

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

June 2023

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Acronyms and Indonesian Terms

<i>Adat</i>	Local and traditional customs, laws, and dispute resolution systems used in many parts of Indonesia
AMDAL	<i>Analisis Mengenai Dampak Lingkungan</i> —Environmental and Social Impact Assessment
ADB	Asian Development Bank
Bappenas	National Development Planning Agency
BBDF	Bintuni Bay Development Foundation (<i>YPTB – Yayasan Pembangunan Teluk Bintuni</i>)
BDS	Business Development Service
BIN	National Intelligence Agency
BNPT	National Counterterrorism Coordinating Agency
BPMIGAS	<i>Badan Pelaksana Kegiatan Usaha Hulu Minyak dan Gas</i> – the National Upstream Oil and Gas Implementing Agency, the Government of Indonesia partner in the Tangguh Project (which was declared unconstitutional and disbanded in 2012)
BPK	<i>Badan Pengawasan Keuangan</i> – State Audit Agency
Brimob	Mobile Indonesian police brigade
<i>Bupati</i>	The head of a <i>kabupaten</i> , or Regency
CAP	Community Action Plan – the support program approach to facilitating community-driven development projects in Directly Affected Villages
CSTS	The consortium constructing TEP under the EPC contract
DAV	Directly affected village as originally identified by the Tangguh LNG project
DG Migas	Directorate General for Oil and Gas
<i>Dinas</i>	Agency
DPR	<i>Dewan Perwakilan Rakyat</i> – The House of Representatives
DPRD	<i>Dewan Perwakilan Rakyat Daerah</i> – Provincial House of Representatives parliamentary body
EITI	Extractive Industries Transparency Initiative
ENR	Energy and Natural Resources
ESDM	Ministry of Energy and Mineral Resources
GOI	Government of Indonesia
ICBS	Integrated Community Based Security
ICITAP	U.S. Department of Justice’s International Criminal Investigative Training Assistance Program
IEDP	Indigenous Enterprise Development Program
IPB	<i>Institut Pertanian Bogor</i> , or Bogor Institute of Agriculture
ISP	Integrated Social Program – an implementation unit within the Tangguh Project and the social-economic development programs managed by that unit
JUKLAP	Joint Field Guidelines for Security
<i>kabupaten</i>	District or regency
<i>Kapolda</i>	Papua Chief of Police
<i>Kapolres</i>	<i>kabupaten</i> (regency) police commander
<i>Kodam</i>	TNI provincial command

<i>Kodim</i>	TNI district command
<i>Kota</i>	City
KPPIP	GOI Committee for the Acceleration of Priority Infrastructure
KPK	Anticorruption Commission (“KPK”)
LARAP	Land Acquisition and Resettlement Action Plan – the Tangguh Project action plan describing the involuntary resettlement impacts of the Project
LNG	Liquefied natural gas
MOE	Ministry of Environment
MOF	Ministry of Finance
MOU	Memorandum of Understanding
MRP	Papuan People’s Council – a representative body composed of religious, <i>adat</i> , and women’s leaders created by the Special Autonomy law
NGO	Non-governmental organization
OECD	Organization for Economic Cooperation and Development
OPM	<i>Organisasi Papua Merdeka</i> , or Free Papua Movement – a separatist organization
<i>Otsus</i>	Special Autonomy
<i>Pangdam</i>	Papua Military TNI Commander
<i>Perdasus</i>	Special Autonomy regional regulation to be passed by the DPRD and approved by MRP for allocating oil and gas revenues (DBH)
PLN	Indonesia’s national electricity company
<i>Polsek</i>	District Chief of Police
<i>Proper</i>	Ministry of Environment national audit program
<i>Puskesmas</i>	Local health clinic
PKB	National Awakening Party
PSC	Production Sharing Contract
PPP	United Development Party
RAV	Resettlement Affected Village as originally identified by the Tangguh Project – Tanah Merah Baru, Saengga, and Onar
SBY	Former Indonesian President Susilo Bambang Yudhoyono
SKJ	Travel permit required that restricts access to Papua
SKKMIGAS	National Upstream Oil and Gas Implementing Agency, the Government of Indonesia partner in the Tangguh Project (which replaced BPMIGAS)
SOP	Standard operating procedure
TEP	Train 3 expansion project
THCU	Tangguh Health Care Unit
TIAP	Tangguh Independent Advisory Panel
TNI	<i>Tentara Nasional Indonesia</i> – Indonesian military forces
TSDP	Tangguh Sustainable Development Program – Tangguh social program that will replace the previous ISP under the new AMDAL governing Tangguh’s expansion
UGM	University of Gadjah Mada
UNIPA	State University of Papua at Manokwari
UNCEN	State University of Cenderawasih at Jayapura
UP4B	Unit for Accelerated Development in Papua and West Papua

VAT
YSA

Value-added tax
Yayasan Social Augustinus – a local foundation

I. INTRODUCTION

The Tangguh Independent Advisory Panel (“TIAP” or “the Panel”) provides independent, 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 original Panel was created in March 2002, and was chaired until 2009 by former U.S. Senator George Mitchell. 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 and served as an advisor to the Governor of Papua from 2008 to 2010.¹ The Panel utilized an independent counsel and secretariat headed by attorney Gary Klein and the additional support and counsel of Spencer Wolf of the Daschle Group.² The current Panel was established in 2011 and has been extended by bp through October 2023. The conclusions and recommendations in this report are those of TIAP alone and reflect conditions and positions at the time of the TIAP visit.

This is TIAP’s 14th full report and the current Panel’s seventh and final report. It comes at a critical time:

Firstly, bp is completing a major expansion of Tangguh that will add 50% to its capacity. The Tangguh Expansion Project (“TEP”) includes a third train at the LNG site, an additional LNG jetty, two new platforms and 16 new wells. It is now scheduled to be completed in late 2023. At the time our visit in March 2023, approximately 6,000 construction workers were still working and living at the site, down from about 14,000 workers at peak in 2020-2022. The social and environmental impact statement that governs bp’s commitments to the region during construction (“the TEP AMDAL”) was completed in 2014 and, together with the original AMDAL in 2004, will govern its commitments during operations thereafter.³

Second, bp has recently been granted a 20-year extension of its Production Sharing Contracts (PSC), which permits bp to continue operating Tangguh from 2035 until 2055.

And third, bp has been granted a separate POD in Bintuni Bay for enhanced gas recovery and carbon sequestration and reinjection (EGR/CCS), a groundbreaking project that will

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 The previous Panel, which monitored the initial construction phase of the Project, was chaired by former U.S. Senate Majority Leader George Mitchell, and included Lord Hannay of Chiswick, Ambassador Sabam Siagian and Reverend Herman Saud.

³ See TIAP First Report on Operations and Proposed Expansion, May 2014 report at p.10, for a more complete description of the expansion.

again bring major construction to the region and will allow Tangguh to become carbon neutral in its production of LNG from Tangguh.

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 in Indonesia more generally. The Panel also again observed the special challenges associated with simultaneous operations and major construction, particularly with regard to safety. 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 visit Tangguh. Their annual review is limited to issues of safety, environment, resettlement, and social programs. The Lenders Group conducted its final visit to Tangguh in February 2023 and will issue its final report later this year. 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 compliance, relate directly to whether bp can achieve its goal of making Tangguh a world-class model for development.

In March 2023, TIAP visited Papua (Manokwari, Sorong and Bintuni Bay) as well as Jakarta. The Panel met with national NGOs, Ministers and other senior officials of the Government of Indonesia ("GOI"), including the Deputy Minister for Public Security at the Coordinating Ministry for Political Affairs, Legal & security Affairs, the vice chairman of SKKMigas, the Director General of Oil and Gas in the Ministry of Energy and Mineral Resources, the Special Advisor for Acceleration of Infrastructure and Investment, the Deputy Minister for the Coordinating Ministry for Political Legal and Security Affairs, the Deputy Minister for Regional Development of the Coordinating Ministry for Economic Affairs, the Vice Minister for Home Affairs and the Secretariat of the Office of the Vice President. The Panel also had the opportunity to meet with NGO's and journalists, and to discuss Tangguh with both the U.S. and U.K. Ambassadors. The Panel also met with bp's implementing partners who are supporting and assessing bp's social and economic development programs.

TIAP also met with the Bupati of Teluk Bintuni ("Bintuni Bay"), the Vice Bupati, the Papua Barat TNI Commander (the "Pangdam") and the Papua Barat Chief of Police (the "Kapolda). In Bintuni, it met with Papuan village leaders from the north shore and with Papuans who have started businesses under bp's SUBITU program. The Panel did not have an opportunity to meet with the Governor of Papua Barat or with representatives from

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://bp.bp.com/sectiongenericarticle.do?categoryId=9004751&contentId=7008791>

south shore villages. While at Tangguh, TIAP met with Papuan apprentices and workers, and bp managers running the management, operations, Papuan development programs and security at the LNG site as well as coordinating these activities with CSTS. The Panel also met with Papuan NGOs and human rights advocates.⁵

The Panel recognizes that between the visit and the publishing of this report, that there may have been developments relating to some of the key issues reviewed. Where possible, the report will discuss these changes, but unless otherwise noted, this report is based on information available to the Panel as of March 2023.

This report will focus principally on issues and concerns related to security and human rights, bp's social and economic development programs, and Tangguh's impact on local Papuan communities and the environment. But it is important to note at the outset that since TIAP's last visit in January 2020, bp effectively managed the Covid pandemic at Tangguh and throughout Bintuni Bay, while during this period completed 100% of TEP off-shore construction, 99.3% of on-shore facilities and loaded a record number of LNG tankers.

During the pandemic, much of bp's economic and social development activities were redirected to address the potential impact of Covid on the local communities. Although unfortunately one worker died of Covid, bp ran a very successful Covid prevention program at Tangguh, which fully vaccinated thousands of workers, established a PCR testing facility on site, and quarantined hundreds of workers who tested positive. bp also provided critical vaccines to all workers and families, and medical supplies and staple food packages to Papua Barat and Teluk Bintuni. Although hard data is not available, there seem to have been few if any fatalities in the kabupaten.

Also, the significance of the GOI's decision to grant bp a 20-year extension of its PSC, from 2035 to 2055, and to do so in 2023, cannot be overstated. This is a remarkable and unique development. In recent years, Indonesia has terminated the PSCs for several foreign operators and transferred those facilities to Pertamina. In addition, the GOI recently acquired a majority interest in Freeport, the largest foreign operation in Papua. The GOI has not committed to a full-term extension of a PSC for any of its vital natural resource development to a foreign entity in the past 10 years.

The reasons are several. Firstly, the policy of the GOI has shifted dramatically to understanding the need for the expertise and capabilities of experienced operators to manage complex facilities successfully; second, the early and prompt extension is inextricably connected with the GOI's approval of the POD for the EGR/CCUS project, which will deliver significant increases in gas production at the same time it captures and reinjects virtually all the CO₂ released by Tangguh's production fields.⁶ The CCUS

⁵ See Appendix B for a full list of the stakeholders consulted by TIAP during its March 2023 visit.

⁶ The EGR/CCUS project is a separate POD granted by the GOI in 2022, one month after bp's application. The project will increase production by about 1 TCF and extend the plateau of Tangguh production by several years. It will accomplish this largely by capturing, compressing, and reinjecting approximately 5 million tons of CO₂/year back into the reservoirs. If sanctioned by bp this year, it could begin CO₂

elements of this project would be one of the largest carbon reinjection projects in the world, and would certainly contribute to making Tangguh a world-class model for development; and third, significantly, the GOI, most notably the Coordinating Minister for Political Security and Legal Affairs, SKKMigas, the Minister of Energy & Mineral Resources and the Minister of the Environment, understand and recognize that the presence of Tangguh and bp's programs in particular have improved the lives of those living in and around Bintuni Bay and has and will continue to provide a major source of revenue to the GOI, the province and the kabupaten.

The Panel reviews 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 people; and the U.S. – U.K. Voluntary Principles on Security and Human Rights (the "Voluntary Principles"). The Panel also consults global guidelines such as the United Nations Guiding Principles on Business and Human Rights ("the Guiding 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 but does review bp's compliance with its social and environmental obligations under the AMDAL. This includes obligations of the TEP AMDAL. The Panel again 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, not bp. The Panel expects bp to issue responses to each of the Panel's recommendations and, as noted, anticipates conducting open meetings with interested parties to discuss this report and bp's responses.

II. RECOMMENDATIONS

i. Security

ICBS

The Tangguh security model, ICBS, has succeeded in all its principal objectives. Despite many challenges, there has been no significant increase in troops stationed in or around Bintuni Bay and, most significantly, there have been no serious allegations of human

reinjection in 2027. It will effectively make Tangguh carbon neutral, thereafter, becoming bp's least carbon intensive project. Construction may require up to 3,000 employees and will necessitate a new AMDAL. Because this is a new and separate project, despite its historic importance, TIAP has not reviewed its potential implications for Papua and Bintuni Bay.

rights abuses by any security forces. Throughout this period, bp has steadfastly resisted major modifications to ICBS.

It is important that bp resist any efforts to change the fundamental principles of ICBS. This includes not only the multiple layers of response to an emergency, but also the requirement that all security forces related to Tangguh be trained in human rights and adhere to the principles of the U.S.-U.K. Voluntary Principles on Human Rights and Security.

However, at least until the local government fully implements the perdasus DBH, bp should consider, in coordination with SKKMigas, providing support for selective social service or local infrastructure projects proposed by either the Kapoda or the Pangdam. Any such support should be contingent on a determination that the project will not lead to any permanent increased public security forces stationed in the communities of Teluk Bintuni. Thus, construction of essential infrastructure, including clean water, new housing, roads, or schools, could be considered.

Cyber

bp has taken many cyber security precautions, particularly regarding potential external threats. bp also is sensitive to the threat that may arise from inside Tangguh. However, it appears that little if any redundancy exists among control room operators. Therefore, wherever possible, bp should limit the ability of a single operator to control operational critical functions. Also, these operators should be vetted fully. That vetting should be undertaken by security professionals familiar with the political forces and factions in Papua, rather than by more generic HR or security professionals who may not understand the motivations of certain Papuans.

It is also important that bp remain vigilant and proactive regarding potential threats generated by AI.

Exclusion Zone Violations

It is important that bp fix and maintain the buoy system on all exclusion zones and establish clear boundaries that are visible and can be monitored for any future potential shifting.

ii. Social Development Programs

BP has already provided considerable support for health, education, and community development, with significant positive effects. But it cannot be confident that government can effectively take over all social and community development, largely with revenues generated by Tangguh. Therefore, bp must continue to actively guarantee delivery of benefits that it is obligated to provide.

Health

Despite the dramatic improvement in health care in the region since Tangguh began, there remain significant disparities in health care services among north and south shore

communities. bp should seek to reduce those disparities by providing sufficient incentives to recruit and retain health care providers in all north and south shore districts, including the provision of housing for these workers.

Education

bp is obligated to establish at least one flagship high school in the region. Progress is being made on the flagship school in Tanah Merah Baru, but there has been little progress on a flagship school on the north shore. To reduce tension and increase equity, bp should also support a second flagship high school that serves the north shore.

Although there has been considerable improvement in elementary education in all the villages, some districts have had difficulty retaining teachers. bp should provide necessary incentives to recruit, attract and retain teachers in each village, including the provision of housing, if necessary, for these teachers.

bp, in coordination with SKKMigas, should provide college scholarships to deserving Papuan students for the duration of its time as operator, and should call them Tangguh scholarships.

Bintuni Bay Development Foundation

bp should promptly establish and capitalize a development foundation, specifically designed to fund programs or projects selected by north shore communities. The foundation should be capitalized by bp and governed by an independent, trusted third party, which could guarantee transparency. Interest should be distributed regularly among the north shore tribes, for projects selected by each. The foundation should be run independent of the local government and should dissolve within a fixed period following the commencement of distribution of revenues pursuant to implementation of the Perdasus DBH.

iii. Local Governance Support

It is critical to Tangguh's long-term success as a world class model that it operate in an environment with effective and transparent local government. Local government failures will be viewed as Tangguh failures. As long as local leaders accept assistance, bp should continue active support for improved local governance and stronger civil society, until these governments reach levels that measurably demonstrate reasonable competence and transparency.

iv. North Shore Housing

Given the history of inaction and delay, bp must do what is legally permissible to take over the management of the north shore housing program, in order to meet its AMDAL commitments. In the interim, bp should publicize its intention, and take visible steps to demonstrate to the communities on the north shore tangible evidence of its greater and more immediate commitment.

Until its AMDAL commitments are met, bp also should provide alternative compensation to the affected villages. One option is to reinstitute some version of the earlier CAP program for the impacted districts and villages. This would not only provide immediate benefits to the affected villages that have not received promised housing but would also demonstrate bp's good faith commitment to the north shore communities.

v. Electrification

While the failure to provide electricity to the north shore has not been bp's fault, it remains one of the highest sources of tension in the region. Until PLN implements electrification, bp should provide an alternative. This could include either solar power installations in those buildings or areas where feasible or, in places where solar is not viable, additional diesel power generation facilities and fuel. If needed, bp should provide the resources to train villagers to operate and maintain the solar equipment.

vi. Papuan Workforce Development

bp is nearing its AMDAL commitment to employ 85% Papuans in Tangguh operations by 2029. A significant element in its progress is the Papuan apprentice program, in which bp has successfully trained more than 100 young Papuans in critical technical skills. Although this program is not currently needed, it is important that bp remain focused in its hiring, retaining, and developing of Papuans in order to reach the 85% goal by 2029 and maintain or exceed it through the three decades of future operations.

Mentor Program

Papuan employees have benefitted greatly from the mentor program, particularly the Papuan women. This is essential to enable Papuans to rise to levels of supervision and management. bp should encourage all its Papuan employees to participate in the mentor program and reward senior management who offer to be mentors.

Demobilization

bp should help to train demobilized workers from the Bintuni Bay region for future employment and consider using the vocational training program established by the Bupati as a vehicle for future employment.

i. Environment

bp has met all of its environmental commitments, an accomplishment made considerably more difficult by the presence of thousands of construction workers and the Covid 19 pandemic. Its priority attention to environmental compliance should be maintained throughout operations.

bp has also sponsored independent regular surveys of the Bintuni Bay environmental quality and fisheries. It is essential that these surveys continue regularly through 2055, both to quantify and mitigate any potential adverse effects on water resources and for

Tanggung to be able to defend against unsubstantiated claims. The results should be shared with local and GOI officials and socialized with village and tribal leaders.

ii. Local Economic Progress

It is difficult to quantify the economic progress that has taken place in the region, particularly in the local villages, where the economy is rudimentary, and progress has varied substantially. bp has commissioned an independent analysis of the economies in each village since the start of Tangguh construction. This Survey on Social Affairs and Household Income (livelihood) of the Indigenous People around the Tangguh LNG project should continue on a regular basis throughout bp's term as operator and must be made public. Such an independent, professional, detailed assessment is the only way in which the real economic impact of Tangguh on its most immediate neighbors can be measured.

iii. Local business support

The business development program has produced some notable successes, including AC repair, apparel manufacturing and the water taxi service. bp has provided business counseling to many others. It should continue to support the establishment of local IP run businesses under the Subitu program and provide financial support for the most promising until they are profitable.

iv. Relationships with Co-Ops

The development of food and fish co-ops in several neighboring villages to supply Tangguh has been a major success. While the COVID 19 pandemic challenged bp's ability to continue fully its purchases from the local co-ops, it is critical that any new contract for food services at Tangguh require purchases from these co-ops.

v. Gas to Power

Although bp has met its AMDAL obligation and will be ready and able to supply LNG to the region, it should continue to work with the Governor and the Bupatis to permit mini-LNG tankers to deliver gas if feasible to nearby smaller cities in Papua Barat.

vi. Transparency and Communication

TIAP has repeatedly urged bp to increase its efforts on transparency, public information, and communication and to support increased GOI transparency as a priority. Transparency is particularly important because much of the financial and budgetary information for the province and the kabupaten remain difficult, if not impossible, to discover.

Continuing to regularly inform local leaders, both government and non-government, of Tangguh's programs and plans is self-evident. Informing national media of the benefits from Tangguh should also be a regular component of external affairs. In addition, at this point, a specific Tangguh Indonesian website and increased engagement with

Indonesian social media would be useful mechanisms for informing the general public and building Tangguh's positive narrative.

vii. External, Independent Monitoring

bp should consider continuing some form of external monitoring. One of the many unique situations faced by bp at Tangguh is the difficulty for outsiders to visit the area. The GOI continues to enforce a policy to limit very strictly all outside non-business, non-tourist visas to the area. Tangguh is also extremely remote and inaccessible, even to Indonesians. Thus, the outside world has a very limited view of Papua generally and Bintuni Bay in particular. Actors with a specific agenda may confuse, misinform, or distort conditions or situations that may arise. An external panel helps to publicize an accurate, objective description and assessment.

III. POLITICAL AND SECURITY UPDATE

i. Historic Overview

TIAP was established in 2002 to provide objective external guidance to senior bp management regarding the non-commercial aspects of the Tangguh LNG project. It was specifically charged with advising bp regarding how Tangguh can achieve its potential as a world-class model for development. The panel was to consider: the project's impacts on nearby villages; its environmental impact; and its impact on political, economic, social conditions in Papua and the Bintuni Bay region generally.

At the time, there were numerous violent threats of separatism and religious/ethnic conflict in Papua. When Tangguh's first POD was approved, Indonesia was emerging from The Suharto era, seeking to democratize, and facing violent separatist movements in Papua and Aceh, the 2 provinces at the geographic edges of the archipelago. The government's response in both cases was a measure of special autonomy. It was unsuccessful in Aceh, where separatist violence continued, requiring ExxonMobil to station more than 20,000 troops near its LNG operations at Arun, and resulting in many fatalities. This was a situation that Indonesia and bp wanted to avoid.

ii. Political Background

Special Autonomy for Papua was designed to marginalize this unrest. In an effort to win the hearts and minds of Papuans, the new law provided a measure of local control through elections of local leaders; requiring provincial office-holders to be Papuans; creating a Papuan People's Council (MRP) to provide a voice in governance to indigenous Papuans; recognizing the local cultural traditions of *adat*; significantly increasing general funding for health, education and infrastructure (Otsus);⁷ and, most significantly for bp,

⁷ Papua received disproportionately large allocations under the General Allocation Fund (DAU) and the Special Allocation Fund (DAK) as well as the additional funding provided by Special Autonomy. Papua's

allocation of 70% of post-tax natural resource revenues from projects in the province. The 70% provided to the province is split by a formula, under which 6% goes directly to the province, 12% to the producing regency and 12% to the other regencies. The remaining 40% is allocated by a special regional bylaw, to be divided pursuant to regulations implemented by the province and the regency (the “Perdasus DBH”).⁸ Tangguh was the first and most substantial new resource development project under the 2001 special autonomy law for Papua. Thus, Tangguh has been the test case for the effectiveness of the revenue sharing provisions of the special autonomy law.

Throughout this period, the GOI policies regarding Papua have focused on increased transfer payments to local governments, economic development, and infrastructure improvement. In 2021, Special Autonomy for Papua was extended for another 20 years beyond its original 20-year term. In 2022, the legislature divided the two Papuan provinces into six, thereby creating many new provincial and regency (kabupaten) capitals. Tangguh will remain in Teluk Bintuni and Fakfak Regencies and Papua Barat Province.

The policy has worked, to a degree. The cities and large towns of Papua Barat are demonstrably different than prior to Special Autonomy. New infrastructure and increased commerce and population (much through migration of non- Papuans) is evident. Health care throughout the provinces is much improved.

Bintuni, the per capita wealthiest kabupaten in Papua Barat⁹ has grown dramatically, only partly as a result of Tangguh. It built a government center, the regional hospital, new churches and mosques, and many roadside small businesses. The entire community is electrified and has clean water. Homes have TV’s and washing machines. Other than better roads, the transportation infrastructure has not improved dramatically.

Improvements in the villages around Bintuni Bay are less noticeable.¹⁰ Although the Panel did not have an opportunity to visit any of the villages near Tangguh on this trip, it met with north shore village leaders who travelled to Bintuni to address the Bupati, TIAP and bp.¹¹ In these north shore villages, the housing and infrastructure remain primitive, there are few roads, limited agriculture, many villages do not have grid-based electricity and most commerce is by small boat. Fishing remains the primary commercial activity.

revenues, defined as provincial and local combined, more than doubled between 1999 and 2002. See TIAP 4th Report, March 2006.

⁸ The provincial Perdasus 3/2019 already has allocated 30% of this portion to the province and 70% to the producing kabupaten(s).

⁹ Teluk Bintuni is the second wealthiest kabupaten in Indonesia measured by government transfer payments divided by population, yet it has among the highest poverty rates in the country.

¹⁰ There is a separate and significant imbalance of specific benefits from Tangguh between north and south shore communities, notably housing and electrification, which is addressed on pp. 28-30 below.

¹¹ This meeting is discussed in detail on p .21 below.

Despite the massive amounts that the GOI has transferred to Papua¹², many Papuans and most village leaders' express disappointment with Special Autonomy and Papua's relationship with the GOI generally. The Panel would conclude that these policies, which recently have been renewed, and are likely to continue for a considerable period, primarily benefit elites and the commercial class, but thus far have failed to fully win over the hearts and minds of the people of Papua.

The causes of this failure to meet expectations can reasonably be allocated among the central government, the regional government of Papua Barat and the regency government of Bintuni Bay. However, many attribute some of the blame to bp, since promised benefits from the government can easily be confused with promised benefits from Tangguh.

The first and primary cause of political complaint today in Bintuni Bay is the failure of all levels of government to implement the Perdasus DBH, over a 20-year period to do so.¹³ During virtually every TIAP visit since production began, there was an obstacle to implementing the regulations to distribute Tangguh revenues for local improvements. These barriers were first the GOI, then the Papua Barat legislature, then the Papua Barat Governor, then the MRP, then the Bupati, and finally, now the local economic development agency. The causes are many, but at root the problem is the inexperience and lack of capacity, or worse, the alleged corruption of these institutions. Each of these governments have only existed for a few years; they were newly created when Papua was divided and had no institutional foundation or civil society. Despite bp's yearslong efforts to support governance,¹⁴ and improvements in the quality of the financial statements of both Papua Barat and Teluk Bintuni to the level of unqualified,¹⁵ the formulation and implementation of new regulations remains difficult.

The Perdasus DBH, as finally drafted, would allocate the producing kabupaten's natural resource revenues to local health care, local education, infrastructure and to adat priorities, which would be split between near term and long-term needs. However, while agreement has been reached on these allocations, implementation remains dependent on the local government issuing specific perdas that govern spending. It is unclear when, if at all, these perdas will be finalized and when this funding will begin to be distributed. In the interim, it is critical that bp fill the void in the immediate vicinity of Tangguh.¹⁶

¹² See TIAP 7th Report, March 2009 at pp.17-20 for a detailed discussion of this issue.

¹³ The more specific complaints between north shore and south shore tribes are related directly to bp AMDAL commitments, not to Special Autonomy.

¹⁴ See p. 34 below.

¹⁵ The province and the kabupaten have received "unqualified" ratings from the National Audit Agency for 9 years, but were "qualified" until 2014. See TIAP First Report on Operations and Proposed Expansion, May 2014 at p. 47; TIAP Report on Operations and Tangguh Expansion Project, May 2020 at p. 30.

¹⁶ TIAP's specific recommendations to address this concern are at pp. 21-22 below.

This need is not novel. The first recommendation to bp of the first TIAP report suggested that bp “provide early, tangible, and visible support to the birdshead region¹⁷ and the province in education, healthcare, capacity building and job training. This early support from BP will help to diminish any opposition to the project resulting from any delay of revenues under special autonomy”. Remarkably, this observation from 2002 seems entirely applicable today. bp has already provided considerable support in each of these areas over this period, with significant positive effects.¹⁸ But it cannot be confident at this time that government can effectively take over all social and community development, largely with revenues generated by Tangguh. Therefore, as described below, bp must continue actively to guarantee delivery of benefits that it is obligated to provide.

iii. Security Background

The second issue that has been at the heart of bp’s relationship with local communities is security and how the military and the police deal with Tangguh and its neighbors.¹⁹ When bp began the project, Indonesia was emerging from The Suharto era and facing a violent separatist movement in Papua. The Free Papua Movement (“OPM”) and the TNI were engaged in numerous murders, violent attacks, and human rights abuses. These incidents were mainly located in what is now Papua Province, many of which were in or around the massive Freeport copper and gold mine near Timika²⁰. In addition, at that time, the TNI derived a large portion of its revenues from private businesses and facilities that it had a duty to protect. Bp of course had to avoid illegal payments to TNI and, if at all possible, any demands for such payments.

One incident that illustrates the danger of having TNI protect Tangguh, as it did other vital national assets, took place in late 2001, shortly before bp decided to proceed with Tangguh. Theys Eluay, the leader of the Papua Presidium Council, a peaceful freedom congress that drafted the initial structure of Special Autonomy, was murdered by TNI officers while returning to Jayapura from dinner with the head of the TNI regional command. Ultimately, 10 TNI officers (not the senior command) were tried and convicted for this crime. This episode underscored the fragility and potential for mass violence in the Indonesia/Papua political relationship and the critical role that the TNI would play in enhancing or destabilizing that relationship.²¹

¹⁷ The Birdshead region includes the entire are of Papua surrounding Bintuni Bay; in 2002, Papua Barat province and Teluk Bintuni kabupaten did not exist.

¹⁸ bp’s health, education and community development programs operating at the time are detailed in each of TIAP’s reports.

¹⁹ The police were a part of the TNI until 2001.

²⁰ Most alarmingly, 3 teachers (2 Americans and 1 Indonesian) were murdered near Freeport when a convoy was ambushed. It was never clear whether the attack was perpetrated by OPM or by TNI, in an attempt to demonstrate the need for greater TNI presence.

²¹ See TIAP Report, Oct. 2002, at p.10.

The GOI's response to this violence and unrest was Special Autonomy and reform of the TNI.²² bp's response was to craft, with support from the national military college, LEMHANAS, a system of 3-tiered security, relying primarily on a private, fully trained Papuan security force, which became Integrated Community Based Security (ICBS). Many observers believed the concept of keeping the TNI and the Polri from the area near Tangguh except in emergencies would fail; some thought it illusory. Bintuni Bay, and the Birdshhead region generally, were then peaceful and generally free of separatist or religious conflict.²³

It is now clear that ICBS has succeeded in all its principal objectives. Despite new TNI and Polri commands that were established in Papua Barat, there has been no significant increase in troops stationed in or around Bintuni Bay and, most significantly, there have been no serious allegations of human rights abuses by any security forces. Throughout this period, bp has steadfastly resisted major modifications to ICBS, and has actively pressed the State Intelligence Agency ("BIN"), TNI, and Polri to endorse and respect the organizing principles embodied in it. Specifically, the concept of private well trained Papuan security guards protecting the facility, with the police at a distance and called in only for emergencies that are beyond the capabilities of Tangguh's private security, and the TNI only called in if the police capability is insufficient; the regular training of all security personnel in human rights; annual coordinated joint training exercises; and adherence to the US-UK Voluntary Principles on Security and Human Rights, of which bp was an original private sector signatory.

The ICBS agreement with SKKMigas and the National Police has been extended and modified by additional agreements multiple times. These changes had to accommodate the establishment of a new police headquarters (Kapolda), and a new TNI command (Pangdam) for Papua Barat in Manokwari. bp discouraged several efforts to increase police presence in Bintuni and at the LNG site. With SKKMigas, it negotiated strict limits and public reporting of any payments made by bp to the police for reimbursements of lawful activities related to Tangguh; and agreed to support a 4-man police kiosk at the request of Saengga villagers. More recently, with bp's participation, SKKMigas and the Polri agreed to the establishment of a Quick Response Force ("QRF") consisting of a team of select police personnel stationed at the LNG site to respond to any emergency beyond the scope of Tangguh private security. This agreement has strict limitations on police

²² As stated, the National Police were separated from the TNI. In addition, over the next several years, the TNI was barred from engaging in certain private businesses, and the TNI's substantial representation in the national legislature, the DPR, was eliminated.

²³ Papua is the only province in Indonesia that was historically majority Christian, and ethnically Melanesian, with a minority who were Moslem and Malaysian. The more recent influx of Moslems from other parts of Indonesia has led to significant religious conflict in some areas. The Birdshhead region was one of the only parts of Papua with an historic mix of both, with Islam predominant on the North and Christianity prevalent in the South.

activity and includes extensive reporting requirements.²⁴ Thus far, it has worked without incident.

TIAP's first recommendation on security in 2002 was to "pursue the concept for community-based security flexibly, recognizing the need to reconcile this approach with the TNI's obligation to protect vital national assets." This flexibility has worked well, and may be required again, in the face of recent TNI requests for bp support of social service or infrastructure projects in the region.²⁵ The TNI and the Polri have lawful and legitimate interests in providing security for Tangguh, a vital national asset, and the region. Thus, a balance will again be required that accommodates the practical reality of the Pangdam's and the Kapolda's objectives in the region with the essential need that all public security forces protecting Tangguh be limited to the minimum required and respect the human and civil rights of all Bintunians.

iv. Security concerns today

i. Armed Violent Incidents in Papua Barat

Demobilization of the massive construction workforce on site has diminished the physical threats to Tangguh security internally, but recent incidents throughout Papua suggest that the external threat of violence in the Bintuni Bay region may have increased. Armed attacks by separatists affiliated with the West Papua Liberation Army ("TPN-PB") have increased. Since 2018, TPNPB armed attacks have become more organized, systematic, and fatal.²⁶ The causes of this violence may have been exacerbated by the extension of Special Autonomy, which many feel has failed to help common Papuans, and by recent division of the two Papua provinces into six, with new kabupatens to follow.

Violent attacks by separatists in Papua is not new; it has been a serious concern throughout Tangguh's history. But these attacks have usually been in areas of unrest, such as the Central Highlands and the Timika area near Freeport, primarily in Papua Province and far distant from Tangguh. Until recently, there has not been a violent separatist attack near Bintuni Bay. But since 2020, there have been at least seven attacks in Papua Barat, some of which may be politically motivated. More recently, there was an armed separatist incident in Maybrat, the sparsely populated kabupaten in the foothills just

²⁴ For a full discussion of the QRF agreement and the prior agreements governing the police role in Tangguh security, the Joint Field Guidelines for Security, known as the JUKLAP/PAMBERS, see TIAP Report on Operations and the Tangguh Expansion Project, May 2020 at p. 23-26.

²⁵ This is not the first time the police or TNI have suggested that it pursue social improvements projects in the villages. See TIAP First Report on Operations and Tangguh Expansion Project, 2015 at pp.26-27. For a specific discussion of the bp's possible support of TNI activities in the region, see p. 23-24 below.

²⁶ A report by the Institute for Policy Analysis of Conflict (IPAC) in 2022 found that "public funds at district- and village-level governments have flowed to the purchase of firearms used by armed separatists."

north of Teluk Bintuni and less than 100 km from Tangguh.²⁷ Shortly thereafter, several local Papuans were arrested in Bintuni for illegal possession of firearms.²⁸

The proximity of the recent separatist violence at Maybrat, together with the recent arrests of residents of Bintuni for illegal possession of weapons, combined with the increasing frustration of residents in north shore communities, and the anger of some, has the clear potential for violent action against Tangguh.

There have been protests of various kinds against bp in the past, but few have turned violent, or seriously threatened Tangguh operations.²⁹ TIAP has conducted village “town hall” meetings on previous visits in which individual villagers expressed anger and threatened to act against bp. But the frustration of several north shore communities has now become more widespread and the proposed disruptive action more organized. Although most of the village leaders recognize that the primary causes of their anger are the inaction of the local government to implement the Perdasus DBH and the housing program, and of PLN to interconnect the villages to the electric grid, the leaders of these three districts nevertheless jointly threatened disruptive action against Tangguh if nothing were done to alleviate their grievances. These community leaders recognize that violence against Tangguh or disruption of operations will quickly get the attention of all parties involved. If such violence were to occur, it is almost certain that police, and possibly TNI security forces would descend on the regency, imperiling the entire concept of ICBS. It is therefore imperative that bp take preemptive action to quench the impulse among some to take violent action against Tangguh.

ii. Local Government Failure to Deliver Benefits

The continuing failure of the local government to implement the perdasus DBH must be added to this combustible mixture of nearby separatist violence and possible unlawful weapons possession as a cause of the threat to Tangguh. The primary fiscal benefits from Tangguh to the local community emanate from the perdasus DBH. Although Tangguh has delivered real benefits to the Bintuni Bay region, these benefits have been inherently local and limited in scope. The perdasus DBH, on the other hand, is intended to provide massive increases in revenue to the producing kabupaten government to spend throughout the regency on all major social programs, infrastructure and adat priorities.³⁰ This regulation has been delayed for more than a decade by actions of the central government, the

²⁷ Maybrat kabupaten has been transferred to the new province of West Coast Papua, with Sorong as its new capital.

²⁸ Private possession of firearms in Indonesia is generally illegal. TIAP met with the lawyer defending these Papuans, who asserted that the weapons were traditional and there was no evidence of any plans to use them.

²⁹ See TIAP Report on Operations and TEP, March 2020 at p. 26.

³⁰ Several previous reports have detailed the formulas and sought to estimate the revenues that should flow to the kabupaten from the revenue sharing of Tangguh production. See TIAP 4th Report, March 2006 at pp.32-35; and TIAP Report on Operations, October 2012 at pp.39-42 .

provincial Governor, the provincial legislature, the MRP and the kabupaten government. TIAP's last report, more than three years ago, realistically noted that the final local regulations "may not be easy or immediate."³¹ Nonetheless, it is shocking that this *perdasus* has not been finalized. It is not clear where these revenues are being held, possibly at the regional level or at the local level. But it is clear these revenues are not yet being spent on improving the lives of Papuans in Bintuni Bay.

This failure is obvious to the villagers on the north shore, who expressed their frustration to TIAP, and probably to many others in the region. bp cannot rectify this inaction, and it cannot become a substitute for local government, but it can take independent action to demonstrate Tangguh's commitment to nearby communities and thereby diminish antipathy toward Tangguh.

iii. Bintuni Bay Development Foundation

Such action could take various forms. The critical component is that north shore leaders promptly see bp's active intervention in stalled community development programs that were promised to them. This is not a new development. In the years prior to commencement of operations, TIAP called for bp to establish and maintain a limited term foundation, in which the interest earned is spent immediately on programs or projects selected by north shore leaders³². Such a foundation was first recommended in 2007, to provide a mechanism for delivery of benefits to north shore communities before startup of Tangguh in 2009.³³ The Bintuni Bay Development Foundation was established in 2008 and began to deliver some tangible benefits by 2009, diminishing tensions as a result.³⁴

³¹ 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. TIAP Report on Operations and TEP, May 2020 at p.19.

³² See TIAP 3rd Report, February 2005 at p.22. A more limited purpose foundation, the Dimiga Foundation, was established at the outset by the Land Acquisition and Resettlement Action Plan (LARAP) to support the three south shore tribes directly impacted by resettlement of their villages.

³³ "Benefits to north shore villagers can be accelerated in several ways. First, the Bintuni Bay Development Foundation, which would carry out recommendations made previously by the Panel, should be implemented promptly. The Foundation would fund infrastructure in the areas that are identified by local leaders. However, issues of structure and governance have delayed the establishment of the Foundation. While these issues are important, they should not impede the establishment of the Foundation. BP should work with the Bupati to set a timeline that would have the Foundation up and running in 2007. This is essential if results on the ground are to be seen by start-up." TIAP 5th Report, March 2007.

³⁴ The Bintuni Bay Development Foundation, designed to support infrastructure on the north shore and offset some of the perceptions of unbalanced benefits, is functioning (although its legal status is not yet formally registered). In 2008, the Foundation constructed ten teacher's houses, and began construction of one student dormitory, one kindergarten, and two libraries. 93% of available funds were spent in these villages. The CAP funds remain available in subsequent years if not spent in the year in which they become available. In 2009, the program will include ten community houses, two teacher's houses, and improvements to clean water systems. Despite challenges in organization and implementation, the

It is not clear whether this Bintuni Bay Development Foundation remains a functioning legal entity. Regardless, bp should promptly establish and capitalize a new development foundation, specifically designed to fund programs or projects selected by north shore communities. One possible structure is to create a Board consisting of one member from each of the tribes in Teluk Bintuni living on the north shore. The fund should be capitalized by bp and governed by an independent, trusted third party, possibly an Indonesian NGO, which could guarantee transparency. Interest should be distributed regularly among the north shore tribes, for projects selected by each. The foundation should be run independent of the local government and should dissolve within a fixed period following the commencement of distribution of revenues pursuant to implementation of the Perdasus DBH. bp's capital contribution should be returned to it following dissolution.

There may be other, simpler mechanisms for delivering immediate tangible benefits to north shore communities. TIAP would recognize any parallel effective effort by bp to accomplish this objective as responsive to its recommendation. The key benchmarks are prompt delivery of benefits and recognition among local leaders that bp is taking action to rectify imbalances.

In previous TIAP reports, this issue has been categorized as a part of "Near Term Benefits to the Region", or "Infrastructure and Community Development." While these issues certainly remain within those subjects, TIAP for the first time is categorizing this concern under Security, because the frustration and anger have risen to a level that the Panel believes threatens Tangguh security and operations, and thereby threatens to undermine the continued successful implementation of ICBS.

iv. Ongoing Relations with Police and TNI

Separately, and more specifically, both the Kapolda and the Pangdam expressed increasing interest in actively partaking in social service and community development projects in the Bintuni Bay region. Both also indicated that one of the roles of public security is to control the flow of information to communities, in order to prevent "misinformation." The Kapolda outlined the police response to the incident at Maybrat, which involves an increased police presence and involvement in controlling the flow of information. He specifically suggested that ICBS be "expanded" to include new schools run by the Polri. The Pangdam expressed interest in pursuing TNI programs in a broad range of community services. He extolled the benefits of a greater TNI presence in local villages, praising the people's trust in the military, and its need to fulfill people's lives and deliver much needed resources that are not being delivered by local government or Tangguh.

Foundation's projects on the north shore are already helping to diminish tensions. TIAP Report, March 2009 at p.26.

Requests for financial support from both of these leaders for support of their community service projects will almost certainly be forthcoming. Without question, bp in coordination with SKKMigas, must respond to such requests. That response should recognize the fundamental principle of ICBS that the presence of public security forces in the region be kept to a minimum. TIAP strongly supports that principle, and therefore recommends that bp, in coordination with SKKMigas and the Minister of Energy and Mineral Resources, continue to discourage any increase in security forces in the area surrounding Tangguh. Agreements are currently in effect that carefully circumscribe the police presence in or around Tangguh and the TNI role in securing Tangguh³⁵; these agreements should be extended with minimal modification.

However, at least until the local government fully implements the perdasus DBH, bp should carefully consider, in coordination with SKKMigas, providing support for selective social service or local infrastructure projects proposed by either the Kapoda or the Pangdam. Any such support should be contingent on a determination that the project will not lead to any permanent increased public security forces stationed in the communities of Teluk Bintuni. Thus, construction of essential infrastructure, including clean water, new housing, or schools, could be considered.³⁶ But any project or program that could lead to a permanent, or indefinite increase in troop presence should be resisted. If TNI or the Polri determine to increase their troop presence in Bintuni Bay, they may do so, but bp should not provide any financial or reputational support for such an action.

Further, any such support should be fully transparent, as are per diem payments to the local police for specific contractual assignments.³⁷ But because of the sensitivity of any financial support, bp should insist that any project or program be audited independently. Without that guarantee, bp could not be certain that its funds were properly spent.

v. Cyber Security/AI

Cyber security remains a separate and critical component of Tangguh's overall security that has long been a priority for TIAP. bp employs an extensive multi-layered approach to threats globally and specifically to such threats at Tangguh. Cyber security protections are designed by bp's global group security team and activities are monitored continuously in London and Houston. There is a firewall separating all of Tangguh's operational activities

³⁵ See, e.g., TIAP Report on Operations and TEP Expansion, May 2020 at pp. 24-27.

³⁶ One program for which TNI already has requested BP financial support is new water wells in south shore communities. Clean water wells have been attempted in the past and failed for lack of maintenance. bp should be cautious about supporting any community development projects that are limited to south shore communities.

³⁷ For example, bp has long paid per diems to the police for participation in the annual joint exercise, see TIAP 5th Report March 2007 at p.20; TIAP First Report on Operations, January 2011 at pp.16-18; and BP financially supports the QRF police stationed at site. See TIAP Report on Operations and TEP, March 2020 at pp. 23-26.

from the Internet, so that control room operations cannot be hacked from the outside. bp also requires extensive employee training on cyber threats for all Tangguh personnel as well.

bp's priority attention to these external threats is critical and commendable. bp also is sensitive to the threat that may arise from inside Tangguh. However, it appears that little if any redundancy exists among control room operators, thereby opening the possibility that a single rogue employee could sabotage a critical function of the facility. While remote, such an action could be extremely damaging. Therefore, wherever possible, bp should limit the ability of a single operator to control operational critical functions. Also, these operators should be vetted fully, even those who graduated from the Tangguh apprentice program. That vetting should be undertaken by security professionals familiar with the political forces and factions in Papua, rather than by more generic HR or security professionals who may not understand the motivations of certain Papuans. These positions are far too sensitive to be given to employees solely on the basis of technical merit.

In addition, there are novel and potentially unanticipated threats that will emerge from AI. At this time, it is not possible to specify what these threats may entail. But given the already existing pervasive methods of compromising the internet through various forms of hacking, it is likely that new mechanisms will be developed by some using AI who could attack Tangguh. It is critical that bp security remain vigilant and proactive to prevent any such attacks.

vi. Exclusion Zone Violations and Perimeter Security

Violations of Tangguh's exclusion zones, both around the jetties and the offshore platforms, has been a difficult issue for many years.³⁸ Because much of the local commercial activity in Bintuni Bay is fishing, it is understandable how some villagers either mistakenly enter the exclusion zone or intentionally do so because of better catches around piers and platforms. There is no question that the LNG facility's jetties interfere with fishing from the nearby villages, particularly the resettlement villages. There is also no question that individual fishermen endanger both themselves and operations by crossing into the exclusion zone. Separately, there have been multiple violations of Tangguh's perimeter security in the past primarily by local villagers, some who may be motivated by grievances³⁹.

bp has taken steps to harden its perimeter fencing and increase monitoring. It has now instituted a new Tangguh Security Enhancement Program ("TESP") which is responsive to recommendations made by TIAP in the past.⁴⁰ This program seems responsive to the onshore threats, but thus far has not effectively dealt with offshore incursions. bp has a

³⁸ See, e.g., TIAP 7th Report and Overview, March 2009 at p. 50; TIAP First Report on Operations and Expansion May 2014 at p. 22.

³⁹ See, e.g., TIAP Report on Operations and TEP, December 2017 at p. 29.

⁴⁰ See TIAP Report on Operations and TEP Expansion, May 2020 at pp.28; TIAP Report on Operations and TEP, December 2017 at p. 29.

plan to replace and secure its offshore buoys later this year. TIAP will not be in a position to monitor this solution and determine whether it will remedy the problem. Thus, at this point, TIAP recommends that this plan include a physical mechanism to locate and fix the buoys so that there is no confusion about where the exclusion zone exists. In addition, if necessary, the markers should be plainly visible to all who come near them.

IV. PAPUAN WORKFORCE DEVELOPMENT

Papuan workforce recruitment, development, and retention is one of the most critical components of bp's AMDAL commitments. Under the AMDAL, 85% of the workforce - including supervisors and managers at Tangguh – must be Papuan by 2029. After several years of difficulty growing its Papuan workforce⁴¹, bp seems to be on track to meet, and possibly exceed, its obligations. However, this commitment has not yet been achieved. To do so, it is important that bp remain focused in its hiring, retaining, and developing of Papuans in order to reach that goal by 2029 and maintain or exceed it through the decades of future operations.

i. Papuan Workforce for operations

bp's current operations workforce includes 72% Papuans. Of this, 61% (460) of skilled workers are now Papuans, and impressively, 42% (73) are managers or supervisors, a percentage that for the first time meets AMDAL commitments.⁴² This is an improvement over previous levels and suggests that bp is capable of achieving 85% Papuan employment by 2029. A significant portion of that Papuan workforce are the approximately 100 young bp skilled technicians who have graduated from the apprentice program and are now working and contributing on site. Additionally, through its Papuan scholarship programs, six Papuans now have positions of responsibility in assignments at other bp projects throughout the world. These capable, experienced Papuans may eventually return to Papua to manage Tangguh.

ii. Apprentice Program

One of the greatest success stories for bp in its operations at Tangguh has been the Papuan apprentice program, which trains smart, ambitious young Papuans in a three-year intensive program of English and technical skills. This successful effort, more than any other Papuan recruitment or training program, has allowed bp to grow its skilled Papuan workforce and made it possible meet its workforce commitments by 2029.⁴³ Because of the limited number of current openings for technical entry level positions, and the likelihood that few such positions will become available in the near future, BP has discontinued the apprentice training program.

TIAP has some concern about bp's ability to maintain the predominantly Papuan technical workforce without any ongoing technical training program. There will of course be

⁴¹ See, e.g., TIAP Report on Operations and TEP, December 2017 at p.30-32.

⁴² This data is as of March 2023. See Appendix C.

⁴³ See Appendix D for a statistical summary of the apprentice program, and TIAP Report on Operations and TEP, March 2020 at pp.32-34, for a full discussion of the apprentice program.

departures and reassignments for a variety of reasons, including promotions of capable technicians to more responsible positions. In order to fill these openings with Papuans, it will be necessary for bp to continue some training program, possibly scaled back or intermittent, not only to meet its required AMDAL commitments to Papuans in 2029, but also to fulfill that commitment for the entire period of operations through 2055. Although it may be difficult to continue a program at smaller scale, bp may be able to join with other sponsors to train fewer students. The apprentice program has proven to be an excellent source of technical, skilled employment at Tangguh and thus should serve as the model for future needs. While the program is unlikely to be needed in its entirety, bp cannot rest on its success and ignore future needs. bp must maintain some program going forward, including recruiting at Papuan high schools, universities, and other job marketplaces in Papua to ensure that a pipeline of talented Papuans remains available to fill entry level technical jobs and allow BP to maintain its commitments to the region.

iii. Women in the Workforce

bp has done a commendable job in recruiting and training women for its Tangguh workforce. More than 60% of all Papuan technicians who graduated from the apprentice program are women, many of whom were born and raised in Papua Barat. This reflects not only the strength of bp's recruitment program, but also the quality of the young Papuan applicant pool. In addition, although unrelated to BP's AMDAL commitments, two of Tangguh's current site managers are female, one of whom was the first national female site manager within the entire BP organization.

The Women's International Network (WIN), a program to foster women's success within bp, has also been a success at Tangguh. The WIN program seeks to make sure inclusion and gender equality exists in the BP workplace. Both the Papuan and non-Papuan women at Tangguh participate and benefit from these activities. Given the male dominated history of the oil and gas industry, it is particularly important for bp to encourage and support its female employees, who clearly add to the quality of its workforce. The WIN program is an important element in that effort and should continue to receive bp's support for its activities at Tangguh.

Although female Papuan workforce commitments are not a specific obligation of the AMDAL, women's empowerment and economic progress is a community development priority. The successful recruitment, training, and promotion of qualified Papuan female employees, particularly those from the Bintuni Bay region, reflects one of the most tangible results of that priority. This result is not accidental. This effort must continue without interruption as bp operates Tangguh until 2055.

iv. TEP Demobilization

As the Tangguh Expansion Project (TEP) moves toward completion, planned workforce demobilization is taking place and moving toward its final stages. At its peak of Post COVID

workforce, TEP required approximately 12,500 workers.⁴⁴ The current workforce is around 6,100. More than 5,400 Papuans have been employed since the project was first sanctioned in 2016. At the time of the Panel’s visit, more than 1,000 Papuans remained employed, including 278 IPs and 395 workers from Bintuni/Fakfak.

Demobilization began in October 2022, with peak demobilization expected in mid 2023, when approximately 6,000 workers will be demobilized, including 1,271 Papuan workers and 342 IP workers. Once TEP construction is completed and train 3 is commissioned, fewer than 2000 employees will be needed to run Tangguh and virtually all those positions will require skilled workers. Thus, very few new long-term jobs will be available to local IP.

bp has managed the demobilization to keep as many Papuans employed as possible, so many will lose their jobs this year. bp has no specific AMDAL based obligation to these demobilized workers, but nonetheless should try to help those workers who seek bp’s support. bp should consider “scholarships” for recently decommissioned workers at the skills training center that has been established in Bintuni or elsewhere in Papua.

V. SOCIAL AND COMMUNITY DEVELOPMENT PROGRAMS

For nearly 20 years, pursuant to its AMDALs, bp has been implementing community development programs in the nearby villages surrounding Bintuni Bay. These began with the integrated social programs (“ISPs”) and the Community Action Programs (“CAPs”) for the Directly Affected Villages (“DAVs”)⁴⁵, followed by the Tangguh Social Development Program (“TSDP”) for the broader region. There is no question that these programs have delivered many tangible benefits to Tangguh’s immediate neighbors. The most notable of these successes have been in healthcare, education, infrastructure, and economic development. Although some of these programs were more effective in some villages than others, overall, the improvements in each of these critical measures throughout the kabupaten has been dramatic.

Yet despite these successes, there remain two glaring failures to deliver promised benefits that are still unrealized, particularly for north shore communities: housing and electrification. It is important to note that bp is not solely responsible for the disappointments on north shore housing and electrification. But bp undertook the responsibility to deliver these benefits under the AMDAL.

Furthermore, while bp has provided significant education benefits to the surrounding communities, primarily at the elementary level, AMDAL commitments have not fully been

⁴⁴ TIAP did not review whether bp and its contractors met the Papuan and IP employment commitments related specifically to TEP, since the project is soon to be completed and these obligations are now moot. In summary, the TEP workforce had approximately 9% of Papuan skilled workers and 6% of Papuan managers at the time of the Panel’s visit. See Appendix C. A full review of the TEP workforce compliance record for BP and its contractors should be undertaken and the results published.

⁴⁵ See TIAP 4th Report at pp.26-28. for a discussion of these programs.

met. bp must continue to provide incentives that will retain competent teachers in each village, and it must deliver a “flagship” high school on both the north and south shore.

Increased unrest in the region underscores the need to deliver these promised benefits. Recent violent incidents in the region, combined with tensions related to the establishment and governance of new provinces and kabupatens, failure of the local government to implement essential programs and growing anger among North Shore leaders, presents a serious threat to BP’s reputation and Tangguh’s operations. bp cannot begin to reduce any of its community development efforts once TEP is commissioned; to the contrary, it must continue to do its utmost to see that these programs are implemented fully. And with specific regard to north shore housing and electrification, bp must now play an even more active role to provide these benefits until its obligations are fully satisfied.

i. North Shore Housing

Since 2005, the refurbishment of north shore housing and infrastructure in the original Directly Affected Villages (“DAVs”) has been a top priority of these villages. This was a direct result of the new housing and infrastructure that bp built for the villages that were relocated because of the location of the LNG facilities.⁴⁶ Despite continual efforts by bp, encouraged throughout by TIAP, these stark disparities in housing and village infrastructure between north shore and south shore DAVs remain. They are understandably the underlying cause of much of the tension in the region. In 2014, these nonbinding objectives officially became obligations of the TEP AMDAL. The requirement specifically required construction of 456 new homes in the Wiriagar, Taroi, and Tomu districts. For many reasons, primarily related to government licensing and supervision of timber and new construction, the program has been repeatedly delayed. As of March 2023, only 97 of the 456 houses have been completed. Although the COVID-19 pandemic was partly responsible for the most recent delays, the end result should be unacceptable to bp, which constructed the entirety of TEP during this period.

Given the history of inaction and delay by governmental authorities, in order to meet its commitments to housing in the north shore, bp must do what is legally permissible to take over the management of the program. There may be barriers to terminate the existing contracts immediately, but they should be terminated at the earliest feasible time. In the interim, bp should publicize its intention, and take visible steps to demonstrate to the communities on the north shore tangible evidence of its greater and more immediate commitment.

⁴⁶ The construction and electrification of Tanah Merah Baru and Saenga were required pursuant to the Land Acquisition and Resettlement Action Plan (“LARAP”). Although the LARAP does not apply to any of the other villages, it quickly became apparent that some form of new housing and electrification was also appropriate for all the DAVs. These obligations were not codified until the TEP AMDAL in 2014.

In addition to assuming more direct control over management and construction, bp should provide alternative compensation to the affected villages

Until the AMDAL commitments are met, BP should reinstitute some version of its earlier CAP program for the impacted districts and villages. The CAPs were in effect for all the DAVs under the original Tangguh AMDAL. They provided an annual payment of approximately \$30,000 to each village for whatever purpose the village leaders selected. The program led to a variety of benefits specific to each village, from new docks and boardwalks to new Mosques, to funding for women's empowerment programs.⁴⁷ This alternative compensation should be provided to the affected villages until the TEP AMDAL commitments are realized. This would not only provide immediate benefits to the affected villages that have not received promised housing but would also demonstrate BP's good faith commitment to the north shore communities during this period.

In addition to compensation, bp should increase its communication with north shore village and district leaders, providing regular outreach and socialization of the progress of the housing program, and soliciting feedback from the villages on how bp can improve the living conditions of these Tangguh neighbors.

ii. *Electrification*

Electrification, particularly of the north shore villages, has long been one of the highest sources of tension in the region. The RAVs on the south shore were first electrified in 2005. bp long ago met its commitment to build a substation and provide PLN with 8MW of excess power from the LNG site, more than enough free power to electrify the entire Bintuni Bay region.⁴⁸ PLN laid a power cable under Bintuni Bay and electrified Bintuni in 2014. However, as we approach a decade since bp built its power station, the power grid has still not been fully extended into most the north shore villages, or to Babo and several remote south shore villages.

bp is not at fault for the failure of the extension of the power grid. It not only fulfilled its commitments to provide power, but it has undertaken continual efforts to encourage PLN and the Bupati to work together to expedite the process of building out the power grid.⁴⁹ Village leaders recognize that PLN is primarily responsible for this failure. But, like north shore housing, the affected communities see the failure of government/Tangguh to deliver promised benefits as, at least partly, the fault of bp. This was a promise made by Tangguh. For bp to attain long-term reputational benefit resulting from Tangguh's presence in Bintuni Bay as a world class project, it must deliver electricity in the near term to all these villages.

⁴⁷ See TIAP First Report on Proposed Expansion, May 2014 at pp. 27-28 for a more complete discussion of the CAP program.

⁴⁸ See TIAP First Report on Proposed Expansion, May 2014 at p. 30.

⁴⁹ There are separate issues related to payment for the electricity by some villagers and subsidies for such payments that may also affect PLN's or the local government's interest in providing grid-based power to all the villages.

bp cannot compel PLN to act more quickly, and it cannot build any separate grid. But BP surely can provide alternative power generation equipment that offers some level of electricity for homes and facilities in these communities in the interim. bp constructed a small solar installation in Tanah Merah Baru before 2009, and provided/subsidized diesel fuel to Onar, one of the RAVs. TIAP has previously recommended alternative means of power generation to the affected villages until this AMDAL obligation is realized.⁵⁰ Until PLN implements electrification, bp should provide an alternative⁵¹. This could include either solar power installations in those buildings or areas where feasible⁵²; or, in places where solar is not viable, additional diesel power generation facilities and fuel. If needed, bp should provide the resources to train villagers to maintain the solar panels, possibly in coordination with the vocational school in Bintuni.

iii. Healthcare

The significant improvement in overall healthcare in the Bintuni Bay region and surrounding villages may be the most important successes from Tangguh's social programs. Malaria, which was prevalent in the area and killed many, particularly children, has been virtually eliminated. There have been dramatic reductions in the incidence of many other diseases, and there has been dramatic improvement in infant and maternal mortality. TB and HIV/AIDS testing has been much advanced. The first hospital in Teluk Bintuni began operations in 2015 and continues to be the most important advancement of healthcare in the region. As a result, average life spans have lengthened significantly. Much of these improvements are directly attributable to bp's community health care programs over the past 20 years.

However, while the program has improved the health care for all Bintunians, it has been generally more successful in south shore villages, where it is easier to retain resident health care professionals. Every affected village has a small health care kiosk, and BP has trained local residents for each village as midwives and in dispensing pre-packaged medications. For continued success bp must ensure that these kiosks are properly staffed and maintained, at least until local government support can be assured. Thus, it is important for bp to continue to provide sufficient incentives to attract, train and retain health care workers, including housing if necessary. Although this should be bp's objective in all the designated villages, it should first focus specifically on those north shore villages where the community health care program has had difficulties.

iv. Education

bp's support for elementary education has provided significant benefit to the children in the Bintuni Bay region. Although there have been difficulties in the past with education

⁵⁰ See TIAP Report on Operations and TEP, December 2017 at p. 31-32; TIAP Report on Operations and TEP, March 2020 at p 40.

⁵¹ Even under the most optimistic plan for PLN to extend its grid, Sumuri and Wiriagar would not be electrified until 2027, and Tomu not until 2028.

⁵² BP has already made plans to install solar and wind generation for selected common facilities in Arguni and Taroy, which it hopes to be operative by late 2023.

facilities, supplies, computers, and teachers, some of which persist, the literacy and numeracy levels of the population have risen dramatically, and the average number of years in school for residents, particularly for girls, has improved significantly.⁵³ One of the major continuing challenges in education has been retaining teachers. Until bp is certain the local government is able to do so, bp should continue to provide sufficient incentives to attract and retain teachers in each village covered by its AMDAL commitments, including housing for teachers if necessary. Further, the gains in basic education in the region should not be lost while bp is operating Tangguh. bp cannot rely on the kabupaten government to guarantee adequate elementary education at each AMDAL affected village and should continue to monitor local educational performance. Where and if necessary, throughout its tenure as operator of Tangguh, bp should supplement local resources to maintain adequate facilities, supplies, and teachers.

Separately, the AMDAL commits bp to support “at least one flagship high school” in the region. For a variety of reasons, this commitment has been long delayed. TIAP has long recommended that in order to fulfill its commitment, it should establish flagship schools on both the north and south shores, which is necessary if they are to serve the entire community⁵⁴. Finally, a “flagship” elementary school is functioning in Tanah Merah Baru, which should evolve into a flagship high school, with boarding available for students. The establishment of the first flagship school in this south shore community (one of the RAVs) increases the perceived disparities in benefits among the local communities and thus the imperative for BP to establish a complimentary education program on the north shore.

Finally, bp should continue to provide scholarships through SKKMigas to deserving Papuan students for university educations. This program has been ongoing, already producing many successes of Papuan scholarship recipients. This ultimately redounds to the enhanced reputation of bp⁵⁵ and should continue throughout operations.

v. Economic Development

Bp’s community economic development programs have provided significant benefits to all of the affected villages. They have been a central element in bp’s AMDAL commitments since initial construction began. 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. These programs have significantly broadened the economic base of every village, which was limited to fishing, shrimping and rudimentary agriculture when Tangguh began. They also have materially increased the role of women in the local economy.

The overall economic impact of these programs is difficult to quantify. bp has sponsored an independent, professional periodic economic survey of the neighboring villages in order to better inform itself and the public of the economic and social progress in these

⁵³ See Summary of the Annual Survey on Social Affairs and Household Income (livelihood) in the Indigenous People around the Tangguh LNG project, 2019.

⁵⁴ See TIAP Report on Operations and TEP, March 2020 at pp. 43-44.

⁵⁵ TIAP has and continues to suggest that these scholarships be titled “Tangguh” Scholarships.

communities.⁵⁶ It is important that these surveys continue and be made available to the public. bp cannot be certain that its economic development programs have been successful without independent confirmation, and it cannot modify or improve its programs without a detailed understanding of their economic effects.

One of the most important of these programs has been the development of local agricultural co-ops that have supplied Tangguh catering with much of its fresh produce and fish over the years of TEP construction.⁵⁷ These gains are qualitatively apparent over time and have the strong support of the local communities. The results have been quantified, to the extent possible, in the household income survey and census, undertaken since 2003.⁵⁸

It is important that these programs be maintained or expanded in the decades ahead. Although Tangguh will not have thousands of workers to feed, there are many new enterprises in the Bintuni Bay region, and the population continues to grow. Thus, local markets should continue to increase for some time. Any future Tangguh catering contract should require that significant portions of fruit and vegetables, fish and shrimp continue to be purchased from these co-ops, thereby providing them with a base market from which they can grow. To the extent needed, bp should continue to provide technical and financial support to ensure their continued success.

One of the most visible elements of the enterprise development program is the establishment and development of new small businesses run by IP's. These new businesses, called SUBITU's, began in 2015 with the creation of a clothing manufacturing facility and an air conditioning repair business. Both businesses remain in operation, each with many IP trained workers. The A/C repair business is now profitable and has spun off from program financial support. Two newer significant enterprises are a north shore water taxi and a laundry business, each based in Bintuni. These entities, and hundreds of other nascent businesses, have received technical, legal, and administrative support from BP's Business Development Service ("BDS"), which is freely available to all IP's who seek to start a business. Significantly, bp also provides these entrepreneurs with business ethics training.

The enterprise development program not only is helping to create locally owned functioning profitable useful businesses, but importantly, it is also developing the human capital of local IP's. Once again, it was apparent that the people who owned, operated, and worked at these businesses were capable, smart, and hardworking. It would have been difficult for any of these businesses to have been established without bp support. And it seems likely that many will become independent and profitable in the future. It is

⁵⁶ See, e.g., Appendix E: Annual Survey on Social Affairs and Household Income (livelihood) in the Indigenous People around the Tangguh LNG project, 2018.

⁵⁷ See TIAP Report on Operations and TEP Construction, December 2017, at p. 35.

⁵⁸ See TIAP First Report on Operations and Proposed Expansion, March 2014 at Appendix III and TIAP Report on Operations, October 2012 at Appendix III for historic comparative data on incomes of indigenous people and others in nearby villages.

particularly important to note that women, local IP women, have played a managerial and increasingly senior roles in some of these businesses.

The SUBITU program has been a success by any measure. It has allowed enterprising young Bintunians to overcome the significant barriers faced by IPs to establish businesses. And it has led to the hiring of hundreds of Bintunians by these businesses. Bp's financial support for these businesses cannot continue indefinitely and is intended to terminate when the business becomes profitable. However, having already achieved multiple successes with this program, and because it so effectively elevates aspiring local IPs at little cost, bp should continue to devote necessary resources to nurture the current SUBITU businesses and maintain its business consulting services for as long as needed to assist new potential entrepreneurs.

VI. LOCAL GOVERNANCE SUPPORT

The need for bp's continued support for improved governance at the provincial and local levels has not diminished. Despite multiple efforts in the past⁵⁹, it is clear that the basic operations of government, from planning, to budgeting to spending and transparency are seriously deficient. This is the most benign explanation for the failure of the local government to implement the perdusus DBH and the north shore housing program.

Since 2018, Tangguh has partnered with the NGO Kemitraan to support governance principles for local authorities and civil society, particularly regarding its implementation of the perdusus DBH and the distribution of revenues from Tangguh to Teluk Bintuni. This support was interrupted by the Covid 19 pandemic and has now resumed. Support for the provincial government has all but been eliminated.

It is unfortunate that this support has not produced more tangible results. But it is essential that these efforts continue. Earlier, the recent creation of the new province and the new kabupaten were clear causes of the inability of local government to function effectively. Since, there have been multiple elections that have brought in new officials to the regency and provincial governments with limited experience or training in governing. For the most part, both the Papua Barat Governors and Teluk Bintuni Bupatis have welcomed this support.

It is critical to Tangguh's long-term success as a world class model that it operate in an environment with effective and transparent local government. Local government failures will be viewed as Tangguh failures. Worse, local government corruption will be confused with bp corruption. For these reasons, as long as the local leaders accept assistance, support by respected Indonesian NGOs for improved local governance and stronger civil society should be continued until these governments reach levels that measurably demonstrate reasonable competence and transparency.

⁵⁹ BP has supported efforts to improve local governance almost since the creation of the regency in 2004. However, due to unrelated issues, this support with its partner UGM was terminated in 2015 and has not been fully replaced. See TIAP May 2014 Report at 47; and December 2015 Report at 45.

VII. ENVIRONMENT

Tangguh’s environmental performance for both construction and operations are judged by its compliance with the requirements of the TEP AMDAL and the standards set by Indonesia law. In recent years, bp’s environmental performance at Tangguh has been excellent. It achieved the Blue level in the PROPER audit conducted by the Ministry of Environment and Forestry for four straight years, which status requires full compliance. Tangguh then qualified for and achieved the highest level, Green, that requires five years of Blue level status. Most recently, in 2021, Tangguh was nominated for the “Gold” prize at PROPER for its environmental achievements, and, in December 2022, Tangguh again received a Blue PROPER evaluation.

These accomplishments are particularly impressive given the massive influx of workers for TEP during the past five years and the environmental impacts of construction. Most recently, Lenders Panel audit of environmental compliance in February 2023 found no items of non-compliance⁶⁰. Waste and emissions monitoring show compliance with all limits set by environmental permits issued by the GOI.⁶¹ Thus, to date, Tangguh operations are now performing without any environmental non-compliance, and its contractor, CSTS, with close BP coordination, is nearing completion of TEP construction without any issues.

Tangguh also continues to implement an environmental management system in compliance with ISO 14001:2015, the most recent revision of the global standard.

In addition to the environmental quality of the LNG site, the protection of the environmental quality of Bintuni Bay is equally important. bp has conducted multiple surveys of fish, shrimp and crab stocks and environmental quality of Bintuni Bay, as well as marine mammals,⁶² beginning in 2003 to establish a baseline. The scope of the surveys includes water quality and hydrodynamics assessments, potential fishery resources (e.g., diversity, stock assessment, local community fishing), and marine mammal and sea reptile diversity and habitat. In the past, these surveys concluded that, at that time, there had been no discernable adverse impact from Tangguh operations on the surrounding environment, particularly the fish, shrimp, and crab stocks of Bintuni Bay.⁶³ The results

⁶⁰ See Lenders Panel report on Tangguh, 2023. The Lenders Panel has conducted an environmental audit at Tangguh each year. The 2023 report will be the final audit by the Lenders Panel.

⁶¹ Pursuant to Indonesia law, bp issues environmental reports to the Ministry of Environment and Forestry every six months to track compliance with AMDAL commitments.

⁶² BP, partnering with local universities UNIPA and the Bogor Institute of Agriculture (“IPB”), conducted previous fishery baseline studies of resources in Bintuni Bay in 2004 with UNIPA and follow up studies in 2007, 2009 and 2013 with IPB. There have been at least five such surveys to date.

⁶³ The 2013 survey concluded that there were 118 species of fish. Sustainable fish yield was estimated to be about 2,340 tons per year while the extraction is only about 116 tons per year; estimated sustainable stock for shrimp was about 3,000 tons per year and the current extraction was about 240 tons per year; crab extraction was currently about 2 million crabs per year while the sustainable yield was estimated to be about 13 million crabs per year. The fish sustainable stock in 2013 was about 50% higher than the fish stock in 2007. Four species of turtle and several turtle nesting grounds were identified in the

of the most recent survey were not yet available to the Panel, but the 2019 survey indicates that the concentration of several heavy metals requires further study and possible remediation.⁶⁴

bp should continue to support these periodic surveys of the Bintuni Bay environmental quality and fisheries and take any action that is needed to address any degradations. When the current survey is completed, bp should take action to address any degradations found by the survey. It is essential that these surveys continue regularly both to determine if there are any adverse effects on water resources that bp can address and for Tangguh to be able to defend against unsubstantiated claims. The results should be shared with local and GOI officials and socialized with village and tribal leaders, some of whom have blamed Tangguh for variations in fish or crab stocks in the Bay. Given the extension of the POD until 2055, bp also should conduct a fisheries survey biennially through 2055.

Finally, significant effort has been placed on reducing flaring on site, which is now lower than at any time in the past. bp continues to put a heavy emphasis on further reduction of flaring and should continue to do so.

i. Facility Appearance and Maintenance

While Tangguh facility appearance and maintenance may seem an ancillary issue, bp's commitment to it demonstrates to its employees and all visitors that sloppiness is not tolerated at Tangguh, and maintenance is not something that can be deferred. This is what is seen by all employees and conveys the value of making sure that everything is in working order, all of the time, and that bp values their work. This value is particularly important in a functioning LNG facility, where safety is always the priority.

The physical condition of the LNG site, and its common buildings for administration, residence, recreation, and worship is satisfactory, and a noticeable improvement over

Berau/Bintuni Bay. Three species of marine mammals were also identified during the survey. See TIAP First Report on Operation and Proposed Expansion, May 2014 at pp. 55-56.

⁶⁴ There seem to be several issues that merit attention in the 2019 survey. "Heavy metals in sediments that has not met quality standards were mercury (Hg), cadmium (Cd), nickel (Ni), and silver (Ag). The Hg metal has not met the quality standards at several observation sites in the northern and southern coast and middle water areas of Bintuni Bay "The high content of mercury (Hg) in coastal sediments could be caused by natural conditions, both originating from weathering various natural rocks, mercury salts as fumigants in pesticides, and other ascertained sources. However, the high levels of mercury in coastal sediments could be a big concern in the future, considering several things, including: (1) the potential for mercury from the waste disposal activities of bp Berau Ltd. that has been going on so far where there was almost no case (proven by the previous monitoring result); (2) naturally or geologically that the sources of mercury are minimal at this location; (3) the potential of mercury from other surrounding activities or inorganic mercury which could be transformed into dimethyl mercury with the media of microbial activity has not known yet. For this reason, a more detailed study is needed regarding this matter." The Fisheries, Marine Mammals, Reptile (Turtle) and Mangrove Ecology Study of Bintuni, Bay, Center for Coastal and Marine Resources Studies, Bogor Agricultural University 2019 at p. 154.

some earlier visits.⁶⁵ The main facilities that are used by the workers on a regular basis are well maintained, orderly, and clean⁶⁶. The rooms where workers stay are equally satisfactory, providing ample space and comfort, as well as appropriate cleanliness and services provided like laundry that make their free time more enjoyable.

Notably, the food services for both Papuan and Indonesian/western workers is impressive, and worth commending.⁶⁷ Any new contractors for food services should be held to the same high standards for food quality, appearance, and presentation.

bp should continue to ensure that proper care is taken of the facilities appearances and resources. The bp senior manager of the facility contractors should be held accountable annually for any significant deterioration that takes place.

VIII. GAS TO POWER

Providing LNG for the region was one of bp's broadest commitments 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 for the coastal cities of these provinces, including Jayapura, Manokwari, Fakfak and Sorong. This was intended to be operational by completion of Train 3. 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 regasification plants 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 for power generation that has not been built to date.

bp has met its AMDAL obligation for this program by constructing a new LNG jetty that can accommodate mini-LNG vessels with capacity of 10,000-20,000 m³ which, in turn, would enable Tangguh to supply 0.16 mtpa of LNG for electricity in the Papua region. However, in 2022, the ESDM Ministry did not include Teluk Bintuni and Fakfak regencies in the list of regencies that must convert from liquid fuel/diesel to gas-fired power plants. This decision is currently being appealed by the Governor of Papua Barat. bp is providing technical support to the Governor to request that Teluk Bintuni and Fakfak be included in the Tangguh Gas to Power program.

It is beneficial to the region generally that Tangguh LNG will be made available to some of the larger coastal cities in Papua and Papua Barat, and if this is accomplished the program should be considered a success. But it would be unfortunate if the two kabupaten most directly impacted by Tangguh, particularly Fakfak, which receives fewer direct benefits from Tangguh, do not receive any LNG that is being produced within their borders. Although BP has met its AMDAL obligation and will be ready and able to supply

⁶⁵ The facilities were also satisfactory at the time of the TIAP January 2020 visit.

⁶⁶ TIAP did not visit any of the temporary workers camps that are currently being deconstructed as demobilization proceeds. The AMDAL provides standards for the restoration and revegetation of these area.

⁶⁷ These services have been excellent for a number of years. They have been carried out by BP's contractor, which in recent years has been Indocater.

LNG to the region, it should continue to work with the Governor and the Bupatis to permit mini-LNG tankers to deliver gas if feasible to these nearby smaller cities.

IX. RETROSPECTIVE OVERVIEW AND LONG-TERM RECOMMENDATIONS

i. Retrospective Overview

This was the Panel's seventh and last visit to Papua and Bintuni Bay. In total, the two TIAP Panels made fourteen full trips to the region and submitted Reports to bp senior management. In addition, the Panel conducted at least two open meetings with NGOs in London, Washington and Jakarta after each report was published.⁶⁸ Because each visit is unique and each report focuses on key issues of the moment, they are necessarily incremental. None reflect the magnitude of the changes that Tangguh has brought to the Bintuni Bay region.

While there are issues of concern and causes for complaint among some,⁶⁹ there has been a dramatic transformation in the lives of all Bintunians during this period. Almost all of the changes are beneficial, by any measure of health, education, longevity, infrastructure, local GDP, or economic opportunity. There has been a rapid increase in local population since Bintuni became a local capital, mostly unrelated to Tangguh. While many in the region are now recent migrants, which has brought some tension, virtually all Papuans who are indigenous to the area have benefited from significant long-term progress in health, local education, clean water, local commerce, housing, and infrastructure. The first Panel's Final Report reflected on conditions at that time:

The Panel's first visit, in June 2002, predated any construction or relocation activities. The village of Tanah Merah was located on land that would become a part of the LNG facility. Homes in Tanah Merah, as well as in the villages of Saengga and Onar, were primitive, wooden houses with thatched or corrugated metal roofs and no indoor plumbing, electricity, or cooking facilities. There was almost no commercial activity in the RAVs. None of the nine DAVs had clean water collection systems or any health care professionals or facilities. Malaria, diarrhea, and malnutrition were rampant, causing large numbers of childhood deaths. Diet was extremely limited and poor. Schools in all the DAVs were run down with poor teachers and inadequate supplies; attendance was sporadic and not encouraged. There was limited electricity and no telephones or local radio. There were no motorized vehicles in the villages or any roads connecting them. Other than by small boat, access to the area was limited to a helicopter pad in a small base camp near Saengga village.⁷⁰

⁶⁸ The Covid 19 pandemic prevented these meetings following the March 2020 TIAP Report.

⁶⁹ See pp.26-28 above.

⁷⁰ TIAP Seventh Report and Overview, March 2009 at pp. 49-55.

Twenty-one years later, there is virtually no one in the community living in those unhealthy conditions with almost no opportunity for an education or commerce with the outside world.

These changes are not solely the result of Tangguh. Much of the economic growth in the local region and throughout Papua has resulted from the massive intergovernmental transfers to all Papuan jurisdictions under Special Autonomy, which began in 2001. In addition, there have been major economic and social impacts resulting from the division of Papua in 2003, creating the new province of Papua Barat and the new kabupaten, Teluk Bintuni. The new kabupaten was the first time that a single local government united all the tribes around the Bay in one jurisdiction⁷¹. Significant, but less tangible change also has resulted from democratization, under the 2001 Regional Autonomy law, which provided for elected leaders, thereby replacing Jakarta-appointed governors and bupati with local political leaders elected democratically.

Finally, and fortunately for Tangguh, there have been major changes in the operations of Papuan security forces in the post-Suharto period. This began in 2001, when the National Police was separated from the TNI, leading to a diminished militarization of the police. It accelerated in 2005, when the Military Reform law eliminated TNI's statutory responsibility to protect all "vital national assets" and began to reduce the TNI's involvement in private sector businesses. These changes ushered in community-based policing concepts and a more limited role for the TNI that made ICBS possible.

It is unfortunate that after this lengthy period, and after 13 years of Tangguh operations, there are still some Papuans in the Bintuni Bay region without basic services such as adequate housing and electricity⁷². Although these programs are bp's obligations under the TEP AMDAL, their failure to be fully accomplished thus far cannot be attributable to bp. The obstacles faced by bp at all levels of government have been formidable. Some failures fall squarely on national entities, such as PLN's reluctance to electrify the region with bp providing free power, but fundamentally, particularly at the provincial and local levels, the difficulties stem from newly formed government institutions in recently created jurisdictions that had no experience with democratic governance and virtually no civil society. There is no shortage of resources to accomplish all of the AMDAL's requirements; but there is a failure of political will, or lack of competence, or worse, endemic corruption, that defers solutions to problems that clearly merit immediate attention.

ii. Support for Local and Regional Government

bp cannot usurp any of the role of local government. But it must continue to provide alternative solutions in its immediate neighborhood as long as government fails to deliver on obligations that bp has jointly undertaken. And it must continue to support improved and more transparent governance in the province and the kabupaten so that these

⁷¹ The seven tribes of Bintuni Bay had previously been in three separate kabupaten's.

⁷² See sections V. i. and V. ii. above.

programs can effectively be implemented by local government. bp will now be operating Tangguh for the next 32 years. No matter what other projects are developed in Bintuni Bay, Tangguh will remain the most significant external influence on peace and prosperity in the region. Thus, the continued development of an effective and responsive local government should be BP's most important long-term non-operational goal.

Supporting effective and transparent local government has been a major recurring theme of TIAP's recommendations since these jurisdictions were created.⁷³ This support is essential so that the public can track revenues and spending, thereby allowing external entities to assess the effects of Tangguh's social and community development programs and the uses of Tangguh revenues that have been shared with local government.⁷⁴ It is clear that this goal has not yet been achieved at the kabupaten or provincial level; thus, this support must be continued for the long term.

iii. Preserving the Principles of ICBS

Separately, but equally important in the long term for bp, is preserving the commitments to human rights that have so effectively been maintained to date. The fundamental principles controlling the actions of government and private security forces are embodied in the U.S.- U.K. Voluntary Principles on Security and Human Rights. These principles are incorporated into the agreements that made possible the success of ICBS⁷⁵. In the more than two decades since planning for Tangguh began there has not been a single significant complaint of violent or abusive treatment in the region by the police or TNI. Given the incidents that have occurred elsewhere in Papua during this period, this is no small accomplishment.

For this excellent record to continue for the next 32 years, bp must continue to engage with the Kapolda, the Pangdam, and the agencies of civilian government that benefit from Tangguh's uninterrupted production and its peaceful relations with its neighbors. Although the specific details of ICBS may change, as they have multiple times in the past, it is imperative that bp do its utmost to preserve its inherent community structure and the commitment of all security forces to limit the use of force and protect human rights. It is likely that the police and the TNI will in the future seek to assert their soft power influence in the region, and that bp (and SKKMigas) will be faced with requests to support

⁷³ See TIAP Fourth Report on Tangguh LNG, March 2006 at pp.29-31.

⁷⁴ See, e.g., TIAP First Report on Operations and Proposed Expansion, March 2014 at p.49.

Recommendations: Governance and Transparency

1. Long-term support for more effective governance and transparency at the kabupaten level is essential for Tangguh's social programs to succeed and for Tangguh revenues to be used soundly. For effective implementation, bp should avoid hiatuses and disruptions in this program.
2. bp should focus its support for the Papua Barat provincial government on greater transparency and accountability.
3. bp should consult with the World Bank or another capable organization, the Governor and the Bupati to determine whether an expenditure analysis of their respective budgets could be conducted.

⁷⁵ See, for example, the JUKKLAP agreement between BP, BPMigas (SKKMigas predecessor) and the National Police, outlined in TIAP First Report on Operations and Proposed Expansion, May 2014 at pp.21-24.

these activities. bp's decision-making regarding any such requests must be contingent on both a commitment and a demonstrated practice by its partner of maintaining the rights of all Papuans.

iv. Transparency and Public Information

From the outset, almost every TIAP report has urged bp to increase its efforts on transparency, public information, and communication and to support increased GOI transparency as a priority.⁷⁶ The transparency and availability of governmental financial information relating to Tangguh, and all intergovernmental transfers generally, has increased dramatically during this period⁷⁷. But much of the financial and budgetary information for the province and the kabupaten remain difficult, if not impossible, to discover.

There have been many iterations of bp's attempts to inform the public better, from establishing a local radio, to monthly information newsletters posted in the nearby villages, to cartoon brochures distributed locally to explain specific issues. There have been information sessions with local leaders and NGOs on oil and gas law and explaining changes in Tangguh's social programs.

These efforts have all been useful; some more effective than others. It is essential that bp maintain or increase the outreach activities it conducted during planning and construction. Good relations with its neighbors, local government, NGO's, the national and regional media, and the public generally is contingent on transparent and continual communication of its efforts and activities. This need is increased because of Tangguh's remoteness and inaccessibility. This should be viewed as a permanent and high-level function that continues throughout bp's tenure as operator of Tangguh.

Indonesia's only other example of a foreign multinational extracting resources from Papua is Freeport, a company that engendered major social unrest and experienced many episodes of violence, and which is now majority owned by the GOI. Tangguh has thus far

⁷⁶See, e.g., TIAP First Report on Tangguh LNG Project, Oct. 2002 at p. 28; TIAP First Report on Operations and Proposed Expansion, March 2014 at p.46: " Recommendations: Government and Public Affairs:
1. bp should continue its positive engagement with leaders throughout the construction period, including maintaining regular contact with the Pangdam and the Kapolda.
2. bp public affairs should engage regularly with key media and employ social media tools to communicate more effectively.
3. bp should make Tangguh a more visible leader in community development.
4. Stakeholder forums should be resumed every year in Bintuni Bay, seeking input from government, civil society, and other interested parties. bp should also maintain a program of visits to the LNG site by village leaders during construction."

⁷⁷ The extractive industries transparency standard (EITI) has been implemented in Indonesia for more than 10 years. The initiative was first announced in 2007, and in 2010 the government issued Presidential Regulation No. 26 of 2010 on Transparency of State Revenues and Regional Revenues derived from Extractive Industries. Indonesia became the first ASEAN country to meet the requirements of the EITI International standard in 2014.

avoided many of the mistakes made by Freeport, but it cannot be accepted as a given that this will continue until at least 2055.

Effective public communication is a key to preserving this record. As times change, different mechanisms may become more useful and effective. Regularly informing local leaders, both government and non-government, of Tangguh's programs and plans is self-evident. Further efforts to inform national media of the benefits from Tangguh should also be regular component of external affairs. In addition, at this point, a specific Tangguh Indonesian website and increased engagement with Indonesian social media would be useful mechanisms for informing the general public and building Tangguh's positive narrative.

v. Post-TIAP

TIAP, as a regular external monitor of bp development of Tangguh, is at an end. bp and other interested parties can debate its value, its impact, and its potential as a model for future projects. It stands out as a novel and bold experiment. Very few global development projects employ external panels unless lenders require such review. Those that do are often specific or short-lived. TIAP has represented a long-term commitment by BP to open all of its activities at Tangguh to the outside world, to be responsive to all its recommendations, and to publicize the results, whether critical or complimentary.

Now that construction is completed, and Tangguh will operate with several hundred employees and contractors rather than many thousands of temporary workers, the direct impacts from Tangguh on the local community should diminish significantly. However, the planning for and construction of the EGR/CCUS project in Bintuni Bay is likely to create new issues in new locations that must be addressed equitably and effectively.

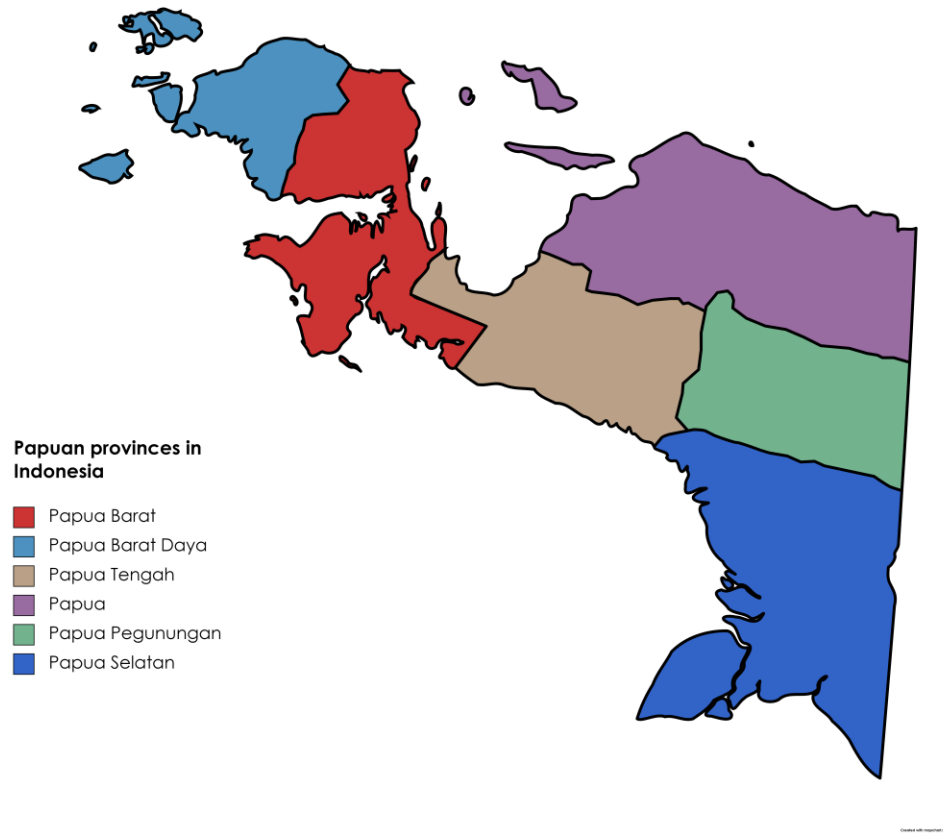
bp should consider some form of external monitoring. One of the many unique situations faced by bp at Tangguh is the difficulty for outsiders to visit the area. The GOI continues to enforce a policy to limit very strictly all outside non-business, non-tourist visas to the area. It is particularly difficult for certain foreign government representatives, journalists, and NGOs to visit.⁷⁸ Tangguh is also extremely remote and inaccessible, even to Indonesians. Thus, the outside world has a very limited view of Papua generally and Bintuni Bay in particular. It is therefore easy for actors with a specific agenda to confuse, misinform or distort conditions or situations that may arise. An external panel helps to publicize an accurate, objective description and assessment.

Many of the issues are regional and national, but a global perspective is useful to achieve bp's goal that Tangguh remain a world-class project. There may be leaders of Indonesia NGO's or former government officials or leaders from other sectors of Indonesian civil society that could provide balanced, knowledgeable, unbiased guidance. It should be a

⁷⁸ The GOI's SKJ visa requirements for visiting Papua have long been an obstacle to independent observers visits to the region.

given that any external monitoring must include a Papuan, qualified by experience to act fairly for the benefit of all affected groups.

Appendix A



Appendix B
Stakeholders Consulted by TIAP
2023 Visit

Government Officials: Indonesia

- Prof. Tutuka Ariadji, Director General of Oil and Gas, Ministry of Energy and Mineral Resources
- Triharyo Indrawan Susilo, Special staff to Minister of Energy and Mineral Resources
- Nanang Abdul Manaf, Vice chairman of SKK Migas
- Insp. Gen. (Pol) Rudolf Rodja, Deputy Minister for Public Order & Security, Coordinating Ministry for Political, Legal and Security Affairs
- John Wempi Wetipo, Vice Minister of Home Affairs
- Dr. Velix Wanggai, Deputy for Government Policy Support and National Vision, Secretariat of the Vice President of Indonesia
- Dr Wahyu Utomo, Deputy Minister for Regional Development and Spatial Planning, Coordinating Ministry for Economic Affairs
- Dr Mirza Mahendra, Director of Oil & Gas Engineering & Environment, Ministry of Energy and Mineral Resources
- Rudi Satwiko, Deputy of Business Support, SKK Migas

Government Officials: United States

- Sung Y. Kim, US Ambassador to Indonesia

Government Officials: United Kingdom

- Owen Jenkins, British Ambassador to Indonesia

Government Officials: Papua and Papua Barat

- Maj. Gen. Gabriel Lema, Commander of the Kasuari Regional Military Command (Papua Barat military chief/"Pangdam")

- Brig. Gen. Yusuf Ragainaga, Chief of Staff of the Kasuari Regional Military Command
-
- Insp. Gen. (Pol) Daniel Tahu Monang Silitonga, Chief of Papua Barat Police (“Kapolda”)
- Petrus Kasihw, Bupati of Teluk Bintuni
- Matret Kokop, Vice Bupati of Teluk Bintuni

Non-Government Organizations (NGOs)

- Robert Mandosir, RMD Institute, Jayapura
- Yan Christian Warinussy, Director of LP3BH, Manokwari
- Andris Wabdaron, LP3BH Manokwari
-

Reverend Matheus Adadikam, Elsham, Jayapura

- Paul Mambrasar, Elsham, Jayapura
- Yorgen Numberi, Komnas HAM
- Jacob Bakarbesy, Conservation International Indonesia

Private Sector Analysts

- Douglas Ramage, Bower Group Asia
- Ahmad Syarif, Bower Group Asia

Media

- Endy Bayuni, Senior Editor The Jakarta Post
- Aris Prasetyo, Kompas

Appendix C

MARCH 2023

Skill Level	1-IP	2-OP	3-Non Papuan	Grand Total
2 - Low Skilled	186	15		201
3 - Semi Skilled	161	143	1	305
4 - Skilled	105	355	293	753
5 - Managerial	28	45	103	176
Grand Total	480	558	397	1435

FEBRUARY 2023

Skill Level	1-IP	2-OP	3-Non Papuan	Grand Total
1 - Unskilled		1		1
2 - Low Skilled	205	19		224
3 - Semi Skilled	165	148	1	314
4 - Skilled	105	357	300	762
5 - Managerial	28	47	106	181
Grand Total	504	571	407	1482

Appendix D

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)

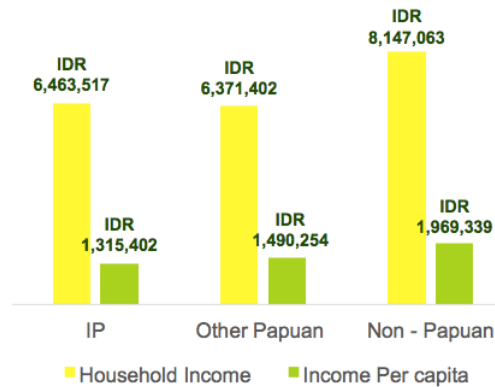
Appendix E

Survey of Local Household Incomes 2018

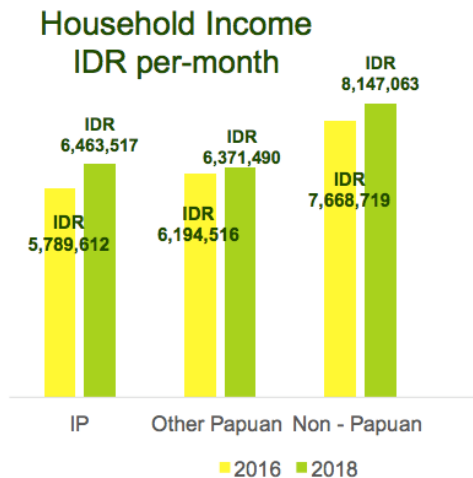
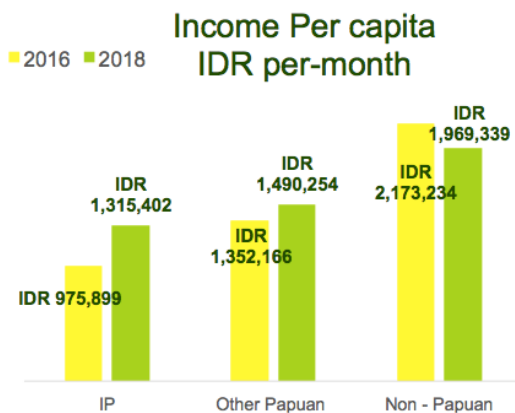
Scope

- This survey conducted in 2018 by UI. The data gathered from 8 districts (Kamundan, Tomu, Weriaqar, 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



Sources:
 - Livelihood income survey by UGM, 2016
 - Livelihood income survey by UI, 2018