# **TANGGUH INDEPENDENT ADVISORY PANEL**

# FIRST REPORT ON OPERATIONS AND PROPOSED EXPANSION OF THE TANGGUH LNG PROJECT

**MAY 2014** 

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# ACRONYMS AND INDONESIAN TERMS

adat	Local and traditional customs, laws, and dispute resolution systems used in many parts of Indonesia
AMDAL	Analisis Mengenai Dampak Lingkungan–Environmental and Social Impact Assessment
ADB	Asian Development Bank
BBDF	Bintuni Bay Development Foundation (YPTB – Yayasan Pembangunan Teluk Bintuni)
BPMIGAS	Badan Pelaksana Kegiatan Usaha Hulu Minyak dan Gas – 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	Badan Pengawasan Keuangan – State Audit Agency
Brimob	Mobile Indonesian police brigade
Bupati	The head of a kabupaten, or Regency
САР	Community Action Plan – the support program approach to facilitating community-driven development projects in Directly Affected Villages
DAV	Directly affected village as originally identified by the Tangguh LNG project
Dinas	Agency
DPR	Dewan Perkwakilan Rakyat – The House of Representatives
DPRD	<i>Dewan Perkwakilan Rakyat Daerah</i> – Provincial House of Representatives parliamentary body
EITI	Extractive Industries Transparency Initiative
ENR	Energy and Natural Resources
GOI	Government of Indonesia
ICBS	Integrated Community Based Security
ICITAP	U.S. Department of Justice's International Criminal Investigative Training Assistance Program
IPB	Institut Pertanian Bogor, 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
JUKLAP/PAMBERS	2009 update to and extension of the JUKLAP agreement
kabupaten	District or regency
Kapolda	Papua Chief of Police
Kapolres	Police commander
Kota	City
LARAP	Land Acquisition and Resettlement Action Plan – the Tangguh Project action plan describing the involuntary resettlement impacts of the Project
LNG	Liquified 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	Organisasi Papua Merdeka, or Free Papua Movement – a separatist organization
Otsus	Special Autonomy
Pangdam	Papua Military TNI Commander
Perdasus DBH	Special Autonomy regulation passed by the DPRD and approved by MRP for allocating oil and gas revenues (DBH)
PLN	Indonesia's national electricity company
Proper	Ministry of Environment national audit program
UGM	University of Gadjah Mada
RAV	Resettlement Affected Village as originally identified by the Tangguh Project – Tanah Merah Baru, Saengga, and Onar

SBY	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
THCU	Tangguh Health Care Unit
TIAP	Tangguh Independent Advisory Panel
TNI	Tentara Nasional Indonesia – 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
UNIPA	University of Papua at Manokwari
UP4B	Unit for Accelerated Development in Papua and West Papua
VAT	Value-added tax
YSA	Yayasan Social Augustinus – a local foundation

# I. Introduction

The Tangguh Independent Advisory Panel ("TIAP" or "the Panel") is designed to provide external advice to senior BP decision-makers regarding non-commercial aspects of the Tangguh LNG Project ("the Project") with a specific goal of advising BP on how Tangguh can achieve its potential as a world-class model for development. The current Panel is chaired by former U.S. Senator Tom Daschle, who served as Majority Leader of the U.S. Senate, and includes Augustinus Rumansara, a Papuan who chaired the Asian Development Bank ("ADB") Compliance Review Panel from 2003 to 2008, served as an advisor to the Governor of Papua from 2008 to 2010 and currently chairs the Papua Low Carbon Development Task Force.<sup>1</sup> The Panel utilizes an independent counsel and secretariat at the law firm DLA Piper headed by senior partner Gary Klein.<sup>2</sup> The current Panel was established in 2009 and has been extended by BP through April 2017.

This is the Panel's third full report and it comes at a unique time. BP has just completed the public consultation phase for the social and environmental impact statement ("the AMDAL") that will form the basis for its commitments during the construction of Tangguh's expansion from 2014-2019 and for the remainder of its operations. TIAP will not critique each of the commitments, which are community based and government endorsed. However, this report will seek to bring TIAP's experience and consultations to the subjects addressed and to help guide BP in its implementation of these commitments. As with previous TIAP reports, in addition to being

<sup>&</sup>lt;sup>1</sup> 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 I.

<sup>&</sup>lt;sup>2</sup> The previous Panel, which monitored the 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.

submitted to BP, this report will be presented to and discussed with interested parties in Jakarta, London and Washington, D.C.<sup>3</sup>

In addition to TIAP's activities, Tangguh is monitored by the Tangguh Lenders Group (represented by the ADB until 2014, Japan Bank for International Cooperation and Mizuho Corporate Bank), which has established an external panel that is staffed by independent experts who visit Tangguh. Until 2014, when the ADB loan was paid off, their reviews of compliance were published on the ADB website. Their review is limited to issues of safety, environment, resettlement, and social programs; their last report was in July 2013. Until financing is arranged, it is not certain whether the lenders panel will monitor issues specifically related to construction of the expanded facility. 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 the Project is perceived by them. These factors relate directly to whether BP can achieve its goal of making Tangguh a world-class model for development.

In March 2014, TIAP visited Jayapura, Manokwari and Bintuni Bay in Papua, as well as Jakarta. The Panel met with Ministers, other government officials and NGOs, the Papua TNI Commander (the "*Pangdam*"), the Papua Chief of Police (the "*Kapolda*"), the Rector of the University of Papua ("UNIPA"), the team from the University of Gadjah Mada ("UGM") working on census and revenue management issues, and both the U.S. and U.K. Ambassadors.<sup>4</sup> TIAP spent several days in Bintuni Bay regency ("*kabupaten Teluk Bintuni*"), meeting with the *Bupati* and other *kabupaten* and village leaders, villagers from north and south shore villages,

<sup>&</sup>lt;sup>3</sup> It will be available, together with BP's responses, on BP's website. *See* <u>http://www.bp.com/sectiongenericarticle.do?categoryId=9004751&contentId=7008791</u>

<sup>&</sup>lt;sup>4</sup> See Appendix II for a full list of the stakeholders consulted by TIAP during its March 2014 visit.

skilled Papuan workers at Tangguh, BP's implementing partners and BP personnel running the management, operations, Papuan development programs and security at the LNG site.

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 Universal Declaration of Human Rights; the Organization for Economic Cooperation and Development ("OECD") Guidelines for Multinational Enterprises; the International Labor Organization Convention Concerning Indigenous and Tribal Peoples in Independent Countries; the World Bank Operational Directive with respect to indigenous peoples and the U.S. – U.K. Voluntary Principles on Security and Human Rights (the "Voluntary Principles"). The Panel also reviews the Project under the more recent global guidelines that include 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 only to financial institutions).

The Panel does not audit BP's compliance with Indonesian or local law, but does review BP's compliance with its obligations under the AMDAL (which governs BP's social and environmental commitments), which will now include the new AMDAL related to the Project's expansion.<sup>5</sup> The Panel was given complete access to all information it requested from BP and total independence in its inquiries and findings. The conclusions and recommendations in this report are those of TIAP alone. The Panel expects BP to issue responses to each of its recommendations and, as noted above, anticipates conducting open meetings with interested parties to discuss this report and BP's responses in London, Washington, D.C. and Jakarta.

TIAP has identified several broad issues that BP should prioritize going forward:

<sup>&</sup>lt;sup>5</sup> See section III below. A copy of the original AMDAL is available at http://www.bp.com/sectiongenericarticle.do?categoryId=9004750&contentId=7008790.

- <u>Tangguh Expansion.</u> Over the next five years, Tangguh will bring many thousands of new workers to Bintuni Bay, increasing threats to security, safety, health, local livelihoods and culture, as well as providing new opportunities for economic development. BP must not only manage these threats directly, it must also ensure that its contractors are abiding by BP's commitments. Effective contractually-based supervision of contractors and subcontractors is essential to minimize these threats and maximize opportunities.
- 2. <u>Benefits for Indigenous People.</u> Over the course of the past ten years, BP has become an integral part of the Papuan community and has demonstrated a commitment to improving the quality of life for those in Bintuni Bay and the villages surrounding Tangguh. As it embarks upon Tangguh's expansion, BP should not lose its focus on the social programs in the region, particularly in the areas of health care, education and economic development, in partnership with the local government and NGOs. This sustained effort is critical to ensuring that the important gains achieved in these areas over the past several years are not only maintained, but are expanded and built upon going forward.
- 3. <u>Electrification</u>. The recent electrification of Bintuni town demonstrated the importance of this benefit to local attitudes. Electrification of the towns and villages of Bintuni Bay will eliminate a source of tension and jealousy that was caused initially by Tangguh electrifying the south shore RAVs. This will materially improve the lives of all of Tangguh's neighbors. BP should work with PLN to achieve full electrification this year.
- 4. <u>North Shore Housing.</u> Disparate housing caused by unequal distribution of benefits continues to be one of the most important long-term issues, creating tensions between the villagers on the north shore and those on the south shore. Despite several good faith attempts to address this issue, it has not been resolved. The new expansion AMDAL and the

agreement on the regulation (perdasus) governing revenue sharing provide the foundation for a renewed and successful effort. BP should not miss the opportunity.

5. <u>Papuan Development.</u> Commitments in the AMDAL to employ Papuans at all levels within BP and at its contractors, and support their vertical and horizontal career development, remain a serious challenge. The commitment of senior management is clear. But this commitment must be transmitted to lower level management, who should be encouraged, through targets and rewards, to coach, mentor and support the personal development plans (PDP) of Papuan employees. Special attention should be given to capable Papuans from Bintuni Bay and its surroundings.

#### **II.** Update on Operations and the Surrounding Region

Tangguh Trains 1 and 2 have been in operation since 2009. Despite the outage of one of the LNG storage tanks in 2013, the facility performed safely and efficiently, delivering a record 114 cargoes, while reducing flared gas to a low of 0.6% of feed gas in 2013.<sup>6</sup> LNG tankers load several times a week. Workboats and employee ferries are in constant activity, even without any construction activity. Attention to safety is a high priority. Plant safety has steadily improved, with recordable injuries down 50% from 2012 and 80% since 2010, to a level of .02 (one injury). Leaks are also down to only one incident in 2013.

In 2013, for the first time, BP delivered cargos of LNG from Tangguh to domestic customers. Tangguh supplied five LNG cargoes to fertilizer company *PT Pupuk Iskandar Muda* (PIM) through a Cargo Substitution Arrangement with the Arun LNG facility. It also began supplying the new Floating Storage and Regasification Unit (FSRU) in West Java operated by *PT Nusantara Regas*. Discussions are underway to supply additional cargoes to the FSRU from

<sup>&</sup>lt;sup>6</sup> See section XI below for additional information.

Trains 1 and 2 over the next several years to support gas sales in West Java. These domestic sales are possible because of the diversion provisions in the sales agreement with Sempra. In addition to the benefit that these sales bring to Indonesia, which is searching for gas supplies to mitigate its oil dependence, they address a serious political criticism: that Tangguh only benefits foreign interests.

The LNG site in Papua Barat Province is remote and accessible only by boat. The two resettlement affected villages ("RAVs") of Tanah Merah Baru and Saengga,<sup>7</sup> are several kilometers away. The nearest towns – Bintuni on the north shore and Babo on the south – are each about a two hour boat ride from the site. The nearest north shore villages are about 30 kilometers across the Bay; about one and a half hours away by speed boat. The facility's footprint is approximately 404 hectares, set within a preserved surrounding forest perimeter of an additional 2,862 hectares. The natural gas flare at the site is visible from many parts of the Bay. Two jetties, one used for docking LNG tankers, extend offshore about a kilometer. A marine exclusion zone surrounds these jetties which impedes the movement of local fishermen from the resettled villages. There are two offshore platforms in the Bay, which collect gas from 15 wells and pipe it to shore; they are unobtrusive and do not interfere with fishing or other commercial activities.

In March 2014, there were 2,657 total employees at the LNG site, of whom 490 work directly for BP and the remainder for contractors. Most of these employees share their jobs with another "back-to-back" worker. About 54% of the workers, including those employed by

<sup>&</sup>lt;sup>7</sup> The nine villages near the LNG site were designated in the AMDAL as Directly Affected Villages ("DAVs"), for which special programs and funding was provided. The villages of Tanah Merah (the actual site of the facility), Saengga (which provided the land on which most Tanah Merah residents were resettled) and Onar (where the remainder of Tanah Merah's residents settled) were also designated Resettlement Affected Villages ("RAVs"), which were governed by the Land Acquisition and Resettlement Action Plan ("LARAP") as well as the AMDAL. The LARAP concluded in 2009 and the RAVs were merged into the same continuing programs as the DAVs.

contractors, are Papuan. Many are from the Directly Affected Villages ("DAVs") and other areas in the Bird's Head region of Papua Barat. This percentage has been stalled at this level since 2011.<sup>8</sup> BP has committed to increase the percentage of Papuans to 85% by 2029.

Project operations most directly affect the villages near the site (within about 30-40 kilometers) (DAVs) and, of course, the resettled villages of Tanah Merah Baru, Saengga and Onar. DAVs near the facility all have experienced population increases (much of which is non-indigenous) and growth in economic activity, including growth in per capita income.<sup>9</sup> But some of the DAVs, particularly on the south shore, have enjoyed greater growth and benefits than others, leading to continuing tension. This will be addressed in greater detail in section VI(B) below. All the DAVs have improved health and education facilities and services, new clean water collection systems, jobs at the Tangguh LNG plant for many of their young men and women and livelihood programs to diversify and increase their sources of income. Soon, all the DAVs, as well as Bintuni town, should be electrified, using power generated at Tangguh.<sup>10</sup>

Economic activity and population in the *Teluk Bintuni kabupaten* (Bintuni Bay regency) continue to increase. Much of this increase results from non-Papuan in-migration from other areas of Eastern Indonesia and Java. Some is caused by other foreign licensees operating in the area, including non-indigenous commercial fishing and logging operations and several other oil and gas companies. One of these companies, Genting Oil, is developing gas resources within the perimeter of the LNG site. Largely because of all this growth, there are proposals in the national parliament (DPR) to establish several new *kabupatens* in Bintuni Bay.

<sup>&</sup>lt;sup>8</sup> There are four definitions and much controversy over who is a "Papuan." These definitions will be fully described in section VII below. The 54% Papuan employment is based on the broadest definition. Only 59% of the Papuan workers are ethnic Papuans.

<sup>&</sup>lt;sup>9</sup> See Appendix III for data from the "Census and Social Economic Survey in Bintuni Bay Regency 2013," Universitas Gadjah Mada, 2013.

<sup>&</sup>lt;sup>10</sup> See section VI(C) below.

This growth is particularly focused in the capital Bintuni, whose population has more than doubled since it was established as a *kabupaten* in 2004 and where there are many signs of construction and development, notably a new modern hospital and a governmental complex on the outskirts of town. Most significantly, at long last Bintuni town was electrified 24/7 by PLN (the national electricity company) in February 2014, using power generated at Tangguh and transferred to PLN at the site. Until then, diesel-generated electricity was intermittent, not universal and expensive, as it is in all the other populated areas of Bintuni Bay. Bintuni's recently built hospital, the only hospital in the *kabupaten*, is functioning well. Although it can only provide primary care, it has expanded its capabilities as a result of BP's support. There are also now commercial flights within the province to its airport. The *Bupati*, Alfons Manibui, and his Deputy are serving their second, and final, five-year term until November 2015.

Babo experienced significant economic activity as the Tangguh supply center and base camp during initial construction. It has not experienced rapid growth recently, although it has retained marine facilities and the airstrip that were rebuilt by BP and will be used during construction. Significantly, Babo has no PLN grid-based electricity, inadequate roads for marketing of goods, and little health care capacity.

Manokwari, the capital of Papua Barat province since it was established in 2004, also continues to grow, although not primarily related to Tangguh. There is considerable new economic and construction activity, both governmental and private, largely resulting from the influx of funds under Special Autonomy. However, there is only expensive diesel-based electricity and, despite some improvements to roads, it remains at least a six-hour road trip from Bintuni. Governor Bram Atururi is serving his second, and final, five-year term until November 2016.

Jayapura, the historic capital of Papua and now the capital of Papua province (about twothirds of the original Papua), also has grown significantly from the inflow of funds under Special Autonomy, but continues to experience considerable political tension. Jayapura is less directly involved in most matters relating to Tangguh since the splitting of the province in 2004. But, significantly, the *Pangdam* (regional head of TNI) and the *Kapolda* (regional Chief of Police) in Jayapura retain jurisdiction over security in both provinces, including Tangguh. Significantly, despite local leaders' calls for increased tourism and other investment, foreigners generally are still not permitted to visit any part of Papua without a special travel permit ("SKJ"). The process for obtaining the SKJ is cumbersome at best and granted only for legitimate business purposes. Thus, the presence of foreign NGOs, students, media and tourists is very rare even in the capital.

At the national level, Ministers and other senior officials of the Government of Indonesia ("GOI") are generally satisfied with Tangguh, but, other than SKKMigas (the upstream regulator), know little about its benefits to Papuans. Much of the GOI's interest is now centered on the Tangguh expansion, *e.g.*, who gets the portion of Train 3 LNG that is committed to domestic uses; and on the renegotiation of the LNG contract with Fujian, which is generally considered unfair to Indonesia. There is optimism that Tangguh's expansion will help to electrify the region, and hope that the expansion will lead to further economic development and stability in Papua. Although there is little familiarity with the Integrated Community Based Security ("ICBS") system employed at Tangguh, there is relief that it seems to be working effectively and that no security or human rights issues have developed at Tangguh.

## III. Tangguh's Proposed Expansion and the New AMDAL

After several years of further exploration, project development and market assessment, BP has embarked on an expansion of Tangguh that will add a new third train that will increase production by 50%. If governmental licensing and BP approvals proceed as anticipated, construction will begin in 2015 and continue until 2019, when the third train will be inaugurated. Although no expansion of the onshore site is required (land has been cleared at the site for up to eight trains), additional jetties will be needed, two new platforms and undersea pipelines will be installed and 16 new wells will be drilled. Because post-2019 development for Train 3 or a possible Train 4 may include a platform and several wells in the Fakfak *kabupaten* (just to the west of *Teluk Bintuni kabupaten*), the new AMDAL expands the local jurisdictions that will be directly affected. Construction will require approximately 7,500 new workers, for whom land will be cleared at the site and a new camp constructed. Significantly, construction will need to proceed in parallel, both onshore and offshore, with ongoing operations from Trains 1 and 2.

Expansion requires several governmental approvals, including the plan for developing the site and marketing the LNG, a new environmental and social impact assessment (AMDAL) and the financing plan. The Plan of Further Development ("POFD") was approved by BPMigas (the then upstream regulator) in November 2012. The POFD commits BP to sell at least 40% of the Train 3 production to domestic consumers. There was no provision for sales to domestic customers in the earlier Tangguh development, which has been the source of much criticism.

Approval of the new AMDAL, which establishes BP's social and environmental commitments, requires the support of the local and provincial governments. In February, the Governor of Papua Barat, the *Bupatis* of both Bintuni Bay and Fakfak as well as local *adat* tribal leaders endorsed the new AMDAL after extensive consultations and several public hearings. The length of the process may have set a record for a project of this kind in Indonesia. TIAP was informed that, after consultation with the Ministers of Energy and Natural Resources ("ENR") and Finance, the Minister of the Environment is likely to provide final approval.

The new AMDAL adds commitments to the many that were included in the original AMDAL and described in previous reports.<sup>11</sup> AMDAL support by local leaders was clearly contingent on these new commitments, of which several are significant. First, the AMDAL adds a new North Shore Housing Project to improve housing and infrastructure in some of the villages on the north shore.<sup>12</sup> TIAP has recommended such a program for several years, and urged the establishment of the Bintuni Bay Development Foundation, which was created for this purpose, but has failed to achieve its goals.<sup>13</sup>

Second, the AMDAL provides for further electrification of the Bintuni Bay area using electricity produced at Tangguh and distributed by PLN. At present, only Bintuni town has Tangguh-based electricity. BP has committed to provide sufficient power for all the DAVs and the town of Babo. This presents challenges that are discussed in section VI below.

Third, the AMDAL commits to a gas to power program for the province of Papua Barat making it possible for coastal population centers in the province to generate affordable electricity with either pipeline gas or LNG from Tangguh. BP has committed 15mmcf per day, sufficient to generate about 50 to 80MW of power, for this purpose. This, too, presents significant challenges, which are addressed in section XII below.

In addition to these three special projects, the new AMDAL will expand the scope of Tangguh's social programs beyond the DAVs to include members of all four indigenous tribes that reside in the immediate coastal area.<sup>14</sup> It will also require the establishment of new centers for the Diversified Growth Strategy in Babo and Bintuni; and it will discontinue the community

<sup>&</sup>lt;sup>11</sup> See, e.g., TIAP's March 2007 report at 15-17 for a discussion of the AMDAL's requirements regarding Papuan employment and 35-39 which references environmental requirements.

<sup>&</sup>lt;sup>12</sup> This is discussed in more detail in section VI(B) below.

<sup>&</sup>lt;sup>13</sup> See the Panel's 2012 Report on the Operations Phase at 47-48.

<sup>&</sup>lt;sup>14</sup> This involves a population of about 20,000. A map of the tribal areas is attached as part of Appendix I.

action plans ("CAPs") for the DAVs, which have provided discretionary funds of about \$30,000 per year for the selected needs of each DAV.

Further, although separate from the AMDAL *per se*, the *Bupati* was concerned that the construction of Train 3 could reduce the flow of revenues to the *kabupaten*. In fact, because of the mechanism for financing the expansion, it would be possible that the revenues flowing to the Bintuni Bay *kabupaten* from Tangguh could decline during the construction period. To avoid this outcome, BP also sought to "protect" the level of revenues to the *kabupaten*. This goal has been agreed to by SKKMigas, the upstream regulator.<sup>15</sup>

Finally, and significantly, the local support for the AMDAL was predicated on an agreement among all the local parties, including the Governor, the two *Bupatis*, and the *adat* tribal leaders, on the issuance of a *perdasus DBH*, or provincial regulation, for allocating the natural resource revenue generated by oil and gas companies, including Tangguh. This perdasus or Special Provincial Regulation is called: "Perdasus Bagi Hasil Minyak dan Gas Bumi" (*perdasus* DBH). This agreement has been reached and approval is now pending at the GOI. Agreement took many years, and was the subject of much controversy. The *perdasus* relates to the 40% of the after-tax revenues from Tangguh that flow to local jurisdictions but are not already allocated by formula. Pursuant to the agreement, this 40% will be split in half: one half (or 20%) will be divided into 4% for the Province, 7% for Bintuni Bay *kabupaten*, 7% for all the other *kabupatens* in the province; and 2% for higher education in the province. The other half

<sup>&</sup>lt;sup>15</sup> See section X below. This would be accomplished by BP deferring refunds on the Indonesia value-added tax ("VAT") that it would otherwise be entitled to take. At the time of TIAP's visit, the MOF was preparing to run "simulations" of the revenue stream using alternative financing mechanisms.

(20%) will be split between a trust fund to be administered by *adat* leaders; and funds for local community development.<sup>16</sup>

As a result of these commitments, support for the Project's expansion among local indigenous people and government officials is strong, although not unanimous. The *Bupati* and many other local leaders are pleased with the way BP has worked with them to reach these agreements, and to provide jobs for Papuans and improve local services. However, there remain serious criticisms about several issues that BP can address, including disparate treatment of north shore villages, Papuan employment and advancement, electrification, and impediments to fishing grounds; and about issues that are primarily for local government to address, such as *adat* recognition for tribal land and resource ownership claims,<sup>17</sup>.

The new AMDAL process has provided by far the best opportunity to date for input from, and dialogue among, local affected parties. It gauged community views on the impact of Tangguh's social and environmental programs as they have been implemented and brought out local feelings toward Tangguh. The original AMDAL was also based on community input but, of course, was structured before construction began and without the input of the more recently formed local government. The experience of local constituencies over the past 10 years has provided them with specific real life understanding of what works and what does not work, and which programs should be eliminated and which need to be changed. Because of its collaborative nature, BP has accepted many of these suggestions and aspirations, in shaping social management into a new Tangguh Sustainable Development Programs ("TSDP"), which will replace the Integrated Social Programs ("ISP").

<sup>&</sup>lt;sup>16</sup> See section X below for a detailed discussion of the implications of this agreement and Appendix IV for a flow chart on the allocation of Tangguh revenues.

<sup>&</sup>lt;sup>17</sup> Local and tribal leaders continue to assert that *adat* compensation should be Rp. 60 billion, but that only Rp. 6 billion had been paid. This is an issue that many hope will be resolved by the *perdasus*, but some expect BP to help fund this claim. See section X(B) below for further discussion of this issue.

First, the new AMDAL shifts the development focus from one centered on the DAVs to "sustainable development that focuses on Indigenous People, thus no longer using the DAVs approach." BP's "policy to prioritize, empower and strengthen the Indigenous People will underlie all of Tangguh LNG's social programs."<sup>18</sup> This shift is in part because migrants moving to Bintuni Bay have taken portions of benefits originally intended for Indigenous People. TIAP endorses this broadening of the social program focus. In addition, by including all of the indigenous tribes living in the area, some of the jealousies between different villages and groups in the area could be reduced.

However, there is no question that the people living in several of the coastal DAVs are the most directly affected of all the people in the region, whether or not they are indigenous. They are practically within sight of the facility, and it most directly affects their environment and their livelihoods. Just as the RAVs were provided new housing, community facilities, electricity and other special benefits because of their special situation, these DAVs merit continued recognition and compensation on a higher level than others in the area. And certainly at this point, although there are migrants living in the DAVs, the overwhelming population of these villages is native Papuan.<sup>19</sup> Special recognition of these villages should continue. Until now the CAPs, which are a \$30,000 per year discretionary improvement fund for each DAV, have successfully provided these benefits. They also have helped to improve village governance and budgeting.<sup>20</sup> Although the CAPS will be discontinued, BP should encourage an allocation of available development funds to these villages for discretionary projects.

<sup>&</sup>lt;sup>18</sup> See Summary of LNG Social Management at 4.

<sup>&</sup>lt;sup>19</sup> The UGM census estimates that 73% of the residents of the DAVs are Papuan, of which 52% are from indigenous tribes. All but four of the DAVs are overwhelmingly indigenous. See section VI(F) below.

<sup>&</sup>lt;sup>20</sup> The new AMDAL specifically recognizes this need: "The most fundamental issue affecting the community's opportunity to improve their welfare is actually the community lacked capacity to play an active role in driving the development of their villages. Tangguh LNG believes that by helping the community to manage the development in

Second, the new AMDAL comes at a good time to reevaluate the initial commitments of 2004 and the revisions made to the ISP in 2009. A five-year period is an appropriate timeframe to implement a program, evaluate its effectiveness, and make needed corrections. In fact, TIAP suggests that the programs be fully reviewed every five years, with the next analysis conducted in 2019 (or earlier where there are clear deficiencies).

Third, many of the new AMDAL commitments are high-level and aspirational, rather than quantitative or program specific. Although the geographic scope is now broader, many have goals similar to previous programs. As a result, it is the specifics of long-term implementation that will matter most. BP must find the best partners and provide consistent support for these programs for the duration of its operations in order to accomplish their lofty goals. Further, many of the programs have new titles and new acronyms. The recasting and reorganizing of earlier programs is confusing to the recipients and other stakeholders, and should be avoided where possible. Revisions or tweaks in a program can be made without eliminating it. If a program is terminated, or replaced, the rationale for the changes should be explained so that there is no implication that it did not accomplish its goals. Credit for incremental successes in previous programs should be acknowledged, while changes are still made to improve performance.

Fourth, the expansion of the geographic scope of Tangguh's social programs will now include additional areas in the Fakfak Regency. This is because new producing wells and a platform may be established in that regency during further development. BP has faced many challenges working with the Bintuni Bay Regency over the period covered by the first AMDAL. In part, this was because the regency was newly created in 2004. However, doubling the number

their villages and encourage improvement of public welfare will create harmonious external relations pattern..." Summary of Tangguh LNG Social Management at 47.

of regencies through which programs must be administered creates the need for significant additional government affairs efforts and will bring many new challenges. TIAP has had no consultation with Fakfak officials to date. BP external relations personnel will need to devote considerable resources to this new jurisdiction and its local government. It is important that programs not be delayed or diluted in Bintuni Bay Regency because of the need to get approvals or other means of support from the Fakfak Regency government.

#### **IV.** Political and Security Developments

There is a great deal of resource nationalism being expressed in Indonesia, including antagonism toward foreign investment in the natural resource sector and enthusiasm for an increased role for state and local owned enterprises. It is an election year, and it is possible that some of this rhetoric is political and will not translate into policy. But nearly every candidate for President, even those most supportive of foreign trade and investment in the past, has voiced a theme of natural resource nationalism that is critical of the status quo on resource development. It is particularly threatening for extensions of existing arrangements and for future investments that are not yet secured by formal agreements. Unfortunately, the principal issues related to Tangguh that rise to the national discourse contribute to this antagonism: first, that Tangguh causes losses to Indonesia because the LNG price to China is so low; and second, that all of Tangguh's production (until very recently) has been exported. Thus, all issues related to expansion must be viewed through this political prism.

The turn toward natural resource nationalism has been reflected in policy and events in several significant ways. First, in November 2012, the Constitutional Court declared the upstream regulator, BPMigas, unconstitutional and disbanded it. The challenge was brought by one of Indonesia's largest Muslim groups, Muhammadiyah, (along with other Muslim

organizations) and based on the premise that BPMigas was independent of the elected government and was overly benefitting foreign companies. Although BPMigas was largely reconstituted "temporarily" as SKKMigas within the Ministry of Energy and Natural Resources, the underlying issue remains to be decided in a new oil and gas law, which is being considered by the DPR, and will very likely reflect this widely held view.

Second, Indonesia's anti-corruption campaign, which has been hugely successful under the leadership of the Anti-Corruption Commission ("KPK"), has also snared some seemingly innocent bystanders connected to foreign interests. In a case brought not by KPK but by the Attorney General, four individuals working for U.S.-based oil and gas giant Chevron Pacific Indonesia ("CPI") or its contractor were convicted of corruption for "losses to the State" related to the costs of a bioremediation project.<sup>21</sup> They are currently serving sentences despite pleas from several government officials that the convictions were without factual support. Separately, the President of ExxonMobil Indonesia was refused an extension of his one-year work contract and ExxonMobil was asked to replace him.<sup>22</sup>

The pressure to nationalize upstream energy production (which was only recently decoupled from national control by the Oil and Gas Law of 2002) is illustrated by the statements and actions of the ENR Ministry regarding extensions of existing production sharing contracts ("PSCs"). In several prominent cases, operators under PSCs that are seeking extensions have been left with uncertainty or denials. For example, uncertainty for Total E&P Indonesia over the

<sup>&</sup>lt;sup>21</sup> Separately, the KPK investigated contributions made by the President of CPI to the Riau local government. *See* INVESTOR DAILY, REPUBLIKA, KONTAN, Apr. 9, 2013.

<sup>&</sup>lt;sup>22</sup> See "RI asks ExxonMobil Indonesia to Replace its President Director," THE JAKARTA POST, Jan. 2, 2013.

future of the oil-and-gas Mahakam block off East Kalimantan has led it to halt its expansion of new projects there.<sup>23</sup>

The Deputy Minister of ENR made clear that the government would increase the role of national and local companies in the field of oil and gas, which should be capable of competing against foreign companies. He added that foreign companies and technology currently dominate the upstream oil and gas industry in the country and that the regulator (SKKMigas) should raise the role of national companies in the upstream oil and gas industry. Provincial companies are also seeking to enter the oil and gas business.<sup>24</sup>

There have been many calls from independent analysts for the dissolution of SKKMigas and the substitution of Pertamina as the manager of all upstream assets. One much quoted analyst specifically criticized BP, saying: "In fact, British Petroleum has the guts to use natural gas reserves that belong to the country as collateral to expand its field. ...SKKMigas' duties must be transferred to Pertamina."<sup>25</sup>

This antagonism is also reflected in populist activism. For example, students from Riau University rallied before Chevron Pacific Indonesia's headquarters in Riau, demanding the central government hand over operation of the Siak oil block to the local administration. The protest escalated as the students burned tires and broke the five-meter high metal gate at Chevron's Rumbai camp.<sup>26</sup>

Adding fuel to the fire was the recent conviction of the head of SKKMigas, Rudi Rubiandini, for bribery by a Singaporean oil company (Kernel Oil). Kernel won several tenders

<sup>&</sup>lt;sup>23</sup> Several oil and gas companies have left Indonesia or are selling their assets, including Hess Corp, Anadarko Petroleum, Premier Oil and Korean National Oil.

<sup>&</sup>lt;sup>24</sup> See BISNIS INDONESIA, KORAN SINDO, Sept. 10, 2013. The province of West Java has formed a special government controlled company, known as a BUMD, to manage its new oil and gas fields independently.
<sup>25</sup> See the discussion of media and public affairs below in section VIII. *See also* "Kurtubi: Oil and Gas Must be

Managed by State-Owned Companies," Antaranews.com, Sept. 13, 2013; NERACA, Sept. 16, 2013.

<sup>&</sup>lt;sup>26</sup> See "Students Want Local Government to Take Over Siak Block Operations," THE JAKARTA POST, May 8, 2013.

of oil by SKKMigas.<sup>27</sup> Rubiandini was caught red handed with \$700,000 in cash and has been sentenced to seven years in prison and a fine of Rp. 200 million. An additional \$200,000 was found in the safe of the Director General of the ENR, which Rubiandini claimed was there to give as holiday gifts to Members of the DPR with responsibility over energy.<sup>28</sup> Other more high level officials may be involved as the proceedings continue. The case has led to a heightened popular view that foreign interests have corrupted current oil and gas regulation.

In Papua, the security environment has improved somewhat,<sup>29</sup> although deep divisions and ill feeling toward Jakarta remain. Violence by the separatist movement OPM is down significantly in all areas but the Central Highlands. Violence in the area near Freeport's mine also continues, but it is difficult to know its sources. There has been no political violence, separatist inspired or otherwise, in the Bintuni Bay area. Importantly, there have been no recent episodes of police or TNI human rights abuses; indeed, both the *Pangdam* and the *Kapolda* expressed sensitivity to human rights concerns and promoted new security policies of soft power and improving social welfare. Each would like to increase participation in community and public service projects, a model TNI is using at Freeport. Both officials are new since TIAP's last visit, and were aware of the annual joint exercise implementing the ICBS.<sup>30</sup>

The newly elected Governor in Papua province, Lukas Enembe, and the re-elected Governor in Papua Barat, Bram Atururi, bring a certain degree of political stability. Both view Tangguh positively and both seek to capitalize on gas from Tangguh for power generation in their province. Governor Atururi expressed support for the new AMDAL agreements, particularly the inclusion of Fakfak in the social programs, and Tangguh's plans for

 <sup>&</sup>lt;sup>27</sup> See "Kernel Executive Sentenced to Three Years for Bribing Rudi," THE JAKARTA POST, Dec. 20, 2013.
 <sup>28</sup> See REPUBLIKA, Jan. 28, 2014; KORAN TEMPO, Nov. 12, 2013.

<sup>&</sup>lt;sup>29</sup> See discussion of the security environment in 2011-2012 in TIAP's 2012 report at 9-14.

<sup>&</sup>lt;sup>30</sup> See section V below for a discussion of these issues.

development, but expects those plans to include electricity for Papua Barat. He wants Tangguh to be an example for other oil and gas companies operating in Papua.

Governor Enembe, who is a member of President Susilo Bambang Yudhoyono's ("SBY") Party Democrat, has proposed to modify and improve Special Autonomy after a discussion with the President.<sup>31</sup> He hopes the DPR will enact "Special Autonomy Plus" or *Otsus Plus*, before the end of SBY's term in November. This would be SBY's third effort to deal with dissatisfaction in Papua over implementation of Special Autonomy.<sup>32</sup> Many believe the large flow of funds to the provinces has not produced real benefits for the people, but has been diverted to elites and vanished through corruption. In fact, all 44 members of the Papua Barat Regional Parliament ("DPRD"), including its leaders, were convicted of bribery in a case brought by the District Attorney in Jayapura.<sup>33</sup> These convictions are now on appeal.

The effort to improve Special Autonomy has ignited a heated political debate about whether to save the original law at all or attempt to improve it. Significantly, thus far there has been no violence accompanying the debate. The ideas of each of the Governors are very different, although a draft supported by both has been proposed.<sup>34</sup> The modifications would relate primarily to increased power for the provinces, increased revenue sharing, and greater

<sup>&</sup>lt;sup>31</sup> The Special Autonomy law, Law 21/2001, represents the fundamental political/economic underpinning for stability in Papua; it offered Papua unique economic and political benefits as a mechanism to undermine separatist sentiment and improve economic and social welfare indicators. Special Autonomy, known as Otsus in Papua, provides significant additional funding for provincial and local (*kabupaten*) programs, as well as avowed deference to Papua's unique cultural heritage. Very large revenue flows are now going to Papua, detailed more fully in section X below, but the benefits of this revenue do not accrue equitably to all Papuans, and there is a broad view that the unique cultural deference that was promised to Papua has been largely ignored.

<sup>&</sup>lt;sup>32</sup> SBY proposed a" New Deal for Papua," in 2007 designed to accelerate development, improve social services and provide affirmative action for Papuans. In 2011, SBY's Administration began another effort to improve the implementation of Special Autonomy, reach out to Papuans and diminish conflict by establishing the Unit for Accelerated Development in Papua and West Papua ("UP4B") in September 2011. The Unit is headed by a respected former Lt. General, Bambang Darmono. UP4B is focused on infrastructure and economic development, such as new roads and airports, and was helpful in working with PLN to establish electricity service for Bintuni. <sup>33</sup> See "Replace All Members of Parliament in West Papua," MEDIA INDONESIA (HEADLINES), Feb. 12, 2014. <sup>34</sup> "OTSUS PLUS: The debate Over Enhanced Special Autonomy for Papua," Institute for Policy Analysis of Conflict, Nov. 25, 2013.

affirmative action for indigenous Papuans, including limiting in-migration. It is very unlikely that anything will be enacted in the near term. Few of the proposed changes would affect Tangguh directly since it is already taking the affirmative actions that would be required under the law.

#### V. Security and Human Rights at Tangguh

For Tangguh to be a world class model for development, its presence must not be the source of conflicts and violence in Bintuni Bay. And any conflicts that do occur must be handled peacefully. Toward these goals, BP has designed and implemented its ICBS to provide effective security while diminishing the chance of confrontations between indigenous people and security forces. Tangguh's ICBS, a novel, untried concept at its inception in Indonesia, continues to operate effectively. The inner ring of security is provided by private security guards, all of whom are Papuans, many from the local area. This provides day-to-day security with a uniquely local character, provides good jobs for many local young men and women and gives the villages in the area a connection to Tangguh and a feeling of brotherhood with the security force. Police would be called only for law enforcement or an emergency that cannot be handled by private security. TNI would be called only when private security and the police cannot control the situation. Security officials are encouraging other companies to adopt similar security models.

As important as ICBS is, security at Tangguh should not be understood only as the integration and training of Tangguh security guards with the police and armed forces under ICBS. Equally important to Tangguh security is the development and retention of good relations with the community itself through social programs that bring benefits to people and hence create a sense of partnership and even ownership with the community. This must remain a central element of security.

The key agreement governing the ICBS is the Joint Field Guidelines for Security, the JUKLAP-PALMERS, an agreement between BP and the Papua Police detailing responsibilities, training and appropriate responses to threats and incidents.<sup>35</sup> The agreement, which originated in 2004 and was expanded and renewed in 2009, expires in 2014. It prescribes the annual joint training exercise, the human rights training for police, and the necessary triggers before an incident would involve the police or the TNI. It incorporates the U.N. Voluntary Principles on Security and Human Rights. It is critical that the renewed guidelines continue these practices. Additionally, the extended guidelines should increase the communication and dialogue between the police and the community, so that the ICBS is fully socialized and understood by all. This will be needed to deflect the potential for increased tension during construction, particularly regarding expanded restrictions on fishing. All necessary restrictions on fishing should be discussed by BP and the police with the relevant villages. If possible, alternatives should be offered.

A fundamental element of ICBS requires all security forces that may be called upon in an emergency situation to be trained in and made familiar with the Voluntary Principles, the U.N. Basic Principles on the Use of Force, and human rights principles generally. BP's private security contractor regularly trains its guards in these principles, and specifically in the use of their batons and other crowd control equipment. The conduct of the security guards in crowd control situations is the most likely first test of ICBS in an emergency. This training is not annual, because the guards generally are employed for longer periods. TIAP believes this training is so critical to performance that it should be provided to all new guards before being issued any baton sticks or other potentially injurious equipment, and refreshed annually. This

<sup>&</sup>lt;sup>35</sup> The JUKLAP-PALMERS is more fully described in TIAP's November 2012 report at 13-14, 17-18.

requirement should be included in the contract for the renewed security force, which will be awarded later this year.

For the police, this training has been conducted annually, as required by the JUKLAP-PAMBERS. Until now, the TNI also has voluntarily accepted training for its troops that would be called on in an emergency at Tangguh. BP must work with every *Pangdam* so that this continues. It is essential to continually educate and reinforce with local public security forces the principles included in ICBS.

The second element that is a critical component of ICBS is the joint annual training exercise. The joint training exercises directly include BP, its private security and the Papuan police. Local TNI and NGOs now attend as observers; as do local government and media. The effectiveness of ICBS depends on the understanding of its principles by all security forces in the region as well as the understanding of the community. This is particularly necessary because, at least until now, ICBS is not the norm for these institutions. In several previous visits, TIAP has met with *Pangdams* and *Kapoldas* who were not familiar with the joint exercise, which was not held in 2011. This year, both were aware of it and thought it very useful.

But there were several suggestions for possible improvement. One of the security officers noted that the joint exercise should be more realistic. TIAP endorses this suggestion, and recommends that, to the extent possible, BP work with the police to simulate a real security threat each year in which security forces are not already on the scene. It is also important that the joint exercise not be combined with other parts of the program, such as human rights training. TIAP recommends that these two elements be separated, so that participants can focus on one objective. Last year, the joint training exercise also included a Community Social Responsibility

Program, which had police, TNI and BP cleaning public areas in Babo. Unless these two programs are clearly separated, TIAP believes the joint exercise could be compromised.

Both the police and the TNI expressed strong interest in participating in local community service activities, such as clean-ups, painting or coaching youth sports. These may be laudable activities, and well intentioned; and they may take place without any BP support. But the Panel regards any BP participation in bringing uniformed troops into the villages as inconsistent with the principles of ICBS. At least for now, TIAP recommends that BP limit its support of police and TNI personnel in the affected villages to communications and public forums that inform the community on security, human rights and ICBS. Separately, BP is considering using private security guards to engage in community service activities in their local home villages when they are not on assignment at the site. The Panel endorses this activity, as long as the guards do not wear their uniforms while engaged in this service.

It was also pointed out by a senior security official that the uniforms worn by the private security guards are intimidating. This is certainly an observation made by the Panel as well and is probably intentional. But it is not clear that it is necessary or useful. The now four-year private security contract expires in January 2015. As BP conducts its tender to extend or replace the contractor, it should ask for suggestions on changing the uniform or institute guidelines on when and where uniforms should be worn. For example, when guarding the Tangguh site, authoritative uniforms may be necessary. However, outside of the Tangguh facility, more comfortable and less intimidating uniforms should be considered. The security guards also should be involved in this decision.

Another essential element designed for the protection of human rights, and for the monitoring of breaches, is the grievance system, established for villagers and employees at

TIAP's suggestion in 2006. There were only 38 grievances or concerns submitted by the community in 2013, substantially fewer than the 115 grievances filed in 2011. Most relate to workforce or community development issues. Several related to BP boats causing damage to villagers' fishing nets, for which compensation has been made. No complaints were filed related to human rights, security or maltreatment. There were several grievances in 2012 for which the response took longer than 20 days, the time required by the program. BP has addressed this breach. Although the grievance system otherwise seems to be working well, it is important that BP ensure that the system is understood by villagers and employees, and that they have the capacity to file a grievance and feel comfortable doing so. Toward that end, the community affairs staff should hold periodic forums that include the grievance system in the agenda, and the Project staff should do the same for employees at orientation and in refresher programs. We cannot be certain the grievance system is working unless we are certain that its intended beneficiaries can use it easily and comfortably.

Unlike earlier years, other oil and gas producers are now operating in Bintuni Bay. This raises security and social concerns, as well as cumulative impacts that may affect the community. These companies may not be as respectful of local interests and could trigger actions that could provoke violent reactions by public security forces. BP's intervention last year with one of these companies – Genting Oil – successfully changed its security practices from employing TNI military personnel to using the same trained private security contractor as BP.<sup>36</sup> If others come into the area employing TNI or police for security, or taking other steps that would increase social tensions, BP should suggest modifying their practices and conforming to ICBS principles. Further, BP should increase communication with these other companies to seek cooperative behavior and joint support for local projects that will improve the community.

<sup>&</sup>lt;sup>36</sup> For a more detailed description of this situation, see TIAP's November 2012 report at 15.

Finally, and significantly, is the issue of Tangguh's defenses against cyber-attacks.

Recent events demonstrate that even the best systems can be hacked with devastating consequences. The Panel reviewed Tangguh's thoughtful and multilayered approach, much of which comes from BP Group security requirements. TIAP is not expert on cybersecurity, so it will not critique the defenses established. However, it is critical that Tangguh have a plan for safe shutdown of the facility if the firewall suffers a material breach that could compromise operations. Such a Plan B helps to ensure that the consequences are minimized if a cyber-attack is even partly successful. Second, BP should strongly resist allowing any other party, including SKKMigas, access to its operating systems. Such access would seriously compromise security. Third, the cyber defense systems should be reviewed by experts regularly, given the dynamic nature of cybersecurity technology.

# **Recommendations: Security and Human Rights**

- 1. As part of the renewal process of the JUKLAP, there should be increased socialization of ICBS, particularly regarding necessary restrictions on fishing.
- 2. There should be annual training for security guards, use of batons or other potentially harmful equipment.
- 3. The *Pangdam* should be encouraged to continue human rights training for TNI troops that could be called to Tangguh in an emergency.
- 4. BP should work with the police to make the annual joint exercise a more realistic simulation. In addition, the joint exercise should continue to be held separately from human rights training or other activities.
- 5. The grievance system should be continually socialized, among both affected villages and employees, to ensure that all understand it and can use it easily.
- 6. BP should limit its support for police and TNI personnel activities in the villages to communications and public forums that inform the community on security, human rights and ICBS.
- 7. BP should have a plan to shut down the facility if there is a successful cyber-attack, and should resist providing any external parties' access to its operating systems.

# VI. Programs for the DAVs and the Directly Affected Area

#### A. Community Action Plans

Since construction began, the focus of BP's social programs in the region has been the DAVs, those villages identified in advance of the first AMDAL that are near the project site and would be most directly affected. Aside from specific benefits that were provided to the villages related to resettlement, Tangguh's Integrated Social Program ("ISP") and the Community Action Plans ("CAPs") were provided equitably to all the DAVs. In part as a result of these programs, the DAVs began to split and multiply; increasing from nine initially to 13 currently, with requests pending to split into more. The selection of the DAVs was geographic, but somewhat arbitrary because it drew a bold line between the villages that would receive ISP and CAP benefits and the people in the same tribes a little further away who would receive very little directly.<sup>37</sup> Jealousies and inequities developed between north shore villages and RAVs on the south shore, and between DAVs and non-DAVs.<sup>38</sup>

The new AMDAL seeks to correct these distinctions by expanding the ISP, which will now be called the Tangguh Sustainable Development Program ("TSDP"), to all members of the four indigenous tribes in the Bintuni Bay/Fakfak coastal region. This is an ambitious expansion and will create challenges to effective implementation. But it will spread direct social program benefits to a larger and more self-defined group. As BP broadens the ISP, it is ending the CAPs, which were required by the AMDAL for only 10 years. TIAP believes that the most directly affected villages, whether labeled DAVs or otherwise, merit continued program benefits. Since the program began in 2004, the CAPs have provided unique benefits of about \$30,000 per year to

<sup>&</sup>lt;sup>37</sup> The level of support provided by the social programs combined is not nearly as substantial as the amount of funds flowing to the entire *kabupaten* from Tangguh's natural resources revenue sharing, which last year was Rp. 113 billion.

<sup>&</sup>lt;sup>38</sup> See TIAP's 2002 Report at 12 and the Panel's 2003 Report at 14.

each DAV, ranging from jetty and walkway renovations to Mosque construction, to teacher homes and school renovation to women's enterprise programs. Each village established a governance process, and selected the annual infrastructure or program that suited it best.<sup>39</sup>

There are now government programs that provide similar discretionary benefits to every village in Papua, such as the *Musrenbang Kampong* program, and PNPM Mandiri/Respek program that allocates Rp. 100 million Special Autonomy Funds for each village per year. But these programs have nothing to do with ameliorating the impact or sharing the benefits of Tangguh. They are not a replacement for the CAPs. The CAPs had a useful function as an additional benefit to those villages that are most affected, and whose residents are still mostly indigenous Papuans living with Tangguh in their backyard.<sup>40</sup> At least for the original coastal villages previously known as DAVs, an allocation of discretionary benefits should be continued.

# **B.** North Shore Housing and Infrastructure

North shore housing continues to be one of the most important long-term issues that needs to be addressed. From the start, there have been jealousies between villagers on the north shore (Sebyar tribe) and those on the south shore (Simuri and Irarutu tribes), who were relocated and compensated with new modern houses, new community buildings and religious facilities and electricity. These tensions were aggravated because the north shore villagers believe that the gas is under their land, and they have not been adequately compensated. TIAP has urged BP to address these grievances, and it has attempted to do so.<sup>41</sup> Early on, BP established a vocational training center in the north shore town of Aranday to teach carpentry, electrical work and office skills to indigenous people and sought to use the timber from the clearing of the LNG site for

<sup>&</sup>lt;sup>39</sup> See, e.g., Appendices 2 and 4 to TIAP's 2006 and 2007 reports (respectively) detailing the uses of the CAPs at those times.

<sup>&</sup>lt;sup>40</sup> See analysis of 2013 census data below at section VI(F) and (G).

<sup>&</sup>lt;sup>41</sup> See, e.g., TIAP's 2003 report at 14-15 and the Panel's 2005 report at 13, 16.

north shore homes and infrastructure. For disparate reasons, these plans were not successful.<sup>42</sup> In 2008, in part as a result of TIAP's recommendation, BP and the Regency government established a new Bintuni Bay Development Foundation to focus on north shore housing and infrastructure.<sup>43</sup> While this has produced some modest improvements, it has focused its recent projects on bus transportation improvements and village infrastructure. Its modest funding and management difficulties have precluded meaningful results in housing renovation.

The new AMDAL will require BP to address this issue anew. A Memorandum of Agreement has already been executed between BP, SKKMigas and the Regency government to provide funding for a housing restoration program. A study is now being conducted to review options. TIAP welcomes this renewed commitment. In visits to north shore villages, it is apparent that the physical infrastructure and housing stock has changed little since Tangguh arrived. Although new housing in some villages may breed jealousy in others, a successful housing restoration program in the most directly affected north shore villages will at last provide the residents of those villages with a material benefit that many have long thought they deserved.

The source of funding for this program is not fully resolved. The new West Papua perdasus on revenue sharing for oil and gas (DBH) allocates 20% of Tangguh's natural resource revenues to an *adat*-administered trust fund and community development programs.<sup>44</sup> If possible, funds should be allocated from these sources. In addition, BP can contribute materials and other tangible support in recognition of these *adat* rights. A portion of the timber originally cleared for the LNG site remains at the site and may still be usable, and a large number of trees must be cleared for the new worker camp. This timber could be milled into lumber and used for this program. The sawmill and lumber should be Tangguh's in-kind contribution. This was

<sup>&</sup>lt;sup>42</sup> See TIAP's March 2009 report at 25-26.
<sup>43</sup> See TIAP's 2009 Report at 26-28.
<sup>44</sup> See section X(A) below.

essentially the original plan, and it now appears feasible. However the materials and funding issues are resolved, BP, working with the *Bupati*, should make every effort to complete a new housing program on the north shore by the time Train 3 is inaugurated.

There is a subsidiary issue relating to whether some of these homes should be renovated or whether new homes should be built in new locations. TIAP discussed this issue with the *Bupati*. Although no village should be moved without full and informed consent, it is TIAP's view that certain villages, Weriagar and Mogotira in particular, may be best served by rebuilding in a new location. These villages are being inundated by Bintuni Bay; much of the villages are under water at high tide. Agriculture in these areas is almost impossible. Rising sea levels will only exacerbate this problem. Every effort should be made to inform these villagers of their options and the consequences of each, and BP should support whatever is the informed choice of the villagers.

# C. Electrification

If housing is the most important long-term issue, electrification of the surrounding area is the most important short-term issue. The reasonably priced 24/7 electrification of a home or a business is a dramatic improvement. Diesel-generated electricity (and some solar) was installed in the RAVs when they were constructed, but nothing was provided to the DAVs.<sup>45</sup> In 2013, after lengthy delays, PLN installed distribution systems in many of the DAVs after BP built an 8 MW power generation unit and connected it to a PLN substation adjacent to the LNG site. As noted, power was turned on to Bintuni town in February 2014, activating 4 MWs of power, shortly before the agreement on the new AMDAL. But grid-based power is not yet available in

<sup>&</sup>lt;sup>45</sup> TIAP has encouraged BP to expand electricity to all the north shore DAVs since 2006. *See* TIAP's March 2006 report at 28.

other DAVs, both north and south shore, or in Babo. BP has committed to support PLN to address this issue in the new AMDAL; it should do so promptly and as a priority.

TIAP met with PLN, which is cooperative and supportive of this goal. There are serious physical challenges to bringing the grid from Tangguh to Babo and some of the remaining south shore DAVs. These may take time to overcome but they are not insurmountable. BP should work with PLN and with the Unit for Accelerated Development of Papua, UP4B, to develop this infrastructure. In the interim, BP should seek SKKMigas approval for temporary diesel-based electrification of these villages, and Babo, while they await PLN infrastructure, on terms and at rates comparable to those that would be charged by PLN. Electrification, which will materially improve the lives of Tangguh's neighbors, should not wait another year.

# D. Health

In its first decade, the ISP delivered material benefits to all the DAVs, primarily in health, education and livelihood. Both health and education services and outcomes have improved dramatically during this period. TIAP has chronicled the steady decline in malaria prevalence in the DAVs, from 23% in 2000 to 0.08% in 2013. BP's goal, in supporting the local health department, is that Bintuni Bay will be malaria free by 2020. There have also been major declines in diarrhea outbreaks, the major cause of child mortality<sup>46</sup> and gains in child and maternal mortality and child immunizations.<sup>47</sup> Births that are attended by medical staff, generally trained midwives, soared from 32% in 2009 to 66% in 2013.<sup>48</sup> Much of this success is the result of BP's Tangguh Health Care Unit ("THCU"), now called Community Health and run by a local foundation, the Yayasan Sosial Augustinus ("YSA"). This has installed health kiosks and

<sup>&</sup>lt;sup>46</sup> See TIAP's March 2009 report at 34-35.

 <sup>&</sup>lt;sup>47</sup> Child immunizations reached 88% in 2013, but lag significantly in several DAVs, where the level is under 10%.
 *See* Appendix III and the "Census and Social Economic Survey in Bintuni Bay Regency 2013," Universitas Gadjah Mada, 2013. The survey is available to interested parties by contacting TIAP.
 <sup>48</sup> *Id.*

trained residents for each village as midwives and in dispensing pre-packaged medications. BP has also supported the recently built Bintuni hospital with technical support and donations of medical check-up equipment, providing the hospital with capacity for 15 check-ups per day.

BP will face major health care challenges during the next five years. It must sustain these improvements in the former DAVs and avoid the spread of infectious diseases during the influx of thousands of workers in the area while at the same time expanding the programs to the indigenous peoples throughout Bintuni Bay. To do so, BP must partner with capable, dedicated experts, and support their needs. One expressed need is for longer contracts from the local government, so that health workers can better utilize the capacity they develop; another is to mount a greater joint effort on behavioral change.

As BP expands its health programs, it should first focus its effort on Babo, which is clearly directly affected by Tangguh and includes a significantly larger population than any of the DAVs. While there is a clinic in Babo, it has limited capacities. BP is working to upgrade the clinic, particularly its capacity to respond to obstetric emergencies and pediatric care, which are the most urgent needs. As BP improves this facility, it should also support the broader community need for emergency medical care and emergency transport. Now that there is a hospital in Bintuni, which is a three hour boat ride away, having a clinic capable of stabilizing emergency cases and transporting them to Bintuni or elsewhere could save many lives.

#### E. Education

There have been multiple measures of gains in primary and secondary education in the DAVs and Bintuni, largely the result of the work of BP's partner, British Council, along with the *kabupaten's* education department. Literacy among children and adult women has increased, but the portion of the adult population that is not literate remains very high, ranging from 50% in

Babo to 96% in Tomage. School attendance is up but the percentage of children not in school remains over 10% in several villages and is more than 20% in Tomu. The high school graduation rates, for those attending, of 100% for the past three years are suspect, and must not be taken as a true measure of performance.

There is no question that primary and secondary education in the *kabupaten* has improved materially since 2003. But there is also no question that more needs to be done to raise standards so that graduates can be trained for skilled jobs or go on to university education. This will be a challenge since the contract with partner British Council has now expired, and BP must partner with a new expert team. Further, BP will be obligated under the new AMDAL to expand its education programs to a broader area. The departure of British Council could set back the education program. BP needs to find an equally capable long-term partner and continue to develop the capacity of the *kabupaten* education department.

In almost every visit to a DAV, leaders were thankful but requested more support for education, from teacher housing, to books, supplies and computers. As explained fully in previous reports,<sup>49</sup> BP has partnered with three religious-based foundations that have provided rotating primary school teachers in the DAVs. This primary school program needs to continue for the long term. BP should pay careful attention to these partners regarding their needs, and meet those needs wherever possible.

As with medical personnel contracts, village leaders and NGOs expressed concern regarding the short duration of contracts for teachers, which impairs their effectiveness. BP should work with its partners and local government to address the length of teacher contracts and extensions. It should support financial or other incentives to retain those teachers who want to stay and have performed effectively.

<sup>&</sup>lt;sup>49</sup> See, e.g., TIAP's March 2007 report at 22-23 and the Panel's March 2008 report at 29-30.

One innovation that BP has proposed is to establish several flagship high schools in the area, akin to magnet schools in the U.S. This responds to requests from the community and will go a long way toward achieving long-term goals. It is important that at least one flagship school be on the north shore and one on the south shore. Further, appropriate support must be provided for the boarding of students.<sup>50</sup> BP should work with the local education department in locating and constructing these schools and facilities to bring this concept to fruition promptly.

#### F. Economic and Livelihood Development

The University of Gadjah Mada ("UGM") conducts a biennial census/survey in the region that has been ongoing since 2003. This is a most useful activity that measures economic development, as well as indicia of health and education. It provides an objective measure of demographic, economic and social changes in the DAVs and a comparison with similar villages not in the program. This census is indispensable to independent observers and should be continued every two years for the duration of Tangguh operations.<sup>51</sup>

Population in the DAVs, after increasing by about 80% since 2003, leveled off in the 2011-2013 period at about 11,500, with some villages still increasing (Tofoi: up 21%) and some decreasing (Weriagar: down 21%). Indigenous Papuans now represent about 52% of the population, with non-Papuan migrants comprising about 27% (primarily in four locations). In 2003, about 83% of the DAVs residents were indigenous Papuans.

Household incomes in all the DAVs increased substantially, both since the start of construction and in the most recent two-year period. Since 2003, household incomes have soared by an average of more than 400%, from a low of 245% growth in Mogotira, to a high of 962% in Taroy. The most rapid increase has taken place since 2011, as average incomes have

<sup>&</sup>lt;sup>50</sup> This concept failed at the middle school level in Tanah Merah Baru.

<sup>&</sup>lt;sup>51</sup> See "Census and Social Economic Survey in Bintuni Bay Regency 2013," Universitas Gadjah Mada, 2013. As noted previously, the entire census is available to interested parties by contacting TIAP.

risen just over 100%. The lowest household monthly income in 2013 was in Mogotira (Rp. 5,409,371, a 58% increase since 2011) and the highest was Taroy (Rp. 11,175,334, an almost 350% increase since 2011). Although incomes of the non-Papuans living in most of the villages are higher, incomes for indigenous people and other Papuans also rose during the 2011-2013 period. In certain villages there was an increase in the number of people working in fishing, and in others an increase in those employed in agriculture, both probably the result of Tangguh's purchases of fish and prawns and fruits and vegetables from local stocking points.<sup>52</sup>

Since 2008, the primary source of outside income for the DAVs has been the sale of fruits, vegetables, shrimp and fish to Tangguh catering (currently contracted to Indocater), which totaled 345 tons grossing about Rp. 6 billion in 2013 (approximately \$500,000). There are seven stocking points in villages throughout the Bay. There were complaints from villagers about infrequent pick-ups from stocking points (Onar) and delayed payments for products sold (Taroy). BP should discuss these issues with Indocater and the cooperatives formed in the villages to buy the products and sell these products to Tangguh, and seek to resolve them; if it cannot, the rebidding of the Tangguh catering contract should include specific requirements regarding number of pick-ups each week and mechanisms to ensure prompt, frequent payment for all purchases, including requirements in contracts with the cooperatives. TIAP has enjoyed all of these local products. They are high quality. Tangguh's caterer should have as one of its priorities the maximum purchases of local products.

The livelihood program focuses on diversified growth in the DAVs, and is primarily devoted to improving agriculture and fishing practices, household economic management and microenterprise development. This has generated some success, particularly with fruit and vegetable production that is largely managed by women, and in household management and

<sup>&</sup>lt;sup>52</sup> See Appendix III (income charts from UGM).

saving, also largely undertaken by women. However, its progress is slow. This form of support will be needed for the long term if it is to have sustainable results. Moreover, the program will now be expanded to the greater area covered by the new AMDAL. This will be an additional challenge for which BP must find a capable implementing partner.

Once electricity is available in all the DAVs, these business programs could be expanded to include production and sale of more finished products, possibly in partnership with others in Bintuni Bay or more broadly. One of the *Bupati*'s highest priorities for development is an integrated transportation system in Bintuni Bay. This, together with electricity, would certainly foster economic development. He has requested BP's support and assistance for this vision. BP should look for ways to support the *Bupati*'s plan, as a way to capture additions to the value chain in the DAVs.

One tangible result of livelihood development is the bicycle and motor repair workshop in Babo, which was established in 2012. This is useful, providing benefits to the owners, workers and the surrounding community. There have been boat engine workshops begun in two DAVs, but the model has not been replicated in other locations or with other functions. The Babo workshop should be viewed as a demonstration project. Now that it has been demonstrated successfully, other motor repair shops should be established in each of the DAVs or other towns in the affected region with a demonstrated need. With electricity coming to each DAV, training of an electrical technician for each DAV to repair simple malfunctions should also be considered.

#### G. DAV Public Welfare

The UGM census has also tracked welfare indicators and satisfaction levels. It creates a "welfare index" measuring the success of development composed of three indices: education,

health and economics. UGM believes the improvement of living standards objectively can be seen through the welfare index.<sup>53</sup> The combined index rose in each census from an initial level

of 59.27 in 2007 to 69.83 in 2011 to 73.66 in 2013. 54

## **Recommendations: Programs for the DAVs and Teluk Bintuni**

- 1. The CAPs provided unique and important benefits for the DAVs. Although they will be discontinued in 2014, replacement discretionary benefits for the most affected coastal villages should continue.
- 2. New or renovated housing for north shore villages should be a long-term priority. BP should support this program by producing lumber from felled trees at the LNG site.
- **3.** Electrifying all the DAVs and Babo should be the highest near-term priority. Until PLN can install grid-based electricity, BP should support temporary diesel-based power generation in Babo.
- 4. As the health care program is expanded, BP should first focus on improving capacity and facilities at Babo, including emergency care capabilities, long-term personnel capacity and emergency transportation to Bintuni or elsewhere.
- 5. BP should continue to build capacity of the Regency education department, continue its support for primary education in the affected villages, support incentives to retain effective teachers for longer periods, and focus its new education partnership on development of flagship secondary schools.
- 6. BP should resolve stocking point pickup and payment issues with Indocater and the cooperatives in the villages that purchase the products from the community before selling it to Indocater. If it cannot, it should include requirements addressing these complaints in any extension of these contracts.
- 7. Livelihood development and household economic management programs should be continued for the long-term, looking to develop added value products. Their long-term vision should be toward creating a sustainable and self-reliant household economy. This will sustain the household economy from adverse, cumulative impacts of the multiple development projects that will come in to this area.
- 8. BP should support motor or electrical repair shops in each DAV where needed.

<sup>&</sup>lt;sup>53</sup> Health and education indicators that are included in this measure include: malaria prevalence, children's immunization, average years-in-school, enrollment of primary school students, and the literacy rate.

<sup>&</sup>lt;sup>54</sup> Tables from the census comparing these measures from 2009 to 2013 are included in Appendix III.

9. The biennial census/survey formerly conducted by UGM should be continued to monitor progress in the livelihood program. To increase its usefulness, the census should also monitor trends of spending (consumption and investment) and savings by the community.

#### VII. Papuan Employment, Training and Procurement

#### A. Recruitment and Training

BP recognizes that employment and advancement of Papuans is one of the most important and lasting benefits that Tangguh brings to Papua. It has taken seriously its AMDAL commitments that by 2029 BP and its contractors will employ 100% of Papuans in non-highly skilled and non-supervisory jobs and at least 78% in skilled and 33% in supervisory positions. These commitments will be reaffirmed, but not modified, in the new AMDAL. As of 2012, BP and its contractors were ahead of plan. Papuans now comprise 54% of total workers. BP had established a Papuan Development Committee, as recommended by TIAP, to increase its management focus on working actively to meet recruitment and retention targets.

However, higher percentages are increasingly difficult to meet. Although the level of Papuan workers was 54% in 2011, it remained at 54% in 2013. This level is substantial after less than five years of operation, and is one of the reasons Papuan leaders are generally pleased with BP. But it is now evident that progress is becoming more difficult, particularly for the more skilled positions. As a result, BP has determined that a more intense effort is required, and will revamp its recruitment programs for the construction period with the goal of finding, training and retaining sufficient skilled Papuans to meet future operations targets.

Notably, BP will establish a new Operations and Maintenance (O&M) Technician Development program. Recruiters will scout all the major population centers of Papua for promising students who have the aptitude and determination to learn technical skills without a

university education. Training and development for O&M technicians will be done at a Skill & Excellence center outside of Papua. Students who are not selected as O&M technician apprentices but who show promise will have the opportunity to go to a feeder pool to be trained in selected trades centers in Papua. The trade centers will teach trades needed by BP and its contractors, including motor mechanics, industrial electricians and pipe fitters; and skills that will be in demand, including scaffold rigging, fork lift operating, crane operating, welding and plumbing. To improve chances for success, the new apprentice program will be conducted at a facility offering international qualification as well as meeting Indonesian national standards; it will be linked with BP and Tangguh Competency Management Assessment System (CMAS) so that it is aligned with BP's global curriculum and program; and it will enroll more students than needed to increase chances that a sufficient number will succeed, be recruited and retained.

Until now, BP has relied on sending a small number of students each year to the Cepu vocational training center on Java. This new effort can only increase the likelihood that Tangguh will meet its Papuan employment targets, and it has the secondary benefit of training Papuans in skills that will be useful for many other employers.<sup>55</sup> The expanded recruitment program should also enlist Tangguh's Papuan employees for recommendations of colleagues, friends or relatives that might be interested in this training.

The new O&M technician development program builds on the previous technician development program in which already skilled Papuans have been trained in LNG operations over a three-year period. This has been ongoing for seven years, with graduates of the first six "batches" hired at Tangguh and several rising to highly skilled and supervisory positions.<sup>56</sup> One

<sup>&</sup>lt;sup>55</sup>In many respects, the program is like a much larger version of the vocational training center established at Aranday to train Bintunians, which failed in part because of the small pool of recruits that could use it.

<sup>&</sup>lt;sup>56</sup> Out of a total of 116 entrants to the apprenticeship program, 90 completed the program and thus far 41 were hired by Tangguh.

element of the apprentice program that has been a barrier to advancement and a complaint by the technicians is the availability of English language training.<sup>57</sup> BP has addressed this by providing English classes in Manokwari and Jayapura to all who are interested. Thus far, 110 technicians have enrolled, and attendance has been higher than for classes previously given at Tangguh. At the request of some, BP has added computer training. Providing an opportunity to improve English skills when workers are off-site thus far seems preferable to offering English while on duty 12 hours a day at Tangguh. This is a promising solution to the problem and should be continued as long as the technicians are participating. BP should also explore demand for additional locations for training, such as Fakfak or Sorong.

BP will also continue its Challenger program, for university graduates throughout Indonesia. The program now has twelve Papuans employed, but only three were recruited in 2013, a small portion of the total intake. There has not been a single Challenger selected who is from Bintuni Bay. BP has sought to increase the number of Papuans, but without much result to date. These are jobs for individuals with potential to rise to supervisory positions at Tangguh and even more senior levels in the company. BP should refocus its effort to recruit more Papuans to this program.

The foregoing relates primarily to recruitment. Retention and advancement are equally important over the long-term. BP Tangguh should devote greater attention to how capable Papuan staff at Tangguh can progress in their career path, both vertically as well as horizontally in the company and for their future career development. Special attention in coaching and mentoring shoud be given by their direct managers, who also should assist in the personal development plan of the staff. BP should establish targets for direct managers and reward those who achieve them.

<sup>&</sup>lt;sup>57</sup> See TIAP's November 2012 report at 33-35.

An additional issue relating to workforce recruitment that has persisted is the need for BP to enforce Papuan hiring targets on its contractors. This issue, which is not solely within BP's control, will be even more important during the construction period. Papuan employment priorities are included in BP's contracts with contractors, but it has been difficult for BP to enforce these targets. In the past, TIAP has recommended financial penalties for failure to meet Papuan hiring targets.<sup>58</sup> If the new Papuan Technician Development program is to be successful, contractors also must hire those who complete the program. BP should make these requirements clear to all its major contractors, before they are retained, and impose penalties in the contract for failure to meet pre-agreed upon levels.

Finally, although 54% of the workforce is now Papuan, some believe that this figure is inflated, because an estimated 40% of these workers are not ethnic Papuan. Under the AMDAL, there are four different ways for an individual to qualify as a Papuan, commonly classified as A, B, C and D; only those who qualify as A or B are ethnic Papuans.<sup>59</sup> TIAP has resisted entering this debate, but it is now clear that BP will not have accomplished its full goals if a substantial majority of its Papuan employees are not ethnic Papuan. BP recognizes the importance of this metric. It should give priority in all its recruitment programs to ethnic Papuans. A particular focus should be applied to Papuans from the Bintuni Bay/Fakfak area.<sup>60</sup> These "Bintunians" should be provided the first opportunities and, where possible, should be selected for training to qualify for available jobs.

<sup>&</sup>lt;sup>58</sup> See TIAP's March 2009 report at 68, 70.

<sup>&</sup>lt;sup>59</sup> Papuan A means that both parents are Papuan; Papuan B means one parent is Papuan; Papuan C means married to a Papuan; and Papuan D means born in Papua and has lived there for at least 10 years.

<sup>&</sup>lt;sup>60</sup> The seven tribes living in the Bintuni Bay area are Wamesa, Irarutu, Soub, Sebyar, Kuri, Moskona, and Simuri. Four are in the immediate coastal area surrounding Tangguh. See Appendix I for a map of the locations of the tribes in the Bintuni Bay area.

#### **B.** Enterprise Development and Procurement from Papuans

The Bird's Head Business Empowerment Program is designed to increase capacity of regional business and build greater supply chains for Tangguh. It has been operating since 2008. The program mentors local businesses so that they can become capable of supplying or servicing Tangguh or other contractors. In 2013, the total value of contracts secured by the program's mentees was \$38.9 million. This level has been flat for three years. Only 12% of the total were contracts related to Tangguh; most of the contracts were government purchases.

This is a useful and necessary program, but it has not achieved the results anticipated. With the construction of Train 3, there should be more opportunities for purchases of goods and services supplied by Papuans. BP should focus its training and mentoring on areas that will be needed during construction, and encourage its engineering, procurement and construction ("EPC") contractor and its subcontractors to hire these local firms, wherever possible. Technical and business standards required by Tangguh and its contractors present challenges to success. BP should address these directly in its training programs, and consider developing a system under which qualified Papuan firms that have successfully completed training become eligible and preferred sources for construction activities.

#### **Recommendations: Papuan Employment, Training and Procurement**

- 1. BP should pursue its new Papuan O&M Technician Development Program aggressively to meet hiring needs for current and future operations. It should also support the development of trade centers in Papua to deliver skilled Papuans for BP and its construction contractors' hiring needs.
- 2. BP should continue to provide English language training to all participants who seek it. It should explore whether there is demand for this program in Sorong, Fakfak or other locations.
- **3.** BP must explain and enforce Papuan hiring targets on its contractors, including financial penalties for failure to meet agreed upon targets.

- 4. Priority for all Papuan recruitment and training programs should be given to ethnic Papuans, particularly those from the Bintuni Bay region.
- 5. BP should focus its business empowerment program on those supplies and services that will be needed during construction, and encourage its EPC contractor and its subcontractors to use these firms, where possible. It should develop a preferential system for firms that meet BP standards.

#### VIII. Government and Public Affairs

BP's communication with regional and local officials has improved materially since TIAP's last visit. Both Governor Atururi and *Bupati* Alfons acknowledged this progress, which was largely based on BP's intense and cooperative engagement with both officials during the AMDAL process and the recent electrification of Bintuni town. It is important that this improvement not be episodic. Good communication with these governments, which will have to take the lead on all Tangguh social programs, needs to continue throughout the construction period, when tensions could arise from the influx of new workers, and as these programs are rolled out to a broader community.

It is also important to maintain regular contact with the *Pangdam* and the *Kapolda* who, while resident in Jayapura, are key decision-makers regarding Tangguh security and are interested in making Tangguh a shining contrast to Freeport. Each should be kept informed of developments and invited to visit the LNG site. BP's recent appointment of a Director of Security should make such regular contact practicable.

BP's communications program in Jakarta has not been so effective. Little has changed since TIAP previously pointed out the need to increase public awareness of Tangguh's benefits to the nation.<sup>61</sup> If anything, there is a greater need today for positive information to help counter

<sup>&</sup>lt;sup>61</sup> See, e.g., TIAP's November 2012 report at 19-21. "The limited news relating to Tangguh often deals with the need for renegotiation of the LNG contract with China, which is generally characterized as a financial loss for Indonesia. These articles imply that Tangguh is a loss for Indonesia. More recently, there have been stories about

the increasing calls for resource nationalism. The reputation of the oil and gas industry has declined in the past several years. BP cannot reverse this trend. But it can provide facts and information that demonstrate Tangguh's benefits to Papua and the nation. If Tangguh seeks to set a positive example for resource development in Indonesia, it must be publicized or it will go unnoticed.

The need for such communication was evident just prior to the TIAP visit, when Tempo, the largest weekly news magazine in Indonesia, ran a cover story entitled, "A Surprise from 10 Downing Street: Tangguh: Beyond Papua."<sup>62</sup> The article was laced with inaccuracies and halftruths, repeating the assertion that Queen Elizabeth II facilitated approval of the Tangguh expansion by knighting President Yudhoyono and stating that the British government owned BP. But more significantly, the cover page proclaimed, "FUNDING THE LNG REFINERY 3 IN TANGGUH WILL REDUCE STATE REVENUES BY RP 12 TRILLION. THE PROJECT IS SUSPECTED OF GETTING SPECIAL FACILITIES AND POLITICAL LOBBYING." This allegation, suggesting that the financing of the expansion caused large losses to the state, was a principal theme of the lengthy article. <sup>63</sup> The article also featured an insert headed, "Cheap Gas for China." The reasons for Tempo running this story and giving it such prominence are unclear; they may be political and not related directly to BP. But now, many who read these articles view BP as a foreign company devising schemes to steal Indonesia's natural gas resources and sell it cheaply abroad. Other than highlights at the end of the article from a short videoconference interview with William Lin,

whether Tangguh LNG from Train 3 should be reserved for domestic uses, another theme that implies that Tangguh LNG benefits other countries more than Indonesia. Thus, it is important that this news vacuum and these negative themes be countered with actual facts relating to how Tangguh benefits Papua and Indonesia. These facts can best be conveyed by increasing liaison activity with senior government officials and by increasing public affairs and media activities. Both functions can increase recognition of Tangguh as a national asset and understanding of its social programs and their benefits to Papuans."

<sup>&</sup>lt;sup>62</sup> "A Surprise From 10 Downing Street: Tangguh: Beyond Papua," TEMPO, Mar. 4, 2014.

<sup>&</sup>lt;sup>63</sup> TIAP will not address the substance of these allegations. BP has done so in its responses cited below. It is sufficient to note here that the charge relates to the method of financing the expansion and recovering project costs, and whether Indonesia's revenues are maximized over the short term or the long term.

President of BP Asia-Pacific, there is no indication that BP had discussed these issues with the reporters or editors of this periodical.

BP's reaction was immediate and forceful, resulting in a point-by-point response to Tempo. After an interview with the Jakarta Post, it also resulted in at least one favorable article on Tangguh that did not even mention the financing issue.<sup>64</sup> This positive media was entirely reactive, and likely would not have occurred if not for the initial story. BP's public affairs strategy cannot remain reactive, but should engage with key media on a regular basis. A short summary of Tangguh's financial benefits to the State, particularly as a result of the expansion, and its benefits to Papuans socially, should be a standard presentation to leading journalists. Further, BP should employ social media tools to communicate as well, particularly given Indonesians' high use of social media. Regular updates and reports on progress and successes on Facebook or Twitter or other platforms will go a long way toward countering the public perception that Tangguh does not provide benefits to Indonesia.

Relatedly, Tangguh needs to be more visible as a leader in community development, locally in Papua, as well as nationally. Virtually every adult in Papua and most in Jakarta know that Freeport has had an extremely difficult time with security and community relations. Very few know that Tangguh is having a very different experience. BP should not take excessive credit for community benefits or contributions to state revenue; there is a balance. BP is a contractor and only operates the facility. Government, and BP's partnership with the agencies of the GOI, should be given credit for the successes. One element of this recognition would come with greater use of the name "Tangguh." Whether it be Tangguh scholarships or Tangguh electricity, the Tangguh wing of the Bintuni hospital, Tangguh health prevention programs, or

<sup>&</sup>lt;sup>64</sup> "BP Upbeat over Selling Train 3 Gas Despite Projected Glut," THE JAKARTA POST, Mar. 12, 2014.

Tangguh-sponsored teachers, it is important that some of the most material and lasting benefits be directly associated with Tangguh.

Communication and public engagement will be key. It will be important for BP to maintain its public consultation in the project area. It is these most affected stakeholders who will set the tone for Tangguh's reputation nationally. This past year, as part of the AMDAL process, BP conducted much beneficial public engagement. As construction begins, it is equally important that BP renew the periodic public dialogues that existed previously. Stakeholder forums should be held every year, either in Bintuni or Babo, or possibly Fakfak, inviting government and civil society in each area for a briefing and discussion. Village level forums, which have been successfully conducted by BP's community affairs team, should also be continued, focusing on the impacts of construction, ICBS and ways in which BP can better support the community. Finally, BP should continue a program to bring village and district leaders to Tangguh and maintain its local newsletter during the construction period.

#### **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.

#### IX. **Governance and Transparency**

Support for stronger governance and transparency remains central to the sustainability of all the social programs and to productive and non-corrupt uses of revenues from Tangguh. This support is particularly necessary at the local level, where the need is greatest. Large sums of natural resource revenue from Tangguh are now flowing in to the Bintuni Bay kabupaten government. Strengthening its institutions can only help to ensure that this money is well spent. The Center for Population and Policy Studies at UGM has completed its governance and transparency support at the regency and village level that it had conducted since 2009. There is no question that this has improved the capacity of the local administration and the local DPRD.<sup>65</sup> It is also clear that continuing and effective support is essential if the *kabupaten* government is to have even average capacity; at present, *Teluk Bintuni* would still fall at the bottom of the list of capacities for all *kabupaten* governments. Its accounts cannot be audited by the State Development Audit Agency ("BPK") because of lack of transparency. BP's goal should be to help the *Bupati* raise the standard of transparency to the "unqualified" level that can be fully audited.<sup>66</sup> It would be a great success if external observers could be confident that Tangguh revenues were being spent effectively for the development of the *kabupaten*.

Capacity development for the government of *Teluk Bintuni* presents enormous challenges and requires a long-term and sustained commitment. UGM's activities, or a comparable level of support, must be continued. UGM's program for *kabupaten* level governance support expired in March 2013; the UGM contract for district and village level governance ended in January 2014. Although an extension of the program is currently being tendered in accordance with GOI regulations, there will necessarily be a lengthy hiatus between partners and then a start-up period

<sup>&</sup>lt;sup>65</sup> The program is more specifically described in TIAP's November 2012 report at 35-36.
<sup>66</sup> The system of BPK audits is more fully described in TIAP's November 2012 report at 37-38.

for any new partner. A stop and start approach is not effective implementation. If SKKMigas regulations will not permit extensions of effective programs without a competitive tender, BP should tender the new contract before the existing contract expires, to achieve continuity or at least minimize the interruption.

There is also great need for governance support of Papua Barat, particularly as it relates to transparency.<sup>67</sup> Although BP must maintain the focus of its governance support at the local level, it is also important that it remains a presence and is seen as a force for transparency at the provincial level. This need is demonstrated by the recent conviction of all 44 members of the provincial DPRD for misuse of funds. BP has supported workshops in Manokwari explaining oil and gas law. It should expand this effort, by supporting anti-corruption activities and transparency initiatives. This is not a short-term program. Throughout Tangguh's operations, BP should be seen in the provincial capital as a force for clean and transparent government.

To move toward the goal of transparency, BP should explore the possibility of working with an external party, such as the World Bank, to conduct an expenditure analysis. This could be done at the *kabupaten* level and/or the provincial level. This would not constitute an official audit, but it could provide a better accounting of the budget, and it could focus attention on the uses of Special Autonomy funds and Tangguh revenues. Of course, this would require the cooperation of the Governor and/or the *Bupati*. Such an analysis could be seen proudly as a demonstration of progress in accountability prior to the end of the Governor's and the *Bupati's* ten year tenures.<sup>68</sup>

<sup>&</sup>lt;sup>67</sup> See TIAP's November 2012 report at 35-39 for a full discussion of transparency issues at the regional level and the role of BPK.

<sup>&</sup>lt;sup>68</sup> The World Bank conducted such an analysis for all of Papua in 2005, with the full cooperation of then Governor Solossa. See TIAP's March 2007 report at 34.

BP discussed such an expenditure analysis with UGM, but as a result of Papuan student protests at UGM, these discussions were suspended.<sup>69</sup> These protests should certainly not prevent such a study from being conducted, if the Governor and the *Bupati* agree. If UGM cannot participate, BP should consult with the World Bank or another capable institution, possibly working together with UNIPA, on whether such an analysis of Papua Barat and/or *Teluk Bintuni* is viable given current levels of transparency. If the World Bank concludes it would be useful, BP should discuss it with the Governor and the *Bupati*, and support such a study if these leaders agree.

### **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.

## X. Tangguh Revenue Management

#### A. Natural Resource Revenue Split

Revenues from Special Autonomy continue to increase at both the provincial and

kabupaten levels. In 2013, the revenue transferred under Special Autonomy (Dana Otsus) to

Papua Barat was Rp. 1.72 trillion (about \$150 million). This is in addition to the Rp. 1.71 trillion

<sup>&</sup>lt;sup>69</sup> The students opposed studies being done by non-Papuan universities for extractive industries, claiming that the study results are biased and marginalize Papuans.

in transfers made to the province under *Dana Perimbangan*, the Balancing Fund that goes to all provinces under regional autonomy<sup>70</sup>

Additionally, all provinces and districts/cities ("kotas") receive a portion of the revenue derived from natural resource projects in their jurisdictions. Special Autonomy provides Papua and its *kabupatens/kotas* with a special enhanced revenue split. Natural gas and oil revenues, after first tranche petroleum, taxes and cost recovery, are split 70% for the province and its jurisdictions and 30% to the central government.<sup>71</sup> For natural gas, of the 70% portion going to the province, 30% (of the total revenues) is split by a fixed formula – 6% to the province, 12% to the producing *kabupaten*, and 12% to all the other *kabupatens/kotas* in the province. The remaining 40% to the province is allocated only by a special regulation ("*perdasus*") that must be issued by the province and approved by the GOI.<sup>72</sup>

Natural resource revenues from Tangguh have risen significantly since production began. Natural resource revenue transferred to Papua Barat and its regencies/cities grew significantly between 2012 and 2013.<sup>73</sup> Bintuni Bay received its 12% formula allocation, which represented about 16% of its total budget in 2013. This does not include the additional 40% that now will be allocated pursuant to the *perdasus DBH*.

The allocation of the 40% discretionary portion of natural resource revenues has been a source of controversy and concern for some time. Although it has been more than 12 years since

<sup>&</sup>lt;sup>70</sup> In FY 2013, Papua Barat province directly received Rp. 3.6 trillion (about \$300 million). These amounts are principally from the Balancing Fund ("Dana Perimbangan"), which controls fiscal transfers under regional autonomy to all provinces, and from the Special Autonomy Fund ("Dana Otsus"), which is specific to the Papua provinces and requires 80% for health and education and the remainder for infrastructure. These transfers are higher per capita levels than to any of Indonesia's 31 other provinces. Note that despite these large transfers, Papua Province and Papua Barat remain Indonesia's two poorest provinces, with 32% of its people below the poverty line, and *Teluk Bintuni* is one of Papua Barat's poorest *kabupatens*.

 $<sup>^{71}</sup>$  For natural gas, this is the reverse of the regular provincial split of 30%/70%; for oil, the regular split is 15%/85%. These special formulas are in effect for 25 years after enactment of Special Autonomy (until 2027), after which the share reverts to 50%.

 $<sup>^{72}</sup>$  A chart depicting this flow of revenue is included in Appendix IV.

 $<sup>^{73}</sup>$  This includes both the province's 6% formula allocation and the 40% that will in the future be allocated pursuant to the *perdasus*.

the enactment of Special Autonomy, the local governments and the MRP (the Papuan People's Council) have been unable to agree on an allocation until now. As a result, no planning or utilization of these discretionary funds was possible. These issues have now been successfully resolved, in large part because the expansion and the new AMDAL process forced such action.

Before the Governor, the *Bupati* and *adat* leaders would agree to the Tangguh expansion, they insisted on an underlying agreement regarding the revenue split. BP supported this process, primarily by funding an academic study conducted by UGM and UNIPA and by facilitating meetings between the MOF, the Governor and the *Bupati*. The agreement allocates half of the 40% by formula, with 6% going to the province, 7% to the producing *kabupaten*, 7% to the remaining *kabupatens* and 2% for university development. The remaining half, or 20% of the total, is split evenly between an *adat* administered trust fund for future needs of the indigenous tribes and community development funds for current local needs. In addition to the elected officials, *adat* leaders and the MRP agreed to this allocation. Although the Ministry of Home Affairs must still approve the *perdasus DBH*, there is agreement that this will be forthcoming.

In addition, the *Bupati* was concerned that the costs of construction of Train 3 could impair the flow of natural resource revenues during the construction period. Because the expansion is being financed as an addition to the existing facilities, and not as a stand-alone project, its costs may be recovered from sales of LNG from Trains 1 and 2. Thus, it is possible that shared revenues could decline for a period before increasing to even higher levels once Train 3 is in operation. To prevent this possibility, BP has agreed to defer its refund of the VAT to the extent needed to place a floor on the formula allocation portion of the natural gas shared revenues for the *kabupaten*. The *kabupaten* government also will soon also be receiving its additional 7%, and the local *adat* community receiving its 20%, under the new *Perdasus DBH*.

With these two agreements, the *Bupati* and the local council can plan their budgets for projects and programs during the construction period.

#### B. Adat Ownership Claims

Since before construction of Tangguh, the north shore *Sebyar* tribe has insisted that they are due compensation for the rights to the natural gas that underlies their land. Although this *adat* claim has no formal legal basis under Indonesia law, as the Constitution declares that all natural resources belong to the State, the Special Autonomy law requires respect for *adat* traditions and legitimate *adat* rights and all leaders in Papua believe these rightful claims must be addressed. In deference to these desires, in 2010 the GOI, at the initiative of the *Bupati*, agreed to compensate the *Sebyar* tribe with a payment of Rp. 6 billion, but all parties seem to agree that this payment does not satisfy the entire claim of Rp. 60 billion.

Many *adat* leaders have demanded that BP pay this additional compensation. BP cannot pay any *adat* claims. It is a contractor to the GOI and a partial owner of Tangguh. On several occasions, TIAP has suggested that *adat* claims relating to Tangguh can and should be addressed as part of the *perdasus* governing the revenue split from Tangguh. This is now possible. The *perdasus DBH* will allocate 20% of the shared revenues to recognize *adat* rights, from which 10% will be dedicated to establish an *adat* trust fund for future generations. While the exact future amounts cannot be known, this portion should accumulate to Rp. 54 billion within a few years. BP should continue to consult with all local parties affected by this claim, and support efforts to implement the *adat* recognition through this allocation, but it should make clear that the *perdasus DBH* is now the guiding instrument for payment of this claim.

### C. Transparency in Revenue Split

Transparency and accountability also should be a part of the funds flowing pursuant to the *perdasus DBH*. The *perdasus DBH* includes the requirement that "the provincial, regency and city government must manage the oil and gas DBH [natural resource funds] in compliance with the regulation, efficient, economical, effective, transparent and accountable with attention to fairness, reasonableness/legitimacy and benefit for the people".<sup>74</sup> Given the low level of transparency that now exists in both Papua Barat and *Teluk Bintuni*, and the inability of BPK to audit either jurisdiction without a "disclaimer" status, the *perdasus DBH* now provides a rare opportunity to improve transparency. If it is not possible to conduct an expenditure analysis of the entire budgets of the province or the *kabupaten*, BP should explore with the Governor and the *Bupati* the narrower possibility of such an analysis for the natural resource revenues. It could also discuss such analysis with SKKMigas and MOF, which support transparency of these transfers. This would be a natural extension of Indonesia's growing commitment to the Extractive Industries Transparency Initiative (EITI).<sup>75</sup>

#### **Recommendations: Revenue Management**

- 1. BP should support the local government's use of a portion of the fund established by the *perdasus* on natural resource revenue sharing for recognition of any legitimate *adat* claims relating to tribal ownership of natural resources.
- 2. BP should assist with the formation and capacity building of the management of the entity that will administer the trust fund for the 10 % allocation of the oil and gas revenue split by the *perdasus DBH*.
- **3.** BP should encourage the Governor and the *Bupati* to implement the transparency and accountability provision of the *perdasus DBH* by supporting an expenditure analysis of all natural resource revenues transferred to the province.

<sup>&</sup>lt;sup>74</sup> Section VI clause 11. This is an improvement over the earlier draft which stated simply: "[t]he accounting for and reporting of a financial statement of funds from oil and gas production sharing and special autonomy funds by the Provincial Administration to the Government proceeds in accordance with applicable laws and regulations."

<sup>&</sup>lt;sup>75</sup> See TIAP's November 2012 report at 37.

#### XI. Environment

TIAP does not review Tangguh environmental performance in detail. This is within the scope of the Lenders External Panel, which annually monitors Tangguh's environmental compliance under the 2002 AMDAL and standards adopted in the loan agreement. The Ministry of Environment ("MOE") also annually audits Tangguh environmental compliance. TIAP reviews environmental issues as they affect the indigenous people of Bintuni Bay and the reputation of BP.

The Minister of Environment (the only Papuan in the current Cabinet) is pleased with BP's environmental performance and supports Tangguh's expansion. In 2012, the MOE included Tangguh in its national environmental audit program for industrial operations (known as "*PROPER*"). It establishes a five level color-coded ranking system for environmental performance. Gold is the highest annual category, followed by green, blue, red and black. A project can only earn green status with 100% compliance plus additional environmental and social programs. A project can be classified as gold only after three years of achieving green. Tangguh was placed in the blue compliance category for 2012 in part because that is the maximum category for the first PROPER audit. But in 2012 and 2013, Tangguh experienced fluctuations related to concentrations of ammonia in produced water discharges, which led to a second blue classification.<sup>76</sup> This is unfortunate, and does not reflect the care and attention to environmental compliance that BP seeks to maintain at Tangguh. Actions have been taken to prevent this from reoccurring. BP aspires to achieve gold status. It must reach this goal if Tangguh is to be viewed as a model for global development. BP has implemented systems that

<sup>&</sup>lt;sup>76</sup> The concentration was higher than allowable, although the discharge load was still within the permit limits.

should allow 100% compliance. It must commit the resources needed to prevent isolated episodes such as those that have occurred during the past two years.

In 2013, BP conducted its fourth fishery survey,<sup>77</sup> and its second marine mammal and mangrove study of the area. These surveys were conducted as part of regular monitoring and will also serve as the baseline for the new AMDAL. 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 Bintuni and adjacent Berau Bay. The results concluded that there are 118 species of fish. Sustainable fish yield is estimated to be about 2,340 tons per year while the extraction is only about 116 tons per year; estimated sustainable stock for shrimp is about 3,000 tons per year and the current extraction is about 240 tons per year; crab extraction is currently about 2 million crabs per year while the sustainable yield is estimated to be about 13 million crabs per year. The fish sustainable stock is now about 50% higher than the fish stock in 2007. This increase is likely due to the reduction of commercial trawling activities in the area. There was limited commercial fishery activity in 2013; however, in early 2014 some commercial trawling activities were back in operation. Four species of turtle and several turtle nesting grounds were identified in the Berau/Bintuni Bay. Three species of marine mammals were also identified during the survey.

The 2013 study demonstrates that, thus far, there has been no discernable adverse impact from Tangguh operations on the surrounding environment, particularly the fish, shrimp and crab stocks of Bintuni Bay. But protection of these resources must not only be attained; it must also be publically demonstrated. It is essential that these surveys continue regularly both to

<sup>&</sup>lt;sup>77</sup> BP, partnering with local universities UNIPA and the Bogor Institute of Agriculture ("IPB"), conducted a fishery baseline study of resources in Bintuni Bay in 2004 with UNIPA and follow up studies in 2007 and 2009 with IPB.

determine if there are any adverse effects on resources 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 blame Tangguh for variations in fish or crab stocks in the Bay.

It is also important to continue monitoring of possible contaminants to be able to determine if construction activities or future operations are affecting water quality. As part of the 2002 AMDAL implementation, environmental monitoring is conducted on a regular basis. In addition, environmental baseline surveys were conducted in 2012 and 2013 for the new AMDAL, covering wet and dry seasons, to update previous baseline surveys. The scope of these surveys includes seawater and sediment quality for wider Bintuni Bay. It is TIAP's understanding that the new AMDAL will require that this regular monitoring continue throughout the operations period.

Two specific accomplishments justify special mention. First, through process changes and efficiency improvements, BP has reduced flared gas dramatically. From initial levels of 13.3 Bcf in 2010, flared gas losses were reduced to 2.6 Bcf in 2013, an amount saved that could fill almost two LNG ships. This is a reduction of 79% from 2010 levels, and a reduction of 58% from 2012 levels. This is, of course, environmentally beneficial; it also has the subsidiary effect of minimizing the visibility of the flare from the neighboring villages in Bintuni Bay.

Second, BP has instituted a cooking oil recovery program that converts these wastes into biodiesel for use in vehicles at Tangguh. The program is now producing biodiesel in quantities to fuel five vehicles; it is being expanded to be able to fuel all vehicles at Tangguh. As a secondary benefit, residual oils that remain after the biodiesel conversion process are being made into soap, thus far only on a laboratory scale. These processes leave only small amounts of

waste oils for transport to distant certified facilities. This is an excellent initiative and demonstrates Tangguh's commitment to the environment.

Finally, expansion provides a new opportunity to review options for reducing emissions of CO<sub>2</sub>, which amounted to 4.73 million tons in 2013. Much of this comes directly from production, from which CO<sub>2</sub> constitutes 12% of the feed gases. There are also significant emissions from plant operation, including flaring, turbines and boilers. Options for re-injection or reduction in CO<sub>2</sub> were considered before initial construction, and rejected by BPMigas and its predecessor, Pertamina, as too costly.<sup>78</sup> Options for CO<sub>2</sub> reduction should be explored again, particularly from the new wells being drilled. In the past decade, Indonesia has become one of the world's leaders on climate change issues, and may be more receptive to the benefits of CO<sub>2</sub> reduction systems. Technology in this area has evolved as well. It is unlikely that CO<sub>2</sub> reinjection will be permitted by the GOI, but it is possible that newer options using current technology could reduce CO<sub>2</sub> emissions or test methods for doing so. BP should explore the current options and present a proposal to SKKMigas that would reduce emissions or test new technology. Any progress in advancing or demonstrating carbon reduction technology would be useful and welcome.

#### **Recommendations: Environment**

- 1. BP should commit the resources needed to eliminate any occurrence of noncompliance so that it can achieve green and ultimately gold status in its environmental review by MOE.
- 2. The regular survey of fish, shrimp and crab resources in Bintuni Bay as well as environmental monitoring should continue, so that any impacts from construction and future operations may be measured.
- 3. BP should explore with SKKMigas options for installing or testing new technology for reducing CO<sub>2</sub> emissions.

<sup>&</sup>lt;sup>78</sup> See, e.g., TIAP's March 2008 report at 46-47.

#### XII. Long-Term Benefits for the Province

With Tangguh's expansion, greater lasting benefits will be brought to areas of Papua Barat other than Bintuni Bay. Principal among these is supplying gas for power generation and support for the University of Papua at Manokwari (UNIPA). BP has committed in the new AMDAL to supply up to 15mmcf per day from its Train 3 production, for power generation of about 50 to 80 MW in Papua Barat. This is separate from its commitment to provide electricity in Bintuni Bay, and responds directly to Governor Atururi's vision that Tangguh be a catalyst for economic development in the province. The Panel urged BP to address this issue in the new AMDAL;<sup>79</sup> now that it has done so, BP must support the complex logistics and planning that will be needed to implement this commitment.

BP has begun by supporting a feasibility study to explore the options. PLN, which would be the critical partner in contracting for transport of these supplies and modifying its power generation facilities, is cooperative and supportive of this goal.<sup>80</sup> It believes that technical challenges can be overcome using mini LNG tankers, similar to those currently being used in China and Norway. A mini-tanker would load either from the Tangguh LNG dock or from one of Tangguh's full LNG tankers. It would deliver LNG to small receiving terminals at various locations in the province, possibly starting in Fakfak, Sorong or Manokwari. PLN believes these facilities could be built in less than two years.<sup>81</sup> PLN considers the purchase of these supplies from Tangguh as a commercial endeavor, rather than as charity for the province. Given the relatively shorter distances that the LNG would need to be transported and the smaller ships, it

<sup>80</sup> The Governor has a notion to establish a separate Papuan company to transport this gas and run power generation in the province. Whatever merit this may have, it is certain to delay the project and create additional complications. <sup>81</sup> Other options are still being reviewed, including mid-size LNG tankers, LNG tank trucks and pipeline systems. TIAP is not pre-judging the result of the study, and will support whichever option is selected as most feasible. PLN believes the mini-LNG tankers is the preferred choice.

<sup>&</sup>lt;sup>79</sup> See TIAP's 2012 report at 48-49.

seems reasonable that these sales could be economically viable for all parties. Thus, although BP has only committed to 15mmcf per day, if commercial terms can be arranged and more gas is ultimately needed, additional amounts should be considered if available. This project will take the active support of both the province and the GOI, as well as PLN. But accomplishing this goal will be seen as one of the fundamental successes that Tangguh has brought to Papua; it will go a long way toward demonstrating the benefits to Indonesia that foreign developers with expertise can deliver, and it will help establish Tangguh as a world-class project.

Second, TIAP has long endorsed BP's support for higher education in the province generally, and for UNIPA in particular.<sup>82</sup> Cooperation with and support for UNIPA now exists on several fronts, helping it grow into a diverse and reputable regional university. To the Rector's pleasure, BP partnered with UNIPA to support the study that led to the *perdasus* on natural resource revenue sharing; to help develop the power supply system for Bintuni Bay; to conduct fish stock and contaminant baseline studies of Bintuni Bay; to sponsor field work by students in the Regency; to brief villages on the AMDAL process; and to provide English language training for BP technical staff. BP is providing scholarships for 25 students at UNIPA each year in math and science. The Rector hopes to establish new faculties at Manokwari in engineering, technology, education and social/political science. He also envisions a new campus at Sorong for a medical school and a new campus at Raja Ampat for fisheries and marine studies. These would all be significant enhancements of educational opportunities for Papuans. Although not specifically required by the AMDAL, BP should demonstrate its leadership among companies doing business in Papua Barat by supporting these initiatives.

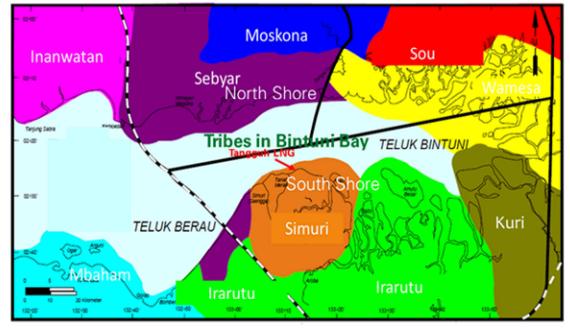
<sup>&</sup>lt;sup>82</sup> See, e.g., TIAP's November 2012 report at 21.

## APPENDIX I



## MAP OF PAPUA AND PAPUA BARAT PROVINCES

INDIGENOUS TRIBES IN THE BINTUNI BAY AREA



Sumber: ANDAL Terpadu LNG Tangguh, 2002

## **APPENDIX II**

# STAKEHOLDERS CONSULTED BY TIAP 2014 VISIT

<u>Government Officials: Indonesia</u> Bambang Permadi Soemantri Brodjonegoro, Deputy Finance Minister Prof. Dr. Balthasar Kambuaya, MBA, Minister of Environment Nur Pamudji, President Director of PLN Widhyawan Prawiraatmadja, Deputy Chairman for Commercial Management, SKKMIGAS

Government Officials: Papua and Papua Barat Dr. Allimudin, MM, Kepala Bappeda AKBP Cristian Amos Akeiwi, Wadirpam Obvit Abraham O. Atururi, Governor of West Papua Yosef Yohan Auri, West Papua Legislative Council (DPRD) dr. Andreas Ciokan, Kadin Kesehatan Kombes Pol Heb Dehemm, Dirbinmas Polda, Papua Bp. Edy, Kompolnas Lukas Enembe, Governor of Papua Drs. Wim Fimbay, MM, Sekda Bintuni AKBP.Reza Herasbudi,SIK,MM, Kapolres, Bintuni Drs. Akuba Kaitam, Wakil Bupati Bintuni Irjen Pol Drs. Tito Karnavian, MA, Kapolda, Papua Derek Lokden, SH, Kadin Pendidikan Pemuda & Olah raga Drs. Chris Mailoa, Kepala Bidang Koperasi & UMKM IPTU. Junus Makamur, Kasat Intel Polres, Bintuni Drg. Alfons Manibui, DESS, Bupati Bintuni Drs. Gustaf Manuputy, Kadin Perhubungan Informastika dan Komunikasi Simon S. Papa, S.sos, Kadin Perindustrian Perdagangan & Koperasi Kompol. Rahareng, Wakapolres, Bintuni Kombes Pol. Tatang, Karo Ops Polda, Papua Widianingsih Sri Utami, SP Kadin Pertambangan Vitalis Yumte, Head of MRP, Papua Barat Mayjen TNI Drs. Christian Zebua, MM, Pangdam Cendrawasih, Papua

<u>Government Officials: United States</u> Robert O. Blake, US Ambassador to Indonesia James P. Feldmayer, Political Office, U.S. Embassy Joel A. Kopp, First Secretary, Energy and Extractive Industries, U.S. Embassy

<u>Government Officials: United Kingdom</u> Mark Canning, UK Ambassador to Indonesia Residents of the Bird's Head Region of Papua Kapten Inf. D Aronggear, Danramil Babo Samsul Bahri Fiawe, Village Leader for Nusei, Babo Hayum Fimbay, Village Leader for Kanaisi, Babo Jafar Fimbay, Ketua PBM -Tokoh masyarakat, Babo Ningsih Fimbay, Head of Koperasi Ma Tambeysiri, Babo Saleh Fimbay, Village Leader for Modan, Babo Rudi Hardjo, Head of Babo District Abdullah Manuama, Village Leader for Amutu, Babo Bernard Nafurbenam LMA, Babo Hamis Nauri, Village Leader for Irarutu III, Babo Umar Nauri, Village Leader for Kasira, Babo Muin Rita Rita, Kepala Sekolah SMU Negeri, Babo AKP Daniel Sarampang, Kapolsek Babo Agus Suharjo, Chief of District, Babo Said Bauw-Villagers of Babo Kartini Refideso-villager of babo Fayakum Fimbay-villager of babo Anshory Manuama-villager of Babo

## <u>Onar</u>:

Rafael Agofa-Village head in Onar Baru Anton Soway-Village head in Onar Baru Yakonias Wayuri-Tokoh masyarakat kampung Onar Hanokh Siwana-farmer in Onar Arifin Agofa-farmer in Onar Septon Wayuri-villager in Onar Yohanes Agofa-villager in Onar Apia Kamisopa- villager in Onar Lebrina Wayuri-villager in Onar Titus Inanosa-villager in Onar Abubakar Solowat-Villagers of Taroy Hasan Bauw- BP Village Representative John Utres-Tokoh Masyarakt Onar

#### Taroy:

Ridwan Solowat-Kepala Kampung Taroy Abdul Nabi Kadir-Kepala Kampung Pera-Pera Muhammad Bauw-Kepala Kampung Tambanewa Isac Asmorom-Kepala Kampung Sorondauni Abubakar Solowat-Ketua LMA Hasan Bauw-Village Representative Saidin Bauw-Head of cooperative Jaman Nabi-Secretary of cooperative Ibrahim Solowat-Treasury of cooperative

Non-Government Organizations

BSK (Andi Kurniadi, Program Manager; and Adbul Basid, Field Supervisor)

ELSHAM Papua (Ferry Marisan, Director; Matius Rumbrapuk, Staff; and Zandra Mambrasar, Staff)

FOKER LSM Papua (John Liem: Steering Committee, and Lien Maloali: Secretary Executive) Komnas HAM Papua (National Committee for Human Rights) (Frits Ramandey : Director, Yohana Tukayo: Staff and Kristina Kensimai : Staff)

LP3BH Manokwari - Lembaga Penelitian, Pengkajian dan Pengembangan Bantuan Hukum (The Institute for Research Investigation and Development of Legal Aid (Andris Wabdaron,: Coordinator For NGO in West Papua Threstje J. Gaspersz, SH: Head of Division Programs empowering women and Children Simon R. Banundi, SH: Coordinator for office contact in Bintuni Semuel H. Yensenem, SH: Coordinator for cooperation)
Muhammadyah Bintuni (Sistoyo, Head of Mauhammadyah Bintuni)
World Wildlife Fund-Indonesia (Budi Satyawan Wardhana -Director for Policy, Sustainability and Transformation)
WWF Region Papua (Benja Victor Mambay, Director)
YSA (Yayasan Sosial Agustinus), Operation Manager Suster Zita.
YSA (Suster Cita, Operation Manager, Yayasan Sosial Agustinus)
YPK Bintuni (Daniel Sebaru, S.Sos, MM, Head of YPK Bintuni)
YPMD (Decky Rumaropen, Director, Nicolas M and Eddy D. Ohoiwata, Pice Inaury, Aiesh

Rumbekwan, Paticia M, and Lusiana)

Private Sector

Bower Asia Group (Douglas Ramage)

Institute for Policy Analysis of Conflict (Sidney Jones, Director; and Cillian Nolan, Deputy)

Academic Institutions in Papua and Papua Barat:

Dr. Suriel S. Mofu, Rector UNIPA

Ir. Yohanes S. Budiyanto, M.S. Assistant Rector IV - UNIPA

Deny A. Iyai, Lecturer, Coordinator for Cooperation - UNIPA

Ir. Frederik Luhulima, Lecturer : Coordinator Program Revenue Sharing - UNIPA

UGM (University of Gadjah Mada) (Agus Joko Pitoyo, Lecturer and Researcher; Dr. Setiadi

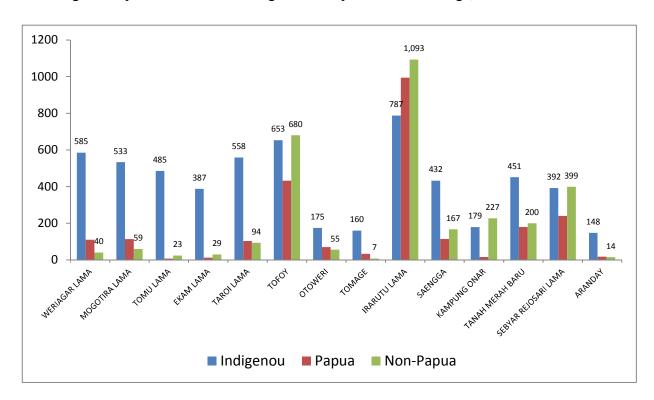
Prabowo, M.Si, Lecturer and Researcher; and Anna Marie Wattie, Lecturer and Researcher)

Individuals:

Shofwan Azhar, SE, M.Sc., Lecturer, IKOPIN Haryono, S.Sos., Researcher, Research Center University of Indonesia Drs. Johszua Robert Mansoben, M.A., Ph.D, Lecturer, Cenderawasih University Lucy Mitchell, Independent Consultant Reverend Herman Saud Senior Editors Jakarta Post, Sabam Siagian Agus Sumule, Independent Consultant Sonny Wibisono, S.Sos., Researcher, Research Center University of Indonesia

## **APPENDIX III**

## DATA CHARTS FROM UGM CENSUS AND SOCIAL ECONOMIC SURVEY IN BINTUNI BAY REGENCY 2013



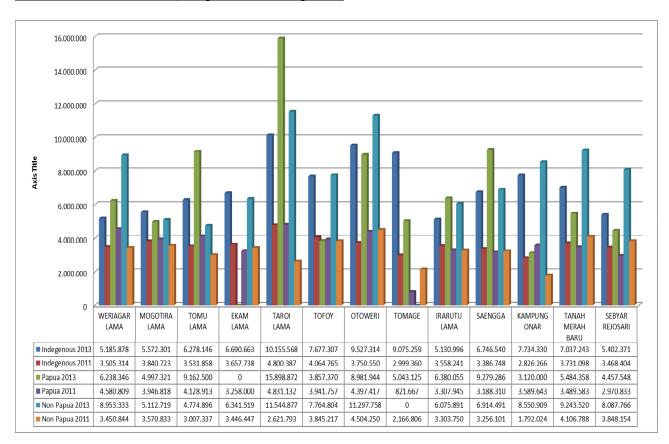
Percentage of Population based on Indigenous Peoples in Each Village, 2013

## Household Income per Village in DAVs and IDAVs (2005-2013)

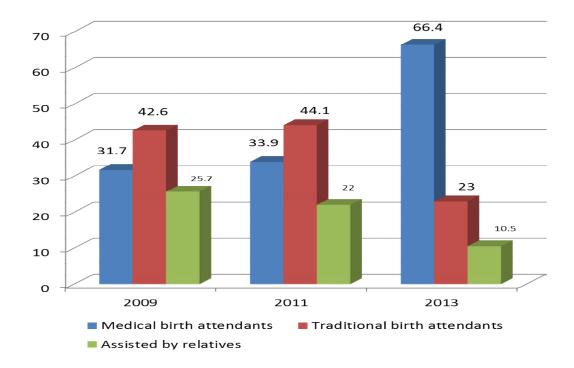
Village	2001*	2003**	2005	2009	2011	2012	2013	%	%
								Increase	Increase
								since	since
								2003	2011
Weriagar	1,305,000	1,184,000	1,684,865	3,218,810	3,760,179	5,886,281	5,676,488	379	51
Mogotira		1,569,000	1,525,333	2,209,815,	3,416,493	6,456,924	5,409,371	245	58
Sebyar	559,000	N/A	1,148,210	2,601,348	3,334,551	5,001,125	6,781,912		103
Rejosari									
Tomu	507,000	1,300,000	967,380	2,522,468	3,411,977	6,273,815	6,233,615	380	83
Ekam		1,340,000	1,602,973	2,442,581	3,739,259	6,355,638	6,630,234	395	77
Taroy	790,000	1,052,000	2,398,230	2,808,784	2,501,467	7,448,877	11,175,334	962	347
Otoweri	N/A	1,158,000	2,665,085	2,046,667	4,332,845	3,614,893	9,904,120	755	128
Tomage			2,100,556	2,292,059	2,863,322	NA***	8,342,144	620	191
Irarutu 3	328,000	N/A	1,367,845	2,785,712	4,002,807	6,149,675	5,928,134		48
тмв		1,526,000	2,250,729	2,834,975	3,622,219	6,312,127	7,508,058	392	107
Saengga	840,000	1,526,000	2,250,729	2,555,117	3,519,952	5,017,447	7,092,412	365	101
Onar	N/A	1,268,900	1,286,188	1,295,850	2,331,642	4,314,545	8,163,305	543	250
Tofoi	504,000	1,383,000	1,302,382	2,507,858	4,298,686	NA***	6,965,112	404	62
Average		1,349,878	1,734,654	2,470,926	3,387,025	6,283,135	6,907,856	412	104

\* Social Demographic, Economic and Culture Survey conducted in March - April 2001 : Collaboration work between UNCEN and PT. INTERSYS - provided for AMDAL document 2002.

\*\*Social Economic Census UNCEN 2003. Note that the household income figure for Otoweri & Tomage in 2003 was the same, before it expanded to become two villages in 2004-2005. \*\*\* Note that in 2012, Tomage and Tofoi were not included in the quick income survey.

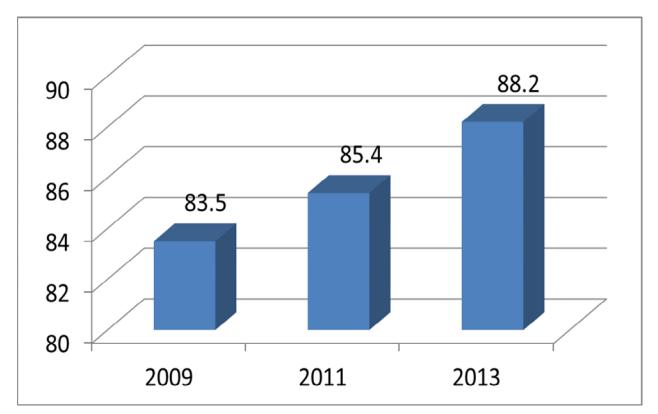


#### Income Based on Status (Indigenous and Migrants)



Health Indicators: Birth Attendants, 2009 - 2013

Health Indicators: Children under Five Years Old who had Full Immunizations According to their Age



## Welfare Index for DAVs and IDAVs

Welfare Index	<b>T</b> 1 2000	<b>T</b> 1 2044	<b>T</b> 1 0040
Kampung	Tahun 2009	Tahun 2011	Tahun 2013
Weriagar	54.57	61.76	66.25
Mogotira	56.62	58.86	64.16
Sebyar Rejosari	83.58	75.16	78.72
Tomu	49.42	57.85	60.95
Ekam	56.18	57.58	64.88
Taroy	57.43	60.19	72.68
Otoweri	62.28	74.73	80.52
Tomage	67.06	69.40	76.91
Irarutu 3	80.79	82.03	77.94
Tanah Merah Baru	77.49	79.00	76.35
Saengga	74.22	73.84	77.01
Onar	68.20	75.75	80.16
Tofoi	77.53	81.56	81.06
Rata-Rata	66.57	69.83	73.66

## APPENDIX IV

## **REVENUE SPLIT FOR NATURAL GAS PRODUCED IN PAPUA BARAT**

## **Building and Land Tax**

Central Government = 10% Local Government = 90%

### **Customs Duties**

