



PNG LNG Project

Attachment to

Angore Well Pads and Access Roads
Resettlement Action Plan PGHU-EH-SPZZZ-46003

Angore Tie-In Project
Wellpad C and Associated New Areas

Angore Well Pads and Access Roads RAP
Appendix – Angore Tie-In Project
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ACRONYMS

ACRONYM	Definition
CAA	Clan Agency Agreement
CCA	Clan Caretaking Agreement
CDS	Community Development
CPA	Clan Payment Agreement
DPE	Department of Petroleum and Energy
FRV	Full Replacement Value
IPCA	In Principle Clan Agreements
KP	Kilometer Point
LR	Livelihood Restoration
PNG	Papua New Guinea
RAP	Resettlement Action Plan
ROW	Pipeline Right of Way

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1. Introduction

This document is an Appendix to the Angore Well Pads and Access Route RAP (document number PGHU-EH-SPZZZ-460003 approved Jan 2013) including Appendix Angore Tie-in Project (approved 28th July 2016), and the Kutubu to Hides (KP0-80) RAP (PGHU-EH-SPZZZ-490029 approved Jan 2013). The purpose of this RAP appendix is to define the impacts of amendments to the Angore Tie-in Project which was initially designed to connect Angore Well Pad A (RAP PGHU-EH-SPZZZ-460003) and the PNG LNG Mainline ROW through to Hides Plant Site (PGHU-EH-SPZZZ-490029). This amendment consists of:

- Two new gas wells will be drilled at the original exploratory wellpad (Angore Wellpad C), located approximately 1.5 kilometers northeast from Angore Wellpad A and requiring approximately 24.9
 Ha. This area will be required for the duration of the Project (estimated to be 35 years) and includes the required Buffer Zone to meet safety standards
- Approximately 2.8Ha located adjacent to the North East section of the Angore Wellpad C Buffer zone. This area will be required for approximately 5 years
- Approximately 1055 M² "brownfield" located at a high point immediately next to the Angore Wellpad B road This area will be required for the duration of the Project (estimated to be 35 years) for the location of a Telecom Tower
- Approximately 3.9Ha of land on each side of the Angore Greenfield ROW commencing approximately 200 meters from the Northern end of the Angore Greenfield ROW and running for approximately 25 meters. This area will be required for a duration of 5 years and will supply the required additional aggregate required for development of Wellpad C
- Two areas totaling 645 M² adjoining the road between Wellpad A and Wellpad C will be required for approximately 12 months. Borehole activity will be undertaken at these locations to provide required information for the HDD of the pipeline connection between Wellpad A to Wellpad C.

2. Resettlement Goals and Objectives, Principles, Processes, and Legal Framework

The goals, objectives, and principles of and the legal framework for, as well as the processes through which resettlement will be planned and implemented for all resettlements occasioned by the PNG LNG Project as a whole are set out in the Environmental and Social Management Plans. Additional details on the social/cultural/economic context of the Angore area are given in the Angore Well Pads and Access Roads RAP and associated appendices. The resettlement process complies with legal requirements and criteria as given in the PNG Oil and Gas Act and the Lenders Environmental and Social requirements (IFC Performance Standards 5: Land Acquisition and Involuntary Resettlement, Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts, and Performance Standard 7: Indigenous Peoples.)

3. Avoiding/Minimizing Displacement

The initial selection of Angore Well pads A & B site was based on technical feasibility for drilling. The site was cleared during the PNG LNG Project period and has continued to be used by Company since that period.

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Ongoing monitoring of the sites indicates that the very difficult downhole geology of Angore Wellpad A (existing of many fractured and overpressure zones) now has wellbore integrity issues that cannot be overcome. In October 2018 the decision was made that Angore existing wells at A1 and A2 would need to be plugged and abandoned. At the same time the uncompleted well at Wellpad B would also be plugged and abandoned. The original Angore exploration well drilled by BP in the 1980s (now called Wellpad C) is less geologically convoluted and will now be utilized to source the Angore fields.

Wellpad B site will continue to be used as a laydown area until the end of the construction period. Part of the reasoning for using the site was to minimize additional disturbance. The camp site located at Wellpad A and initially associated with drilling activities has been maintained and the issues associated with community activities resolved with the community agreeing to ongoing use of this land for the duration of the works. Company will continue to use Wellpad A as a camp site to support the Plug and Abandon activities in an effort to minimize further land requirements associated with the additional activities. Following completion of a new camp construction within the Wellpad C buffer zone, this camp will be closed.

Company has designed Wellpad C and Wellpad C access roads and camp requirements with the objective that no additional land will be required at this site after the initial displacement thereby avoiding the structures which have been erected around the boundaries of the site and Angore Access road.

Several route options were evaluated for the connection between the 'greenfield' ROW and the Wellpad C area. Route options which require a full ROW and traditional trenching methodology were discarded to avoid structures and gardens along the route options. Therefore the connection will be made using Horizontal Directional Drilling (HDD) methodology.

Prior to ground survey activities commencing, a review of prior surveys, satellite photos and local information indicated that several main dwelling and associated minor structures were located inside of the Wellpad C construction and buffer footprint. Some of these were determined to be vacant and used on an ad-hoc basis for prostitution activities. Pre-construction survey activities confirmed that these structures comprised 9 households currently inhabited and used for residential purposes that cannot be avoided. Full and detailed social surveys have been undertaken with these 9 households to ensure baseline data was collected for Standard of Living and Livelihood Restoration. The Social Survey determined that no households requiring Special Case Management exist within this area. During the Pre-construction survey (which included engineers, construction specialists and geotechnical specialists), extra work spaces were selected in locations where no social sensitivities were identified, thus avoiding structures and gardens. The location of the Telecom Tower likewise was selected with consideration to avoid all structures. The final Telecom Tower site has a small number of fallow plants identified which will receive full replacement compensation. The additional aggregate area required along the Greenfield ROW was also included in the PCS with no social sensitivities identified.

Construction methodologies (including HDD for the pipeline) will be adopted to mitigate social impacts and minimize the need for additional land for access roads (associated with steep grades). Where additional laydown, spoil and construction related areas are required, selection has been made with the focus using buffer zones and areas already within the Wellpad A and Wellpad B areas.

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4. Impacts of Angore Tie-In Project- Wellpad C and associated new Areas

Direct - Household Displacement

Nine (9) households will be directly affected by losses due to land acquisition/use and will be provided with compensation. All households are located within the Wellpad C area. No households will be displaced from the Telecom Tower, Greenfield ROW additional requirements or the Borehole areas. The table below shows the breakdown of losses.

PHYSICAL & ECC	DNOMIC				
Type of impact	# HHs affected	Details of Impact	# people	Livelihood Source	Impact / Resettlement Site
Loss of 3 dwellings, active garden and pit latrine	1	 3 Bush dwellings will be displaced (2 larger and better quality than normal) Both established and newly planted garden including sweet potato food crops will be displaced. Household will be able to harvest most existing crops due to timing of land clearance activities Owner has confirmed his approval for displacement 	11 (all 3 structures)	 Currently receives and uses compensation paid by EMPNG for ROW deprivation and management activities (This is a Clan payment but Head of Household indicated that he used money as livelihood source during social survey) Livelihood Restoration program will be provided by EMPNG 	 Land security - Head of Household also holds land at Diladala (near KP5 ROW for which they received full compensation as FN092 during Foundation project. This land was returned to them after Foundation construction completed and is patriarchal Distance - Head of Household has Law and Order Issues against him and is currently outside of the area. His wife (structure 1), mother (structure 2) and father & wife (Structure 3) are expected to move to the place they were living during Foundation project Services - The new location is considered to have the same access to services
Loss of 1 dwelling, active garden, cook haus, pig haus and pit latrine	1	 One standard bush structure Both established and newly planted garden including established and newly planted sweet potato mound. Household will be able to harvest genuine crops due to timing of land clearance activities Fallow garden and bush areas 	6	 Livelihood Restoration program will be provided by EMPNG Further information to be provided at completion of social survey activity 	Further information to be provided at completion of social survey activities

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Loss of 1 dwelling, active garden and pig haus	2	 One standard bush structure One standard bush pig haus Both established and newly planted garden including established and newly planted sweet potato mound. Household will be able to harvest genuine crops due to timing of land clearance activities Fallow garden and bush areas Owner has confirmed his approval for displacement 	5 (HN009) 6 (HN012)	 Livelihood Restoration program will be provided by EMPNG Further information to be provided at completion of social survey activity 	 Further information to be provided at completion of social survey activity HN009, HN011 & HN012 are brothers and sister
Loss of 1 dwelling, active garden and pit latrine	1	 One standard bush structure One bush style pit latrine Both established and newly planted garden including established and newly planted sweet potato mound. Household will be able to harvest genuine crops due to timing of land clearance activities Fallow garden and bush areas Owner has confirmed his approval for displacement 	7	 Livelihood Restoration program will be provided by EMPNG Further information to be provided at completion of social survey activity 	 Further information to be provided at completion of social survey activity HN009, HN011 & HN012 are brothers and sister
Loss of 1 dwelling and active garden	4	 One standard bush structure Both established and newly planted garden including established and newly planted sweet potato mound. Household will be able to harvest genuine crops due to timing of land clearance activities HN006 also contained some very old, non-maintained and non-harvestable coffee plants (believed to have been in place prior to earlier activities in the area). These were counted and will be paid out at the rate of small plants Fallow garden and bush areas Owner has confirmed his approval for displacement 	10 (HN004) 6 (HN006) 6 (HN007) 10 (HN010)	 Livelihood Restoration program will be provided by EMPNG Further information to be provided at completion of social survey activity 	 Further information to be provided at completion of social survey activity HN004 has alternative locations at Anguale (approx. KP5-6 along the ROW) and use both sites.

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ECONOMIC ONLY	(
Type of Impact	# of Households affected	Details of Impact	Livelihood Source					
compensated a	No households were identified with economic only impact. The fallow plants identified within the Telecom's Tower location are owned by HN008 and will be compensated at Valuer General Rates with CPI applied. LR will be supplied at the Household level due to the active gardens located at the Wellpad C							
location								

Non-Direct - Clan Impact

Company will also pay clan-based damages payments and aggregate royalties for aggregate used for project construction purposes if sourced from a quarry. Rates and clan approvals can be sourced through the applicable IPCAs. A new IPCA will be signed for the Wellpad C area with the Uu, Pai and Imiga Clans. Whilst agreements already exist with these clans the specific land areas within existing IPCA's do not include the Wellpad C area.

IPCA#	KPs	Date	Clan Total	Area
11.3	0.16	26/3/2010	35	Dagia – HGCP
TBA	Wellpad C area	TBA	3	Angore Wellpad C

The Company will also enter into Clan Land Compensation Agreements (CLCA) with impacted clans for compensation under Section 118 of the Oil and Gas Act – covering land use and enjoyment, surface damage, damage to flora and fauna, gardens and trees, etc. for these new areas. The Company signs a Clan Agency Agreement and Authority to Pay (CAA) with each clan which records the amounts due to the Clan for the new land required to complete the Angore Tie-in Project activities.

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5. Special Case Households

An initial assessment was undertaken of the households which would be impacted by physical or economic displacement, and it was determined that there were no issues identified which would classify any households as a special case. Full social surveys were undertaken for all households identified for displacement and no special cases are identified during this process. PNG LNG resettlement process ensures ongoing monitoring and evaluation activities and engagements associated with LR Program delivery will be undertaken in a manner that will regularly assess both the physically and economically displaced households. If a household declines from their current situation, the household will be reviewed for possible inclusion into the Special Case Management process.

6. Social, Cultural, and Economic Environment

Please refer to the Angore Well Pads and Access Road and Kutubu to Hides (KP0-80) RAPS for full details on the topography, clan listing, history and resource development of the area.

7. Eligibility and Entitlements

Eligibility	Affected Category	Agreement	Assistance / Compensation	Considerations for Implementation
Houses and Oth		(Physical Relocation) F		
Houses and Ott Recognized owner(s) of the assets and structures (identified in the Survey before Cut-off date, and confirmed by Census)	Households with an available relocation home	Resettlement Agreement for Standard Structure - Agreement between ExxonMobil PNG Ltd and the Household to be resettled	Resettlement Assistance Pace Housing Part A – Cash Compensation: K14,085 linked to signing agreement, dismantling and garden establishment Part B – Deferred Payment. K12,248 deposit into an Interest Bearing Deposit or deferred payment for 6 months Part C – Materials in kind payment which includes materials (.e.g. water tank, iron roofing and guttering and other housing materials) plus bank deposit to equal the total value of K36,743	Clearly communicate details regarding site development, construction schedules Consultation to ensure household understands the Materials in Kind Part C compensation and selection options available Delivery of Materials In Kind components of the package will be delivered at the time of relocation Company will monitor construction of new structure including addition of materials in kind (e.g. iron roofing, guttering and water tanks, solar panels) and provide advice if required Cash component of all compensation will be paid to the individual's bank account. Where required Company will assist in setting up bank accounts and pay for the K100 to cover the first year's bank fees
2. Damage to T Recognized land and resource users and owners	rees and Crops Individual / household landowners for garden land	Economic Displacement Agreement For Agricultural Assets - Agreement between ExxonMobil PNG Limited and the owner of the garden (crops, trees) for the compensation of loss or damage to the area of the garden impacted. Rates will be based on 2014 Valuer General Rates with CPI increase for	Full Replacement Value (FRV) for affected area of crops and trees planted by individuals (excluding mature crops that can be harvested). Compensation will not include any payment for crops on land or resources not directly impacted by Company Assistance to restore or improve livelihoods through Livelihood Restoration program	Clearly communicate details associated with site development and relocation schedules One-time compensation paid to individual's bank accounts at FRV Livelihood restoration program will be made available to households whose sustainability is impacted by economic displacement until such time as all materials delivered and the households has been deemed to have their

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	2015, 2016, 2017 and 2018 For Huli ditches		gardens restored (maintained or improved)
	compensation rates are based on rates		In cases where crops can be made available to
	used established		households to harvest
	during the		without incurring any safety
	construction phase		risk, this will occur
	of PNG LNG plus CPI for larger tall		
	Huli Ditches. For		
	smaller, approx. 1m		
	depth ditches compensation will be		
	50% of the larger		
	Huli ditches		
Clans or	In-Principle	Damage Payment -	Clearly inform about site
other groups	Compensation	Compensation based on	development and relocation
with rightful recognized	Agreement (IPCA)- Agreement between	FRV for trees naturally seeded in affected areas	schedules
claim to	ExxonMobil PNG	to be paid directly to Clan	One-time compensation to
communal	Limited and	Bank Account	community (landowner
land	Landowner clans to	Danishatian Barmant	group) paid to Clan Bank
	acquire the right to use the land and pay	Deprivation Payment – Compensation based on	Account with all clan members' notified that
	compensation rates	area to be paid directly to	payment has been made.
	(according to the	Clan Bank Account	Clan select clan members to
	PNG Oil and Gas		act as Agents for
	Act) for damage, deprivation and		management and signing of bank account
	gravel royalties		Barin account

Copies of all agreements, including the IPCAs and CAAs are lodged with the Company's document control group and provided to the Department of Petroleum and Energy on a quarterly basis.

All compensation payments under the resettlement agreements are either executed in the field for cash or materials in kind) or via electronic payment to accounts. Amounts paid are consistent with the Resettlement Guidelines. It is planned that all monetary based compensation will be paid to bank accounts of the asset owners per the Resettlement Guidelines.

8. Livelihood Restoration

It is anticipated that the construction schedule will allow for food crops associated with active gardens to be harvested prior to commencement of clearing of land activities. Therefore the program is aimed at maintaining and improvement of sustainability for the eight households who will lose future food gardens or cash crops at this location. The livelihood restoration program will be based on the program adopted during construction phase of PNG LNG that continues to be successfully implemented throughout the project impact area and consists of:

An initial LR survey of the new garden sites and detailed discussion with the household. The survey will assess capacity and capability of the members and determine a specific program suited for the household

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- Improving productivity through the provision of high producing and more resilient seeds, tubers and seedlings
- Improving agricultural knowledge through the provision of training and mentoring
- Potential provision of limited number of small livestock based on outcome of initial survey

The final LR program composition for each household will be determined at completion of the initial LR survey but the scope and budget per household will be in-line with that provided during the construction phase of the PNG LNG project.

9. Entitlement Cut Off Date

As detailed in the Angore Well Pads and Access Roads RAP, the Company undertook video and photo documentation of project land requirements for all new land required for the Angore tie-in Wellpad C and associated new areas scope of works. Completion of the Pre-construction survey represents the cut-off date for physical assets and improvements that will be compensated under the Resettlement Program. The cutoff date declaration for the associated areas was declared on the 21st September 2019. Wellpad C area cutoff declarations and asset counts were undertaken between the 21st and 24th of September 2019.

10. Consultation & Disclosure

Consultation with the affected communities and households regarding proposed project Angore project activities has been ongoing since July 2019, commencing with discussions associated with community law and order issues and the need to Plug and Abandon Wellpads A&B, continuing throughout the period in readiness for the re-commencement of Angore construction activities. This has included Peace and Order celebrations and determination of Community Development, employment and other community benefits. This is in addition to the ongoing community engagements as part of base business for PNG LNG operations.

Consultation for the Angore Wellpad C area began in September 2019 with initial meetings with community leaders, advising them that Wellpad C area would be required.

Full community consultation was undertaken with clan leaders and members prior to commencement of the Pre-construction survey in each area. Public Disclosure Meetings for all areas were conducted to ensure local community members were provided with information that explained the scope of works, location of activities, expected timing, potential business and individual benefits (including explaining the limitation of employment possibilities). All engagements were undertaken with the participation of an Independent Legal Advocate to ensure community members could obtain independent advice. A Community Affairs officer with local language skills acted as interpreter during these engagements. These meetings also provided communities with the opportunity to raise concerns, ask questions and receive responses to issues raised.

Angore

Angore

Angore

2019

24 September

2019

28th

September

2019 26th October

2019

subareas

Wellpad C Area

subareas

Angore WPC

Clans

Angore WPC

landowners (various)

Locale	Dete	٨٣٥٥	Number of Attendees					
Locale	Date	Area	Male	Female	Children	Total		
Angore Wellpad A	15 th August 2019	Angore Idauwi	General co		tion and engagem counted	ent. Numbers		
Hides 4	16 th August 2019		4	0	0	4		
Angore	12 th September 2019		4			4		
Angore	16 th September 2019	Imiga Clan	4			4		
Angore	21 September 2019	Angore Hangore	4	2		6		
Angore	21 September 2019	Borehole 2 Angore Road	14	2	3	19		
Angore	21 September 2019	Telecom Tower	73	12	15	100		
Angore	21 September 2019	Wellpad C Area 1	71	14	15	100		
Angore	22 September 2019	Borehole Area Angore Road	14	3	3	20		
Angore	21 September 2019	Greenfield ROW	9	6	2	17		
Angore	23 September	Wellpad C Area	10	3	4	17		

17

20

12

7

11

10

Not counted

40

20

23

The households identified during the Pre-construction Survey as requiring physical or economic displacement were engaged on the days noted above. The social team (including Independent Third Party Advocate) explained the resettlement process (as detailed in the Resettlement Guidelines), crops were counted and the count approved and signed by the household representative. For the households that will be physically displaced the team undertook a basic Social Survey at the time of the Pre-Construction Survey. A detailed Social Survey was undertaken on the 26th October 2019 during which further explanation of the Project, the process and the expected schedule was provided. Ongoing consultation and engagements will occur during the agreement stage of the Resettlement process.

An Independent Third Party Advocate firm has been engaged to provide independent legal advice to communities and community members impacted by Project activities. Kubak & Kubak Solicitors and Barristers acts as the independent advisor to Project-affected households to inform them of their rights, responsibilities and obligations concerning the resettlement program in the context of both national PNG legislation and PNG LNG commitments. The specific roles and functions undertaken by this group are detailed in the Angore Well Pads and Access Roads RAP.

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The Independent Third Party Advocate captured some concerns amongst community members during disclosure meetings. These included the following concerns raised associated with resettlement:

Issue	Project Measure to Address Issue
Compensation for Resettlement – Head of Household for HN005 has a law and order issue outstanding against him. Queried if that will that impact his rights to receive compensation	Company Response – The HoH is entitled to compensation for all his assets which will be displaced through these activities. Regardless of any outstanding warrants, full compensation will be paid. Company is working with local leaders to ensure agreement signing can occur and payments made to his bank account.

Following the disclosure process detailed in the Angore Well Pads and Access Roads RAP, this RAP will be translated into Huli will be distributed and explained upon request within the affected communities and will be made available on the PNG LNG website (www.pnglng.com).

11. Grievance Management Framework

A Grievance Management Process has been implemented to receive, respond to, and address any grievances made during the activities detailed in this document. Further details of PNG LNG's engagement procedures and obligations including the Grievance Management framework are available in the PNG LNG Stakeholder Engagement Plan.

12. Organizational Roles and Responsibilities

Overall responsibility for the planning, implementation and monitoring of physical and economic displacement rests with the Company. The Company's PNGX Socioeconomic organization through its Land Access & Resettlement team leads the resettlement activities and works together with the PNG LNG Community Affairs organization. This team has been and will be responsible for these activities. Refer to the Environmental and Social Management Plan for full details.

13. Monitoring and Evaluation Section

As detailed in the PNG LNG Environment and Social Management Plan - Land Access, Resettlement and Livelihood Restoration Management Plan - Production outcome evaluations and monitoring will be undertaken to ensure impacted households achieve maintained or improved Standard of Living (SOL) and maintained or improved Livelihood Restoration (LR).

SOL evaluation will be undertaken by Company Resettlement Leads. Company Resettlement Leads have in excess of 10 years' experience in PNG resettlement activities including monitoring and evaluation of impacted households.

LR monitoring and initial evaluation will be undertaken by third party experts who will be contracted to provide the LR program. Whilst final determination of third party suppliers of LR program has not been

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completed, it is expected that Company will utilize the services of the company which supplied these services during PNGLNG Construction phase and which currently provides CDS agriculture programs support. Third party suppliers will provide their final report on the sustainability of the resettled households whilst the final household LR evaluation will be undertaken by Company Resettlement Leads.

14. Implementation Schedule

A schedule of tasks has been developed to plan and implement the major components of the resettlement implementation in the second half of 2019 through 2020. All compensation is scheduled for payment before the end of first quarter 2020, with displacements completed in the same period. Standard of Living Evaluations are scheduled for completion by September 2020 whilst Livelihood Restoration activities are planned for completion by December 2020.

Proposed Schedule*	2019			2020			2021		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agreement Signing									
Compensation Payments									
Physical & Economic Displacement (based on project schedule/needs)									
LR Program									
Food Garden Surveys									
Seedling Distribution									
Livestock Distribution									
Training									
Monitoring									
Evaluation									
Final Report LR							*		
SOL Evaluation									
Final Report SOL					-				
Angore Program Closeout Report								*	

^{*}based on current project schedule

15. Resettlement Budget

All costs for the Angore Connection works resettlement program are included in the "Angore Tie-in Project" budget. Costs are estimated at between US\$3.7 and US\$4.0m over the full project period for all P&GA activities for support of these new areas (additional budget exists for the initial Tie-in activities) including approximately US\$1.5m to US\$2.0m for resettlement compensation, Livelihood Restoration, ongoing evaluation and ongoing stakeholder engagements associated with the Project displacement activities.

Attachment 1 Map of Structures, Active Garden and Fallow Gardens Which will be Displaced

