

**Tangguh Independent Advisory Panel
Report
on
Operations
and
Tangguh Expansion Project**

May 2020

Table of Contents

I.	Introduction.....	4
II.	Highlighted Issues.....	6
III.	Recommendations.....	10
IV.	Political Update.....	15
V.	Security and Human Rights Update.....	23
VI.	Revenue Management.....	30
VII.	Papuan Workforce Development.....	31
VIII.	Social and Community Development Programs.....	37

Acronyms and Indonesian Terms

AMDAL	Analisa Mengenai Dampak Lingkungan (Indonesian ESIA)
BAPPENAS	Badan Perencanaan dan Pembangunan Nasional (National Planning and Development Agency)
BPK	Badan Pemeriksa Keuangan (The Audit Board of the Republic Indonesia)
BOF	Bulk Offloading Facility
CAP	Community Action Plan
C&EA	Communications and External Affairs
CSTS	Chiyoda-Saipem-Tripatra-Suluhardi (an EPC Contractor for Tangguh Expansion Project)
DBH	<i>Dana Bagi Hasil</i> (revenue sharing Fund)
DPR	Dewan Perwakilan Rakyat (the House of Representatives)
ESDM	Energy dan Sumber Daya Mineral (Energy and Mineral Resources)
FKPM	Forum Kemitraan Polisi dan Masyarakat (Police and Community Partnership Forum)
GoI	Government of Indonesia
ICBS	Integrated Community Based Security
ICRC	International Committee of the Red Cross
IDR	Indonesian Rupiah
IP	Indigenous People
KADIN	Kamar Dagang Indonesia (Indonesia Chamber of Commerce)
KNPB	Komite Nasional Papua Barat (The National Committee for West Papua)
LNG	Liquid Natural Gas
LP3BH	the Institute for Research, Assessment and Development of Legal Advocacy – an NGO in Manokwari
MRP	Majelis Rakyat Papua (Papuan People Council)
MUI	Majelis Ulama Indonesia (Moslem Indonesia Council)
PLN	Perusahaan Listrik Negara (State power company)
SKKMIGAS	Special Taskforce for Upstream Oil and Gas Business Activities
TEP	Tangguh Expansion Project
TNI	Tentara Nasional Indonesia (The Indonesian National Armed Forces)
TSDP	Tangguh Sustainable Development Programme
VPSHR	Voluntary Principles of Security and Human Rights

I. INTRODUCTION

The Tangguh Independent Advisory Panel (“TIAP” or “the Panel”) provides external advice to senior BP decision-makers regarding non-commercial aspects of the Tangguh LNG Project (“the Project”). It specifically advises BP on how Tangguh can achieve its potential as a world-class model for development. The current Panel is chaired by former U.S. Senator Tom Daschle, who served as Majority Leader of the U.S. Senate, and includes Augustinus Rumansara, a Papuan who chaired the Asian Development Bank (“ADB”) Compliance Review Panel from 2003 to 2008, served as an advisor to the Governor of Papua from 2008 to 2010 and currently chairs the Papua Low Carbon Development Task Force.¹ The Panel utilized an independent counsel and secretariat headed by Gary Klein and the additional support and counsel of Spencer Wolf of the Daschle Group. The current Panel was established in 2011 and has been extended by BP until June 30, 2022.²

This is the current Panel’s fifth full report and it comes at a critical time. BP is engaged in a major expansion of Tangguh that will add 50% to its capacity. The expansion, known as the Tangguh Expansion Project (“TEP”) will include a third train at the LNG site, an additional jetty, two new platforms and 16 new wells. At the time our visit, more than 14,000 new construction related workers were working and living at the site. In 2014, BP completed the social and environmental impact statement (“the TEP AMDAL”) that governs its commitments during the construction (now scheduled to be completed in 2021) and, together with the original AMDAL in 2004, its operations thereafter.³

This report will seek to bring TIAP’s previous experience and current consultations to these subjects and to help guide BP in evaluating and implementing its existing and new commitments, particularly regarding its impact on the people of Bintuni Bay and of Papua, as well as on Indonesia more generally. The Panel also observed the special challenges associated with simultaneous operations and major construction. As with previous TIAP reports, this report will be published, along with BP’s responses, and will be presented to and discussed with interested parties in Jakarta and London.⁴

In addition to TIAP’s activities, Tangguh is monitored by the Tangguh Lenders Group, represented by the ADB, Japan Bank for International Cooperation and Mizuho Corporate Bank, which has established an external panel that is staffed by independent experts who

¹ For the purposes of this report, the term “Papua” refers to the region encompassing both Papua province and West Papua province (“Papua Barat”). The term “Papua province” refers to the province of Papua following its split with Papua Barat province. The term “Papua Barat” refers to the province of Papua Barat (previously known as Irian Jaya Barat) following its establishment in 2004. A map of Papua and Papua Barat showing key locations related to Tangguh is included as Appendix A.

² TIAP was established by BP in 2002. Former U.S. Senate Majority Leader George Mitchell chaired the first Panel that monitored the initial construction phase of the Project. The panel also included Lord Hannay of Chiswick, Ambassador Sabam Siagian and Reverend Herman Saud.

³ See TIAP’s May 2014 report at 10 for a more complete description of the proposed expansion.

⁴ In lieu of a separate presentation in Washington, D.C., the London meeting will be publicized to all stakeholders and webcast. The Report also will be available, together with BP’s responses, on BP’s website. See: <http://www.bp.com/sectiongenericarticle.do?categoryId=9004751&contentId=7008791>

visit Tangguh annually. Their review is limited to issues of safety, environment, resettlement, and social programs. In recognition of the work of the Tangguh Lenders Group, TIAP focuses on matters relating to security, human rights, governance, revenue management, the political environment and the broader issues relating to how Tangguh affects the people of Bintuni Bay and Papua and how it is perceived by them. These factors, broader than strict issues of compliance, relate directly to whether BP can achieve its goal of making Tangguh a world-class model for development.

In January 2020, TIAP visited Papua Barat (Manokwari and Bintuni Bay) as well as Jakarta. The Panel met with NGOs, senior officials of the Government of Indonesia (“GOI”), including the office of the Coordinating Minister for Security and Political Affairs, the head of SKKMigas, the Ministry of Mining and Energy (ESDM) and the Ministry of Development (BAPENNAS). The Panel also discussed Tangguh with the U.K. Ambassador and the U.S. Embassy.⁵ The Panel also met with several of BP’s implementing partners who are supporting BP’s Papuan development programs.

TIAP met with the Governor of Papua Barat, the Bupati of Teluk Bintuni (“Bintuni Bay”) and the Papua Barat province Chief of Police (the “Kapolda”).⁶ In Bintuni Bay, TIAP also met with leaders of affected Papuan villages from the north shore (Taroy) and south shore (Tanah Merah Baru). While at Tangguh, TIAP met privately with Papuan workers and BP personnel running the management, operations, Papuan development programs and security at the LNG site. It did not meet with officials of the EPC contractor who are managing TEP construction and its security and safety, but did meet with BP managers who are coordinating these activities with BP. The Panel also met with Papuan NGOs, human rights advocates, journalists and experts on political and economic conditions in Indonesia and Papua.⁷

The Panel monitors BP’s programs and activities in relation to the most respected current global norms that establish best practices for projects in developing countries. These include the long established Universal Declaration of Human Rights; the Organization for Economic Cooperation and Development (“OECD”) Guidelines for Multinational Enterprises; the International Labor Organization Convention Concerning Indigenous and Tribal Peoples in Independent Countries; the World Bank Operational Directive with respect to indigenous peoples; and the U.S. – U.K. Voluntary Principles on Security and Human Rights (the “Voluntary Principles”). The Panel is also informed by global guidelines such as the United Nations Guiding Principles on Business and Human Rights (“the Guiding

⁵ The U.S. Ambassador is preparing to leave and the new Ambassador had not yet been confirmed.

⁶ TIAP was not able to meet with the Papua Barat TNI Commander (the “Pangdam”), or the Bintuni Bay Chief of Police (the “Polres”) who died shortly before our visit, both of whom we met on the previous visit. See TIAP Report December 2017 at p. 2.

⁷ See Appendix B for a list of the stakeholders consulted by TIAP during its January 2020 visit. See Appendix II of the October 2012 TIAP Report for a complete list of stakeholders consulted by TIAP until that date, and subsequent Reports for stakeholders consulted in each specific visit.

Principles”); the IFC Performance Standards on Environmental and Social Sustainability; and the Equator Principles (directly applicable to financial institutions).

The Panel does not audit BP’s compliance with Indonesian or local law. Rather, it reviews BP’s compliance with its social and environmental obligations under the AMDAL. This now includes obligations of the TEP AMDAL. The Panel was given complete access to all information it requested from BP and total independence in its inquiries and findings. The conclusions and recommendations in this report are those of TIAP alone. The Panel expects BP to issue responses to each of its recommendations and, as noted above, anticipates conducting open meetings with interested parties to discuss this report and BP’s responses.

II. HIGHLIGHTED ISSUES

BP is midway through the construction of TEP, and now has faced directly the difficult challenges inherent in operating Tangguh and simultaneously building Train 3, while at the same time seeking to fulfill its commitments to Indonesia and the Papuan people memorialized in the TEP AMDAL. The critical issues inherent during the construction process include the paramount concerns of safety and security, as well as protection of the environment; and the long continuing issues regarding Papuans, including social and community development, local government capacity and revenue management, relations with the community, Papuan workforce development, health and education in the region, grid-based electricity, north shore housing and adat based compensation.

In many respects, BP has risen to and met these challenges. Its reputation and good will among national, regional and local leaders has perhaps never been more positive. National leaders see Tangguh as a major strategic asset and the model for Bintuni Bay development. Their primary concerns relate to production and government revenues from Tangguh, but leaders generally support BP’s expenditures for social programs and Papuan workforce development, from which they see rising living standards and opportunities for local Papuans.

Regional leaders, who are more familiar with specific programs, also are generally pleased with the results of BP’s development programs; believe that Bintuni Bay has avoided the civil disturbances that occurred elsewhere; and support requiring other companies entering the region to implement similar plans and programs. The Bupati, who is finishing his first term this year, is pleased with the progress he has witnessed since 2015, despite serious delays and limitations on program delivery, which he does not attribute to BP. Even local north shore village leaders, who voiced legitimate complaints, generally have a positive view of Tangguh’s impacts to their communities.

BP’s safety record during construction thus far has been excellent, both in operations and at TEP.⁸ TIAP witnessed BP’s culture of “safety first” in every aspect of Tangguh operations

⁸ See Appendix C for more detailed information on Tangguh health and safety .

and training; and this value has, at least thus far, been transmitted to and applied by the CSTS construction consortium.

Security and human rights at site during construction, when more than 15,000 workers have been present at one time and during which 25,000-30,000 workers will have worked and lived, has been excellent. This was certainly among TIAP's greatest concerns as construction began. But despite significant changes to the ICBS program, including a new police presence at Tangguh, there have been few incidents, virtually no violence or significant disruptions, no cyber breaches or terrorist threats, and importantly, no occurrences or allegations of serious human rights violations. Even at the peak of construction activity, Tangguh security policy has maintained the trust of the community. (See p. 23-27 below.)

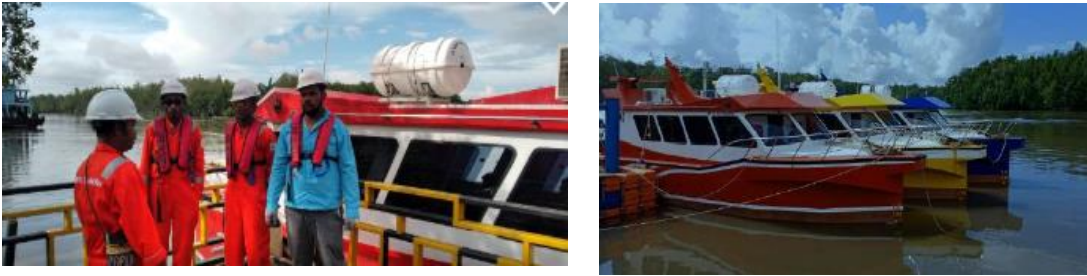


Picture 1. Joint Training program with police in Tangguh LNG site

Environmental performance also has been excellent. To date, there have been no air, water or waste disposal issues during construction. BP's overall environmental performance has achieved the coveted Green status under the Ministry of Environment's project rating system. The Lenders Panel, which conducts a detailed review of environmental compliance, found no issues of non-compliance in its 2019 review. And BP is researching and testing mechanisms to reduce, capture or reinject carbon in its future gas production operations, which could be utilized at Tangguh.

Social and community development programs, with several significant exceptions, generally have produced measurable benefits and have the support of the community. Tangguh's diversified economic development programs have contributed to the improved economic conditions of the local population, including the local indigenous people ("IPs"). These include establishing local fruit and vegetable, and fish cooperatives that provide substantial portions of Tangguh's catering needs for operations and for TEP

construction; funding and supporting new businesses owned and operated by IPs that manufacture and sell garments, and that repair air conditioning equipment; and this year supporting a new locally run water taxi in Bintuni Bay. (See pp. 41-42 below.)



Picture 2. Water taxi business run by Subitu enterprises

These enterprises, already functioning, have the promise of even greater success as the region rapidly grows and industrializes with additional oil operations from Genting Oil and likely future petrochemical/fertilizer production, which is a strategic policy initiative of the GOI.



Picture 3. Genting oil exploration activities in Simuri District, Teluk Bintuni Regency

BP's long but sometimes uneven support for local and regional capacity development has contributed to progress in the promulgation of the long-delayed regional Perdasus DBH, the regulation that finally establishes a formula for the distribution of the increased oil and gas revenues provided to Papua under Special Autonomy. This will govern the allocation and accountability of a large portion of the very significant revenues generated for the region from Tangguh. In addition to allocating funds for health and education, the Perdasus DBH for the first time provides for recognition and funding of adat programs, run by local cultural leaders, for both immediate and long-term needs. Implementation

in Bintuni Bay cannot take place until local regulations (“Perdas”) are developed and promulgated related to allocations among tribes, usage, accountability and transparency. BP’s technical and legal support for developing these Perdas remains its most immediate priority for capacity support. (See pp. 30-31 below.)



Picture 4. Workshop on oil and gas special regulation with three producer regencies i.e. Teluk Bintuni, Raja Ampat and Sorong.

Progress on Papuan workforce development, which has long been one of BP’s greatest challenges, is perhaps its greatest success since TIAP’s last visit. The Papuan apprentice program, begun in 2016 to educate and train talented young Papuans for skilled jobs at Tangguh, has produced its first batch of graduates who have taken their places as skilled entry level technicians. The second and third batches are being schooled in English and trained in technical specialties. All who graduate are guaranteed jobs at Tangguh. TIAP met both with the graduates and current students, and were impressed with their accomplishments, skills and eagerness to succeed at Tangguh.

After visiting the campus, the Bupati was so impressed that he established a training center in Bintuni, run by the same contractor, to train Bintunians in less sophisticated technical skills needed for construction and maintenance, such as welding, scaffolding and pipefitting. This three-month program has already produced four batches of about 100 graduates who have taken jobs with CSTS and other construction projects. This training center has the potential to provide many local young men with useful vocations as Bintuni Bay industrializes.⁹

These entry level training programs will go a long way toward allowing BP to meet its AMDAL requirement that Tangguh be run with 85% Papuans by 2019. But significant obstacles remain relating to the advancement of Papuans workers to managerial and supervisory roles, also required by the AMDAL. BP is addressing this through its Tangguh Emerging Leadership Program, which must be continued and should be expanded.

⁹ See, e.g., Papuakini.co 100 young Papuans enrolled as new students at P2TIM Teluk Bintuni, March 2, 2020.

While the foregoing accounts for considerable benefits to Papuans, two critical programs have stubbornly resisted significant progress: electricity and North shore housing. Both are essential to address the disparity in benefits flowing to North vs. South shore communities; both have been delayed for years through numerous technical and institutional obstacles; both are requirements of the TEP AMDAL; but both are beyond BP's sole capacity to resolve.

Electricity is fundamental to economic and educational development. Despite BP's construction of an 8MW substation at Tangguh in 2012, and the cable that PLN laid across Bintuni Bay in 2015, the extension of grid-based electricity to villages on the North shore and to Babo and several villages on the South shore has not taken place. This is primarily a failure of government, principally PLN, and most in the region seem to recognize that, but it reflects badly on Tangguh and BP's commitments. Therefore, if PLN does not act, BP should attempt to ameliorate the failure as best as possible. Temporary or alternative electricity generation should be provided to every village that has no PLN service by the completion of TEP.

The North shore housing program has also suffered through a series of delays, modifications, political disputes and supply constraints. The program has been an aspiration of North shore villagers since the construction of the resettled South shore villages in 2005, and became a commitment in the TEP AMDAL in 2015. Thus far, only 21 of 456 authorized houses have been built.

As with electricity, implementation is not a failure solely of BP, which has provided funding and supported design and construction management. But the program was delayed multiple times because of design disputes, government disagreements, and contractor ineffectiveness. One significant practical constraint is obtaining Papuan timber that is certified as lawful. Recently, the program was restructured by the kabupaten government to allow greater BP supervision and multi-year contracting, with a new goal of completion by 2024. Although BP did not cause the delays, the failure reflects on the commitments expected of Tangguh. Accordingly, BP should provide each of the three affected districts with agreed upon compensation, such as funding for additional infrastructure improvements in each village, as was done earlier with Community Action Plans ("CAPs").

III. RECCOMENDATIONS

A. *Security and Human Rights*

- 1. Now that ICBS has been modified and a police presence has been established at Tangguh (the "QRF"), BP should work closely with the police to ensure that all personnel in the QRF have received human rights training by a certified expert in the protection of human rights. It should also encourage the Kapolda to assign only Papuans to the QRF.**
- 2. BP should ensure that all monitoring of and reporting by the QRF that is required by the SOP's is fully implemented and that any issues that arise from this reporting are addressed promptly with the police or SKKMigas.**

3. Although an annual joint training exercise is no longer a binding commitment of public security forces, BP should continue to schedule such training exercises for its security personnel and actively seek the participation of the police and the local TNI.
4. All Tangguh private security personnel should continue to receive regular human rights training from qualified experts, and BP should actively encourage the police and TNI to provide similar training to any personnel who may respond to any incident at Tangguh.
5. As transportation and commerce increases in the area around Tangguh, BP should continue to increase its use of drones, cameras and other technology to monitor and secure Tangguh's perimeter.
6. BP should exercise caution in its participation and support for the FKPM, to ensure that these forums do not lead to any appearance of BP assisting the police in any intelligence gathering or establishing a more direct presence in nearby villages.
7. Thus far, the coordination with and supervision of the CSTS security force has gone well, both in terms of preventing any TEP workers from bringing weapons or other contraband onsite and in managing the few incidents that have occurred. This success must not lead to complacency. The training, vigilance and processes that BP has exercised to date should be continued just as rigorously as CSTS winds down the number of workers at TEP.
8. BP should work with the Bupati, SKKMigas and regional officials to impose comparable AMDAL obligations on new industrial developers in Bintuni Bay, to adopt and fulfill security arrangements, workforce requirements and social programs as those implemented by BP.
9. BP's must continue to invest in state-of-the-art cyber security technology and procedures for Tangguh and regularly review its cyber practices. All employees with any possible access to Tangguh's operating systems should be provided cyber security training on a regular basis.

B. Revenue Management

1. Following the promulgation of the Perdasus DBH by Papua Barat, BP should provide targeted support to the Bupati and the Bintuni Bay legislature in their effort to draft and implement the local Perdas that will allocate and regulate the distribution of Tangguh's revenues in the kabupaten.

C. Papuan Workforce Development

1. The Papuan Apprentice Program has been a great success. It is now planned to have three batches of up to 40 students, filling up to 120 entry-level technician positions at Tangguh. Because of the importance of this program, BP should annually reevaluate its needs for future technicians and, if there likely will be opportunities for entry level technicians in three years, it should continue the program with the appropriate number of Papuan students who can fill those positions.

2. If BP is to meet its AMDAL commitments for 2029, it is equally important that BP provide greater opportunities to current Papuan employees to advance to more senior managerial positions. Toward that goal, senior management should meet regularly with representatives of the Papuan Employee Steering Committee when visiting Tangguh; they should encourage mentors to provide guidance and support to Papuan mentees, and, wherever possible, encourage non-Papuan middle managers to support and promote qualified Papuans on their teams.
3. BP has established The Tangguh Emerging Leadership Development program and the Challenger program to provide opportunities for promising Papuan college graduates. These programs make it possible for Papuans to rise to more senior management level assignments. In order to achieve its goal that Tangguh be run primarily by Papuans by 2029, BP should select at least two Papuan Challengers each year, including at least one female, to develop a pool of such highly trained managers.
4. To meet its requirements for skilled and managerial Papuans by 2029, BP should increase its external recruitment of qualified, experienced Papuans to fill more senior positions. BP should increase recruiting at Papuan universities and other job marketplaces in Papua. It should also make known all job opportunities to its Papuan employees, to enlist them as recruiters and increase the network of potential applicants.
5. CSTS has met its EPC contractual requirements for hiring of Papuan unskilled, semi-skilled and skilled workers, in part through its effective “upskilling” program. But it has failed to meet its obligations to employ Papuans for managerial/supervisory positions. This should be addressed immediately. BP should work with CSTS to implement additional recruitment and training measures promptly, because little time remains to meet these important obligations.

D. North Shore Housing

1. The AMDAL requirement to construct new houses in three North Shore districts will not be met by completion of TEP. This program is critical not only for village development, but also to address the tensions between North and South shore communities that have existed for 15 years. BP should assume a greater supervisory role in the project, place a senior manager in charge of its completion, and secure timber from wherever available to accelerate construction.
2. Further, if new housing is not delivered on time, compensation should be provided for the affected villages. This could take any agreed upon and authorized form. One mechanism, which benefits all in the village, is to finance infrastructure improvements selected by local leaders, similar to the original Community Action Plans (“CAPs”).

E. Electrification

1. Grid-based electricity, required by the TEP AMDAL, has not been delivered to North shore villages or South shore communities, including Babo, which is the location of BP's base camp and airstrip. BP has met its commitment to provide power generation, but PLN has not constructed or activated its grid. BP should press PLN to provide this infrastructure. But until PLN commits to an electrification schedule, BP should seek authority to provide 24/7 diesel power to Babo, and either establish additional diesel generation, or provide solar lamps or other solar based electrical power to all non-electrified villages.

F. Education

1. BP should continue its effective support for elementary education in the Bintuni Bay region through its partners to provide teachers, materials and computers to students in all of the villages covered by its AMDAL commitments.
2. The AMDAL commits BP to support at least one "flagship" high school in the region, where the best students can learn and board in preparation for a higher education. This commitment has been long delayed, most recently because the jurisdiction for high schools has been transferred from the kabupaten to the province. BP should fulfill its commitment, working with the Governor to establish flagship high schools in both the North and South shore of Bintuni Bay.
3. BP should continue to provide scholarships through SKKMigas to deserving Papuan students for university educations.

G. Health

1. Health care in the region has improved dramatically as a result of BP's initiatives and its support for the kabupaten health programs. But health care still significantly lags national standards. The hospital in Bintuni is a key element in future progress for better outcomes. BP should continue to work with the Bupati to improve facilities and capabilities of the hospital to enable it to become a referral hospital.

H. Economic Development

1. The produce and fish cooperatives in Bintuni Bay nurtured by BP have generally been successful. BP is meeting its purchase obligations. But CSTS has not fulfilled all of its procurement commitments, in part because of logistics and scheduling deficiencies. BP should work with CSTS and any deficient subcontractors to resolve any issues that may prevent it from meeting its obligations. If the required amounts of purchases are not made, BP should enforce contract penalties and provide compensation to village coops.

2. The SUBITU businesses that have been fostered by BP are promising, and require BP's continued support, at least until other companies begin operations in Bintuni Bay and provide additional markets. BP should support the formation of additional locally owned businesses, such as laundry, scaffolding and auto maintenance.
3. The new water taxi business supported by BP is a critical element in developing the economy of Bintuni Bay. BP should work with the Bupati to ensure its continued operation, and seek to interest other companies entering the region to support or subsidize this business.

I. Environment, Maintenance, and Appearance

1. Vigilant BP oversight and coordination with CSTS on environmental protection should continue until TEP is completed. Good results until now cannot lead to complacency regarding the remainder of the project.
2. BP should continue to take whatever action is possible to further reduce the flaring of gas, particularly on hot days when the flare forms a black cloud.
3. When it is completed BP, should review the results of its periodic Bintuni Bay fisheries survey and take action to address any degradations found by the survey. BP also should continue a biennial fisheries survey through 2035.
4. BP should assign a senior manager to oversee its contractors' facility maintenance performance, and require prompt repair or cleanup of any visible signs of disrepair.

J. Coordination with other Local Developers

1. BP, in coordination with the Bupati and the Governor, should exchange its best practices with other large enterprises entering Bintuni Bay, including Genting Oil and fertilizer/petrochemical companies, to encourage them to adopt policies supportive of local needs, specifically: a) hiring local Papuans released by BP or CSTS at the end of TEP construction, particularly security guards; b) purchasing produce, fish and other food products from local coops; and c) adopting the principles of ICBS and providing human rights training to all private security guards.
2. Working with the Bupati, BP should provide active out-placement support to encourage new enterprises in the region to hire local workers who no longer have jobs with BP operations or TEP construction.

K. Gas to Power

1. Providing Tangguh LNG to power Papua's electrical grid has long been a goal and is now a commitment. BP is constructing all necessary physical facilities to accommodate mini-tankers at its new jetty. But bureaucratic delays and inaction by PLN have pushed back implementation well beyond TEP completion. BP can still play a constructive role, and should

engage with the Governor, PLN and other responsible parties to expedite activation of the program, particularly in Papua Barat.

IV. POLITICAL UPDATE

The principal political event since TIAP's previous visit was the reelection of President Joko Widodo ("Jokowi") to a second, and final, five-year term. He was reelected by a margin of more than 10 percent against the same opponent, Prabowo Subianto, a retired General and leader of the nationalist party Gerindra. Although the margin of victory was clear, Prabowo supporters initially took to the streets and the courts in an attempt to question or overturn Jokowi's victory. The popular opposition, fueled in part by Islamist sectarians, was shut down promptly by the Jokowi government, when the Coordinating Minister for Security, retired General Wiranto, "throttled" or shut down the internet in order to impede social media organizing of opposition protests.¹⁰

Jokowi had enjoyed an enviable approval rating in his first term but his reelection was not at all assured. In 2017, the defeat of the popular Governor of Jakarta, Basuki Tjahaja Purnama ("Ahok"), who was Jokowi's hand-picked deputy, and his conviction and two-year imprisonment for blasphemy, raised serious questions about the power of the Islamist movement and the effects of false social media campaigns on presidential politics.¹¹ In part to counter allegations of being insufficiently Muslim, Jokowi named an elderly clerical leader, Ma'ruf Amin, who was the Chairman of one of the nation's largest Muslim organizations, Muslim Ulama Council ("MUI"), as his running mate. Under his leadership, MU supported strict laws against pornography, and calling for the criminalization of LGBT relationships.¹²

Whether or not these social media campaigns influenced the vote, they were not sufficient to affect the outcome. Not only did Jokowi win nationally, his party, PDI-P, still firmly controlled by former President Megawati Sukarnoputri, won the most seats in parliament, the DPR, and with other coalition parties, provided Jokowi with a solid majority.

Shortly thereafter, Jokowi invited Prabowo to join his government.¹³ Gerindra accepted the offer and Prabowo was named Defense Minister. This expanded the ruling coalition in the DPR to approximately 75% and marginalized the opposition parties. While very broad, this diverse coalition requires Jokowi to serve many masters. His new cabinet of

¹⁰ See, e.g., [Violence Erupts in Indonesia's Capital in Wake of Presidential Election Results](#), New York Times, May 22, 2019.

¹¹ See TIAP December 2017 Report at p.14-15.

¹² See, e.g., [Why has Indonesia President Joko Widodo Picked a Hard-Line Cleric as his Running Mate?](#) ABC News, August 17, 2018.

¹³ See, e.g., [Jokowi will prioritize Gerindra in his reconciliation cabinet](#), Koran Tempo, June 25, 2019.

34 Ministers, is equally divided between experts and coalition political leaders. And the Speaker of the DPR is Puan Maharani, Megawati's daughter.

Jokowi's initial second term policy initiatives, as well as some of his positions during his first term, calls into question his earlier credentials as a non-elite anti-corruption reformer, which led to his meteoric rise from Governor of Jakarta to President in 2014. In the closing days of its session, just weeks before Jokowi's inauguration, the DPR passed a law to severely constrain the activities of the KPK, the Anti-Corruption Commission, which had investigated, and led to convictions of many elected political leaders.¹⁴ Despite significant street protests and indications that Jokowi would issue a decree to nullify the law, he allowed it to take effect. In addition, the DPR passed but then deferred modifications to the criminal code that would prohibit all non-marital sex, also leading to significant protests.¹⁵ The enactment of this law has been deferred, but the religious forces pushing for these changes have not diminished.

Jokowi's initial domestic policy initiatives are focused on continuing to expand infrastructure, particularly transportation, and on enacting two "omnibus" laws to encourage business expansion, job creation, reduce bureaucracy, and expand export industries and direct foreign investment. These laws would change labor laws, education laws, tax policies and restrictions on foreign investment. Jokowi, a businessman by background, has long preached the need for Indonesia to become more competitive and more attractive to foreign investment, but it remains the worst country in Southeast Asia in attracting Foreign Direct Investment. It is not clear when or in what form these initiatives will be enacted, but they are already attracting many amendments that may distort its objectives and protect vested interests.

Although Jokowi has never made foreign policy a priority, as did his predecessor SBY, he faced a serious challenge shortly into his second term. Chinese fishing vessels, in multiple locations, accompanied by Chinese coast guard vessels, were seen working in an area known as the Natuna Sea, within Indonesia's exclusive economic zone, that China claims to be within the "nine dash line." Jokowi responded forcefully by sending Indonesian fishing and Navy vessels to the area and then appearing personally to express Indonesia's sovereignty over the area.¹⁶ While this is principally a foreign policy challenge, because of Indonesia's large Chinese minority and the history of attacks, there is the potential that anti-Chinese sentiment could fuel domestic tensions or violence.

¹⁴ See, e.g., [House Approves New KPK Leadership](#), Jakarta Globe, September 16, 2019.

¹⁵ See, e.g., [Thousands in Indonesia Protest Bills to Limit Rights and Ban Extramarital Sex](#), New York Times, September 30, 2019. President Joko Widodo faces pressure to revoke a law curbing anti-graft efforts and to kill measures that would forbid abortion and sex outside marriage.

¹⁶ See, e.g., [The Next Front: China and Indonesia in the South China Sea](#), FPRI, Jan 27, 2020.

Jokowi's energy priorities and policies are a thicket of conflicting political interests. They are too complicated for TIAP to explore in detail in this report. However, several themes emerge: First, expansion of State-Owned Enterprises ("SOE's"), particularly Pertamina. The career of the new Energy Minister, Arifin Tasrif, has been in SOE's; he is a political appointee and has no private sector experience. Many forces seek to expand Pertamina into a top-level state-owned oil company, such as Petronas or Sinopec. This is in direct conflict with the effort to attract private oil and gas investment. Jokowi has placed Ahok (the former Governor of Jakarta) in the role of Commissioner of Pertamina, which suggests an attempt to counter the corruption and inefficiency at Pertamina. But these are deeply, imbedded problems, and leaders seem not to understand why production at existing fields continues to decline as Pertamina takes on more previously privately run projects.

Second, expansion of natural gas use, particularly in Java. Jokowi clearly sees natural gas as a part of the solution to declining oil production and increasing oil imports. (Another part is increased use of renewables, particularly biofuels.) However, despite these policy objectives, almost all of Indonesia's new powerplants will be coal fired, which is unlikely to change in light of the enormous power of coal industry oligarchs. Further, mid-stream natural gas infrastructure is badly underdeveloped and significant domestic additions to supply are years off. In addition, there is significant political pressure coming mainly from consumer interests, such as the Chamber of Commerce ("Kadin"), to keep gas prices low, below market levels. Unless these efforts lead to a modification of existing contracts for Tangguh LNG (which was not mentioned to TIAP), these policies should not directly affect Tangguh generally or Train 3 in particular.

A. Papua Barat Update

Until late 2017, Jokowi's overall Papua policy continued its first term focus on infrastructure and economic development, together with at least rhetorical attention to the human rights violations and other abuses of the past. Jokowi made many visits to Papua to highlight his policies of inclusion and development, but he has not followed through on earlier promises regarding pardons and release of political prisoners, or on eliminating the requirement that all foreigners register and receive government approval (the "SKJ") before travel to Papua.

During much of the period since TIAP's last report, the Jokowi administration's Papua policy was consumed by the termination of Freeport's contract of work and the effort to transfer 51% of the ownership of Freeport to the GOI, Papua province and Mimika regency. Until this nationalization of the country's largest taxpayer was completed in

2018, this distraction, which was broadly covered in the Indonesia media, overshadowed all other aspects of Jokowi's Papua policy.¹⁷

In December 2017, the President issued another decree broadening development goals in Papua.¹⁸ Presidential Instruction Number 9 of 2017 on the Acceleration of Welfare Development in Papua Province and West Papua is focused on the health and education sectors, and includes local economic development, basic infrastructure, digital infrastructure, and connectivity. The new instruction primarily adds education and health to the development priorities, and also seeks to shape development based on respect for culture, custom and indigenous Papuan interests.

The National Development Agency ("BAPENNAS") explained that the new instruction will focus on education in the government's development plans for Papua and West Papua, enumerating eight specific education goals: distributing more Indonesia Smart Cards (KIP), improving the quality of education in high schools, preparing assistance for teachers, increasing the number of teachers, providing e-learning for teachers, including local content in education, eradicating illiteracy and establishing boarding schools.

The relative calm in Papua that had persisted for Jokowi's presidency was shattered on December 2, 2018, when construction workers building the Trans-Papua highway through the Central Highlands were attacked, captured, and massacred by separatist rebels. More than 20 workers were killed, and many other civilians were incarcerated and killed in the investigation and response by the police and TNI that followed.¹⁹ Despite threats of further attacks, Jokowi vowed to finish construction of the highway, with military engineers taking over construction.²⁰

Although these specific attacks were limited to the Central Highlands, long the locus of violent separatist activity, the long simmering tensions between Papuans generally and their Indonesian brothers erupted violently in August-September 2019. The violence was triggered by incidents involving Papuan college students in Surabaya, who did not salute the flag of Indonesia on National Day, and were subjected to racist taunts by other students and possibly by members of the TNI. Despite apologies by the Governor of East Java and others, violent demonstrations broke out throughout Papua and Papua Barat,

¹⁷ According to the agreement, Freeport and Anglo-Australian peer Rio Tinto will sell their shares and interests in the local joint venture Freeport Indonesia, which runs the Grasberg mine, to state-owned resources company Indonesia Asahan Aluminum, or Inalum See, e.g., [Indonesia mine nationalization shakes top copper producer](#), Asia Review, July 18, 2018.

¹⁸ This follows multiple previous initiatives under Jokowi and SBY, including the New Deal for Papua in 2008 and the UP4B Task Force to accelerate infrastructure in 2012.

¹⁹ See, e.g., [Indonesia attack: Gunmen kill 24 construction workers in Papua](#). *BBC News*. 5 December 2018.

²⁰ See, e.g., [Papuan fighters vow more attacks on Indonesian highway](#). AP News. March 28, 2019.

including Manokwari, Sorong and Fakfak, the three cities nearest to Tangguh. By the end of August, violent demonstrations, arson and vandalism had spread to most of Papua's cities; as well as other cities with groups of Papuan students.

Some of the ensuing violence may have been instigated or encouraged by the West Papua National Committee ("KNPB"), the separatist group based in Oxford, U.K., and lead by Papuan exile Benny Wenda. The group had earlier planned protests to coincide with the U.N. Human Rights Council meeting on September 9 in Geneva, to call into question Indonesia's sovereignty over Papua. Whatever the specific causes, violence in Papua worsened in September, with more than 30 killed, mostly migrants, in Wamena, and others, mainly Papuan students, killed and injured in Jayapura. The GOI responded by shutting down the Internet for several days, to reduce the ability of activists to communicate and organize, and, by arresting activists.²¹

Significantly, the violent demonstrations that spread throughout Papua and Papua Barat did not take place in Bintuni, Babo or any of the smaller communities in the Bintuni Bay kabupaten. There was a peaceful demonstration in Bintuni, but TIAP is not aware of any other disturbances or increased tensions in Bintuni Bay resulting from these incidents.

The violence of last fall has subsided, for now, and its long-standing political, ethnic and religious causes are too complicated to be discussed in detail in the report. However, the response of the Jokowi administration thus far has not addressed the racist underlying causes of the violence, but instead has called for continued economic and social development, with several possible modifications.

First, the Home Affairs Minister, Tito Karnavian, formerly the Papua Kapolda and the national Chief of Police, has tentatively approved the further division of Papua into a third province, South Papua, and the creation of several new kabupatens. This is not likely to take place without the concurrence of the Governor of Papua, Lukas Enembe, who primarily represents the interests of Papuan highlanders, rather than the coastal Papuans.

Second, Karnavian also has suggested that local voting in certain kabupatens in the Central Highlands no longer be held by direct vote, but by appointment or indirect election. This possible step back from direct elections results from the use of tokens, or nokens, by tribal chiefs to cast ballots for an entire village. For example, in 2019 Jokowi won 100% of the vote in five kabupatens in the Central Highlands. In addition, it appears that census statistics have been wildly exaggerated in these kabupatens to increase their representation in the Papua DPRD and to increase allocations of funds to these districts.²²

²¹ See, e.g., [21 killed amid fresh unrest in Papua](#). The Jakarta Post (p.1), September 24, 2019.

²² See, e.g., [Numbers Matter: The 2020 Census and Conflict in Papua](#). IPAC Report no.60, October 29, 2019.

While these are serious changes being contemplated in Papua, TIAP is not aware of any discussions regarding such changes in Papua Barat.

Third, in 2021, the principal fund under Special Autonomy, the OTSUS, will expire after 20 years. The remaining provisions of Special Autonomy, including requirements that the Governors and Bupatis be indigenous Papuans; the continuation of the Papuan Peoples Council (“MRP”), and the sharing of natural resource revenues with local jurisdictions with a much more generous formula than other provinces, will continue without additional legislation. The OTSUS fund, which allocates 2% of the national total to Papua, has poured billions of additional Rupiah into Papua. OTSUS has not been without controversy; many have charged since its inception that the funding is corruptly channeled to the elites, and does not benefit the people. Nonetheless, there seems little interest in reforming the OTSUS, and the GOI is planning to submit legislation to extend it, and possibly to increase it. If legislation is not enacted in 2020, TIAP was informed that the Jokowi administration can and will extend the fund unilaterally.

Both the Governor and the Bupati are running for reelection this year. Both are nearing the end of their first terms. Both are pleased with BP/Tangguh community relations and development programs. Both are highlighting their roles in several of Tangguh’s social and community development programs and other accomplishments related to Tangguh. The Governor (and the Vice-Bupati) participated in a first ribbon cutting celebration of the first houses to be completed in the North Shore housing program (see picture 5 and pp.37-38 below); the Governor proudly celebrates the enactment of the DBH Perdasus; the Bupati considers the technical training center in Bintuni, modeled after BP’s apprentice training program (see pp.32-33 below), one of his most significant accomplishments; and the Bupati wants to build additional schools using the BP “model school” in Tanah Merah Baru as the template (see pp. 43-44 below).



Picture 5. Hand-over ceremony the completed renovated houses to community in North Shore Area



Picture 6. Tangguh Technician program for youth Papuan

Economically, although Papua Barat remains one of the poorest provinces in Indonesia, the Bintuni Bay area continues to grow and, with several glaring exceptions, such as North Shore housing and electricity (see pp. 37-40 below), the economic and living conditions of its people continue to improve. By any measure, health parameters and education outcomes are improving and indigenous people participation in commerce is growing. Shockingly, the National Social and Economy Survey by the Central Statistics Agency ranked Teluk Bintuni as the second highest out of the 20 most prosperous regencies in Indonesia. By these measures, only Central Jakarta, the epicenter of economic activity and government administration of all Indonesia, ranked higher in per capita GDP.²³

Picture 7. Installed power infrastructure that supplies up to 4MW of electricity to Teluk Bintuni and Teluk Bintuni power grid plan from PLN

²³ See, e.g., [Don't Envy, This Is The Most Prosperous District In Indonesia](#). Solopos, January 21, 2018. According to this report, the most prosperous regencies ranking is made based on the data published in 2018. The prosperity level of municipality or regency is calculated based on income per capita indicator, which in turn is calculated based on the gross regional domestic product (GRDP) divided by the total population of the area.

V. SECURITY AND HUMAN RIGHTS

Effective security together with the protection of human rights has been and remains one of the foremost challenges for Tangguh. Thus far, BP has met these challenges by protecting Tangguh from any significant physical or cyber security breach without causing any incident or even substantiated allegation of human rights violations by public or private security personnel.

The formation and implementation of Tangguh's Integrated Community Based Security ("ICBS") has long been a focus of TIAP. Its fundamental principle of a three-tier layered response to any breach has worked effectively for almost 15 years. Under ICBS, Tangguh's Papuan private security personnel are responsible for all but the most significant breaches, before calling in the Papua police to respond to a major incident that they cannot control, and only calling on the TNI if the police response is inadequate. Moreover, ICBS has until now required that all security personnel who may be called in to support Tangguh security are trained in the requirements of the Voluntary Principles of Security and Human Rights ("VPSHR") and that all of these units of security conduct an annual joint training exercise to familiarize commanders with possible incidents and appropriate responses.²⁵

From 2014-2018, the relationship between Tangguh security and the Papua police was governed by an agreement, the JUKLAP/PAMBERS, which implemented ICBS under a national umbrella agreement between the Police and SKKMigas. TIAP has expressed concern about potential amendments to this agreement that could increase police or TNI presence at or near Tangguh. These concerns increased following first, the formation of a new separate Kapolda (Police Regional Command) in Papua Barat in 2014; second, the formation of a new Pangdam (TNI Regional Command) in Papua Barat in 2017;²⁶ third, the upgrading of the local Bintuni TNI command to a Kodim; and fourth, the formation of a new Navy Armada Command at Sorong in 2018. The concerns related to increased presence of public security forces, together with increased terrorist attacks in other parts of Indonesia and the impending huge influx of workers that were soon to be on site for TEP construction, led TIAP to recommend multiple improvements and upgrades to its private security and its coordination with CSTS security.²⁷ Many of these recommendations have been implemented.

However, additional changes also were made that modify the basic concept of ICBS and the terms of the JUKLAP/PAMBERS. In March 2018, that agreement was replaced by a new Cooperation Contract ("KKS") between the Kapolda and SKKMigas. Unlike the earlier

²⁵ The formation, implementation and evolution of ICBS is detailed in many previous TIAP reports, including threats to its integrity from the Police or TNI who sought a more direct role in Tangguh security. See TIAP Report March 2009 at pp.12-17; TIAP Report December 2015 at pp.25-29.

²⁶ See TIAP Report December 2015 at p. 26.

²⁷ See TIAP Report December 2017 at p 22-25.

JUKLAPs, BP is not a direct party to this agreement, although it is a party to the implementing Standard Operating Procedures (“SOPs”).

Significantly, the KKS establishes a small police unit, called the Quick Response Force (“QRF”) that is assigned to the LNG site on an indefinite basis. This is the first time that any public security force has been stationed at Tangguh.²⁸ There are strong human rights protections included in the SOPs, which require that every officer assigned to the QRF be trained in the Voluntary Principles and other elements of human rights protection, that human rights be protected in any emergency situation, and that responses are in accord with the principles for the gradual use of force.²⁹ The KKS also provides detailed requirements for payment of all police services by SKKMigas, which payments are ultimately charged back to Tangguh’s owners.³⁰ Thus, although Tangguh is paying for these security services, all fees and expenses paid are fully accounted for, strictly limited and transparent.

The SOPs detail the responsibility for management of security risks. They classify the security situation as either: a) a Safe Condition that can be addressed by Tangguh LNG Security, which maintains the responsibility for handling security and shall coordinate with the QRF; b) a Vulnerable Condition that can still be addressed by Tangguh LNG Security, and the responsibility for handling security remains on Tangguh LNG, which must coordinate with QRF; c) a Highly Vulnerable Condition that has a potential to stop the construction, operation and / or other activities related to the operation of Tangguh, such as anarchy, detention, hostage taking, perpetrated by community members, or workers or contractors or other suspicious persons, in which case QRF can take the necessary security measures; or d) if there is an escalation of the situation, Tangguh LNG Security may request assistance to QRF, and if QRF cannot manage the situation then Head of QRF may request assistance from the Papua Barat Regional Police; and if handling the increasing security situation requires greater force, the Police may request security assistance from the Indonesian National Army, although the control of situation remains with the Indonesian National Police in accordance with the laws.³¹

The use of these multiple levels of response for different levels of threats are similar to the criteria used in previous agreements implementing ICBS. However, unlike ICBS, the determination of the vulnerability of the facility to a particular threat is not delegated to

²⁸ The previous Kapolda had suggested to TIAP that a small unit should be stationed at Tangguh because of the long response time that would be required for any police response to an emergency on site, a thought that also had been expressed by previous Kapoldas and Pangdams. See TIAP Report December 2017 at p. 18.

²⁹ See Standard Operating Procedures about the National Vital Object Security Task Force (SATGAS PAMOBVIT) in Tangguh LNG Working Area, July 6, 2018; and WORK GUIDELINES: The Use of Force, Vital Object Safeguards Task Force.

³⁰ See KKS, Sec. 8.1 Payment and Payment Method.

³¹ Id. Sec. 1.

BP security, but in vulnerable situations is reserved to the Police and SKKMigas. Thus, for the first time, it is possible that the police could respond to a security incident that Tangguh security management believes does not require a police response.

To assure strict compliance with the requirements of the SOPs, there are extensive provisions for reporting, monitoring and evaluating. QRF must keep a daily log, file a weekly report to the Regional Police and to Tangguh security, and submit a monthly report to SKKMigas and a special report for any vulnerable situation. In addition, evaluations of performance are to be conducted every quarter by Tangguh security and the QRF and biannually by Papua Barat police and SKKMigas. SKKMigas must renew the entire agreement annually.³²

The QRF has been functioning on site since mid-2018, with about 10 officers, mostly Papuans.³³ These police are in uniform, they participate in a daily joint mobile patrol with the Security Response Team (SRT) in the outer fence area, and they train / drill with the BP response team on a weekly basis. Otherwise, they do not participate in regular Tangguh security activities or patrol the local villages. To date, there have been no recorded adverse incidents involving the QRF involving Tangguh or TEP workers; many at Tangguh are not even aware of the QRF presence.

Although the QRF presence is limited and circumscribed, there remains pressure for the police and possibly the TNI, both Army and Navy, to increase their presence in the area further, in part because of the continuing industrialization and growth of Bintuni Bay. This has already begun with the establishment of a new TNI Kodim and an Air Force presence. Thus far, the QRF has worked, and there is no reason to expect that it cannot continue to function without adverse incident if it remains at Tangguh permanently. However, it is critical that BP not sacrifice the fundamental premises of ICBS - including a three-tiered response to any security threat or incident and regular human rights training of all security forces, which has earned the trust of the local community - to any asserted additional needs of public security forces to increase their presence or roles in Tangguh security.

Maintaining security without incident during construction of TEP was and remains the most significant immediate challenge. There were more than 14,000 TEP workers on site at the time of TIAP's visit. These workers are vetted by CSTS, and their onsite security is managed by CSTS, using Guardatama, the same private security contractor used by BP. CSTS prepared a comprehensive security plan, pursuant to BP's requirements, that details and explains its security policy. It was critical that CSTS implement this plan as BP would

³² See Work Guidelines Reporting and Evaluation, Vital Object Safeguards Task Force; KKS, Art 12.

³³ The QRF personnel are not required to be all Papuans, but the Kapolda has thus far stationed Papuans on site.

require, and that its security guards would be trained sufficiently to properly handle all possible situations.³⁴

Thus far, coordination and implementation have worked well. Through daily meetings and regular senior management consultation, there have been almost no significant breaches of security among the TEP workers. Through 2018 and 2019, there have been 51 instances of workplace violence or assault, and only two allegations of sexual abuse or harassment, which have been punished by dismissal of the offender. There have been no breaches involving bringing weapons, other than small knives, onto the site, and no incidents that required a police response.³⁵ Given the large number of CSTS workers and their close proximity to each other, this is a remarkable record. Clearly, CSTS thus far has taken its security contract obligations seriously and has implemented them scrupulously.

The most significant security incidents have occurred offsite, in nearby villages, and are usually related to personnel issues or worker pay, including CSTS recruitment for TEP. Several protests have included boat “detentions,” in which workers prevent a BP crew or supply boat from departing for Tangguh. Some have required assistance from the police to resolve. There have also been protests by some in local tribes claiming rights to adat compensation, most prominently at the Babo airstrip. All have been resolved peacefully. Thus far, the coordination with and supervision of the CSTS security force has gone well, both in terms of preventing any TEP workers from bringing weapons or other contraband onsite and in managing the few incidents that have occurred. This success must not lead to complacency. The training, vigilance and processes that BP has exercised to date should be continued just as rigorously as CSTS winds down the number of workers at TEP.

BP also has instituted another new program in its community engagement strategy: The Community Policing Socialization and the Police and Community Partnership Forums (“FKPM”). These are primarily presentations conducted in local villages, some with adults and others with students, and involve collaboration between BP and local police. They are designed to educate local people on issues relating to security and safety, including domestic violence, terrorism, the exclusion zone, TEP socialization, BOF construction, Tangguh’s non-land trespassing policy and preventing radicalism. These may all be laudable topics to educate Tangguh’s neighbors to potential dangers. They also facilitate the police in their collection of data and identifying problems to help carry out their general police functions (i.e., gather intelligence). The forums do not require the police to station any personnel in the villages. The presence of police or other public security in the local villages has never before been actively supported or encouraged by BP, other than the Joint Marine Patrol at Tanah Merah Baru to help manage the exclusion zone. If the separation of a police presence from the villages is to remain a guiding principle of ICBS, it is important that BP’s participation and support of the FKPM programs be limited to the

³⁴ See TIAP Report December 2017 at pp. 20-22.

³⁵ The most significant disruption arose during the national election, when ballots were not available for all Indonesian workers, and some protests arose. These were resolved without any violence.

coordination of these forums and that it not facilitate any greater police activity or presence in nearby villages.

As industrialization of Bintuni Bay continues, it is almost certain that the size of public security forces will increase, and that other companies operating in the area may not be parties to the VPSHR or may not value human rights and appropriate use of force as highly as BP. This will inevitably put increasing pressure on BP to accommodate the interests of security forces, as was necessary in the establishment of the QRF. Any pressures to increase security forces at the LNG site or in nearby villages should be resisted, particularly after the completion of TEP and the departure of the thousands of non-Papuan workers.

In addition, it is important to continue and regularly refresh the human rights training that are given to these security personnel from qualified experts. There were complaints from some NGO's that the training was often being given to police and soldiers by their commanders. Even if the commanders have been properly trained, this is not an adequate method and does not meet the requirements of ICBS. Periodic training by human rights experts, such as the ICRC or LP3MH, is critical if there is to be any assurance that all personnel have been properly trained.

Also, although the annual joint training exercise is no longer a contractual obligation of the police, it must continue, as it evolves to game new and more realistic threats. This is critical because the commanders and troops in the region are rotated regularly, and new personnel are not familiar with ICBS procedures and likely threats. Further, as new companies begin industrial operations in Bintuni Bay, they should be invited to participate in the joint training exercise, and encouraged by BP to adopt security procedures that mirror ICBS. At present, these measures have the support of local government and the Kapolda.³⁶

Cyber security remains a separate and critical component of Tangguh's overall security. BP globally is subjected to millions of cyber-attacks every day. BP has taken a serious and multi-layered approach to such threats at Tangguh, which is designed by BP's global group security team and is reviewed by them regularly. There is a firewall separating all of Tangguh's operational activities from the Internet, so that control room operations cannot be hacked from the outside. There is extensive employee training on cyber threats as well. TIAP continues to encourage BP to consider cyber threats as dangerously as it treats physical threats, and to provide Tangguh with the latest and best technology and training for countering any such attacks.

³⁶ TIAP was not able to meet with the Papua Barat Pangdam, who is a Papuan, or the local TNI Commander (who had recently died in an accident. However, TIAP had met previously with the Pangdam, who had suggested a need for greater police or TNI presence in the Bintuni Bay area.

The following are specific recommendations related to security and human rights:

- Now that ICBS has been modified and a police presence has been established at Tangguh (the “QRF”), BP should work closely with the police to ensure that all personnel in the QRF have received human rights training by a certified expert in the protection of human rights. It should also encourage the Kapolda to assign only Papuans to the QRF.
- BP should ensure that all monitoring of and reporting by the QRF that is required by the SOP’s is fully implemented and that any issues that arise from this reporting are addressed promptly with the police or SKKMigas.
- Although an annual joint training exercise is no longer a binding commitment of public security forces, BP should continue to schedule such training exercises for its security personnel and actively seek the participation of the police and the local TNI.
- All Tangguh private security personnel should continue to receive regular human rights training from qualified experts, and BP should actively encourage the police and TNI to provide similar training to any personnel who may respond to any incident at Tangguh.
- As transportation and commerce increases in the area around Tangguh, BP should continue to increase its use of drones, cameras and other technology to monitor and secure Tangguh’s perimeter.
- BP should exercise caution in its participation and support for the FKPM, to ensure that these forums do not lead to any appearance of BP assisting the police in any intelligence gathering or establishing a more direct presence in nearby villages.
- Thus far, the coordination with and supervision of the CSTS security force has gone well, both in terms of preventing any TEP workers from bringing weapons or other contraband onsite and in managing the few incidents that have occurred. This success must not lead to complacency. The training, vigilance and processes that BP has exercised to date should be continued just as rigorously as CSTS winds down the number of workers at TEP.
- BP should work with the Bupati, SKKMigas and regional officials to impose comparable AMDAL obligations on new industrial developers in Bintuni Bay, to adopt and fulfill security arrangements, workforce requirements and social programs as those implemented by BP.
- BP’s must continue to invest in state-of-the-art cyber security technology and procedures for Tangguh and regularly review its cyber practices. All employees with any possible access to Tangguh’s operating systems should be provided cyber security training on a regular basis.

A. Environment, Appearance and Maintenance

In recent years, BP's environmental performance at Tangguh has been excellent. After achieving the Blue level in the PROPER audit conducted by the Ministry of Environment for four straight years, Tangguh qualified for and achieved the Green level that requires five years of Blue level status. Gold is the only higher level attainable. This accomplishment is particularly impressive given the massive influx of workers for TEP during the past two years and the effects of construction. The Lenders Panel audit of environmental compliance in July 2019 found no items of non-compliance. Thus, not only are Tangguh operations now performing without any environmental non-compliance, but CSTS, with close BP coordination, has also been operating without any issues at this time. In addition, BP obtained ISO 14001:2004 certifications for Tangguh Operations' environmental management system.

Separately, BP has commenced restoration of 3,600 hectares of land as rehabilitation for the land used to construct Tangguh. This program will ultimately reach 7,000 hectares, which are selected by the government of Papua Barat. The rehabilitation is scheduled to be completed by 2035, BP's AMDAL obligation.

Although flaring of gas is required for safe operations, BP successfully reduced its flaring and associated CO₂ emissions from 2009 to 2015,³⁷ but its CO₂ emissions have been flat since 2016, when Tangguh reached its prescribed sustainable emission reduction, SER, of 6.3K tons of CO₂, which was also achieved in 2019.³⁸ More broadly, BP has begun testing for new technology to capture and reinject carbon from gas production. If this testing shows promise, it should be considered for use at Tangguh. Any reinjection program may require SKKMigas approval, which BP should seek. BP should continue to take whatever action is possible to further reduce the flaring of gas, particularly on hot days when the flare forms a black cloud.

The physical condition of the LNG site and its buildings is generally satisfactory. Unlike some previous visits, the main facilities used by workers and seen by all who visit were well maintained and orderly. There were some specific dilapidated signs at the entrance to the site, which have been removed or replaced. The overall appearance of Tangguh is its most visible demonstration of a commitment to quality and perfection, and should be treated as a priority, by BP and any of its contractors responsible for facility maintenance. BP should assign a senior manager to oversee its contractors' facility maintenance performance, and require prompt repair or cleanup of any visible signs of disrepair.

³⁷ See TIAP Report December 2015 at pp. 7.

³⁸ In fact, CO₂ emissions in 2019 actually exceeded emissions in 2017 of 4.6 tons, and in 2018, 4.9 tons, because of abnormal flaring during planned maintenance – TAR or unplanned trips in operations.

The following are specific recommendations related to environment and maintenance:

- **Vigilant BP oversight and coordination with CSTS on environmental protection should continue until TEP is completed. Good results until now cannot lead to complacency regarding the remainder of the project.**
- **BP should continue to take whatever action is possible to further reduce the flaring of gas, particularly on hot days when the flare forms a black cloud.**
- **When it is completed BP, should review the results of its periodic Bintuni Bay fisheries survey and take action to address any degradations found by the survey. BP also should continue a biennial fisheries survey through 2035.**
- **BP should assign a senior manager to oversee its contractors' facility maintenance performance, and require prompt repair or cleanup of any visible signs of disrepair.**

VI. REVENUE MANAGEMENT

The distribution and transparent management of governmental revenues generated by Tangguh has been a concern since before operations began.³⁹ Until recently, neither the province nor the kabupaten could be audited effectively by the national audit agency (the BPK), and only after 2014, after considerable governance support provided by BP, was the kabupaten's financial accounts considered "acceptable" (not the highest rating of "unqualified") by BPK.⁴⁰ Recent developments in natural resource revenue management may begin to rectify these accountability concerns.

Accordingly, the long-delayed enactment of the regional regulation (the "Perdasus DBH") implementing an allocation of provincial natural resource revenues, such as revenues from Tangguh, may be the most significant development related to Papua Barat governance in several years. To the people of Bintuni Bay, the transparent allocation and distribution of natural resource revenues ("DBH") from Tangguh toward local needs is one of the most important elements of Papuan Special Autonomy. Under the Special Autonomy provisions on revenue sharing, natural gas post-tax government revenues are allocated 70% to the province and 30% to the central government, the reverse of all other provinces (except Aceh). The law provides that this 70% be allocated by a specific formula, with 6% provided to the province, 12% to the producing kabupaten, 12% among the other kabupatens and 40% to be distributed pursuant to a special provincial regulation, the Perdasus DBH. The development of this Perdasus DBH has taken more than a decade to accomplish,⁴¹ to the great frustration of local leaders. Until now, there has been little accountability or transparency about how this 40% of revenues have been allocated.⁴² Moreover, without this Perdasus DBH, no revenues from Tangguh have been allocated to

³⁹ See TIAP Report March 2009 at pp. 17-19.

⁴⁰ See TIAP Report December 2015 at pp. 44-45.

⁴¹ See TIAP Report, December 2015 at pp.22-23; TIAP Report December 2017 at p. 19

⁴² See TIAP Report December 2015 at pp. 44-45.

the local adat communities, which have made claims for compensation from BP and the GOI since before construction began.

The Perdasus DBH reflects agreement among all parties on allocation among various jurisdictions and needs, including health and education and to the local adat community. Importantly, the allocations to the adat communities are to be split between current needs and a trust fund for future generations. BP supported the Province with the promulgation of this regulation by funding technical and legal analyses.

However, while the Perdasus DBH is complete, additional steps still must be taken at the local level before distributions under the formula may begin. The Kabupaten must enact three local regulations, or Perdas, to provide for 1) specific allocations to each of the seven tribes of Bintuni Bay; 2) usage limitations; and 3) and accountability and transparency requirements. These may not be easy or immediate. BP is providing governance support to the Bupati to assist this effort. The Bupati remained uncertain about how the adat trust fund to which funds would be allocated would be managed for future generations, as a post-Tangguh fund.⁴³ But, for the first time, it seems possible that revenues from Tangguh will be distributed transparently among local adat tribes in the not too distant future.

The following is a specific recommendation related to revenue management:

- **Following the promulgation of the Perdasus DBH by Papua Barat, BP should provide targeted support to the Bupati and the Bintuni Bay legislature in their effort to draft and implement the local Perdas that will allocate and regulate the distribution of Tangguh's revenues in the kabupaten.**

VII. PAPUAN WORKFORCE DEVELOPMENT

As TIAP had stated many times, one of BP's most fundamental and quantifiable commitments under the AMDAL is to recruit, train and promote Papuans so that in 2029, 20 years after operations began, Papuans will comprise 85% of the workforce, including the managers who will be running much of Tangguh. This requires that 78% of all skilled workers and 33% of supervisors be Papuan.⁴⁴ These commitments have always been cited by Papuan leaders as one of Tangguh's lasting legacies for Papua.

⁴³ See TIAP Report; December 2015 at p. 45; TIAP Report December 2017 at p. 19.

⁴⁴ Papuan includes any person of Papuan origin as defined by Law No.21/2001 regarding Special Autonomy (Otonomi Khusus), or: a) someone originates from the Melanesian race with tribal origins in Papua; b) his/her mother or father is Papuan origin; c) non-Papuan but married to someone of Papuan origin; or d) non-Papuan origin, but has been living in Papua for at least ten (10) years.

The TEP AMDAL imposes additional requirements on BP and its contractors regarding the hiring of local IP and other residents of Bintuni Bay and FakFak during construction.⁴⁵ To implement this commitment, the EPC contract requires CSTS to employ Papuan workers, including those from the Bintuni Bay/ FakFak region, for 45% of all unskilled workers, 30% of semi-skilled, 2% of skilled and 1% of managers working at the site. CSTS has met these commitments for unskilled, semi-skilled and skilled workers, but has failed to hire or promote Papuans sufficient managers/supervisors positions, where only 4 out of 1463 employees are Papuans.⁴⁶ With only a little more than one year remaining for TEP, BP should seek to enforce this element of CSTS' Papuan workforce commitment promptly.

Since before operations began, BP has taken this commitment seriously; it has planned or instituted multiple efforts to increase Papuan employment at Tangguh.⁴⁷ However, until recently, none of these programs had achieved the intended results, with the level of Papuan workers remaining about 54% from 2011 until at least 2017, and the level of Papuan skilled workers stalling.⁴⁸ BP recognized that novel and greater efforts were needed to recruit, train and promote Papuans if this commitment is to be met.

A. Papuan Apprentice Program

Most fundamentally, in 2016 BP established a new apprentice training program, specifically designed to train aspiring young Papuans, primarily from the Bintuni Bay region, for skilled jobs in operations. Together with its partner PetroTekno, which is conducting the program at a secluded campus-like facility at Ciloto, in the mountains near Jakarta, it has carefully recruited three batches of 40 able Papuan high school graduates, about 50/50 young men and women, based on their aptitude and motivation. Each of the 40 participants in each group was selected from about 1,000 applicants, so the program is highly selective. The three-year immersion program focuses first on English language skills and basic math and science, and then teaches each student a specific program in either mechanical, electrical or maintenance that will provide a skill set tailored for highly technical operating jobs at Tangguh. Safety, together with other BP values, is an integral part of the entire program. Critically, each student must develop his/her English language skills sufficiently to move up to the next level. Students are tested on their English and technical learning regularly. Thirty-two of the initial 40 students graduated in the first

⁴⁵ For purposes of meeting these targets, the TEP AMDAL defines Papuans who are IP, as "The customary or tribal people residing in the coastal areas of the Bintuni Bay, comprising the original clans from the Sebyar, Irarutu, Simuri and Petuanan Arguni, Wertuar and SekarPikpik ethnic groups, who inhabit a defined custom owned area, as well as the other community members in that area who are acknowledged by the indigenous people as part of their tribal community, and have lived in the custom-owned areas since before the presence of Tangguh LNG in 2002."

⁴⁶ See Appendix D.

⁴⁷ See TIAP Report March 2007 at pp. 15-16; TIAP Report Oct 2011 at pp. 31-35; TIAP Report May 2014 at pp. 38-41.

⁴⁸ See TIAP Report Dec 2017 at pp. 25.

batch, and they are now all employed as technicians at Tangguh. The second batch will be graduating this year, and the third batch has begun its training. In total, approximately 100-110 young Papuans should be offered skilled jobs in operations and production, jobs that have the potential to provide a successful career at Tangguh or in any technical industrial enterprise. The graduates are expected to commit to work at Tangguh for at least 7 years.⁴⁹

TIAP met with the first batch graduates at Tangguh and was given a tour of the training center by the current students.⁵⁰ The program and the students are very impressive; it has great potential to provide a feeder pool for future technical, skilled employment at Tangguh and possibly elsewhere. Although these young students will not immediately be managers at Tangguh, they will likely form the corps of the skilled operations staff for many years. TIAP is much encouraged by this program. Although only three batches are planned, because jobs may not be available for more than the three classes of graduates, BP should reevaluate its future needs annually to determine if some future job openings may provide opportunities for smaller groups of Papuans who could participate in the training program.

In addition to its direct results, the apprentice program has also led to additional training that will benefit other young Bintunians. The program is serving as a model for a shorter, less selective and less highly skilled training program instituted by the Bupati. The Bupati visited the PetroTekno campus and invited the company to establish a training center in Bintuni that could provide skills to many of the approximately 960 high school graduates who each year applied for but were not selected for BP's skills training. This three-month program, begun in July 2018, does not require advanced English proficiency, and focuses on semi-skilled trades including scaffolding, pipefitting and welding. Thus far, five batches with about 400 graduates already have completed the program, each attaining national and international certifications in their trade. All have received job offers, many (about 250) with CSTS; others with construction projects in Jakarta or Malaysia.

Further, because many young Bintunians do not have the aptitude for this technical training or the ambition to enter these trades,⁵¹ the Bupati, together with PetroTekno, has also established a farming skills program in Bintuni, which seeks both to teach methods of growing crops, such as watermelon, watercress and chiles, as well as elevate the prestige of farming as a career path. Thus far, about 80 local youth have participated in the program.

⁴⁹ See Appendix E.

⁵⁰ TIAP met with several of the first batch students on its last visit, and recognized the great potential of these students and the program. Pak Augustinus Rumansara then visited the training facility separately, prior to TIAP's last report. See TIAP Report Dec 2017 at pp. 25-26.

⁵¹ Thus far, the program has been limited to men because of limited facilities and interests in these careers.

Although BP is not directly responsible for either of these local training programs, the example provided by the BP apprentice program, and the initiative taken by the Bupati, has led to these indirect benefits as well. The construction skills that are now needed by CSTS for TEP will likely be useful to other developers of major industrial projects in the area as Bintuni Bay grows and industrializes.

These programs are important and should continue, but they will not likely satisfy the need for future managers and supervisors. If BP is to meet the requirements for skilled and managerial Papuans by 2029, it should increase its external recruitment of qualified, experienced Papuans to fill more senior positions. At the very least, BP should increase recruiting at Papuan universities and other possible job marketplaces in Papua. It should also make known all job opportunities to its Papuan employees, to enlist them as recruiters and increase the network of potential applicants. Further, BP should partner with an employment consultant to seek out qualified Papuans employed by others in supervisory or managerial positions, who could fill specific openings that cannot be filled currently by Papuans already working at Tangguh.⁵²

B. Papuan Advancement

Even with these additional qualified entry-level technical employees, BP must also support and develop less skilled Papuan employees to assume more skilled, managerial and supervisory positions. The AMDAL requires that 78% of skilled positions and 35% of managers be Papuan by 2029. Current levels indicate that 36% of skilled employees are Papuan, and 39% of managers/team leaders are Papuan.⁵³ Thus, real progress has been made but further initiatives are needed. Toward achieving these goals, at the behest of Papuan employees,⁵⁴ BP has dramatically increased its collaboration with the Papuan Employee Steering Committee, a group of Papuan employees, not selected by BP, who seem representative of the broader group. Many have worked at Tangguh since operations began. This committee provides a regular and organized communications mechanism for Papuan employees to express concerns or suggest ideas regarding their employment and opportunities. In recent years, BP senior management has met with available members of the committee on most site visits, and taken their suggestions into account. The members of the committee recognize a greater commitment of senior management to address impediments to Papuan workforce development. It is critical that this commitment continues and that it be transmitted to a greater commitment by middle managers.

One specific area in which these interactions have produced some positive results among current employees is better mentoring by managers. All Papuan employees now have

⁵² TIAP has made similar recommendations previously. See, e.g., TIAP Report Dec. 2017 at pp. 27.

⁵³ The definition of manager/ supervisor includes team leader, supervisor, group lead, foreman, and security chief. Most of the Papuan Leaders came originally from Sorong. See Appendix F.

⁵⁴ See TIAP December 2015 report at pp. 38-39.

mentors, who they can change if dissatisfied. Most believe that having a dedicated mentor helps to build confidence and to deal with the challenges of taking on greater responsibility. As long as employees are free to change their mentor without any adverse consequences, senior management should continue to encourage all managers at Tangguh to mentor any Papuan employee who requests them. But a mentor cannot resolve difficult situations workers may face with their immediate supervisors, who may have no incentive to foster the career of a Papuan worker. Thus, senior management should also encourage, wherever possible, non-Papuan managers to support and promote qualified Papuans on their teams.

Separately, programs have been available to qualified Papuan engineers and other managers to increase the level of their skills and their international sophistication. The Tangguh Emerging Leadership Development program and the Challenger program both seek to provide such opportunities. However, no Papuans have been recruited for the Challenger program in the past several years. It is these programs that make it possible for Papuans to rise to more senior management level assignments. Thus, it is critical that BP actively continue both programs in order to achieve its goal that Tangguh be run primarily by Papuans by 2029. Accordingly, BP should not limit its Challenger selections to individuals who may immediately have a specific managerial opportunity at Tangguh. Papuan Challengers could be selected who would begin at other BP projects or operations, returning to Tangguh if, and more likely when, the opportunity arises. For the next five years, BP should select at least two Papuan Challengers each year, including at least one female, to develop a pool of such highly skilled employees.

C. Contractor Workforce Management

BP has long had difficulty enforcing Papuan workforce targets on its contractors, both in operations and construction.⁵⁵ In part to rectify this, BP now has authority to enter into contracts of five years duration. This should provide enough time for monitoring and enforcement of all workforce requirements. In addition, many of the jobs related to operations had been contracted out in the past, but are now being filled by BP employees, which also will help to meet Papuan employment targets. BP has included in its contracts the right to impose financial sanctions on any contractor that does not meet pre-agreed Papuan hiring requirements; if CSTS or any of its subcontractors fail to reach this important goal, BP must enforce these sanctions.

Of course, during construction of TEP, most Papuan recruitment has been conducted by the CSTS consortium pursuant to the terms of the EPC contract.⁵⁶ This requires the hiring and training of many Papuan workers for the construction workforce, including 100% of

⁵⁵ See TIAP Dec 2015 Report at pp. 34-36.

⁵⁶ Contract for Onshore LNG Engineering, Procurement and Contraction (EPC) For Tangguh expansion project Contract No. 4420001030, Section VIII.

all unskilled workers, 93% of semi-skilled workers, 12% of skilled workers and 6% of managers. The contract specifically requires CSTS to develop an IP and Papuan Worker Development Plan, to report monthly on that plan's implementation, to identify any gaps and to devise plans to close any such gaps.

There were more than 14,000 workers on site at the time of TIAP's visit, and it is estimated that a total of 25,000 – 30,000 individuals will have worked at TEP during its construction. CSTS has met many of its contractual requirements, including those for unskilled, semi-skilled and skilled workers. It also has implemented an “upskilling” program in which 626 Papuans were trained in new skills, including 206 individuals who are now employed in skilled positions.⁵⁷ However, despite this effort, it has not met its commitment for managers/supervisors, where at present only 2% are Papuans, missing its 6% requirement by a large margin. Although it is late in the project's timeline, it is not too late to seek enforcement of these obligations. Papuan employment targets were met during construction of Trains 1 and 2; they can and should be met before the completion of TEP. This will be difficult given the limited time remaining, but BP should work with CSTS to assist its efforts recruiting and/or training of Papuans and be assured that it will meet the targets for Papuan managers by the completion of TEP.

The following are specific recommendations related to Papuan Workforce Development:

- **The Papuan Apprentice Program has been a great success. It is now planned to have three batches of up to 40 students, filling up to 120 entry-level technician positions at Tangguh. Because of the importance of this program, BP should annually reevaluate its needs for future technicians and, if there likely will be opportunities for entry level technicians in three years, it should continue the program with the appropriate number of Papuan students who can fill those positions.**
- **If BP is to meet its AMDAL commitments for 2029, it is equally important that BP provide greater opportunities to current Papuan employees to advance to more senior managerial positions. Toward that goal, senior management should meet regularly with representatives of the Papuan Employee Steering Committee when visiting Tangguh; they should encourage mentors to provide guidance and support to Papuan mentees, and, wherever possible, encourage non-Papuan middle managers to support and promote qualified Papuans on their teams.**
- **BP has established The Tangguh Emerging Leadership Development program and the Challenger program to provide opportunities for promising Papuan college graduates. These programs make it possible for Papuans to rise to more senior management level assignments. In order to achieve its goal that Tangguh be run primarily by Papuans by 2029, BP should select at least two Papuan**

⁵⁷ See Appendix F.

Challengers each year, including at least one female, to develop a pool of such highly trained managers.

- To meet its requirements for skilled and managerial Papuans by 2029, BP should increase its external recruitment of qualified, experienced Papuans to fill more senior positions. BP should increase recruiting at Papuan universities and other job marketplaces in Papua. It should also make known all job opportunities to its Papuan employees, to enlist them as recruiters and increase the network of potential applicants.
- CSTS has met its EPC contractual requirements for hiring of Papuan unskilled, semi-skilled and skilled workers, in part through its effective “upskilling” program. But it has failed to meet its obligations to employ Papuans for managerial/supervisory positions. This should be addressed immediately. BP should work with CSTS to implement additional recruitment and training measures promptly, because little time remains to meet these important obligations.

VIII. SOCIAL AND COMMUNITY DEVELOPMENT PROGRAMS

During the almost 15 years that BP has been implementing first the Integrated Social Programs (“ISPs”) followed by its Tangguh Social Development Program (“TSDP”), many benefits have been delivered to Tangguh’s neighbors. These include successes in health care, education, village Community Action Plan (“CAP”) infrastructure and economic development; all of these programs have achieved significant and widespread results. But the community development programs thus far have failed to deliver two critical promised benefits that were expected by many in the region: north shore housing and electrification. While BP is not fully responsible for the missteps and delays that have contributed to these failures, it is ultimately responsible under the AMDAL to see that these benefits are delivered.

A. North Shore Housing

The restoration of north shore housing and infrastructure in the former Directly Affected Villages (“DAVs”) has been an aspiration of these villagers since 2005, when resettlement and construction of new south shore villages began. Since well before operations commenced, the gross disparity in the housing and village conditions between north and south shore DAVs has increased tensions between north and south shore tribes. There have been proposals for new or renovated housing in these villages since that time.⁵⁸ TIAP has long urged BP to move forward on such a program, although it was not a legal obligation.⁵⁹ In 2014, it became a commitment of the TEP AMDAL: to build 456 new homes (based on a 2013 census) in Wiriagar, Taroi and Tomu districts. Planning and

⁵⁸ See TIAP Report May 2014 at pp. 28-30 for a summary.

⁵⁹ See TIAP Report December 2015 at pp. 33-34.

design proceeded, along with a cooperation agreement with the local government, which was to take charge of implementation. Partly as a result of a new Bupati and a new Governor in 2016, as well as disputes over design and adat compensation, the program was repeatedly delayed.⁶⁰

As a result of these delays, only 21 houses had been completed at the time of TIAP's visit, and there is little chance that all construction can be completed by the start of Train 3.⁶¹ Several changes have been made that are intended to accelerate progress. Most importantly, BP, with its partners, now has been given management responsibility; and multi-year construction contracts can now be signed. Unlike earlier positions, the Governor and the Bupati now both actively support the program and consider it a priority to address jealousy and reduce tensions among the villages and tribes. In fact, the Governor, the Vice-Bupati and the Kapolda all participated in a "ribbon-cutting" ceremony celebrating the completion of the first 21 homes in Wiriagar. But all acknowledge that bureaucracy, permitting requirements and local disputes have caused lengthy delays. Village leaders recognize that these delays were not the fault of BP; in fact, they agree that BP should take over the program to accelerate it.

Although BP cannot usurp the functions of the local government and cannot build the homes without proper permits and authorizations, its assumption of management responsibility for the project allows it to take greater charge and accelerate development. BP, through its partners, constructed three villages on the south shore before construction of Trains 1 and 2; although the conditions are different, it surely should be capable of managing the construction of these new homes in a similar time frame as it constructs a massive multi-billion-dollar LNG expansion.

While there have been many reasons for the multiple delays, one significant cause of the current interruption is the difficulty of obtaining permits for Papuan timber.⁶² Because of the long history of illegal logging in Papua, there are additional safeguards and permits required to prevent illegal use of timber. The villages on the south shore were constructed using timber from other parts of Indonesia; although this may be more expensive, a similar approach should be taken here, at least in part, to accelerate the program while awaiting Papuan timber. BP could additionally place a senior manager in charge of delivering this project as a priority. Further, if new housing is not delivered on time, which looks increasingly likely, compensation should be provided for the affected districts. This compensation could take any agreed upon form, but one mechanism, as TIAP has recommended before,⁶³ is to seek SKKMigas authorization to construct infrastructure

⁶⁰ See TIAP Report December 2017 at pp. 30.

⁶¹ See Appendix G.

⁶² This also was a difficulty when BP sought to use the timber from the earlier clearing of land for the construction of Trains 1 and 2 for north shore housing, only to see the timber eventually rot in piles at the LNG site.

⁶³ See TIAP Report December 2017 at pp. 30-31.

improvements selected by local leaders, similar to the original CAPs, which benefits the entire village.

The following are specific recommendations related to North Shore Housing:

- **The AMDAL requirement to construct new houses in three North Shore districts will not be met by completion of TEP. This program is critical not only for village development, but also to address the tensions between North and South shore communities that have existed for 15 years. BP should assume a greater supervisory role in the project, place a senior manager in charge of its completion, and secure timber from wherever available to accelerate construction.**
- **Further, if new housing is not delivered on time, compensation should be provided for the affected villages. This could take any agreed upon and authorized form. One mechanism, which benefits all in the village, is to finance infrastructure improvements selected by local leaders, similar to the original Community Action Plans (“CAPs”).**

B. Electrification

Electrification of all of the nearby towns and villages of Bintuni Bay has been a priority for the people and their leaders for many years. It is fundamental to better health care, education and economic development. Ever since the construction of the resettled south shore villages, which were electrified almost 15 years ago, this has been a source of tension.⁶⁴

BP, for its part, delivered promptly on its commitment to provide PLN with up to 8MW of excess power from the substation it constructed at the LNG site in 2013. PLN followed by laying an undersea cable to Bintuni that electrified Bintuni town and also extended the grid to several south shore villages. But since 2015, PLN has failed to extend the grid to north shore villages, or to Babo and additional south shore villages. BP, as well as TIAP, has met with PLN on numerous occasions to urge and support extending grid-based power to the rest of Bintuni Bay. But, for various reasons, including the physical difficulty of building the grid on the south shore, and the need to await new home construction on the north shore, PLN has not acted.⁶⁵ Villagers and their leaders generally understand that this failure is not the fault of BP. But, as with north shore housing, it is an obligation under the AMDAL and will remain a stain on the overall success of BP’s social and economic

⁶⁴ See TIAP Report March 2007 at pp. 25. Electrification of these villages was one of the requirements of the Land Acquisition and Resettlement Action Plan (“LARAP”).

⁶⁵ In fact, several north shore villages already have power lines built by PLN that are not activated.

development program until it is resolved. BP should continue to encourage PLN to make these investments and to offer its support, but it cannot force PLN to act.⁶⁶

BP has taken some actions to diminish the impact of this failure. It has provided some diesel-based generation to Babo, which now has 12 hours of power in most locations, and to portions of several other villages. But that is insufficient and is of no value to other villages without any central generator. Until PLN commits to an electrification schedule, BP should seek authority to provide 24/7 diesel power to Babo and, either establish diesel generation or provide solar lamps or other solar based electrical power in all non-electrified villages covered by the TEP AMDAL.⁶⁷

The following are specific recommendations related to electrification:

- **Grid-based electricity, required by the TEP AMDAL, has not been delivered to North shore villages or South shore communities, including Babo, which is the location of BP's base camp and airstrip. BP has met its commitment to provide power generation, but PLN has not constructed or activated its grid. BP should press PLN to provide this infrastructure. But until PLN commits to an electrification schedule, BP should seek authority to provide 24/7 diesel power to Babo, and either establish additional diesel generation, or provide solar lamps or other solar based electrical power to all non-electrified villages.**

C. Economic Development

Diversified local economic development, apart from income from employment at Tangguh, has been a cornerstone of BP's AMDAL programs since inception. These programs have focused on micro-enterprise, women's enterprise development, support for agriculture and fishing cooperatives, and capacity building for local and regional businesses.⁶⁸ As a result of these specific programs and the indirect economic effects of Tangguh, incomes have risen significantly in Bintuni Bay in recent years. BP has commissioned a biennial income survey and census since 2003. The latest survey, conducted in 2018 by University of Indonesia ("UI"), found that average household income increased from IDR 6,591,000 in 2016 to IDR 6,994,012 in 2018, or 6% in the Bintuni Bay and FakFak districts most affected by Tangguh.⁶⁹ While much of these

⁶⁶ It is encouraging that the respected former Chairman of SKKMigas, Pak Amin, recently has been appointed as Commissioner of PLN, a possibly optimistic development. TIAP met with the new Commissioner, who understands the importance of electrification and agreed to take up this issue with PLN management.

⁶⁷ This has been previously recommended by TIAP. See TIAP Report Dec. 2017 at p. 31-32.

⁶⁸ See TIAP Report March 2009 at pp. 35-36; TIAP Jan 2011 Report a p. 21.

⁶⁹ See Appendix H. However, this apparent increase only restores average incomes to those surveyed in 2013, when it was measured at IDR 6,907,000. See TIAP Report December 2017 at pp. 28-29. The historic comparative data are described more fully in TIAP Report March 2009 at pp. 35-36, TIAP Report March 2014 at Appendix III and TIAP Report Oct 2012 at Appendix III.

increases have gone to non-Papuans, who generally enjoy higher incomes than Papuans, incomes also rose for IPs, by 11.6%, and for other Papuans, by 2.8%.⁷⁰

Until now, the development and expansion of the capacity of the local fruit and vegetable and fresh fish coops has had the most immediate effect. These coops now supply substantial portions of the demand for both Tangguh operations and TEP construction. However, the establishment of several new businesses, owned and operated by local IP, the SUBITU businesses, as well as the recently begun water taxi program, provides possibly even greater promise for long term Papuan economic development.

The TEP AMDAL requires BP and its contractors to procure 10% of TEP's fish, fruit, vegetables, legumes, starch and other agricultural products from local IP sources during construction and 65% post-construction. Purchases must be reported monthly. This program has largely been a success, accounting for about 17% of all TEP purchases and 100% of fresh food procurement for Tangguh operations. For the period September 2017 through September 2019, TEP procured 511 tons, valued at \$1,030,000. Total procurement for Tangguh operations has reached 2,875 tons, valued at more than \$5 million. Several of the coops are now being operated independently, without BP mentor support.

However, all monthly targets have not been met. Logistics issues that materially interfere with the program's full success still remain. For example, in the month prior to TIAP's visit, purchases by CSTS from the Tanah Merah Baru coop declined by 30%, causing much fresh produce to go unsold. This was not an isolated incident. Difficulties with tides, weather and boat availability often delay pickups and can lead to spoilage. These deficiencies are primarily the responsibility of CSTS, but BP should be monitoring its performance more currently, helping to resolve these issues, and demanding gap closure plans to address deficiencies. If these cannot be resolved promptly, BP should seek penalties under the contract.⁷¹ The concerns regarding sustained long-term demand for fresh products after the completion of TEP construction may be alleviated by the arrival of several other industrial projects likely to be undertaken in the area, as well as the overall growth of the region, all of which should provide customers for the local coops.

The SUBITU businesses that have been incubated by the enterprise development program continue to show promise if not immediate profitability. The garment manufacturing business and the air-conditioning repair business have been in operation for more than

⁷⁰ The data was gathered from 8 districts (Kamundan, Tomu, Weriagar, Aranday, Babo, Sumuri, Bomberai and Kokas), in both Teluk Bintuni and Fakfak regencies. The previous studies, from 2003 until 2016, were conducted by University of Gadjah Mada ("UGM"), and may not be fully comparable because of differences in methodology.

⁷¹ See EPC Contract, Section VIII Local Content.

four years.⁷² With continued BP support, each of these has the potential to become an independent IP run enterprise. In addition, other activities that have historically been owned and operated largely by non-Papuans, such as laundry services, scaffolding, firefighting and vehicle and boat maintenance, have the potential to become independently run IP businesses with BP support.

Separately, BP has nurtured the start of a water taxi business in Bintuni Bay, beginning with three boats that can take passengers from Bintuni to Babo and other locations. The addition of this service makes possible a significant expansion of commerce and social interaction among the different peoples of the area. At present, the service is limited and expensive for locals. But it is so critical to the development and integration of the Bintuni Bay economy that BP should support it until it can run independently. Fares should be subsidized, if needed, to be set at levels that are manageable for the local people. Efforts should be made to seek local, regional or national government support to ensure that this service continues.⁷³ BP could also seek to utilize the water taxi services wherever possible for its own worker transportation needs.

Together, these businesses, and the mentoring of others by BP's Business Development Service, are an important component of Tangguh's economic development program and may be one of its significant lasting contributions to the people of Bintuni Bay.

The following are specific recommendations related to economic development:

- **The produce and fish cooperatives in Bintuni Bay nurtured by BP have generally been successful. BP is meeting its purchase obligations. But CSTS has not fulfilled all of its procurement commitments, in part because of logistics and scheduling deficiencies. BP should work with CSTS and any deficient subcontractors to resolve any issues that may prevent it from meeting its obligations. If the required amounts of purchases are not made, BP should enforce contract penalties and provide compensation to village coops.**
- **The SUBITU businesses that have been fostered by BP are promising, and require BP's continued support, at least until other companies begin operations in Bintuni Bay and provide additional markets. BP should support the formation of additional locally owned businesses, such as laundry, scaffolding and auto maintenance.**
- **The new water taxi business supported by BP is a critical element in developing the economy of Bintuni Bay. BP should work with the Bupati to ensure its continued operation, and seek to interest other companies entering the region to support or subsidize this business.**

⁷² TIAP toured both of these businesses, meeting with its owners and workers on previous visits. See TIAP Report December 2015 at pp. 48; TIAP Report December 2017 at pp. 29.

⁷³ BAPENNAS, the National Development Agency, in its presentation to TIAP, highlighted local and inter-island transportation as one of the key elements in Papuan development.

D. Health Care

The dramatic improvement in health care in Bintuni Bay has been one of the most successful benefits delivered by Tangguh's social programs. Most notable is the virtual elimination of malaria in the region (0% in 2019), which was massively infected when Tangguh development began,⁷⁴ and which has received commendation from the Government of Indonesia, BP global and, most recently, the United Nations.⁷⁵ More generally, health care clinics (posyandus) have been established in each of the local villages and are helping to prevent and treat other diseases, improve infant and maternal mortality and instill better health care practices. These clinics have referred more than 810 people for TB testing and another 6,100 people for HIV/AIDS testing. More advanced clinics (puskesmas), which, provide services for high risk pregnant women and children, have been operating in Babo, and are now also operating in Aranday and Kokas. The hospital in Bintuni, which has been operating since 2015, remains the single most major advance in the health care of the region, but continues to need BP support to expand its capacities and become a referral hospital, a goal of the Bupati.

The following is a specific recommendation related to healthcare:

- **Health care in the region has improved dramatically as a result of BP's initiatives and its support for the kabupaten health programs. But health care still significantly lags national standards. The hospital in Bintuni is a key element in future progress for better outcomes. BP should continue to work with the Bupati to improve facilities and capabilities of the hospital to enable it to become a referral hospital.**

E. Education

BP's support for elementary education in Bintuni Bay has provided a significant benefit to the community for 15 years. For much of this time, BP has worked with religious based charity partners to bring qualified teachers to the villages and towns. Although there have been concerns regarding teacher retention and supplies, the result has clearly been positive. Attendance and achievement levels have improved, but students in the region generally remain well below national norms, supplies and books are limited, and few students can go on to higher levels.⁷⁶ One measure of the success of the program is the quality of the students in the apprenticeship program, many of whom were early elementary students in the area when the program first began (see pp. 32-33 above).

However, there has been lengthy delays in establishing "flagship" high schools in the region, which were agreed to by BP and the community, and were to be designed to teach

⁷⁴ See TIAP Report March 2009 at pp 33-34.

⁷⁵ The Bupati won the Indonesia Innovation in Public Service Award in May 2015; in June 2018 The Malaria Program in Bintuni Bay won the [U.N. Public Service Award \(UNPSA\)](#).

⁷⁶ See TIAP Report January 2011 at pp. 23; TIAP Report March 2009 at pp. 65-66.

and board the best students and prepare them for a university education. The reasons for these delays are numerous, but should not prevent BP from honoring its commitment, which has been endorsed by government leaders at all levels.⁷⁷ The latest impediment results from the transfer of governmental responsibility for high school education from the kabupaten to the province. Although this could not be foreseen, BP must now work with the Papua Barat government to accomplish its commitment, which must remain a priority.

In part because of this change in jurisdiction, the kabupaten government, with BP's support, has established a "flagship" or model elementary school in Tanah Merah Baru, using the facilities that were originally built for a flagship high school. This lower school facility is a major improvement from other schools in the area; it has additional classrooms, supplies and, most notably, computers for student use (which arrived immediately prior to TIAP's visit). It has facilities for boarding of students that are not resident in the village. BP should continue its effective support for elementary education in the Bintuni Bay region through its partners to provide teachers, materials and computers to students in all of the villages covered by its AMDAL commitments. This is a significant accomplishment, and should be replicated in other villages in the region, both on the north and south shores. But it is not the equivalent of flagship high schools, which have been promised and are necessary to educate Bintuni Bay's best students. This must remain a near term priority.

Additionally, BP through SKKMigas should continue to offer scholarships to qualified students in the region, which it has done since the original AMDAL. In the past year, it provided full scholarships for 79 local students at senior high schools and universities. At least until flagship schools are established, scholarships to go elsewhere will be the only opportunity for qualified local students.

The following are specific recommendations related to education:

- **BP should continue its effective support for elementary education in the Bintuni Bay region through its partners to provide teachers, materials and computers to students in all of the villages covered by its AMDAL commitments.**
- **The AMDAL commits BP to support at least one "flagship" high school in the region, where the best students can learn and board in preparation for a higher education. This commitment has been long delayed, most recently because the jurisdiction for high schools has been transferred from the kabupaten to the province. BP should fulfill its commitment, working with the Governor to establish flagship high schools in both the North and South shore of Bintuni Bay.**
- **BP should continue to provide scholarships through SKKMigas to deserving Papuan students for university educations.**

⁷⁷ See TIAP Report December 2017 at pp.33.

F. Gas to Power for Papua

Providing LNG for the province is BP's broadest commitment to the economic development of Papua and Papua Barat in the TEP AMDAL. BP is required to allocate up to 20mmcf/day (0.16mtpa) for power generation in the coastal cities of these provinces, including Jayapura, Manokwari, FakFak and Sorong. This was intended to be operational by completion of Train 3, but now is at best several years late. To accomplish this undertaking, it was necessary for each province to establish a regionally owned company (a "BUMD"), to purchase and transport the LNG to facilities that are to be owned by PLN. After some delay, the BUMD for Papua Barat has been established. However, much new infrastructure also is necessary to transport and deliver the LNG and regasify it for power generation. None of this has been built to date.

BP is meeting its obligations for this program. TEP will include all facilities needed to serve mini-tankers for delivery of this LNG to the region. BP has also provided technical support and funded feasibility studies to assist the province. BP cannot build the mini-tankers, which are the responsibility of the BUMD, or the receiving terminals, which must be built by PLN. As a result, this program will not be implemented for several years. Nonetheless, BP should be prepared to supply the required LNG to region owned mini-tankers as soon as they are available. In the interim, BP should offer the Governor whatever technical support may be needed to accelerate completion.

The following is a specific recommendation related to gas to power for Papua:

- **Providing Tangguh LNG to power Papua's electrical grid has long been a goal and is now a commitment. BP is constructing all necessary physical facilities to accommodate mini-tankers at its new jetty. But bureaucratic delays and inaction by PLN have pushed back implementation well beyond TEP completion. BP can still play a constructive role, and should engage with the Governor, PLN and other responsible parties to expedite activation of the program, particularly in Papua Barat.**

G. Community Relations

BP's relations with local leaders and the community have much to do with the effective delivery of all the social and economic development programs described above. Without fulfilling all its promises and commitments, that have created expectations, there will of course be difficulties with community relations. But relations with community leaders also depend on trust, and the belief that BP cares about the welfare of the community, and will act to benefit the community wherever possible. This trust has been developed over many years, and seems to have matured into a relationship of respect and understanding. TIAP cannot determine from its limited engagement whether all the people of Bintuni Bay support Tangguh or BP's programs without qualification; but it can conclude that most people, and their leaders, despite specific complaints or criticisms,

appreciate what BP and Tangguh have done for the region and understand that the failures to deliver critical benefits are not entirely the fault of BP.

Much of the credit for this trust, which has taken many years to develop, must go to the individuals from the CRT who serve in the villages as community liaisons and help villagers understand the complex realities of program delivery, and the responsiveness of the C&EA leadership to the grievances, complaints and aspirations of these villagers. Nevertheless, these relationships are fragile, and will likely be tested as BP implements personnel reorganizations that may eliminate some of the positions of Papuans in CRT and on site. It is important that BP explain the necessity of any reductions in force and do whatever is possible to help find new positions for any local Papuans whose jobs are eliminated and to otherwise mitigate the adverse effects of any further reorganizations.

Appendix A

A map of Papua and Papua Barat



Appendix B
Stakeholders Consulted by TIAP
2020 Visit

Government Officials: Indonesia

- Dwi Soetjipto, Head of SKKMigas
- Triharyo Indrawan Susilo, Special staff to Minister of Energy and Mineral Resources
- MajGen TNI Wawan Kustiawan, Deputy for Internal Politics at the Coordinating Ministry of Political, Legal and Security Affairs
- Amien Sunaryadi, President Commissioner, PLN
- Drs. Oktoraldi, MA, Ph.D, Expert Staff for Equity and Regional Development/ Desk Papua Lead, BAPPENAS
- Dr. Velix Wanggai, Director for Disadvantaged Region, Transmigrations, and Rural Development, BAPPENAS

Government Officials: United States

- David Greenberg, chief of political section to US Ambassador to Indonesia

Government Officials: United Kingdom

- Owen Jenkins, British Ambassador to Indonesia

Government Officials: Papua and Papua Barat

- Dominggus Mandacan, Governor of Papua Barat
- BrigJen Dr. Tomagogo Sihombing, Chief of Papua Barat Police
- Petrus Kasihiw, Bupati Teluk Bintuni

Implementing Partners

- Sarwono Pratomo Satrio, President Director, Petrotekno
- Hendra Pribadi, Director, Pretrotekno

Non-Government Organizations (NGOs)

- Robert Mandosir, RMD Institute, Jayapura
- Yan Christian Warinusi, Director of LP3BH, Manokwari
- Simon Banundi, LP3BH, Manokwari
- Fery Manufandu, LP3BH, Manokwari
- Priest Matheos Adadikam, Elsham, Jayapura
- Simon Petrus Inaury, YPMD, Jayapura

Private Sector Analysts

- Sidney Jones, Director, Institute for Policy Analysis of Conflict
- Douglas Ramage, Bower Group Asia
- Ahmad Syarif, Bower Group Asia

Media

- John McBeth, Independent Journalist
- Taufiqurrahman, Deputy Chief Editor, The Jakarta Post

Appendix C

HSE Statistic: Tangguh Expansion Project

LAGING INDICATORS	YTD 2018	YTD 2019
Work Housr Total	12,507,198	33,015,636
BP PMT Work Hours	390,823	498,079
Contractors Work Hours	12,116,375	32,517,557
Fatality	0	0
DAFWC (frequency)	0(0.00)	0(0.00)
Recordable Injury (frequency)	10 (0.16)	16 (0.10)
First Aid	22	75
Loss of Primary Containment/ Spill	15	31

Source: Tangguh Expansion Project, 2018 and 2019

Appendix D

TEP Workforce As of 22 November 2019

Skilled Level	IP no less than			BF no less than			Papuan			Non Papua			Overall H/C
	Actual		AMDAL	Actual		AMDAL	Actual		AMDAL	Actual		AMDAL	
	H/C	%	%	H/C	%	%	H/C	%	%	H/C	%	%	
Unskilled	408	56%	20%	300	41%	25%	21	3%	55%	0	0%	0%	729
Semi Skilled	295	28%	10%	441	41%	20%	245	23%	63%	88	8%	7%	1069
Skilled	140	1.2%	0%	518	4%	2%	705	6%	10%	10778	89%	88%	12141
Managerial/Supervisor	2	0.1%	0%	2	0.1%	1%	25	2%	5%	1434	98%	94%	1463
Total	845			1261			996			12300			15402

Appendix E

Papuan technician apprentice programme

	Production	Mechanical	Instrument	Electrical	Total
Batch 1 (2016 intake)*	23			9	32
Batch 2 (2017 intake)	9	11	9	8	37
Batch 3 (2018 intake)		19	12	8	39
Total	32	30	21	25	108

	2016	2017	2018	2019	2020	2021
Batch 1 *						
Batch 2						
Batch 3						

- The program started with 120 apprentices (40 apprentices for each batch), however few of them couldn't continue the program
- Batch 1 completed the program in January 2019. They have worked as Production or Maintenance Technician at Tangguh LNG (32 technicians).

	Female	Male	Total
Teluk Bintuni Regency	24	21	45
Fakfak Regency	24	16	40
Manokwari Regency	5	12	17
Sorong Regency	2	2	4
Jayapura	1	1	2
Total	56	52	108

- Three year training programme at Ciloto (6 days a week)
- Meet international, national and BP standard
- LNG technical skills, BP values & behavior, safety, English and soft skills (class room and workshop)

Appendix F

Papuan Workforce Development

Skilled level	Indigenous People	Papuan	Non-Papuan	Total employee	% Papuan by level
Unskilled	9	6	1	16	94.0%
Low skilled	88	96	0	184	100.0%
Semi skilled	125	244	54	423	87%
Skilled	32	220	433	685	37%
Managerial/Supervisor	13	49	98	160	39%
Total	267	615	586	1,468	60%

Table 1 Workforce at Tangguh Operation (October 2019)

IP and Papuan Upskilling

As of 22 November 2019

Skills level upgrade

Skilled Level (When hired)	Current Skilled Level	IP	Bintuni & Fakfak (B/F)	Other Papuan (OP)	Total
Unskilled	Semi-Skilled	275	107	38	420
Unskilled	Skilled	34	11	4	49
Semi-Skilled	Skilled	19	34	104	157
Total		328	152	146	626

Appendix G

North Shore Housing Program

District	Total Beneficiaries*	Progress as of 31 Dec 2019	Remaining 2020-2024
Weriagar	171	5 completed of 137 target	166
Tomu	205	13 completed of 37 target	192
Taroy	80	3 completed of 20 target	77
TOTAL	456	21 completed	435

**In accordance to cooperative agreement*



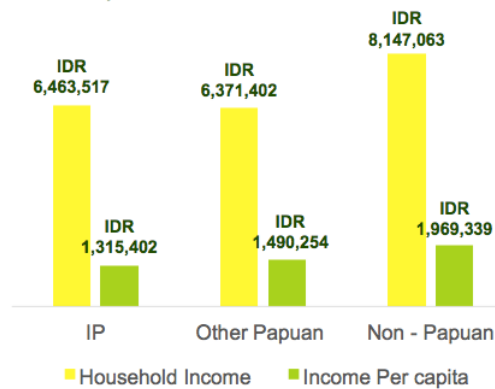
Appendix H

Survey of Local Household Incomes 2018

Scope

- This survey conducted in 2018 by UI. The data gathered from 8 districts (Kamundan, Tomu, Weriagar, Aranday, Babo, Sumuri, Bomberai and Kokas), both in Teluk Bintuni and Fakfak regencies. The result compare to income survey in 2016 by UGM.
- Involved 1,025 respondent samples who were separated in three segments such as indigenous people (IP), other Papuan, and non - Papuan community
- In general the average household income increased from **IDR 6,591,000** in 2016 to become **IDR 6,994,012** in 2018.
- While income per-capita in 2018 is IDR 1,381,132, the amount are slightly higher compare to Bintuni (IDR 1,308,405) or Fakfak (IDR 865,702) or Papua Barat Province (IDR 1,121,892). (note: the UGM didn't measure income per-capita in 2016)

Income Survey Result (IDR per-month)



Survey of Local Household Incomes – trends 2016 to 2018

