.

- Construct the Juha gathering system to bring the gas from the Juha gas field to the Juha Production Facility.
- Construct the Juha Production Facility (JPF) to separate gas and liquids from the Juha gas field.
- Construct the Juha-Hides Rich Gas Pipeline and the Juha-Hides Liquids Pipeline to transport rich gas and liquids from the JPF to the HGCP.

Phase 5 Associated Gas Developments (~2031)

• Modify the Agogo Production Facility to treat the gas from the Agogo and Moran fields and construct a pipeline to carry this gas to the LNG Project Gas Pipeline.

# Phase 6 South East Hedinia Field (Under evaluation)

• Develop wells, wellpads and a multi-phase pipeline to tie back to the Kutubu CPF at the South East Hedinia field.

# 2.3.2 Project Team and Main Contractors

For Phase 1 (Initial Development), the Company will use major EPC Contractors to actually build the LNG facilities and pipelines. Following is a brief description of the work to be completed by each of the major Contractors during the initial Construction Phase of the Project:

**C1 - Infrastructure Contractor** includes an Early Works component and will build infrastructure needed to provide logistics routes for the subsequent EPC Contractors

- **EPC1 Contractor** will build the telecommunications systems
- EPC2 Contractor will build the offshore pipeline and pipeline landfalls
- **EPC3 Contractor** will build the LNG facility
- **EPC4 Contractor** will build the Hides Gas Conditioning Plant and Hides Wellpads
- **EPC5 Contractor** will build the onshore pipeline and Komo Airfield

Drilling Contractor will drill the wells

# 2.4 Production

The Project is expected to have an operational life of approximately 30 years, beginning around the start of 2014 when the first LNG cargo is expected to be ready for shipment. Once Phase 1, the main Construction Phase, is complete and the Project enters Production, there will be a fundamental shift in the areas and types of activity for the remainder of the Project's life. Apart from routine maintenance on the pipeline, major activity will focus on operating the Hides Gas Conditioning Plant and the LNG facility near Port Moresby. These activities will require a significant, albeit smaller, workforce with different skills to those required in Construction.





# 3.0 NATIONAL CONTENT PLAN, OBJECTIVES & ORGANIZATION

# 3.1 National Content Plan

The Company will support development of local jobs, economic growth and improvements in the standard of living by implementing the Project's National Content Plan. The Company will achieve this in large part through its requirements of EPC Contractors in relation to the training and hiring of qualified PNG citizens and the use of local suppliers during the fouryear Construction phase and similar activities by the Company itself during the 30-year Production phase.

Recognizing the needs of communities affected by the Project, and the obligations of the *Employment of Non-Citizens Act* and the *Oil and Gas Act*, the National Content Plan will deliver early and sustainable benefits to landowners and impacted communities. The main focus of these efforts will be:

- training PNG citizens;
- employing qualified PNG citizens;
- purchasing goods and services from local suppliers where competitive with international suppliers;
- developing the skills of PNG businesses;
- investing in community development programs.

These activities are grouped into the three component areas of National Content:

- <u>Workforce Development</u> Train and employ PNG citizens in the construction trades, technical and professional skills that will be needed during the Construction and Production phases of the Project;
- <u>Supplier Development</u> Purchase local goods and services, transfer knowledge and increase local suppliers' business skills to help them meet global standards and qualify for contracts with the Project, and other projects;
- <u>Strategic Community Investments</u> Help reduce barriers to development and improve living standards in communities most impacted by the Project by supporting infrastructure development as well as providing assistance in the areas of health, education, sustainable livelihoods and environment.

# 3.2 Objectives

The Company's National Content objectives are as follows:

# Workforce Development

- To provide equitable distribution of training and employment opportunities while giving priority to communities in the Project Impact Area.
- To train enough PNG citizens to meet the requirements of the Project consistent with the PNG Government's Work Permit Guideline.
- To provide certificated training to PNG citizens engaged in Construction to give them a transportable and recognized skill set.
- To provide PNG citizens with access to positions for which they are qualified.

• To recruit and train PNG citizens for Production and other business functions, to enable qualified PNG citizens to participate fully in operation and management of the Project, while reducing the need for expatriates.

# Supplier Development

- To optimize the participation of PNG suppliers especially Representative Lancos in the Project.
- To stimulate capacity building in selected PNG business segments where sustainable activity is expected such as support to Production and/or non-Project related business.
- To develop local suppliers of goods and services to be economically attractive and competitive against imported goods and services for like quality.

#### Strategic Community Investments

- To adopt a strategic approach to community investments that aligns community needs and Project resources to produce tangible, sustainable benefits.
- To focus efforts on health, education, sustainable livelihoods and environment in those communities most affected by the Project.
- To demonstrate goodwill through capacity building programs and build relationships with communities in the Project Impact Area.

# 3.3 Construction Phase

#### 3.3.1 EPC Contractors' Responsibilities

Because the pipelines, plants and associated infrastructure will be built by EPC Contractors, Company's National Content objectives in Workforce Development and Supplier Development will primarily be achieved through those Contractors during Construction. The Contractors and their sub-contractors will use Representative Lancos to access PNG citizen workers for Construction, and will be responsible for developing the capacity of these Representative Lancos.

The Contractors also will be encouraged to use and develop the capacity of non-Lanco suppliers where these businesses are potentially sustainable, they would benefit from capacity building and it would be practical for Contractors to provide this assistance. In addition, Contractors will use established, mature PNG suppliers of goods and services (that do not require capacity building), in accordance with the requirements of the Oil and Gas Act. Furthermore, the EPC Contractors responsible for Construction of the LNG Plant near Port Moresby and the Hides Gas Conditioning Plant will have the additional responsibility of taking over operation of the Pomtech and Juni training facilities respectively, shortly after their deployment to PNG.

# 3.3.2 <u>Company's Responsibilities</u>

The Company has a range of responsibilities for National Content. It is responsible for developing the National Content Plan on behalf of the co-venturers. The Company will organize the building of the two Construction training centers - at Juni and Pomtech, as well as working with Contractors to develop the curricula for that training. The Company will establish and initially fund an Enterprise Centre to help build the capacity of PNG businesses. The Company will be responsible for delivering the third part of National Content - Strategic Community Investments during the Construction and Production phases - and for coordinating any Contractor-provided community investments. Importantly, the

Company will have overall management responsibility for National Content, including ensuring that Contractors meet their requirements fully and effectively.

# 3.4 **Production Phase**

### 3.4.1 National Content during the Production Phase

During the expected 30-year Production Phase, the Company will continue to manage National Content on behalf of the co-venturers, focusing on all three elements. However, the change from Construction to Production will see the departure of the EPC Contractors, a significant reduction in the size of the Project workforce, the cessation of Project-specific trade and craft training at the Juni and Pomtech training facilities and their transfer to the relevant PNG authorities, and a significant fall in the rate of annual spending. In the years leading up to Production, the Production team will develop new Production-focused contracts with suppliers, and implement a Production-specific training program to prepare PNG citizen employees for the long-term operations, maintenance and business support of the facilities throughout the life of the Project.

# 3.4.2 Production Concept

<u>Workforce Development</u> - As the Project moves from Construction and into Production, a key objective will be the early nationalization of the Company's PNG workforce, consistent with the Gas Agreement. Preliminary projections for the early steady-state Production phase indicate a need for a total of around 400 qualified PNG citizen employees by the end of 2016.

Opportunities for school, college and university scholarships, sponsorship programs and curriculum development efforts will be assessed and implemented as deemed appropriate. For those PNG citizens who do not already have significant experience in Production operations, a 3 to 6 year training program will be implemented to train PNG citizens for long-term Production positions. PNG citizens with a strong employment record in the Construction phase may also be considered for long-term employment in Production if they meet the specified requirements.

<u>Supplier Development</u> – During Construction, Supplier (Local Business) Development will be primarily managed via the EPC Contractors. However, during Production, the Company expects to contract directly with suppliers. A significant number of the contracts required at that time are expected to be with Lancos, other PNG businesses, joint ventures, or partnerships. Some PNG companies are qualified and experienced in providing goods and services to major resource developments. Others are not. Local suppliers will be informed of, and where necessary trained in, requirements for doing business with the Company through:

- regular supplier forums that will cover the scope of contracts, safety, standards of business conduct, invoicing requirements;
- knowledge transfer from international companies to PNG companies; and
- ongoing capacity building training programs executed via the Enterprise Centre.

Large and small PNG suppliers will have an opportunity to provide goods and/or services to the Project during Production as long as their performance meets the Company's expectations. Although initially many PNG suppliers will be used for less complex activities, the long term objective is for those suppliers to develop their capacity to supply more complex goods and services to Production. A Procurement organization will be created and tasked with managing Project contracts during Production.

# 4.0 WORKFORCE DEVELOPMENT

It is the Company's intent to provide significant training and employment opportunities for PNG citizens on the Project. Construction of the pipeline, gas plants and associated infrastructure will be performed by EPC Contractors, and these Contractors will hire PNG citizen Construction workers through Representative Lancos. These Contractors are required to meet all PNG legal requirements on the hiring of PNG citizens and are encouraged to increase the hiring of qualified PNG citizens where capacity exists.

Once the Project enters Production, the Company will manage the operation of the pipeline, gas plants and associated infrastructure with a workforce comprised of PNG citizens and expatriate personnel. Recruitment, training and development will focus on increasing the nationalization of the Production workforce as quickly as practical, consistent with business requirements and the constraints of a safe and reliable operation.

# 4.1 **PNG Labour Requirements**

The PNG Department of Labor administers the *Employment of Non-Citizens Act* 2007 and associated *Work Permit Guideline* 2009 relating to the employment of PNG citizens and foreigners. This legislation applies to Contractors, and taken together divides all occupations in PNG into three categories – red, orange and green. 'Red' positions are reserved solely for PNG citizens. 'Orange' positions must be advertised within PNG before an employer can source foreign workers and gain the necessary work permits and visas. 'Green' positions are freely open to foreigners. The details of these requirements are set out in the *Work Permit Guideline* but a high level summary is shown in the figure below.

Category	Free Access	Advertise	PNG Only
Managers	All others	Assistant Managers	
Professionals	All others	Human Resource Advisors/Staff	
Technicians & Trade Workers	All others	Welders,Fitters,ConstructionTrades,Electrotech&Communications	
Clerical & Admin Workers			All
Machinery Operators & Drivers	Special Crane Operators, Drillers		All others
Laborers	Riggers, Scaffolders, Steel Fixers		All others

Figure 3 – Work Permit Guideline requirements on filling of the six employment categories relevant to the Project

Contractors are required by PNG law to fill all red positions with PNG citizens, and to advertise all orange positions within PNG before a third country national can be employed and receive a work permit. In addition the Company has encouraged EPC Contractors to fill orange and green designated positions with qualified PNG citizens wherever possible.

The Gas Agreement also places a number of responsibilities on LNG Project companies (the Company and its co-venturers), including requiring them to train PNG citizens, where possible, to progressively replace expatriate personnel working on the Project, and to give first preference in training and employment as far as is practical to PNG citizens from the Project Impact Area. Section E of the Gas Agreement requires the Company and its co-venturers to prepare a training and employment program and to report annually to the PNG Government on implementation of that program.

The Project will use qualified PNG citizens where possible. However, demand for some categories of workers in 'red' positions during Construction may exceed the Project's and EPC Contractors' capacity to deliver appropriately trained PNG citizens. This is most likely to happen with some 'red' jobs where it may not be practical to train sufficient PNG nationals in time to meet Project requirements.

# 4.2 Employment during Construction

Based on current projections there will be a peak of approximately 12,000 workers needed to construct the Project, with current estimates of up to 3,500 of those expected to be PNG citizens. This peak is expected occur at about the mid point of the four year period from 2010 to 2013 with ramp up before the peak and ramp down after. Construction activities will take place from the Hides area in the Southern Highlands Province to Port Moresby, with concentrations at the Hides Gas Conditioning Plant near Laite and at the LNG facility 20 km north-west of Port Moresby. Figure 4 shows the general location of work for each of the EPC contracts.



Figure 4 – EPC activities throughout the Project Impact Area

The types of workers to be hired during the Construction phase will be varied. Hiring into professional and senior technical roles will be constrained by the limited availability of PNG nationals with the required qualifications and experience. During the Construction phase, the positions most likely to be filled by PNG nationals include: laborers, drivers, painters,

equipment operators, concrete finishers, cooks, community workers, store men, freight handlers, secretaries, administrative assistants, security guards, laundry workers, welders, carpenters, pipe-fitters, sheet metal workers, electricians, trainers, machinery mechanics, steel fixers, managers, computer technicians, nurses, accountants, scaffolders/riggers, etc.

# 4.3 Employment during Production

Some 1,200 the Company and Production Contractor workers will be needed to operate the Hides Gas Conditioning Plant, the LNG facility, and to operate the office and residential facilities for some 30 years during Production. Some of these jobs must be filled by experienced expatriates but others will be filled by appropriately trained and qualified PNG citizens. A key objective is the eventual nationalization of the Production workforce and it is planned that the majority of these positions will eventually be filled by appropriately trained PNG citizens.

Worker recruitment strategies will be developed following in-country employment surveys and recruitment surveys. Opportunities for school, college and university scholarships, sponsorship programs and curriculum development efforts also will be assessed and implemented as appropriate. PNG citizens with an excellent employment record in the Construction Phase of the Project may also be considered for long-term employment in Production.

# 4.4 Training for Construction

# 4.4.1 <u>Training by the EPC3 and EPC4 Contractors</u>

To address a shortage of existing qualified workers in PNG, the Company will build two training facilities. These facilities will train PNG citizens for Construction of the Hides Gas Conditioning Plant and the LNG facility, with an expected training start date in March 2010. Training at these facilities will be developed and executed initially by the Company. The Company currently is consulting with the EPC3 and EPC4 bidders to agree on courses, curricula and testing requirements so that the training delivers adequate numbers of appropriately skilled workers, able to begin work without delay.

The Company's training contractor will manage these facilities initially to get training underway as early as possible. However, the EPC3 (LNG Plant) and EPC4 (Hides Gas Conditioning Plant) Contractors will take over management and operation of the Pomtech and Juni training facilities respectively, soon after their arrival in PNG in 2010. In this way the training program will benefit from the Contractors' experience in the delivery of training, and the two Contractors employing the trainees will be responsible for ensuring that the training provided best meets their own needs. At the end of Construction these Contractors will hand both facilities back to the Company, and the Company will donate them to the appropriate PNG authorities.

# 4.4.2 <u>Construction Training Centres</u>

The Pomtech and Juni training facilities to be built by the Company will both provide for induction, safety, trade and office staff training for PNG citizens who will be employed in Construction of the LNG facility and the HGCP respectively. Until the successful EPC3 and EPC4 bidders are identified, the Company will not have an accurate idea of their labor requirements. Therefore, planning for training at these facilities is based on best current estimates, in consultation with EPC3 and EPC4 bidders.

The construction schedule and training program will be developed, as far as possible, to deliver the right number of personnel, with the skills needed, at the desired time. Third

country nationals will not be trained at the training centers. Further detail on each of the training facilities is provided below.

#### Pomtech Training Centre

This facility will be constructed at Pomtech (Port Moresby Technical College) around 12km south of the LNG Plant. It is expected to be completed, and to begin training workers for construction of the LNG facility, by March 2010. When fully operational, this facility should produce an estimated 900 trainees each year, over a 3-year period in the areas of general skills, specialized skills and office skills. The training center will have capacity for 400 trainees at any given time.

Most of the students are expected to be sourced locally from villages surrounding the LNG facility. Daily bus transport will be provided for local students. Accommodation will be provided for around 120 people - made up of around 100 trainees from outside of the Port Moresby area, and around 20 instructors and support staff. The center will be provided with electric power, drinking water and sewage treatment and a clinic will be established to perform physical examinations for applicants and to provide minor medical support for students and staff.



Fig 5 – The proposed Pomtech training facility

# Juni Training Centre

The Juni Center is around 14km from the HGCP site. It is also planned to be complete and training recruits for construction of the HGCP by March 2010. When fully operational, the Juni Centre will have capacity to train up to 200 trainees each year over a 3-year period, in general skills, specialized skills and office skills.

Accommodation will be provided for around 130 people, including approximately 90 trainees at any one time, as well as 40 instructors and support staff. The center will be provided with electric power, drinking water and sewage treatment. A clinic will be established to perform physical examinations for applicants and minor medical support for students and staff. A heliport also will be constructed to facilitate emergency medivacs.



Figure 6 – The proposed Juni training facility

# 4.4.3 Construction Training Curriculum and Instructors

Certified Skills – As noted above, the EPC3 and EPC4 bidders are cooperating with the Company to better enable training curricula and schedules to meet their needs. Trade training curricula are being developed for induction and safety training for trainees, as well as trade training in general skills and specialized skills, as follows:

- General skills laborers, drivers, carpenter helpers, cement masons, iron workers, concrete finishers, painters, insulation workers, cooks
- Specialized skills pipe-fitters, welders, electrician helpers, equipment operators

At the time of writing, curricula have been developed for the following roles: welder's laborer, scaffolder's laborer, pipelayer's laborer, steel fixer's laborer, earthmoving laborer, builder's laborer, formworker, concreter/finisher, dogman/rigger, concrete pump operator, painter/rust proofer, concrete batching plant operator, lagger, electrical assistant, backhoe operator, forklift driver, water/petrol tanker driver, road roller operator, non-specialist operator, dump truck operator, tyre fitter, vehicle mechanic's helper, store keeper, security guard, and driller's assistant.

Trades training will be provided through Australia's Technical and Further Education (TAFE) system. Trainees will be trained in the Australian Quality Training Framework (AQTF) – a recognized and accredited training system. Graduates of this training will gain qualifications recognized in Australia and elsewhere in the Asia-Pacific region. The intent of this is to provide qualifications to successful PNG graduates that will enable them to work on other projects in PNG or possibly even overseas after construction of the LNG Project.

Train-the-Trainers – To help meet the Company's training needs and provide a sustainable education benefit for PNG, a train-the-trainer program will be established for PNG citizens to augment and eventually replace expatriate instructors.

The Company will therefore build training facilities, develop curricula for a broad range of trades and develop the capacity of PNG trainers to deliver those courses to PNG students alongside expatriate trainers in a mentoring role. This will provide PNG with all the elements of a sustainable system to deliver trade training well beyond the end of Construction. At the end of Construction, the two training facilities will be transitioned to the appropriate PNG authorities.

# 4.4.4 Training by Other Major Contractors

While the EPC3 and EPC4 Contractors will conduct the majority of their training through the Pomtech and Juni training facilities, the other Contractors - for Infrastructure (C1), the Offshore Pipeline (EPC2), Onshore Pipeline (EPC5) and Drilling - will be responsible for training their own PNG citizen employees for their scope of work.

### 4.4.5 <u>Training by the Company</u>

The Company will provide safety and induction training to PNG citizens employed directly by the Company as a matter of course. On the job training also will be provided as a means of up-skilling the Company's PNG citizen employees. In addition a number of PNG citizen engineers, administrators and project controllers will be recruited by the Company and embedded with the Company affiliates in Australia to receive training and professional development.

# 4.5 Training for Production

PNG citizens also will be trained to meet the Company's Production needs after Construction is complete. Different types of workers will be required for Production to operate and maintain the pipeline and LNG/gas facilities. In general these are highly-skilled positions and will require longer training periods. Aspects of this training are addressed later in this Section.

Additionally, Above Field staff will be required to provide technical, business and administrative support during the Production phase. PNG citizens will be recruited to fill these positions and on-the-job training will be provided through experienced mentors.

# 4.5.1 <u>Training for Field Positions in Production</u>

Recruitment for Operations and Maintenance (O & M) technician trainees is planned to commence in 2009. The Company proposes to begin this process by recruiting approximately 160 trainees during the first four years and anticipates that these trainees will stay in the program for approximately 6 years. Trainees will ultimately be streamed into operator, mechanical, electrical and instrumentation crafts. In addition, marine and logistics trainees will also be recruited and provided function-specific training.

The Production Training team will design training curricula and schedules to meet Production needs for start-up and throughout the life of Production. This includes induction training and safety training for PNG LNG employees as well as a structured and disciplined Operations and Maintenance (O & M) craft training program for 'Field' Positions such as operators, instrumentation technicians, electrical technicians and mechanical technicians.

The O & M craft training is competency-based and will be geared specifically to personnel responsible for the operation and maintenance of HGCP and LNG facilities. This approach has proven elsewhere in the world to be a successful way of nationalizing workforces associated with operations. After successful screening, selected trainees will then begin the following four stages:

#### Stage 1: Orientation, Gap Analysis and High School Top-Ups - approximately one year

The first stage of the O & M training program provides an orientation to the company as well as the gas and LNG business in general. It also addresses core english, maths and science skills. Testing of english language, maths and science will be performed to identify any core gaps. Curricula will be developed by a Company training contractor to close maths and science gaps. The Company's english Language Program will be used to close any gaps in english. An experienced industrial instructor (with an education degree) will coordinate and train PNG citizen teachers to deliver english, maths and science training for the program.

#### Stage 2: Basic Skills Training - one year

The Company's training contractor will supply the basic skills training curriculum. This program includes basic electricity, instrumentation and mechanics, production and processing systems and safety fundamentals. To continue in the O & M Training Program, trainees must successfully complete all Basic Skills Training Program competency assessments. The program will be delivered by experienced industrial instructors.

#### Stage 3: Advanced Skills Training - one year

Before this stage begins, trainees will be assigned a craft - Operations, Instrument, Mechanic or Electrical. Each craft has its own curriculum and training path. Trainees will utilize laboratories and workshops outfitted with specific equipment and tools to assist in this training stage. In order to stay in the O & M Training Program, trainees must successfully complete all Advanced Skills Training Program competency assessments. The Program will be delivered by experienced craft-specific industrial instructors.

#### Stage 4: Facility Specific Training - between two and three years.

This final stage of training occurs on the job. The trainee will progressively work through job specific task books and O & M procedural and non-procedural documentation and assessments. Qualified assessors will monitor the progress of the trainees throughout this stage. Designated O & M expatriate employees will act as mentors to the trainees to help enable them to meet a pre-determined timeline. Specialized Operations and Maintenance jobs associated with on-the-job training include LNG Planner, Scheduler, Control Room Operator, Liquefaction Operator, Purification Operator, Storage and Loading Operator, Utilities Operator, Senior Operations Rover, HGCP Field Operator, SHE/OIMS Coordinator, Instrument Technicians, Electrical Technicians, Mechanical Technicians, DCS Technicians, Maintenance Planners and Maintenance Project Coordinators.

# 4.5.2 Training for Above Field Positions in Production

In addition to the efforts associated with the training and recruitment of Operations and Maintenance (Field) personnel, each relevant Company Above Field Function is currently in the process of finalizing their PNG citizen staffing requirements identifying positions that will be required for operation of the PNG LNG facilities during Production.

The Above Field positions will range through such functions as engineering/operations technical; human resources; logistics; public affairs; medical; business support - finance, tax, treasury, procurement; safety, health environment and security; training and national workforce development; land and community affairs; information technology, telecommunications, etc.

Above Field recruiting activities for both experienced hires and recent university graduates will commence in the second half of 2009. It is expected this activity will be repeated in subsequent years until the targeted positions have been filled.

The Company will continue to build relationships with key tertiary institutions to enhance understanding around careers with the Company and (potentially) its affiliates. In time the Company may introduce a Vacation Student Program whereby students in their penultimate year of study may apply for industrial placements within the Project.

Once employed, these Above Field employees will participate in a comprehensive Orientation/Assimilation Program. Their respective Company Functions will then take responsibility for providing any function specific technical training in PNG and overseas as needed. The employees will also be eligible to participate in appropriate individual effectiveness (eg. negotiation skills, presentation skills, communication skills, etc) programs; leadership programs; and computing courses as deemed appropriate to their individual needs.

The Company employees can expect to receive a large part of their training "on-the-job" under the guidance of experienced Company professionals. Individuals will follow personalized development plans called roadmaps that identify required early competencies, training and developmental experiences and monitor progress towards early competency milestones. This will deliver the required training and experience as early as possible in a person's career.

# 4.6 Workforce Development for Drilling

All drilling service contracts will have Workforce Development requirements for the hiring and training of PNG citizen personnel. Job categories where citizens are expected to work include rig floor crew helpers, roustabouts, camp and maintenance staff, security and administration. Since drilling will be undertaken in three phases over five years, there will be intermittent work opportunities for the local PNG citizens.

Drilling contractors will be required to develop a Workforce Development Plan that contributes to the Company's overall obligation to train, employ and develop PNG citizens. As part of this Plan, drilling contractors will develop and implement a training plan to train their PNG citizen workers in the techniques of the contractors' business.

Drilling contractors will give preference to PNG citizens in hiring among candidates of similar qualifications, skills and competencies. In addition, drilling contractors must use reasonable efforts to replace expatriate workers with PNG citizens provided they have the necessary skills and qualifications.

# 4.7 Geographic Priority for Selecting Workers

The National Content Plan is designed to generate the greatest benefit for communities in the Project Impact Area (PIA). To achieve this in employment, Contractors will be required to select employees according to the following geographic priorities:

- 1st PNG citizens originating from within the local Representative Lanco area
- 2<sup>nd</sup> PNG citizens from the overall PIA
- 3<sup>rd</sup> PNG citizens from the 4 provinces of the PIA and the National Capital District
- 4<sup>th</sup> PNG citizens from elsewhere in PNG

Last Non-PNG citizens from overseas - only for positions open to foreigners

In addition, Contractors will be required to hire PNG citizens through the Representative Lanco for the area where the work will be undertaken, regardless of the origin of that worker. This is designed to direct labor hire revenues to communities within the Project Impact Area, and to mitigate problems associated with the use of PNG citizen employees from one area or clan, in another clan's area.



Figure 7 – The Project Impact Area showing the four impacted Provinces – Southern Highlands, Western, Gulf and Central Provinces – and the National Capital District.

The Company also intends to apply these geographic priorities during Production.

# 4.8 Recruitment

During the Construction phase, the Company will direct Contractors to source all their PNG citizen labor through the Representative Lanco for the area where the work will be undertaken. Accordingly, the Company expects that all recruits will need to register with the Representative Lanco for the relevant area. Whether the workers are employed directly by the EPC Contractor, or employed by the Lanco and made available to the Contractor by contract, will become clearer when Contractors' bids are received and their views become known.

EPC Contractors will need to set up recruitment centers to handle applications for training and employment, and to develop screening, testing, and other selection procedures.

The umbrella Representative Lancos at Hides and near the LNG site will be new, with large demands and little experience in meeting the heavy labor requirements of the Project. The Company will direct Contractors to work with those Lancos to build their capacity and

facilitate smooth service delivery eg. a Lanco and Contractor may decide that Contractor personnel should be seconded into the Lanco. Alternatively, the Lancos may wish to enter into a business relationship with an experienced personnel agency to facilitate the efficient delivery of labor for the Project.

# 4.8.1 <u>Trainee and Worker Database</u>

The Company will work with EPC Contractors and Representative Lancos to establish a trainee and worker database, to facilitate optimal use of trainees and employees across the Project area.

# 5.0 SUPPLIER DEVELOPMENT

#### 5.1 Introduction

#### 5.1.1 Supplier Development Principles

Section 129 of PNG's *Oil and Gas Act* places a number of requirements on the Project with respect to Supplier Development. For example, it requires licensees: to use and purchase PNG goods and services wherever they are comparable to foreign-sourced supplies; to encourage and assist PNG citizens to establish businesses to supply goods and services to the Project; to purchase vehicles, machinery, plant and equipment through PNG-based traders, and to make maximum use of PNG contractors and subcontractors where services in PNG are of a comparable standard to those from overseas. In addition, Section E of the Gas Agreement requires LNG Project companies (the Company and its co-venturers) to prepare a Supplier Development program and report annually to the PNG Government on implementation of that program.

Supplier Development therefore is an important and integral part of National Content. The Company will provide opportunities to Representative Lancos in the Project Impact Area, and help them to develop into sustainable businesses where possible by requiring EPC Contractors to use Representative Lancos to perform specified services for them and to take the lead role in the formation of a suitable business structure. The Company also has facilitated the formation of two umbrella Lancos – one at Hides and one for the four villages near the LNG Plant. Consultations will be undertaken with these umbrella Lancos to help them establish viable and efficient businesses.

EPC Contractors will also be directed to work with the Representative Lanco to implement capacity building programs to advance the technical, operational and business management capabilities of the Representative Lanco. The exact nature of the business relationship will be developed by the EPC Contractor (or, if the Contractor chooses, its subcontractor) and the Representative Lanco on an individual basis.

During the Production phase the Company intends to use selected Representative Lancos as needed to perform specific services. These services will be defined prior to the commencement of the Production phase.

The cornerstone of the Supplier Development process is the desire to promote sustainable local businesses capable of operating after the life of the Project. The Company will work to promote the competitiveness of Representative Lancos and other PNG businesses selected on the basis of their sustainability over the life of the Project, and to stimulate adherence to sound standards in terms of business practices, quality, safety, health, environment and operations integrity.

As part of the Umbrella Benefit Sharing Agreement (BSA), the PNG Government announced that it would provide K120 million in seed capital to PNG businesses to help them develop sustainable businesses to supply the Project. The Company welcomes this initiative and will cooperate with the Government wherever possible in this and other commitments made in the BSA.

# 5.2 Supplier Development Program

# 5.2.1 Program Components

The Supplier Development program is divided into several phases, as shown in the following diagram:



Figure 8 - High Level Supplier Development Process

# 5.2.2 EPC Contractors' Responsibilities during the Construction Phase

The Project's EPC Contractors will be required to meet minimum requirements of Section 129 of PNG's *Oil and Gas Act* in particular the use and purchase of PNG goods and services wherever they are comparable to foreign-sourced supplies. In addition, the EPC Contractors will be required to work with the Representative Lancos to implement capacity building programs to advance their technical, operational, and business management capabilities.

# 5.2.3 <u>Company's Responsibilities during the Construction Phase</u>

During the Construction Phase, the Company will establish and initially fund the Enterprise Centre and facilitate its capacity building efforts with Lancos and other PNG businesses in sustainable activities. The Company will also comply with section 129 of Oil and Gas Act in relation to any contracts for goods and services which it enters into directly.

# 5.2.4 Company's Responsibilities during the Production Phase

During Production the Company will likewise meet the requirements of Section 129 of PNG's *Oil and Gas Act* and will continue capacity building activities.

# 5.3 Supply Base Evaluation

# 5.3.1 Evaluations

The Company commissioned an independent specialist to carry out structured and consistent assessments of the capabilities of existing Representative Lancos. The objective of the assessments was to gain an understanding of their technical and professional capabilities, as well as their business processes and corporate governance. The assessments are tracked in a dedicated database of local suppliers' capabilities. Periodic re-evaluations will be performed in order to measure change in the capacity of

Representative Lancos. The evaluation process used for Representative Lancos may be extended to other relevant PNG businesses as required.

# 5.3.2 Assessment Methodology

Assessments were conducted across eight key elements of business management: 1) Organization and Governance 2) Business Management 3) Finance 4) Personnel 5) Safety Health and Environment 6) Quality 7) Equipment 8) Citizenship, and Reputation.

Upon completion of the assessment, companies were classified into one of the following four categories:

- Three Stars All processes in place and followed.
- Two Stars Most processes in place and generally followed.
- One Star Basic processes in place, but often not followed.
- No classification Does not currently meet minimum standards to work for the Project. However, may be re-assessed after gaps have been addressed and minimum requirements met.

# 5.3.3 <u>Results of Assessments</u>

These assessments indicated that most of these Representative Lancos fall within the one star or two star range. None were rated as three star businesses. Detailed feedback has been provided to these Representative Lancos to enable them to understand their strengths and weaknesses and begin to address areas where their performance needs improvement.



# Figure 9 - Elements of Supply Base Evaluation

# 5.4 **Procurement Process**

# 5.4.1 Opportunity Identification

EPC Contractors will identify their planned sub-contracts and purchase orders, including those to be performed by PNG businesses.

# 5.4.2 <u>Advertisement</u>

EPC Contractors will develop processes to advertise business opportunities during Construction. To assist with this, the Project will develop a structured communication program to make PNG businesses aware of Project opportunities in a timely manner.

The existing Project web-site will be enhanced to include:

- an outline of Project needs;
- a description of business opportunities; and
- provision for supplier registration and survey.

While the Company cannot guarantee Contractors' use of the web-site, it will be available for them to advertise business opportunities and as a compilation of PNG businesses who have registered their interest in supplying the Project.

#### 5.4.3 <u>Tendering Process</u>

The EPC Contractors will implement their individual procurement processes to obtain desired goods and services.

#### 5.4.4 Initial Business Opportunities for Representative Lancos

In conjunction with the initial assessment of Representative Lancos, the Company developed a categorization of activities (Level I, II or III) based on their complexity. The various Project activities were classified into the following three categories:

- Level I Basic services/labor requirements
- Level II Intermediate services/construction requirements
- Level III Highly critical, complex service/construction activities



Figure 10 – Classification of activities

The results of the Representative Lanco business assessments were then linked to the segmentation process described in 6.3.2 above.



Figure 11 – Schematic representation of the star rating system

Based generally on this process, selected activities will be reserved for the Representative Lancos as discussed in Section 6.5.2. If a Representative Lanco's star rating improves, they may be considered to perform more complex activities, providing that these activities are sustainable. The Company will establish an Enterprise Centre to help Representative Lancos and other PNG businesses that will support the Production phase to become sustainable in the long term.

# 5.4.5 The List of Representative Lancos

The list of Representative Lancos, current at the time of writing, is provided below. The Company's Land and Community Affairs (L&CA) group may modify the list of Representative Lancos from time to time to reflect developments. Any change will be communicated to the EPC Contractors and other stakeholders.

Area	Acronym	Representative Lanco	
Hides - Angore – Komo - Juha	HGDC	Hides Gas Development Company Ltd	
Moran	MDC	Moran Development Corporation	
Kutubu	MIC	Maka Investment Corporation	
	KSS	Kutubu Security Services	
	KTL/TWL	Kutubu Transport Ltd/Transwonderland	
	KCL	Kutubu Catering Limited	
	Kawaso	Kawaso Ltd	
Gobe	GFE	Gobe Field Engineering	
	GFS	Gobe Freight Services	
Kikori-Omati-Kopi	KOI	Kikori Oil Investment	
	GFS	Gobe Freight Services	
LNG Plant	Laba	Laba Holdings Ltd	

Figure 12 - Current List of Representative Lancos

# 5.4.6 Estimated Revenue to Representative Lancos and other PNG businesses

The revenue directed to Representative Lancos and other PNG businesses is expected to be significant, although reliable estimates will only be available after the successful EPC Contractors are chosen. The current estimate of potential expenditure with PNG businesses during Construction is in the order of K1.26 billion (US\$450million, assuming a K2.8 = US\$1 exchange rate), as shown below.

	Estimated Expenditure with PNG Lancos and other PNG businesses during Construction - in millions of Kina			
	Level 1	Level 2	Level 3	Total
Upstream Hides, pipelines and infrastructure	252	252	196	700
LNG Plant	140	224	196	560
Total	392	476	392	1,260

#### Figure 13 – Estimated Project Expenditure with PNG Companies

Throughout the 30-year Production Phase, there will be an estimated spend with Representative Lancos and other PNG businesses generally of approximately K200 million per year for goods and services.

#### 5.4.7 Business with Other Companies

Where there is neither sufficient capacity nor prospect of long term sustainability for Representative Lancos, then the EPC Contractors will enter into contracts for goods and services in accordance with their normal procurement procedures, including contracts with qualified PNG businesses.

#### 5.4.8 Direct contracting by the Company

The Company is in the process of developing procedures to ensure compliance with section 129 of the Oil and Gas Act for its own direct contracts. While there will be some of these contracts during Construction, it is expected that the more significant opportunity for contracting with the Company will be during Production.

# 5.5 Capacity-Building

# 5.5.1 <u>General Principles</u>

The Company intends to work with third parties to establish an independent Enterprise Center. This Center will be responsible for capacity-building of PNG suppliers, strengthening their business management skills and providing them with reasonable assistance in seeking financing from PNG banks. However, the Company does not intend to guarantee loans or provide direct financing to PNG businesses.
The Company also will encourage the formation of business relationships between Contractors and Representative Lancos in specific businesses. These relationships will include, but not be limited to joint ventures (JVs).

## 5.5.2 Activities Identified for Performance by Representative Lancos

In addition to areas of work for which Representative Lancos will need to bid competitively, The Company has identified several activities which EPC Contractors will be directed to obtain from Representative Lancos. These areas are as follows:

- EPC2 Labor, catering, camp maintenance, security, vehicles and drivers
- EPC3 Labor, catering, camp maintenance, security
- EPC4 Labor, catering, camp maintenance, security, vehicles and drivers
- EPC5 Labor, catering, camp maintenance, security, vehicles and drivers.

In addition, the Company will identify its major requirements for goods and services for the Production phase and then identify local companies potentially capable of meeting these needs. During the Construction phase, the Company will require the EPC Contractors to work with these companies which should develop their capacity to meet the Company's long-term needs. Depending on a successful assessment, these companies may then be considered for a long-term contract with the Company. The activities identified for possible long-term provision by PNG companies will be identified at a later time.

## 5.5.3 <u>Enterprise Centre – Concept</u>

The Enterprise Center will be available to provide evaluations of PNG companies to the EPC Contractors as required and measure changes in the capacity of PNG companies

PNG companies that are assessed will be provided with personalized and confidential feedback in order to highlight their strengths, point out areas that require attention and provide practical recommendations for overall capacity development.

The Enterprise Center will provide training, mentoring and advisory services aimed at closing gaps identified during the assessments and to improve local companies' business capabilities.

The Enterprise Center is expected to be run by an independent organization and to contract a number of Business Development Specialists (BDS) to help local companies improve their management and performance. The Company will provide funding to the Centre initially, but other international institutions and operators will be encouraged to provide funding to help support the Centre and its operations into the future.

The Centre will begin operation in the second half of 2009 and will be an important ongoing asset for PNG and will deliver sustainable benefits for PNG beyond the life of the Project. It will help position PNG companies to supply the Project during Construction and Production and support PNG's extractive industries into the future.

## 5.5.4 Formation of Business Relationships with Representative Lancos

The combination of the business support provided by the Enterprise Center and the technical / operational coaching delivered by the Project's EPC Contractors to Representative Lancos is expected to result in an overall enhancement in the capabilities of PNG businesses. However, in the specific case of new Lancos at Hides and near the LNG Gas Plant this process may not be sufficient to bring Lancos up to the required level by the time Construction is due to begin.

Business relationships such as joint ventures between Representative Lancos and the EPC Contractors, or their specialized sub-contractors, will provide a very good opportunity to develop the capacity of Representative Lancos in selected activities. These relationships will particularly enable Representative Lancos to draw on the experience, expertise and resources of their associates, who will be responsible for providing them with management support. The involvement of landowners in decision-making also will help promote greater stability and ownership by the PNG business community. Representative Lancos may also wish to enter business relationships with EPC Contractors or other skilled PNG contractors with respect to those activities which are reserved for them.

Such business relationships between Representative Lancos and Contractors, could for example manage: aspects of the selection, training and hiring of PNG citizens, input into work permits processes, competencies follow-up, development plans and facilitate the smooth operation of workforce delivery.



Figure 14 - Examples of areas in which Representative Lancos and EPC Contractors could develop business relationships

This business model will particularly apply at Hides and the LNG Plant, where umbrella companies will incorporate a number of smaller Representative Lancos and thus more effectively represent communities impacted by the Project. Such an arrangement might include the following elements:

- specialized business associates will either be the EPC Contractor or if nominated by the EPC Contractor, specialized sub-contractors.
- establishment of service agreements by the EPC Contractor with the resulting business structure.
- individual Representative Lancos or independent businesses that are part of the impacted community may be contracted through the relevant business structure. For instance, a local food producer may be sub-contracted by the Camp Services provider to supply specific goods.

The Company expects that EPC Contractors and Representative Lancos will takes steps to:

- ensure that umbrella company dividends will flow through to the Representative Lancos, and in turn to the ultimate shareholders, the landowners
- encourage reinvestment of part of umbrella company and Representative Lanco profit into the development of sustainable businesses in the community
- ensure that the umbrella company is able to independently manage its business by the end of the Construction phase.

### 5.5.5 Access to Finance

Access to finance for new and existing suppliers is another component of the Supplier Development program. While the Project will not be directly involved in providing or guaranteeing loans to PNG businesses, it will work with local banks to develop a program based on sound financial risk analysis and appropriate interest rate charges.

#### 5.6 Representative Lancos Strategy

The following map provides the location of the current Representative Lancos.



Figure 15 - Location of Representative Lancos

## 5.6.1 <u>General Strategy</u>

The Project will seek to optimize the participation of Representative Lancos by:

- providing long-term business opportunities for selected Representative Lancos;
- using existing Representative Lancos along the pipeline right-of-way with proven track records, provided they are compliant and representative
- using Representative umbrella companies in new areas (Hides; LNG Plant)
- providing Representative Lancos with access to capacity-building.

#### 5.6.2 Strategy for the Hides Area

Relevant EPC Contractors will contract specific activities related to the Kobalu camp to a joint venture established between Hides Resources Owners Investment Ltd (HROI) and Kobalu Camp Services (KCS). For other activities, EPC Contractors will establish specific business agreements with the planned new umbrella company Hides Gas Development Company (HGDC).



Figure 16 - Hides Lanco strategy

The HGDC Umbrella Company is expected to replace the existing umbrella company (PEJV) covering Hides and Nogoli area and will progressively incorporate BDC (Benaria), Juha and Angore and possibly Komo Lancos. HGDC also will provide opportunities for smaller Lancos to participate in sustainable business through sub-contracting agreements.

The Enterprise Centre will be available to provide capacity-building assistance to the landowners to enable the umbrella company to take over the management of sustainable business relationships at the end of Construction.

## 5.6.3 <u>Strategy for the Pipeline Right-of-Way</u>

**EPC Contractors** will be required to use existing Lancos where possible along the pipeline right-of-way, provided they are compliant and represent the impacted communities. Where Lancos are not fully representative of local landowners they will be required to increase their shareholder base accordingly before they will be entitled to preferential treatment under this Plan. The Company anticipates that landowners within the pipeline right-of-way area will become shareholders of at least one Representative Lanco and thereby share in the business benefits.

The following observations are applicable:

- The Company expects that there will be work for these Lancos during pipeline construction only;
- during Construction, the Company does not intend to promote the introduction of new Lancos, because of the existence of Lancos already capable of performing work for the Project and the challenges facing any new Lanco in terms of competition and sustainability;
- therefore the Project will only provide preferential opportunities to Representative Lancos with a proven track record and they will be expected to offer membership to communities impacted by the Project pipeline works that are not already shareholders in a Representative Lanco;
- some communities who are not presently shareholders in a Representative Lanco may choose to form their own Lanco, which will be subject to assessment as described in Section 6.3;
- The Company supports the consolidation of Representative Lancos as it will eventually create economies of scale, increase shareholder value and enhance sustainability.

# 5.6.4 Strategy for the LNG Plant Area

The EPC3 Contractor will contract the Laba Holdings umbrella Lanco for agreed services required at the LNG Plant site. The following will apply:

- one Representative Lanco has been registered for each of the four impacted villages (Papa, Boera, LeaLea and Porebada);
- each of the four Representative Lancos will be a shareholder in the umbrella company;
- specific business relationships may be established for particular services between the umbrella company and the EPC3 Contractor, or its specialized sub-contractors;
- EPC3 or its specialized sub-contractors will manage these business relationships during the Construction phase and progressively transition to the umbrella company;
- the Enterprise Centre will be available to provide capacity-building assistance to the umbrella company landowners to enable the company to take over primary management of the business relationship at the end of Construction.



Figure 17 - Lanco strategy for LNG Plant site

## 5.6.5 Specific Capacity Building Process Applicable to Representative Lancos

The Enterprise Centre will work with Representative Lancos to improve their corporate governance, transparency and management skills. Appropriate landowner representation, compliance with international and domestic anti-corruption laws (such as the PNG Criminal Code and the US Foreign Corrupt Practices Act), and transparency of management are three important criteria for Representative Lancos to qualify for work. Over the long term, improved governance and transparency will enhance Representative Lancos' ability to compete for increased scopes of work.

Re-assessments will be periodically conducted by the Enterprise Centre to monitor the effectiveness of capacity-building and of the continuous improvement plans implemented by Representative Lancos' management.

In the long term, the Company expects Representative Lancos to build their businesses by specializing and developing their expertise to compete for business in new areas beyond the Project area, where they may not be landowners but will have a specialized service to offer.

## 5.7 Representative Lanco Strategy during Production

The opportunities for PNG businesses will become more limited once the initial Construction Phase is completed. The Production organization will begin putting contracts in place before the end of Construction, utilizing many of the same concepts - the Enterprise Centre to source and develop local businesses, the Company website to advertise opportunities, supplier forums to introduce the Production operation, invitations to tender and bidding practices, etc.

The Production Supplier Development program will be based on four key principles:

• **Support a free market business environment:** promote and work alongside the PNG Government to communicate the favorability of PNG's business environment, such as an efficient banking system, seed money provided by the Government, tax incentives, aligned taxes and customs structure, physical infrastructure and streamlined laws.

- **Develop a national business plan:** as demonstrated in the early phases of the Project, the Company will continue to build strategic plans, outlining the expectations of National Content.
- **Create educational and developmental opportunities:** identify and increase procurement opportunities for local business via the Enterprise Centre; link project opportunities to those in Production; replicate successes within the Project Impact Area, achieve consistency in implementation. Identify additional opportunities for the host country government, where training and development may build areas of industry.
- Industry relationships: familiarizing PNG companies on how to do business with the Company, building confidence to increase investment from international manufacturing and service companies; identify competent local companies through the Enterprise Centre; hold workshops and forums to encourage industry dialogue between international companies and domestic manufacturing and service companies.

# 6.0 STRATEGIC COMMUNITY INVESTMENTS

## 6.1 Strategy and Principles

The Company's Strategic Community Investments are voluntary programs that will provide benefits to host communities, primarily in the Project Impact Area (PIA). The Company will provide these programs on behalf of the Project as a responsible corporate citizen and a good neighbor to the host communities.

The Company will follow global best practice and work through local non-government organizations (NGOs) where possible to implement its Strategic Community Investments program for health, education, sustainable livelihoods, environment and other program areas. The Company will work to strengthen the capacity of NGOs currently operating in the PIA and will encourage other NGOs to enter the PIA to assist with the delivery of the Company's community investments.

However, some Strategic Community Investment initiatives may be undertaken by for-profit service providers other than NGOs, where these initiatives are beyond the NGOs' capacity or not within their mission. Examples of these initiatives are infrastructure, water and sanitization programs and other potential initiatives with engineering and construction aspects. Some of these initiatives may be eligible for tax credit.

The Company's Strategic Community Investments program will focus on areas identified in the PNG Government's Medium Term Development Strategy – particularly health, education and sustainable livelihoods. The findings and recommendations of the Company's Social Impact Assessment (SIA), which reflect community input and anthropological assessment, also contributed to the development of the Strategic Community Investments program.

While the program will focus on health, education, sustainable livelihoods and environment, other program areas could be included where there is an identified need. In addition, five core principles will guide our Strategic Community Investment program:

- Strategic the program will target identified needs, primarily in the Project Impact Area
- Community-Driven Focus the program will seek to deliver what communities need and will encourage community ownership and support
- Capacity Building the program will use community investments to develop capacity
- Working in Partnership the program will cooperate with communities and all levels
  of government to deliver community investment projects
- Sustainable assistance provided to communities will be designed to provide sustainable benefits to those communities.

## 6.2 Community Investment Program Area

Within Strategic Community Investments there are two distinct program areas, Community Investments and Tax Credit Arrangements, both of which provide benefits to host communities.

### 6.2.1 <u>Community Investments</u>

Community Investments are discretionary investments in health, education and infrastructure which are not owned by, or of direct benefit to, the Project and do not form part of Project operations. Rather, these investments are designed for the direct benefit of the communities in which the Company operates. These include contributions to charitable organizations such as NGOs, and community investments delivered through non-charitable or "for-profit" companies.

#### 6.2.2 <u>Tax Credit Arrangements</u>

The Gas Agreement makes provision for Special Tax Credits which allow the Company to claim tax credits of 1.25% of assessable income for the construction costs of Project-facilitating infrastructure that will later become public ie. roads, bridges, airfields. In addition, tax credits are available for development projects that are *government approved* infrastructure investments eg. roads, bridges, schools, hospitals.

## 6.3 Social Impact Assessment

The SIA made 14 recommendations that fell within the scope of the Company's community investments plan. The Company has provisionally accepted these recommendations and prescribed relevant action to address them, as explained in Section 7.5 below.

## 6.4 Primary NGO Relationship

Two challenges for the Company in Strategic Community Investments in the PIA are 1) the lack of NGOs (particularly service delivery NGOs) currently working in the PIA and 2) the resultant difficulty in delivering programs that meet the desired level of capacity building and sustainability.

The Company has undertaken an assessment of non governmental organizations (NGOs) potentially able to deliver some of the Company's community contributions in the PIA. On the basis of this assessment the Company may either enter into a primary relationship with an NGO already present in PNG or establish a relationship with a suitable international NGO not currently present in the country. The Company's relationship with this NGO would not exclude relationships with other NGOs but it would assign an overall program management and coordination role to the primary NGO, including as the major interface and coordinating body with the relevant Provincial Government authorities.

Following receipt and assessment of an acceptable proposal from a qualified NGO, the Company would allocate funding for program delivery. The Company anticipates a 3-year ramp-up period to develop systems and capacity, before the full funding level is reached.

## 6.5 **Program Summaries and Objectives**

Initiatives identified to date for inclusion in the Strategic Community Investments program are summarized below. Other initiatives may be funded over time as needs are identified.

## 6.5.1 <u>Health</u>

The Company will support programs and initiatives in the PIA to address priority public health issues (eg. primary health care, malaria, HIV/AIDS, water & sanitation) with a view to

enhancing and sustaining existing health delivery services by public agencies in the long term.

Objectives will be to:

- help improve the health status of people in the PIA in accordance with government policy, with a focus on immunization, maternal and child health, HIV/AIDS, malaria, safe water and improved sanitation; and
- help the government improve access, quality and management of health services in the PIA.

## 6.5.2 Education

The Company will support education-related programs and initiatives in the PIA to address:

- access to primary education, including child friendly schools & gender equity;
- vocational and community-skills education needs;
- improved access to the College of Distance Education (CODE); and
- scholarship programs with a view to enhancing and sustaining existing education services and vocational education training by public agencies in the long term.

## 6.5.3 Agriculture

The Company will support programs and initiatives in conjunction with appropriate public development and agricultural agencies to engage target PIA populations in:

- improving agricultural techniques (extension activities);
- planning to promote sustainable, long-term agricultural development;
- appropriate utilization of natural resources in Project area communities;
- enhancing ongoing subsistence activities of Project area landowners through the introduction of varied crops and new technologies; and
- making opportunities for sustainable cash-cropping understood and used by landowners.

## 6.5.4 <u>Cultural Heritage</u>

The Company will support appropriate formal initiatives by the National Museum (or similar body) to develop a Cultural Heritage Management Plan, Cultural Foundation or cultural centers in the PIA. Communities wishing to initiate and support their own mini cultural centers or similar will be eligible to apply for CAP grants, described below.

## 6.5.5 <u>Gender</u>

The Company will support initiatives to promote gender equity in the PIA. This includes;

- providing educational and training opportunities for women, including health and vocational education;
- scholarships for local female managers of community organizations;
- child-friendly schools initiatives; and
- support for women's fellowships and projects in the PIA.

## 6.5.6 Bio-Physical Environment

The Company will offer support to environmental conservation activities in the PIA. This includes species & biodiversity protection and community education (including sustainable agriculture). Around the LNG Plant this work will focus on mangrove protection and planting of alternate tree species for firewood.

#### 6.5.7 <u>Public Policy</u>

The Company will support NGO activities in the PIA which promote peace, good governance, transparency and capacity-building for public policy makers.

#### 6.5.8 <u>Community Action Plan (CAP)</u>

The Company will support and expand the Community Action Plan initiated by existing Oil Projects in the Project Impact Area. The CAP program involves 'sweat equity'. Projects are identified by communities and these communities provide a share of the inputs - in terms of labor, land, timber, gravel or similar. The balance of inputs is provided by CAP. Where substantial construction is involved, the Company will attach a tradesman/trade assistant to supervise the work and maintain safety and construction standards. Previous examples funded by the Oil Projects include schoolrooms, staff housing, basketball courts, church buildings, aid posts and airstrip upgrades.

#### 6.6 Implementation Strategy

Implementation of the Strategic Community Investment initiatives must be balanced throughout the PIA; so Project-affected communities benefit from the programs. Relevant groups within the Company will cooperate to provide guidance on the pace and sequence of activities considering overall community needs, Project construction activities and State/Provincial Government policies and plans.

Additionally the Project's Strategic Community Investment programs will be coordinated with those operated by Oil Search for the Oil Projects in the Project Impact Area, recognizing that Oil Search has a mature community program. The Project Strategic Community Investment initiatives will seek, where appropriate, to supplement and expand the Oil Projects' programs to fill gaps in geographic coverage.

A high level outline of the Strategic Community Investment implementation strategy follows:

#### Initiatives within NGO Mission (Charitable Organizations)

- 1. The Company requests work proposals from NGOs, based on community desires from Social Impact Assessment and PNG's Medium Term Development Strategy
- 2. The Company and NGOs negotiate the work plan
- 3. The Company funds NGOs for the work plan
- 4. NGOs implement the work plan
- 5. The Company and NGOs meet quarterly to assess implementation performance and take follow-up action, as needed.

## Initiatives that are Outside of NGO Mission (For-Profit Companies)

- 1. The Company consults with local communities, the Social Impact Assessment and Government Medium Term Development Strategy and identifies initiatives that are not included in NGOs' funded work program
- 2. The Company determines the order in which these initiatives should be pursued
- 3. The Company asks relevant contractors in PNG for proposals to design and build these initiatives and for a plan to hand them to the community or the government to operate
- 4. The Company awards contracts
- 5. Contractors perform the work

#### Tax Credit Initiatives during Construction

Tax Credit during Construction is associated with the Project-required infrastructure and is not part of the Strategic Community Investments budget. Regardless, following is a high-level implementation summary:

- 1. Project identifies Project-required infrastructure that may have public utility
- 2. Project prepares and submits proposal for Government approval
- 3. Government approves the proposals
- 4. EPC Contractors perform the work
- 5. Project maintains appropriate accounting records
- 6. Project meets regularly with Government on status of tax credit infrastructure construction
- 7. The Company applies tax credit during years of revenue generation

#### Tax Credit Initiatives during Production

- 1. The Company works with communities and Government to determine which infrastructure projects (beyond Project required infrastructure) should be pursued for tax credit
- 2. The Company prepares and submits proposal for Government approval
- 3. Government approves the proposals
- 4. The Company asks relevant contractors in PNG for proposals to design and build these tax credit infrastructures
- 5. The Company awards contracts
- 6. Contractors perform the work
- 7. The Company maintains appropriate accounting records
- 8. The Company meets regularly with Government on status of tax credit infrastructure construction
- 9. The Company applies tax credit during years of revenue generation

## 6.7 Other EHL Projects outside the Community Investment Program

Outside of the Strategic Community Investments Program, a number of activities will be funded and managed that will benefit communities in the PIA. These include:

- a range of health activities designed for the Project workforce which will also benefit communities or mitigate Project impacts;
- upgraded and new infrastructure including roads, bridges, and air strips;
- donation of facilities and equipment no longer needed at completion of construction such as buildings, computers, and other equipment.

## 6.8 Contractors' Projects in the Community Investment Program

In addition to initiatives undertaken by the Company, the EPC Contractors building the Project's pipelines and plants also may choose to conduct community support programs within their area/s of operation to assist and develop goodwill with those communities. To align these projects with the Company's own Strategic Community Investment objectives and programs, EPC Contractors will be directed to coordinate those activities with the Company.

## 6.9 Budget

The budget for Strategic Community Investments is approximately K56 million (US\$20M) during the Construction Phase and an estimated K14 million (US\$5M) per year during the Production Phase from EHL.

A separate budget will be developed to cover additional social activities to mitigate the direct impact of Construction and Production. These separate mitigation activities are beyond the scope of Strategic Community Investment.

# 7.0 STEWARDSHIP

## 7.1 Monitoring Performance

## 7.1.1 Oversight by National Content Manager

The Company's National Content Manager has oversight of National Content, however, other functions such as Procurement, Human Resources, Public Affairs, Social Affairs, and Land and Community Affairs all have a role to play. It is the National Content Manager's role to assess performance and take steps to continuously improve implementation of the National Content Plan. The performance of the National Content programs will be continuously monitored through Construction and Production and will evolve in light of lessons learned.

## 7.1.2 <u>Reporting by Contractors</u>

EPC Contractors are required to provide regular detailed reports on Workforce Development and Supplier Development.

## 7.1.3 Coordination and Monitoring of Strategic Community Investments

Close coordination of the Strategic Community Investments will be required among several stakeholders (including The Company, NGOs, EPC Contractors, other Contractors, Oil Search and Government agencies) to enable the Community Investment programs to be delivered strategically and effectively. These stakeholders will meet periodically to review performance, status and plans.

## 7.1.4 Accountability and Meetings with National Government

As part of the monitoring and accountability process during Construction, the Companywith EPC Contractors as required – will meet periodically with the PNG Government. Each of the EPC Contractors will be required to present their Workforce Development and Supplier Development plans and results to the PNG Government. This will help reinforce Contractors' accountability for the performance of their National Content responsibilities. It will also facilitate the PNG Government's interaction with the Company's Workforce Development and Supplier Development efforts. A similar accountability process will be followed during Production.

## 7.2 National Content Steering Committee

To evaluate the National Content effort and provide high-level strategic direction, a Company National Content Steering Committee will meet on a periodic basis. The Committee will discuss National Content performance and plans and provide strategic direction as needed considering evolving internal and external stakeholder expectations. The Committee will monitor the performance of Contractors and the Company in meeting their National Content responsibilities and will develop and enhance National Content during Construction and Production, without sacrificing safety, environment, quality, cost or schedule.

## 7.3 Public Awareness

### 7.3.1 Overview and Objectives

The Company is committed to providing appropriate, timely and accurate information to the people and government of PNG. The Company's Public Awareness Plan is designed to encourage participation in the Project by the PNG people, PNG business interests and the PNG Government. Through our public awareness activities the Company aims to:

- achieve awareness of Project goals and needs;
- build relationships;
- identify and resolve issues of concern, and
- advise PNG citizens and businesses of opportunities for training, employment and business.

EPC Contractors and their sub-contractors may be asked to support the Company's public awareness activities through consultation, materials and by presenting business opportunities during public awareness campaigns.

#### 7.3.2 Employment and Business Opportunities

The principal method the Company is, and will continue to use to communicate training, employment and business opportunities for PNG citizens is regular face-to-face contact with the communities impacted by the Project, with business representatives and with government officials. Through these discussions, information about the Project will be passed on, concerns identified, and training, employment and business opportunities discussed.

Prior to Construction activities, advice of day-to-day opportunities with the Company will be provided as follows:

- advertisements in national newspapers
- brochures distributed to communities
- The Company's website: <u>http://www.pnglng.com</u>

During Construction, the EPC Contractors will be the major provider of work opportunities for PNG citizens and will provide the business opportunities for PNG companies. The Company will coordinate with these Contractors so their public awareness campaigns and approaches are consistent with the Company's approach as far as possible. The EPC Contractors will conduct their own advertising, recruitment and procurement efforts and may establish their own websites for these purposes. Wherever possible, the Company will provide appropriate links to Contractors' sites via the Company web-site.

## 7.3.3 Strategic Community Investment

Similarly regular face-to-face contact with communities impacted by the Project will be the principal method the Company will use to communicate Strategic Community Investment activities. Additional discussions also will be held with the national and provincial governments and other stakeholders as needed.