

PRICEWATERHOUSECOOPERS 



The Urgency of Building Competitiveness to Attract  
**Oil and Gas Investment  
in Indonesia**

An Industry Survey on Investment Issues and  
Opportunities to Enhance Upstream Investment

September 2005

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## **\*DISCLAIMER**

This publication has been prepared to assist those interested in oil and gas investments in Indonesia.

The information in this publication is based on current legislation, case law, accounting standards, generally accepted accounting practice, information produced by governments and government agencies in Indonesia, press articles and oil and gas statistics collected and collated from several referenced sources. The information has been updated as far as practical to September 2005. The document should be taken as a guide only and no specific action should be taken before consulting one of PricewaterhouseCoopers' specialists named in this document.

This publication is intended to provide a general overview of the oil and gas market in Indonesia and is not to provide advice. No liability is accepted for any reliance on any statement or representation where our specific advice is not sought.

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Jakarta, 30 September 2005

It is a great pleasure for me to present the inaugural PricewaterhouseCoopers report on:

*"The Urgency of Building Competitiveness to Attract Oil and Gas  
Investment in Indonesia: An Industry Survey on Investment Issues and  
Opportunities to Enhance Upstream Investment".*

On behalf of the Indonesian Petroleum Association (IPA) and the oil and gas industry, I congratulate PricewaterhouseCoopers and thank them for their continued commitment and support to the industry. I would also like to thank those companies that contributed to the survey to enhance public understanding of the industry and further the process of constructive engagement with stakeholders.

The oil and gas industry remains very important to Indonesia. It is a substantial contributor to export earnings, central and some local government budgets, economic activity, employment, and supports regional development. 2005 brings the upstream oil and gas industry in Indonesia to the crossroads of prosperity or decline. During the last decade Indonesia's share of global upstream investment has halved, at a time when an investment upturn is essential to revitalize the industry.

The new government clearly recognizes the importance of the oil and gas industry and together with BPMigas, has recently responded to some industry issues with a number of initiatives including:

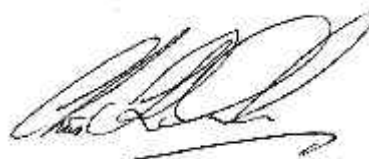
- New Ministry of Finance Decrees on VAT and Custom Duties etc to resolve transitional problems in the New Oil and Gas Law.
- Recent payment of some 75% of long outstanding VAT reimbursement and new procedures for the remaining reimbursement.
- Incentives for the development of marginal oil fields.
- Recent decisive action on petroleum product subsidies that were distorting energy economics.

These initiatives are welcomed and a significant step towards meeting the industry's challenges. Now however, as this survey shows, we need to take further steps if we are to compete in the global market and restore the industry's economic contribution to where it can and should be.

The GOI and oil company geologists remain passionate about the remaining untapped hydrocarbon potential in Indonesia. Existing investors have the resources – funds, skills and passion to invest. With some further much needed improvements to the business environment there is no reason why these resources should not be deployed and Indonesia could once again be attracting a disproportionate share of global upstream capital allocation.

It is time for all stakeholders to join hands and work constructively to enhance investment in the Industry. If we can do this quickly, I have every confidence in the future of Indonesia's Petroleum Industry.

I urge policy makers and regulators to study the results of this survey and to continue the good work by engaging the IPA and its forty two member companies to work towards our common objective of enhancing investment in the industry for the benefit of all stakeholders.



**Chris Newton**  
President  
Indonesian Petroleum Association

Section 1

# Introduction



The petroleum industry in Indonesia has been a key contributor to the Government of Indonesia (GOI) budget and total exports (16% and 25% respectively in 2004). Indonesia is a member of OPEC (Organization of Petroleum Exporting Countries) and is the world's largest Liquefied Natural Gas (LNG) exporter however this number one ranking is being challenged by other countries which have significant quantities of uncommitted gas reserves and LNG exporting facilities. Indonesia's oil and gas production has been declining in recent years, which ironically caused Indonesia to become a net oil importer in late 2004. Domestic companies using natural gas as their feedstock have also experienced difficulties in securing supplies for their needs.

The recent declines in oil and gas production are the direct result of the absence of significant new oil and gas reserve discoveries as well as the lack of development of existing proven oil and gas reserves. Indonesia's current oil and gas production is primarily being pumped from reserves discovered more than a decade ago, many of which are in decline. A number of proved oil and gas fields have not been developed due to contractors perceiving uneconomically justifiable returns for these projects considering the reservoir risks and uncertainty of regulatory measures. The GOI has recently reacted to many of these concerns by offering fiscal incentives such as investment credits on marginal fields and increased equity splits but it is too early to determine if these measures alone are sufficient to increase investment significantly.

Various parties perceive that the lack of significant new oil and gas discoveries has been primarily due to inadequate exploration activities by oil and gas investors over the years, this despite the fact that Indonesia continues to be viewed favourably for geological prospectivity. In a 2002 PricewaterhouseCoopers "CEO Survey – Upstream Oil & Gas" report ("2002 Survey") oil and gas executives rated geological prospectivity as the country's most favourable investment aspect. This theme carried over to the current survey.

Investors' declining interest in conducting exploration activities may pertain to various issues and the climate of uncertainties brought about by significant developments in recent years such as:

- frequent changes in Indonesia's political leadership;
- the enactment of a new oil and gas law but slow enactment of implementing regulations;
- the issuance of new laws many of which conflict with the existing regulatory framework;
- the ongoing restructuring of Pertamina;
- the organizational development of BP Migas/BPH Migas;
- emerging issues related to regional autonomy and taxation; and
- efforts by the GOI to increase tax revenues from the upstream oil and gas industry.

In mid-2005 PricewaterhouseCoopers jointly undertook this survey with the IPA of oil and gas executives who have production or exploration activities in Indonesia to gain their perspectives on the current issues which confront the Indonesia petroleum industry, relationships amongst industry and GOI organizations, actions which could spur further investment and improve their outlook for the Indonesia oil and gas industry in 2005 and beyond. The perspectives shared by these executives are insightful and are critical to address the issues facing the oil and gas industry in Indonesia.

The trends, issues and concepts covered in this survey are not new concepts and are generally known and acknowledged by industry stakeholders. The intent in producing this survey report is to capture in one single document all of the industry issues, problems and obstacles which are preventing the industry from achieving optimal investment. Hopefully by having this single document all industry stakeholders can work together to develop a constructive path forward.

This survey is not intended to be critical of or alienate the GOI, but rather provide a focus or a framework for the GOI to continue its initiatives underway to improve the investment climate. It is expected that by understanding these perspectives, the GOI and related institutions are able to take appropriate and necessary actions so that the upstream oil and gas industry in Indonesia can maximize investment and regain its favorable attractiveness to investors. If the GOI were to act upon many of the issues raised in this survey it is hoped that in the near future Indonesia will be able to increase oil and gas reserves and production, which will ensure security of oil and gas supply for domestic consumption and ensure continuity as a key contributor to the GOI revenue through exports.



Section 2

# Executive Summary





## Development in world's oil and gas industry

Over the past several years the world has experienced significant price volatility. In inflation-adjusted terms the price of oil has not been higher since the oil price shocks experienced in the late 1970s during the Iranian hostage crisis. Oil and gas companies and countries blessed with oil resources have undoubtedly reaped increasing profits from this situation.

Indonesia has long been known as a country in Southeastern Asia which is blessed with significant oil and gas reserves, and has been a member of OPEC since 1962. With this in mind, it would be reasonable to assume that Indonesia has benefited from the recent oil price hikes. Unfortunately this was not the case for Indonesia in 2004. The oil price hikes in 2004 coincided with an unprecedented situation in Indonesia whereby for the first time in the country's history it became a net oil importer.

## Indonesia's oil production at lowest level for the last three decades

Indonesia's oil production peaked 10 years ago and has been declining continuously since then. At the end of 2004 oil production stood at approximately a mere 1.1 million barrels per day, the lowest level in three decades. The country's OPEC quota stands at 1.4 million barrels per day but the country has been unable to achieve its allocated quota for some time.

## Gas supply for overseas buyers and domestic users

Indonesia maintained its position as the world's top LNG exporter up until 2004. Nevertheless, its worldwide share of the global LNG market has been declining, with a 19% share in 2004 (compared to a 32% share in 1998). Exploration and development of new gas reserves have been delayed by uncertainties in commercial terms, including payment guarantees, and a domestic gas pricing policy that has subsidized local industry. As a result starting in 2004 Indonesia has been facing difficulties in meeting both domestic gas demands in addition to LNG sales contract quantities resulting in both LNG buyers and certain domestic gas users being left with insufficient gas supplies. This condition was experienced as the LNG exports and domestic gas consumptions were sourced from declining gas reserves, considering that many of these gas reserves have been exploited since the 1970s. For the last five years LNG exports are down by more than 20% from 1,400 BBTU in 2000 to 1,090 BBTU in 2004, and are expected to decline further in 2005. LNG exports are not expected to increase until 2008 when the Tangguh LNG project starts production.

## Financial and other economic impacts

As a country which has historically depended on the upstream oil and gas industry revenues to fund its development programs, and as a country which maintained until recently a policy of providing fuel subsidies, the declining LNG exports and continuing oil production decline have had significant macroeconomic impacts. With declining oil production and LNG exports, the industry's contributions to the GOI's revenues has followed suit.

Despite the gradual reduction in fuel subsidies in recent years and recent actions taken in October 2005 to substantially eliminate the fuel subsidies, the oil price hikes created greater price gaps, which required more funds to be allocated by the GOI to meet the subsidy. Being a net oil importer is surely worsening the situation.

For the gas sector, the inability to supply both the domestic market and LNG export sale commitments created a direct impact to the GOI's finances as well as indirect impacts to other economic aspects such as employment and the activity levels of other industries which use gas as their feedstock. As a result of its decision to divert gas supply from LNG manufacturing, the GOI had to go to the spot market to buy LNG cargoes as a supply substitute for the LNG buyers, or otherwise negotiate cargo drops from LNG buyers. Uncertainty of LNG deliveries is not a good signal to the LNG buyers amid growing competition in the LNG export market. Domestically, certain gas users likewise face continuing supply uncertainties, which threatens their business continuity and employment of their workers.

### Low investment spending leads to inadequate reserve replacement

The decline in oil production can be attributed to a lack of reserve discoveries sufficient to replace declining production from existing mature fields. This condition is due to the absence of significant exploration and development investments in Indonesia. The average oil and gas exploration and development investments in Indonesia for the last five years only accounted for an estimated 1% of the total world investment. The average annual nominal amount of oil and gas exploration investments in Indonesia for the last five years was less than US\$500 million. With declining find sizes and the fact that any new significant reserves are expected to be discovered in offshore deepwater or more remote locations, higher exploration investment spending is a necessity.

### Undeveloped gas reserves

Indonesia has significant volumes of undeveloped gas reserves. For the lesser reserve sizes, the main potential use is for domestic consumption. The economic incentives are not present to develop these reserves primarily because of uneconomic domestic gas price, existing PSC terms being considered unfavorable by the contractors and/or customer credit risks.

### Various issues posing hindrances for investment in upstream oil and gas industry in Indonesia

There are a number of fiscal, legal and bureaucratic issues which have been posing hindrances to Indonesia's upstream oil and gas industry achieving its full investment potential. Being extensively exploited for more than three decades, it is understandable that the current geological prospectiveness is not as compelling as in the past i.e. due to declining find sizes or due to more difficult environments such as offshore deepwater or more remote locations. It is therefore of utmost importance for the GOI to seriously address non geological-related issues to attract higher investment in the upstream oil and gas industry.

From this survey, the five most compelling issues in the industry are as follows:

- Contract sanctity;
- Security of assets, people and ownership rights;
- Confusion over the New Oil and Gas Law (i.e. Law No. 22/2001)/Implementing regulations;
- Taxation; and
- Legal certainty/judicial reform.

These issues, as well as other issues in the industry, are further discussed in Section 6.

### The outlook

From this survey, we noted that survey participants believed that no one single action by the GOI would significantly increase investment. In other words, there is no "silver bullet" for fixing what ails the industry. The GOI has recently opted to increase fiscal incentives to attract increased investment in the upstream oil and gas industry; however, it is too early to tell if these measures alone are sufficient to significantly increase investment. The survey responses appear to support that in addition to increasing fiscal incentives offered to investors the GOI needs to undertake a concerted and coordinated effort to improve the overall "business environment".

The top five actions which survey participants believed the GOI should undertake to optimize and improve the country's "business environment" in the upstream oil and gas industry are:

- Harmonizing conflicting laws and regulations, including timely implementation of regulations;
- Improved teamwork, coordination and cooperation amongst GOI entities
- Judicial reform;

- Changing the regulatory paradigm to a “shared economic interest” model; and
- Completely eliminate fuel subsidies and implement effective gas regulatory environment.

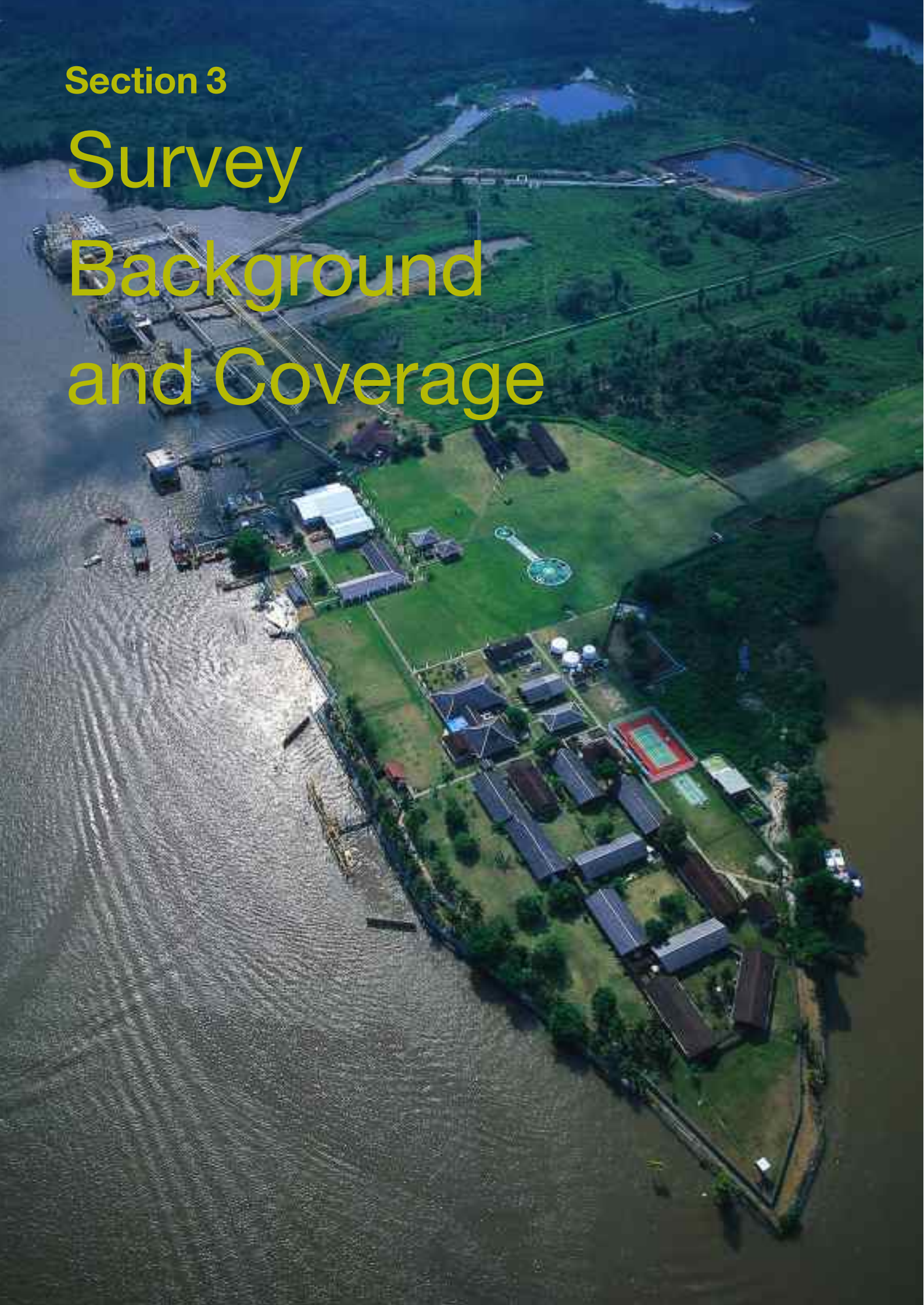
These suggestions are further discussed in Section 7.

Indonesia’s oil and gas industry is at a critical juncture. Survey participants believe with the right GOI actions the recent trends can be reversed and the industry can enjoy many more years of success. With real actions by the GOI to address the issues discussed in the report, the investment climate will hopefully be conducive to attract investment in Indonesia’s oil and gas industry to its full potential. However, without meaningful action on the issues discussed survey participants fear that the industry will continue its downward trends.



## Section 3

# Survey Background and Coverage



## Survey Background

The purpose of the survey is to inform the public and private sectors in Indonesia and abroad about Indonesia's upstream petroleum industry and the contributions made by the industry to the economic and social fabric of Indonesia. In addition, the report attempts to highlight some of the challenges facing the Indonesia upstream oil and gas industry from attracting optimal investment and achieving its full potential.

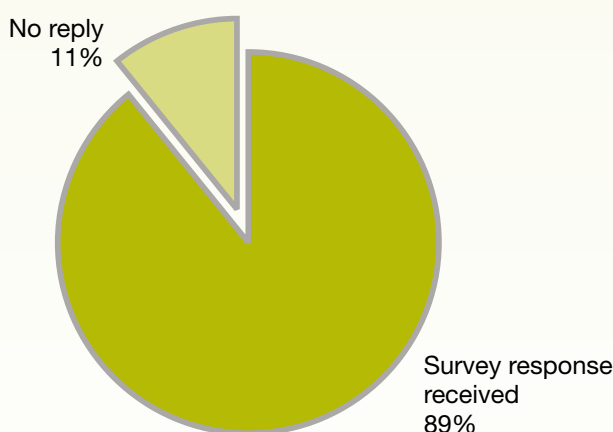
This is the inaugural edition of this survey which PricewaterhouseCoopers hopes to publish periodically in the future. PricewaterhouseCoopers was engaged to undertake this survey on behalf of the IPA. The views expressed in the survey do not necessarily represent the views or opinions of PricewaterhouseCoopers or the IPA but rather those of individual investors and the survey participants.

## Survey Coverage

This report is based on the results of a confidential, comprehensive survey questionnaire circulated by PricewaterhouseCoopers to 25 producing and exploration companies active in Indonesia's petroleum industry in 2004. The survey questionnaire included quantifiable and qualitative data sections. Because of the incompleteness of certain quantifiable data responses we were unable to utilize this data in its entirety in our report. As a matter of necessity we have relied on other publicly available reports for the quantifiable data where required.

The survey results cover 15 producing and exploration petroleum companies with activities in Indonesia during 2004. Virtually all geographic areas of Indonesia are represented in the survey. Although the absolute number of replies only represents a 60% response rate based on petroleum production the survey participants produced approximately 89% of Indonesia's petroleum in 2004. As such the views expressed by the survey participants are considered representative of the industry. The data collected by the survey can be used to draw supportable conclusions about how the industry's stakeholders (communities, employees, GOI, creditors, shareholders and suppliers) benefit from the industry, and to make credible observations about investment and spending trends in the industry. Indonesia rupiah denominated figures in the report have been translated at a Rp9,500/US\$ exchange rate for the convenience of the reader.

**Survey Coverage Based on 2004 Oil and Gas Production**





## Section 4

# Brief History of Oil and Gas Industry in Indonesia





Having an understanding of the past will often help in understanding the future. As such we have provided a historical brief of the Indonesian oil and gas industry below.

The history of the oil and gas industry in Indonesia spans from the Dutch colonial period in the late 19th Century. Following Indonesia's independence, the GOI took over the existing oil and gas operations and established three separate companies to carry out oil and gas operations in different parts of the country. The operation of oil and gas activities in Indonesia was regulated with reference to the 1945 Indonesian Constitution. At that time there were no ordinances regulating the extraction of oil and gas, therefore the concession method (based on Indische Mijn Wet issued by the Dutch government) was used until 1959, even though it was not in accordance with the 1945 Indonesian Constitution. In 1960, Law No. 44/1960 regarding oil and gas mining was issued by the GOI, where this law effectively annulled Indische Mijn Wet.

Key provisions established in Law No.44/1960 were:

- (1) oil and gas mining materials are national assets that should be owned by the GOI,
- (2) oil and gas activities can only be carried out by the GOI, i.e. operated by a state company, and
- (3) the contractor can only help the state company and receive compensation for its efforts.

Subsequent to the enactment of Law No. 44/1960, the GOI established three state oil and gas mining companies (one of which was PN Pertamina) and assigned them Contract of Work ("CoW") agreements to operate oil and gas activities in certain geographic areas with the assistance of foreign oil and gas contractor companies. Since the CoW agreements were not considered in accordance with the spirit of the 1945 Indonesian Constitution, in 1967 the CoWs were changed to Production Sharing Contracts (PSC). As such Indonesia was the "originator" of the PSC contract type.

In 1971 the GOI issued Law No. 8 (the so-called "Pertamina Law" or Law No. 8) which established a special purpose for PN Pertamina. According to Law No. 8, Pertamina's objectives were to develop and carry out oil and gas activities in the broadest sense to be used fully for the country and people's wealth and to create a national defense. Under all the above prevailing laws and regulations, Pertamina undertook the role as an oil and gas player as well as regulator on behalf of the GOI, including undertaking social obligations for the people of Indonesia. Pertamina was also given the monopoly for all downstream activities. No other state-owned enterprise was allowed to undertake activities in the upstream and downstream oil and gas sector.

2001 was an important development for Indonesia's oil and gas industry. In October 2001 Law No. 22/2001 (often referred to as the New Oil and Gas Law) was enacted to replace the 1960 Oil and Gas Law (Law No. 44/1960) and Law No. 8/1971. Law No. 22/2001 mandated deregulation of the upstream and downstream sectors, including the ending of Pertamina's monopoly over downstream oil distribution and marketing of fuel products. Pertamina's upstream responsibilities to manage PSC contractors were also returned to the central government. Under Law No. 22/2001, an executive body was established for the upstream sector, while a separate regulatory body was established for the downstream sector. The executive body, BP Migas (Badan Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi/Government Executive Agency for Upstream Oil and Gas Business Activities), was established in July 2002 to take over Pertamina's regulatory and management functions over contractors in the upstream sector. The regulatory body, BPH Migas (Badan Pengatur Hilir Minyak dan Gas Bumi/Regulatory Body for Oil and Gas Downstream Activities), was established in December 2002 to supervise the downstream sector. With the law, Pertamina was converted into a limited liability company in 2004 and has begun to conduct its operations similar with other oil and gas companies without any regulatory or supervisory role on behalf of the GOI.

## brief history of oil and gas industry in Indonesia

In October 2004 the GOI issued Government Regulations No. 35 (upstream) and 36 (downstream) as elucidations of the Law No. 22/2001 aimed at effective implementation of certain specific provisions included in the law. Law No. 22/2001 was a fundamental change in the industry's structure and the 3 year delay in issuing the implementing regulations has caused many "transitional" regulatory problems and arguably had an adverse impact on investment during such time. It is acknowledged that recently the GOI begun to solicit and seek input from the industry in an effort to ensure that the regulations have favorable impacts on investment in the industry as well to Indonesia's overall economy and is encouraged to continue doing so.





## Section 5

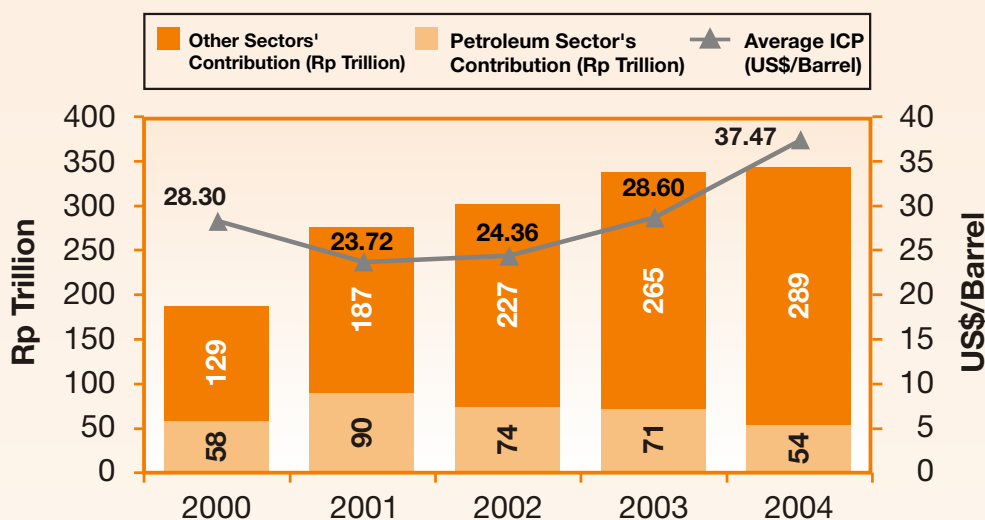
# Upstream Oil and Gas Industry Highlights in the last 5 Years



## Contribution of the Oil & Gas Sector to Total GOI Revenue/Exports

Since 2001, there has been a declining contribution from the upstream oil and gas industry to the GOI revenues, in absolute and relative measures, despite rising international oil prices.

**Chart 5.1a**  
**Contribution of Oil and Gas Sector to Government Revenue**



Source : Ministry of Finance and Petrominer

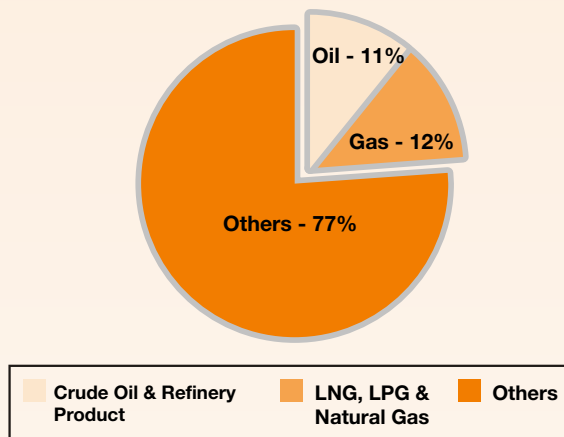
The upstream oil and gas industry has a long history of being a main contributor to the country's state budget. Nevertheless, for the past four years, since 2001 the contribution has been declining in nominal terms as well as a percentage of total GOI revenue. The nominal contribution declined from more than Rp90 trillion (inclusive of the tax revenues from the upstream oil and gas industry – approximately US\$9.5 billion) in 2001 to barely Rp54 trillion (approximately US\$5.7 billion) in 2004 (or from approximately Rp92 trillion (US\$9.7 billion) in 2001 to Rp62 trillion (US\$6.5 billion) in 2004 inclusive of amounts distributed to local governments). Parallel with this, during the same period its share of total GOI revenue declined from 32% to 16% (or from 33% to 18% inclusive of the amounts distributed to local governments). The relative contribution decline in 2004 was even more dramatic if compared to 1990 when the contributions from the upstream oil and gas industry represented more than 40% of total GOI revenues.

The continuing decline of the upstream oil and gas industry's contributions to the GOI's revenues is certainly not favorable for the GOI which is in dire need of new funds for its routine as well as non routine budget expenditures. Arguably the GOI has been pushing to broaden the country's economic base to not be so dependent on the petroleum sector but the dramatic decline can not be attributed to this macroeconomic policy alone. The continuing decline was experienced despite rising international oil prices in the last few years; hence, the decline can be largely attributed to Indonesia's declining oil and gas production.

## upstream oil and gas industry highlights in the last 5 years

As depicted in Chart 5.1b the oil and gas sector comprises approximately 23% of the country's exports. The percentage of exports attributable to the oil and gas sector has been declining over the past several years.

**Chart 5.1b**  
**Contribution of Oil and Gas Sector to Indonesia's Total Export for 2004**

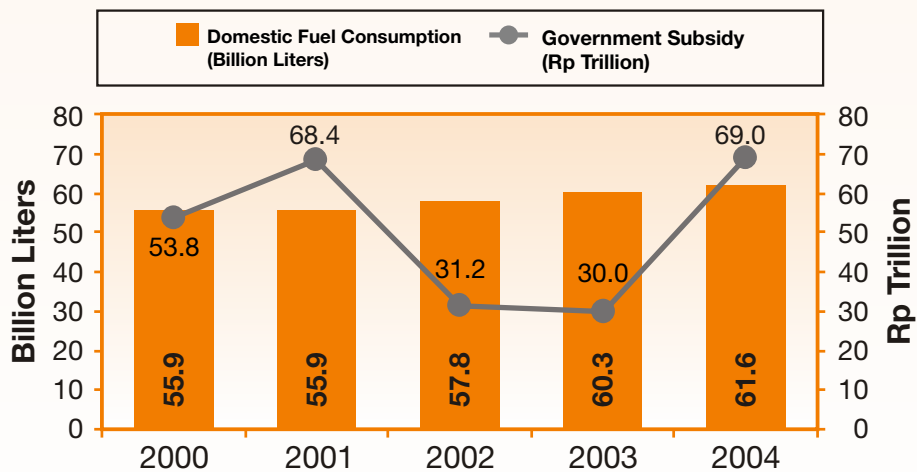


Source: Indonesian Central Bank

## Domestic Fuel Consumption and Subsidy

If we examine the expenditure side of the GOI budget, we can see that the GOI incurred significant expenditures for the fuel subsidy. During recent times, the GOI has taken measures to gradually reduce fuel subsidies through fuel price hikes and in October 2005 substantially eliminated the fuel subsidy. Over the past years, the fuel subsidies burdened the GOI budget due to continuing high volume of fuel consumption and soaring international oil prices. An overview of volume of fuel consumption and magnitude of oil subsidies is presented in Chart 5.2a.

**Chart 5.2a**  
**Domestic Fuel Consumption and Fuel Subsidy**



Source: Indonesian Central Bank and Directorate General of Oil & Gas

As presented in Chart 5.2a, the domestic fuel consumption continues to be significant and has continued to increase over the last five years, which reflects the gradual rebound of Indonesia's economy following



the economic crisis in 1998. The increases were experienced despite reductions in the fuel price subsidy made by the GOI in response to significant increases in international oil prices in recent years. And as shown in the chart, the absolute amount of subsidies in 2004 rose significantly due to the gap between market and subsidized prices. As oil prices soar, the magnitude of the subsidies will follow suit. If global oil prices remain at US\$60 a barrel level the 2005 fuel subsidy is expected to double to approximately Rp 138 trillion (approximately US\$14.5 billion).

The fuel subsidies have a more significant macroeconomic financial impact when the oil volumes are imported instead of from domestic production. Significant imports of oil definitely impact other aspects of Indonesia’s economic wellbeing such as the Rupiah exchange rate as the GOI will need significant foreign currencies for the importation of oil. Continuing declines in oil production may lead to such problems continuing or growing into the future.

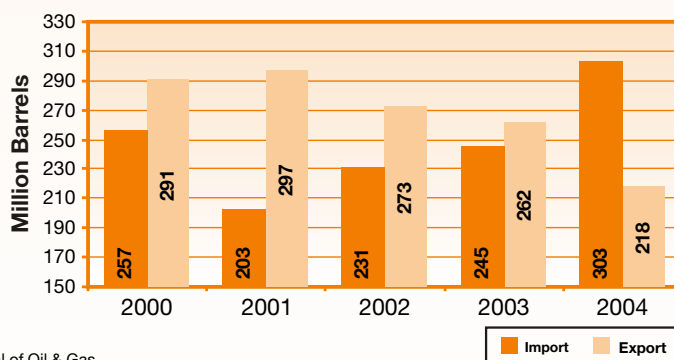
Petroleum subsidies coupled with concerns over pricing and customer credit risk have also been seen as a deterrent for optimal exploration, development and production of gas for the domestic market. Domestic energy consumers are unlikely to consider the use of gas for their operations as long as there are cheaper sources of energy in the form of subsidized fuel oils and related pricing and customer credit risks. The GOI has begun to address these issues, along with other implemented actions, in an attempt to develop a domestic gas industry but stepped up efforts are needed to realize a large domestic gas industry. The GOI understands that use of gas by domestic consumers will reasonably reduce or displace expensive imported petroleum products but needs to work with all involved stakeholders to deliver the necessary regulations.

In late September 2005 the GOI announced that fuel prices would be increased between 50 – 80% effective 1 October 2005. In conjunction with this policy decision a program was implemented to distribute funds to the poor to lessen the impact of the fuel price increases which are expected to increase inflationary pressures. The GOI should be applauded for taking this bold step which should lessen the fuel subsidy impact on the budget deficit, ease pressures against the rupiah and increase exploration, development and production of gas for the domestic market.

### Export and Import of Oil

Oil exports continued to decline while oil imports have continued to increase, culminating with Indonesia becoming a net oil importer in late 2004. Indonesia is in danger of becoming a permanent net oil importer sooner than expected or desired.

**Chart 5.3a**  
Total Import and Export (Crude Oil, Condensate and Refined Products)



Source: Directorate General of Oil & Gas

Chart 5.3a highlights Indonesia’s oil exports and imports for the last five years. The exports consist of crude oil, condensate and refined products, with crude oil being the major portion, while the imports consist of crude and refined products. As presented in the chart, exports have been continually

## upstream oil and gas industry highlights in the last 5 years

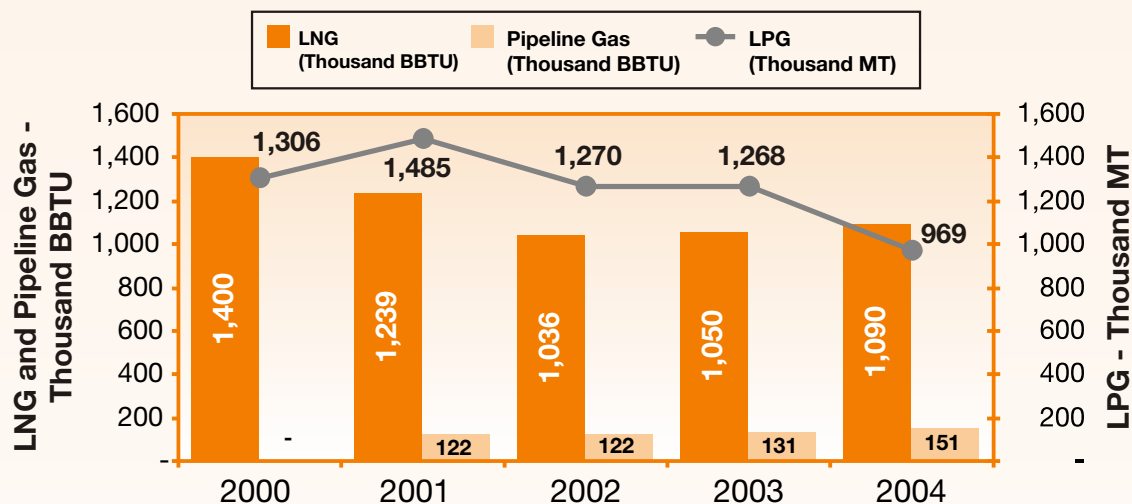
decreasing, while imports have been steadily increasing over the past 5 years. This trend culminated in late 2004 when total imports exceeded exports for the aforementioned oil products and Indonesia became a net oil importer. Being a net importer is in fact an irony for Indonesia as it is a member of OPEC. As mentioned previously, this condition was caused by Indonesia's declining oil production combined with high domestic oil and fuel consumption.

Charts 5.5a and 5.5b present the trends in oil production for the last five years, which shows that oil production has been steadily declining. Unless the GOI addresses the underlying issues causing the declines in oil production, and also addresses the issue of domestic fuel consumption and complete elimination of subsidies, Indonesia is in danger of becoming a permanent net oil importer or a net importer sooner than expected or desired. However, if the GOI takes swift action to completely eliminate the fuel subsidy, improves the business environment and increases fiscal incentives to investors this trend can be reversed and the country can forestall the day it becomes a net oil importer.

### Export of Gas

Declining gas production has created a dilemma between meeting LNG export commitments and supply for domestic consumption.

Chart 5.4a  
Indonesia Gas Export



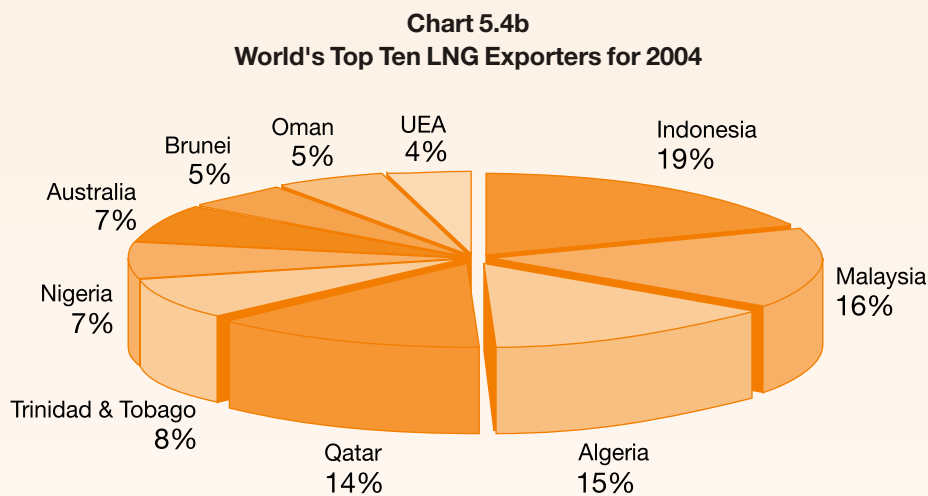
Source: Directorate General of Oil and Gas (except for pipeline gas which was estimated from public data)

As presented in Chart 5.4a, for the past five years exports of LNG and LPG have been on a downward trend. LNG exports were undertaken under long term contracts, currently from the Arun and Bontang processing plants. Pipeline gas exports to Singapore and Malaysia commenced in 2001 from the West Natuna fields and were followed by another pipeline from South Sumatra to Singapore in 2003. The first contract is worth approximately US\$8 billion with total gas volumes of approximately 2.6 TCF over the 20 year contract term, while the second contract is worth approximately US\$9 billion with total gas volumes of approximately 2.3 TCF over the 22 year contract term. In 2004, the annual deliveries from these two pipelines were still below 150 BCF. At the peak, deliveries from both pipelines are expected to exceed 230 BCF per year. Additionally, significant discovered undeveloped gas reserves exist in East Natuna, which present opportunities for increasing gas exports to neighboring countries and beyond.

As widely reported over the recent past, gas supply limitations at both Arun and Bontang illustrates the challenges facing the industry to make supplies available to currently uncontracted demand.

LNG production from Tangguh may increase Indonesia's LNG exports in 2008 when production is planned to start, but this may not be enough to stop Qatar from overtaking Indonesia as the world's largest LNG exporter. In 2004 it was estimated that Indonesia had approximately 19% of the world's LNG export market (see Chart 5.4b) versus 14% for Qatar which has vast gas reserves and additional capacity coming online in the near future.

Indeed Indonesia has other potential LNG projects such as gas reserves in Natuna and Sulawesi, nevertheless the GOI may need to provide certain incentives and business conditions to attract investor interest considering the unfavorable gas quality and/or quantity as well as the hurdles to develop infrastructure in the area.



Source: BP Statistical Review of World Energy June 2005

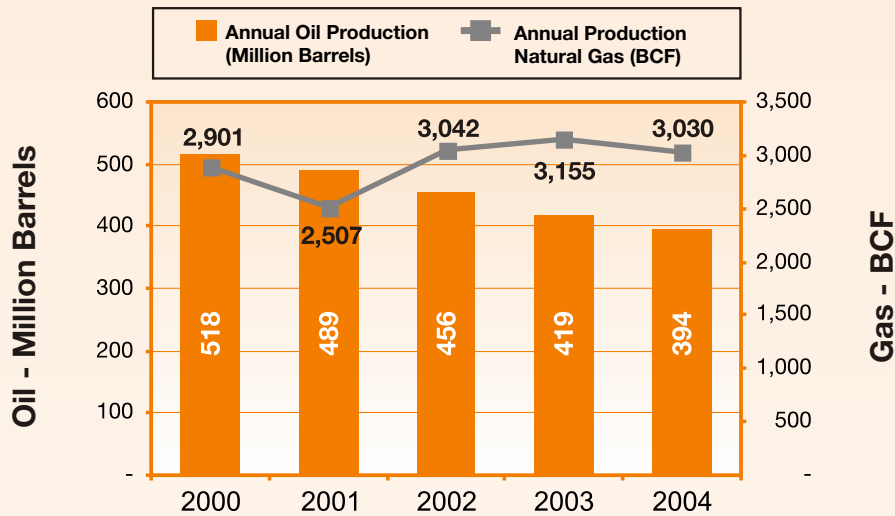
As depicted in Chart 5.4b, in 2004 Indonesia was the world's largest LNG exporter, however, this number one position is being challenged by other countries that have significant quantities of uncommitted gas reserves and LNG exporting facilities. Over the past 25+ years Indonesia has developed a reputation as being a reliable LNG supplier; however, given recent shortages and lack of energy policy clarity, this reputation is at risk. In the early years of the LNG market, Indonesia did not have competition but rather competed with other alternative energy sources. However, as more "players" have entered the LNG market, it has become highly competitive. Many LNG suppliers are prepared to offer flexibility in commercial terms to achieve competitive advantage. Future LNG sales from Indonesia will need to recognize this market reality.

### Oil and Gas Production

The industry continues to experience production declines due to the lack of new significant discoveries or development of replacements for mature fields with declining production.

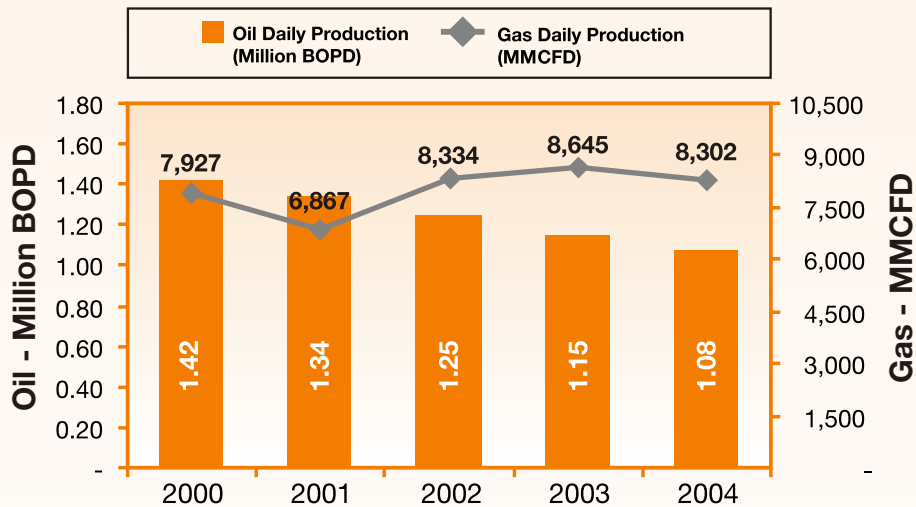


**Chart 5.5a**  
Indonesia Annual Oil & Gas Production



Source: Directorate General of Oil & Gas

**Chart 5.5b**  
Indonesia Daily Oil & Gas Production



Source: Directorate General of Oil & Gas

The fact that Indonesia is facing declining oil and relatively static gas production is apparent in Charts 5.5a and 5.5b. For the last five years, oil production has been steadily decreasing, from above 1.4 million barrels per day in 2000 to less than 1.1 million barrels per day in 2004. The 2005 state budget reflects production of 1.15 million barrels per day, however, most analyst expect the country to achieve less than 1.08 million barrels per day.

During the same period, natural gas production has been up and down and peaked in 2003, but then experienced a decline in 2004 which created problems on the supply side for LNG and domestic gas users as discussed in the previous section. Based on existing gas producers' capacity, Indonesia's overall gas production subsequent to 2004 is expected to continue to decline, until the Tangguh LNG facility starts production which is anticipated in 2008.

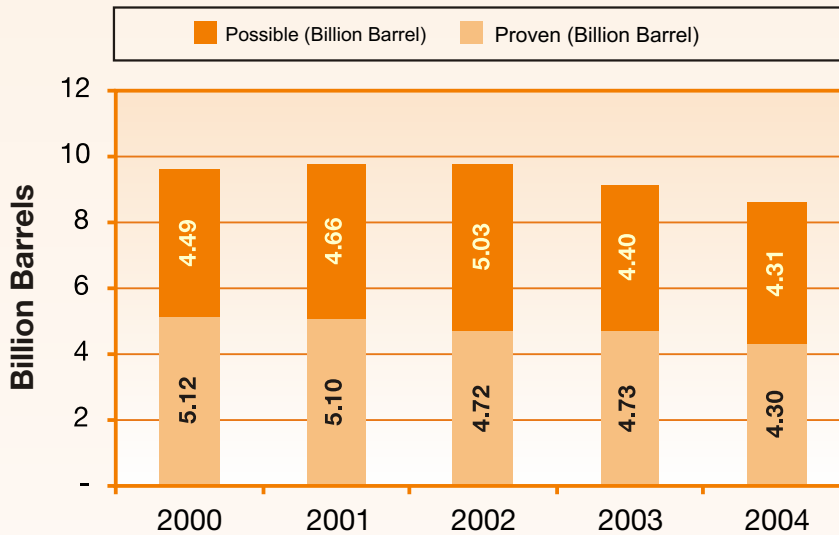
The production decline for both oil and gas is a direct result of structural changes, where the existing production of oil and gas is being pumped from maturing fields which are experiencing production declines as is typical of mature fields. Maturing fields contributed to higher cost of production as additional costs have to be incurred to ensure production flows at optimal rates.

The fundamental question which needs to be pondered is - why was Indonesia unable to find replacements for those maturing fields? Chart 5.7a shows that there has not been significant investment in exploration activities in recent years despite historically strong commodity prices. The chart implies that the inability to discover sufficient replacement reserves was due to the lack of investment in exploration activities or development of other reserves in recent years.

### Oil and Gas Reserves

As presented in Chart 5.6a, Indonesia’s oil reserves continue to decline and were approximately 4 billion barrels of proved and possible reserves respectively at the end of 2004.

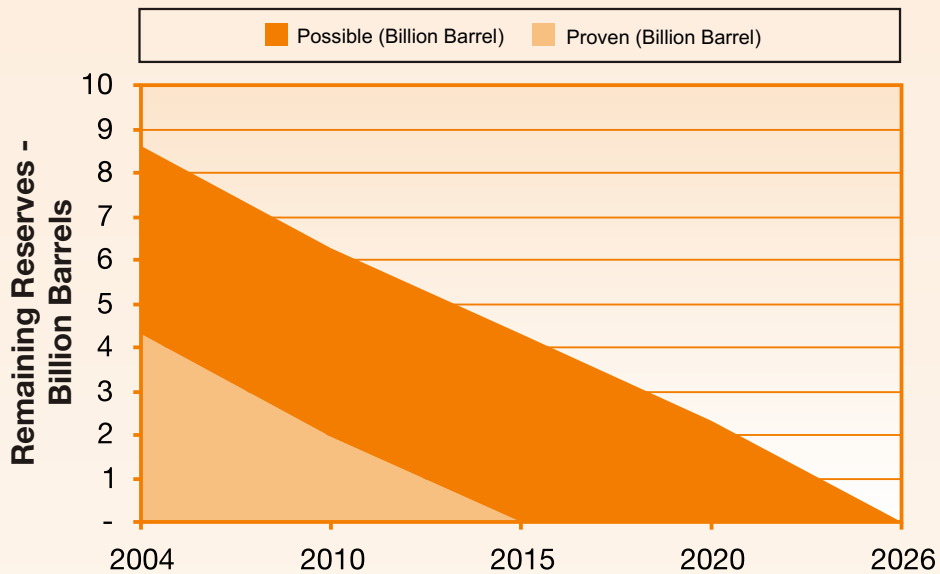
**Chart 5.6a**  
**Indonesia Oil Reserves**



Source: Directorate General of Oil & Gas

As presented in Chart 5.6b, without significant oil reserve discoveries, the reserves may be exhausted within the next 10 to 20 years based on current production levels and decline rates.

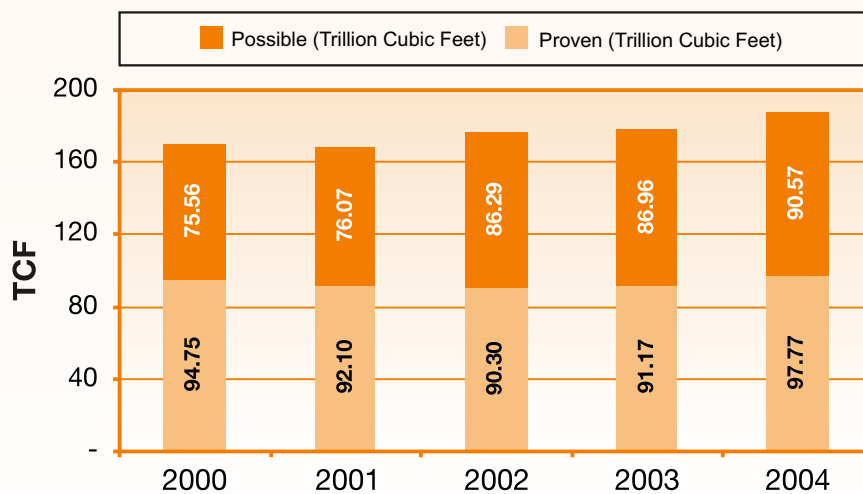
**Chart 5.6b**  
Indonesia Estimated Oil Reserve Depletion



Source: Directorate General of Oil & Gas

Chart 5.6c presents Indonesia’s gas reserves, which reflect modest increases during the last five years with 98 TCF and 91 TCF of proved and possible reserves respectively at the end of 2004. Nevertheless, Indonesia gas reserves are much lower compared to Qatar’s proved and possible gas reserves of 900 TCF (Qatar is one of Indonesia’s main competitors in LNG export sales). The importance of gas in Indonesia’s energy mix has recently taken on an increased recognition as a source of energy. For Indonesia, the main problem for gas exploitation is the prevalence of hurdles for gas reserves development and production. There are a number of obstacles preventing optimal development of the country’s gas reserves, amongst others are the lack of infrastructure, the uneconomic scale of the reserves as many reservoirs are small and scattered in distant areas, low gas prices compared to oil, domestic customer credit quality concerns or require high costs to develop due to gas quality.

**Chart 5.6c**  
Indonesia Gas Reserves

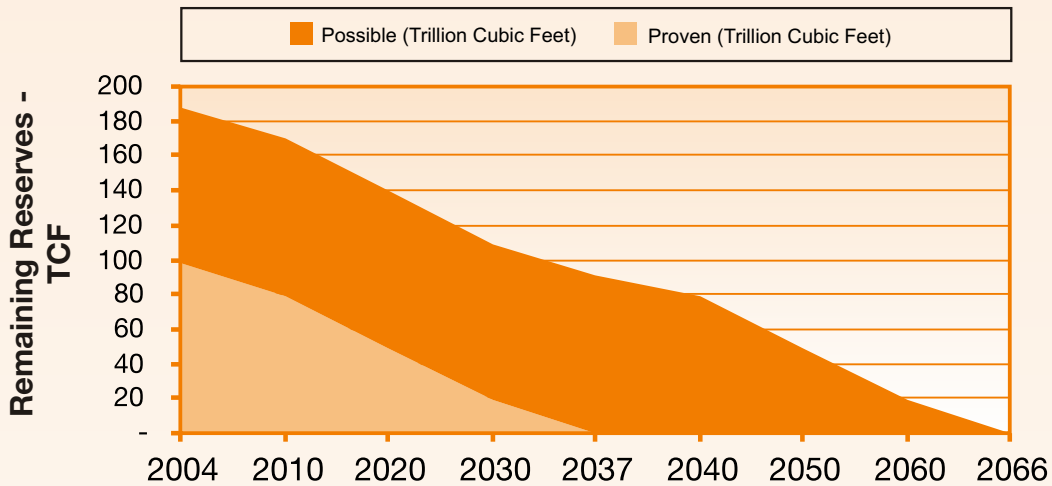


Source: Directorate General of Oil & Gas



As presented in Chart 5.6d, without significant gas reserve discoveries and/or movement from possible to proven classification, the gas reserves may be exhausted within the next 30 years based on current production levels.

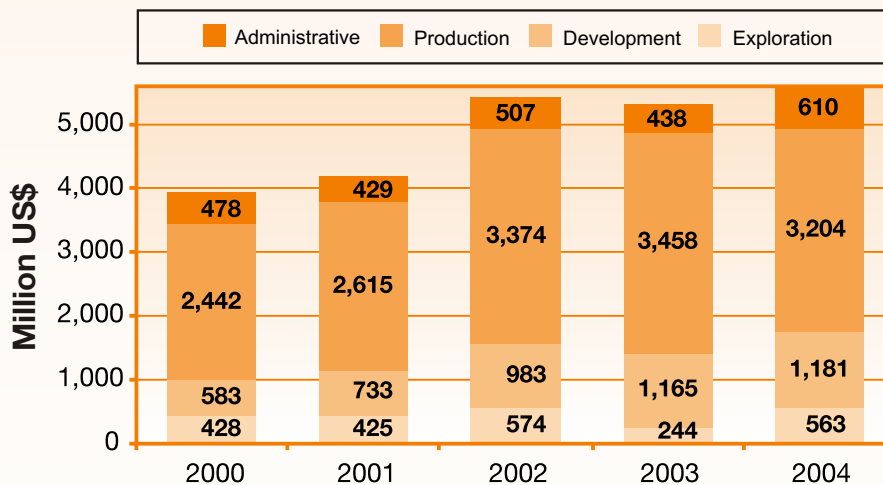
**Chart 5.6d**  
**Indonesia Estimated Gas Reserve Depletion**



Source: Directorate General of Oil & Gas

### Investment in Oil and Gas Exploration Activities

**Chart 5.7a**  
**Spending for Oil & Gas Operations**



Source: Directorate General of Oil & Gas

As presented in Chart 5.7a, since 2000 the relative level of investment in exploration activities has been low. The low level of investment was experienced during the time when Law No. 22/2001 was enacted which was meant to spur new investment in the upstream oil and gas industry. Existing oil and gas companies did not increase their exploration activities despite awareness that their oil and gas reserves were mature and in steep declining production mode nor were there a large number of new players entering the country.

## upstream oil and gas industry highlights in the last 5 years

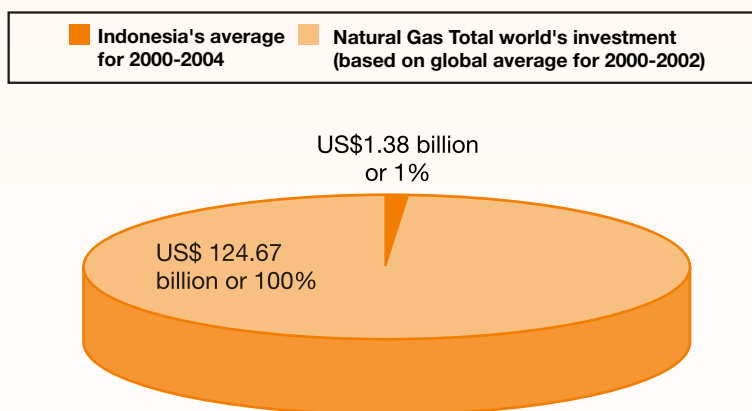
Initially Law No. 22/2001 did not significantly increase investment in the sector due to the increased uncertainty and confusion created by the changes, as demonstrated by the fact that it took almost 3 years from enactment of the law for the implementing regulations to be issued. In the future the GOI may want to consider better socialization of the legal changes to all stakeholders and ensure that an effective and efficient plan is put in place to execute the legal changes in a timely manner, and where possible as many of the changes are embodied in the actual law rather than in a Government regulation. This will provide greater certainty to investors.

### Understanding root causes for lack of investment

It is of utmost importance to try and understand the root causes for the oil and gas companies not investing in exploration activities despite Indonesia's favorable geological prospectivity and the GOI's efforts to spur investment with the passage of a new oil and gas law. It is generally accepted that most of Indonesia's "easy" petroleum discoveries have already been made. Any significant new discoveries are likely to be located offshore deepwater or in more remote locations (i.e. Eastern Indonesia) which lack adequate infrastructure. These types of exploration activities pose more risks to investors and therefore will generally require a higher anticipated return compared to other less risky exploration activities. In addition consistent with the rest of the world the recent discoveries in Indonesia have been smaller in size. The declining "find" sizes and declining investment for exploration activities contributed to the inability to find reserve replacements for maturing fields which led to the continuing production decline. The recent announcements by the GOI of better commercial terms (e.g., incentives for marginal fields and increased equity splits, etc.) has been welcomed by the industry but further measures are needed to attract increased investment. The global upstream investment environment is getting increasingly competitive and to attract investment the country must offer investors competitive rates of return and a conducive business environment.

Going forward Indonesia may only be able to increase reserves and production by optimizing the reserves of lesser magnitude reservoirs, which are more expensive and costly to find and produce. To induce investment for exploration operations in the current environment the GOI must establish regulatory and fiscal measures which are conducive and attractive to potential/existing investors. Unfortunately this has not been the case in the eyes of oil and gas investors in recent years. As such, there has been minimal exploration investment in recent years which led to the absence of adequate reserve replacement and resulted in a continuing decline in production.

**Chart 5.7b**  
**Indonesia vs Global Annual Upstream Oil and Gas**  
**Exploration and Development Investment**



Source: International Energy Agency & Directorate General of Oil & Gas

**Chart 5.7c**  
Global (65 countries) Exploration & Appraisal Expenditures & Indonesia's Share



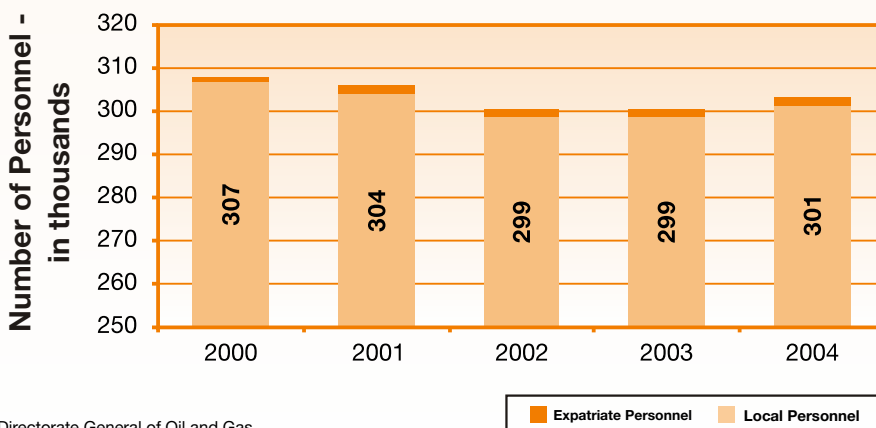
Source: Wood Mckenzie

As shown in Charts 5.7b and 5.7c, for the last five years Indonesia only managed to attract a small percentage of the world's total upstream oil and gas exploration and development investments, despite generally being recognized as a geologically rich country. Indonesia's average annual investment for the last five years represented only approximately 1% of global investments (based on the average of global investment for 2000 – 2002, from International Energy Agency). Considering that the exploration and development costs per barrel of oil equivalent in Indonesia is not expected to decrease in the future, besides geological attractiveness Indonesia needs to provide incentives and an improved business environment to attract significant new investment in the future.

### Industry Employment and Community Development

The Indonesia upstream oil and gas industry has historically been a large employer. In addition to employing a large number of people directly or indirectly many of the jobs provided by the industry are towards the higher paying end of the wage scale. As depicted in Chart 5.8a the industry directly employs over 300 thousand people but there are other indirect benefits to the country besides the direct employment. As many of the oil and gas operations are in remote regions this activity has provided development opportunities for these regions which may have not otherwise occurred.

**Chart 5.8a**  
Employment in Indonesia Oil and Gas Industry



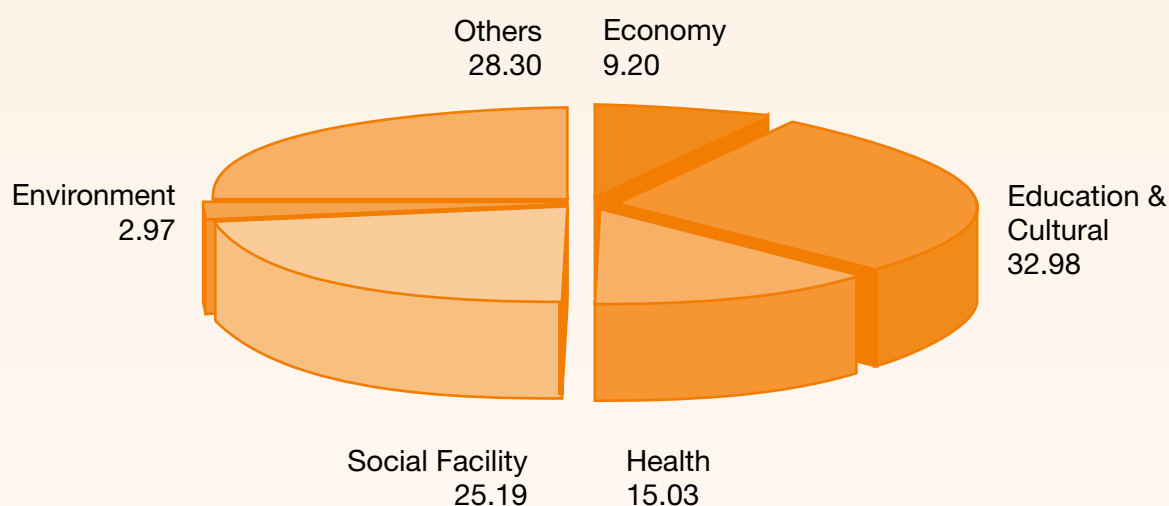
Source: Directorate General of Oil and Gas



## upstream oil and gas industry highlights in the last 5 years

Although the direct monetary impact on the Indonesia economy is significant from the direct employment provided by the industry, the indirect multiplier effect that the oil and gas industry contribution has on other economic activity can not be ignored. Two recent studies by the University of Indonesia on the economic impact of two of Indonesia's larger mining operations showed that the indirect jobs created as a result of mining activity was between 12-37 times the direct employment. While a similar study has not been undertaken specifically for the upstream oil and gas industry because of the similarities between the two industries (operate in remote regions, high reliance on subcontractors, purchases for infrastructure development, etc) it may not be incorrect to presume that the multiplier effect for the oil and gas industry would be in this range. This would imply that the indirect employment provided by the industry ranged between 3.6 million and 11.1 million, a significant percentage of the country's workforce. This implied multiplier is consistent with that found in other countries.

**Chart 5.8b**  
**Expenditures for Community Development Program**  
**by Oil and Gas Sector in 2004 (in Rp billion)**  
 (Total: Rp113.66 Billion)



Source: Directorate General of Oil & Gas

Oil and gas contractors are required to undertake community development programs which are aimed at enhancing the surrounding community's access to better social, economic and cultural conditions than the conditions which existed before the contractors conducted their operations in the area. In 2003 the Ministry of Energy and Mineral Resources ("MEMR") issued guidance on community development programs. Often times companies exceed these minimum community development requirements out of a social responsibility for the communities they operate in.

Total expenditures for community programs undertaken by oil and gas companies for 2004 was approximately Rp113.6 billion (approximately US\$12 million), which were directed towards various aspects of community's interests as presented in Chart 5.8b. Considering that Indonesia is still in dire need for development funds, the continuing and increasing contributions from the upstream oil and gas industry for such programs, although the recipients may be limited to the communities in surrounding areas, will surely benefit the GOI as well as the people of Indonesia.

Other benefits provided by the industry include:

- domestic gas development which is environmentally friendly and lowers Indonesia industry cost of energy and dependence on oil;
- development of infrastructures such as hospitals, schools, roads, etc.; and
- adding to the GOI's revenues.





## Section 6

# Major Issues

# Preventing the

# Upstream Oil and Gas

# Industry from

# Attracting Needed

# Investment





## Revolutionary and Evolutionary Change

Over the past decade Indonesia and more specifically the oil and gas industry has experienced significant change. These changes have included:

- A New Oil and Gas Law;
- A New Regional Autonomy Law;
- A New Manpower Law;
- A New Tax Law;
- A New Environment Law;
- Numerous implementing regulations related to these new laws;
- Establishment of BP Migas and BPH Migas;
- Numerous changes in Indonesia's political system and leadership; and
- Judicial reform.

With all of these changes it's not surprising that issues have arisen. Survey participants indicated that they understood that change was needed and supported the GOI's efforts to change. Many of the issues raised in the survey can be considered transitional in nature. Many of the issues are currently being addressed by the GOI, however, there is concern that it is taking too long to implement and execute solutions to these issues and that the lower levels of the government bureaucracy are slowing down the speed at which these issues are being resolved or in some cases the lower levels of bureaucracy do not agree or support the solutions or change.

## Problems and Issues in Upstream Oil and Gas Industry in Indonesia

A number of critical fiscal, legal and bureaucratic issues and geological prospectiveness considerations need to be addressed by the GOI to spur investment in the upstream oil and gas industry, and make it attractive for existing and potential investors in an increasingly competitive global market.

It was not a coincidence that investment for exploration activities declined subsequent to 2001 when the New Oil and Gas Law/Law No. 22/2001 was enacted. As mentioned in previous sections, Indonesia's share of the global upstream investment pool has steadily declined over the past 5 years.

Since the beginning of the "reformasi" era in 1998, there have been many reformation efforts in Indonesia which directly or indirectly affected the upstream oil and gas industry, such as:

- Reforms for the balance of power between central and regional government, where more power, authority and rights were transferred to regional governments;
- Legal reforms, such as establishment of a constitutional court;
- Enactment of various new laws such as the bankruptcy law, labor law, environmental law, law on forestry, etc.;
- Political reforms, such as direct election of the president and for the local government; and
- Taxation reforms, such as enactment of a new tax law and related implementing regulations.

Implementation of the above new laws and regulations including Law No. 22/2001, have at least in the short term, negatively impacted the upstream oil and gas industry. Examples of situations which either directly or indirectly caused existing or potential investors to reconsider their investment decisions are as follows:

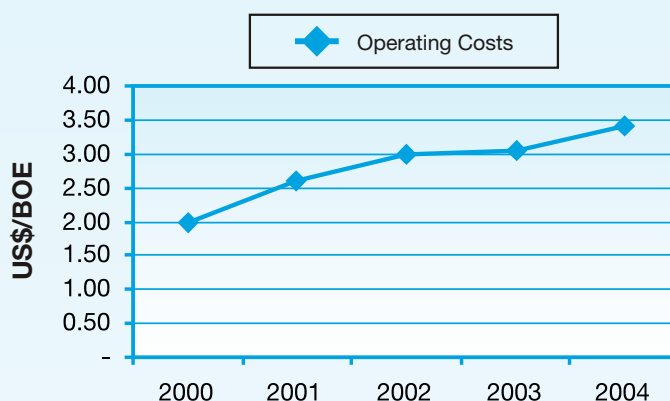
- Imposition of new taxes, fees, etc. by provincial and regional governments;
- Increasing demands by local government for direct participation in project ownership, often by exerting threats to block projects;
- Changes in tax and import duty regulations, including issues on VAT reimbursement;
- Conflicting regulations amongst ministries;
- Unclear roles of central, provincial and regional governments;

## major issues preventing the upstream oil and gas industry from attracting needed investment

- Uncertain sanctity of existing contracts from the impacts of new laws and regulations;
- Increased “micromanagement” by the new regulators adding to industry costs and cycle times; and
- Increased liabilities on the “sellers” of gas.

Due to a lack of investment as a result of the aforementioned issues Indonesia has been experiencing increases in operating costs per barrel of oil equivalent for the last five years as shown in Chart 6.1a. This condition is not favorable for both the contractor and GOI.

**Chart 6.1a**  
**Oil and gas companies' operating costs in Indonesia**



Source : Indonesian Petroleum Association

From a geological prospective, investors expect to discover smaller “finds” in more remote locations which dramatically changes the risk profile of these exploration activities. As previously mentioned this scenario will increase the finding and operating costs thereby lowering profitability without some sort of additional fiscal incentive. To induce investment for exploration operations with such geological risk profile, the GOI must establish regulatory and fiscal measures which are conducive and attractive to potential/existing investors. The GOI has recently announced new fiscal incentives such as marginal field investment credits, increased equity splits, etc.; however, it is too early to tell if these measures alone will be sufficient to significantly increase investment in the sector. Unfortunately industry investors have become skeptical over recent years of investing in the Indonesian oil and gas industry because they perceive that fiscal incentives offered by the GOI are often times negated by other negative developments in the industry. In other words, if the GOI offers investors an increased equity split to induce investment but investors experience or expect to experience difficulties in obtaining VAT reimbursements (say for example) the net impact of the fiscal stimulus may only marginally impact new investment.

This survey is aimed at getting the opinions of industry executives of the issues confronting the industry which are preventing it from attracting the needed investments to regain growth. We also seek to gain an understanding of possible solutions to the issues raised. By gaining an understanding of the issues and possible solutions, we hope that the GOI and other stakeholders of the industry will be able to take actions which will make the upstream oil and gas industry in Indonesia attractive for existing and potential investors in the increasingly competitive global market.

### The Most Critical Industry Issues

To gain an understanding of the most critical issues facing the industry we asked survey participants to rate over 20 different issues confronting the oil and gas industry in Indonesia as well as write in other issues. On a scale of 1 to 5 (5 being “Significantly Important”, 3 being “Moderately Important” and 1 being “Not Important at all”) survey participants were asked to rate the following issues confronting the Indonesia oil and gas industry:

**Critical Industry Issues**

<ul style="list-style-type: none"> <li>Contract sanctity</li> </ul>	<ul style="list-style-type: none"> <li>Security of assets, people and ownership rights</li> </ul>	<ul style="list-style-type: none"> <li>Confusion over Law No. 22/Implementing regulations</li> </ul>
<ul style="list-style-type: none"> <li>Taxation</li> </ul>	<ul style="list-style-type: none"> <li>Legal certainty/judicial reform</li> </ul>	<ul style="list-style-type: none"> <li>Interference from other governmental agencies, such as the tax authorities</li> </ul>
<ul style="list-style-type: none"> <li>Confusion as to the roles of the central, provincial and regional governments</li> </ul>	<ul style="list-style-type: none"> <li>Confusion over BP Migas regulations / “grand fathering” of prior Pertamina rulings</li> </ul>	<ul style="list-style-type: none"> <li>Political risk</li> </ul>
<ul style="list-style-type: none"> <li>Local government relations</li> </ul>	<ul style="list-style-type: none"> <li>Corruption, collusion, and nepotism</li> </ul>	<ul style="list-style-type: none"> <li>Community relations</li> </ul>
<ul style="list-style-type: none"> <li>Clarification of import/master list facilities</li> </ul>	<ul style="list-style-type: none"> <li>Confusion over energy policy and supporting blueprints (gas utilization, etc)</li> </ul>	<ul style="list-style-type: none"> <li>Impact of constitutional court decisions</li> </ul>
<ul style="list-style-type: none"> <li>Confusion as to the role of Pertamina/BP Migas and the Ministry of Energy and Mineral Resources</li> </ul>	<ul style="list-style-type: none"> <li>Transparency in block bidding/evaluation process (e.g., Gazetal)</li> </ul>	<ul style="list-style-type: none"> <li>Timely reimbursement of VAT</li> </ul>
<ul style="list-style-type: none"> <li>Labor regulations and relations</li> </ul>	<ul style="list-style-type: none"> <li>Clarity and consistency of message from GOI ministries involved in oil and gas</li> </ul>	<ul style="list-style-type: none"> <li>Other – participants were allowed to write in issues not names. Some responses were: a) domestic gas pricing, b) domestic market obligation (“DMO”) for gas, c) credit risks for domestic gas purchasers</li> </ul>

Despite the unique risks, exposures and situations faced by each survey participant’s company there was an almost unanimous view amongst the participants as to what the most significant issues facing the industry were and preventing it from attracting the needed investments. Notwithstanding this comment the consensus amongst the survey participants was that all of the identified issues had some importance as beared out by the lowest average score of 4.1. We noted in particular five issues where more than 70% of the survey participants rate the issue as being “Significantly Important”.

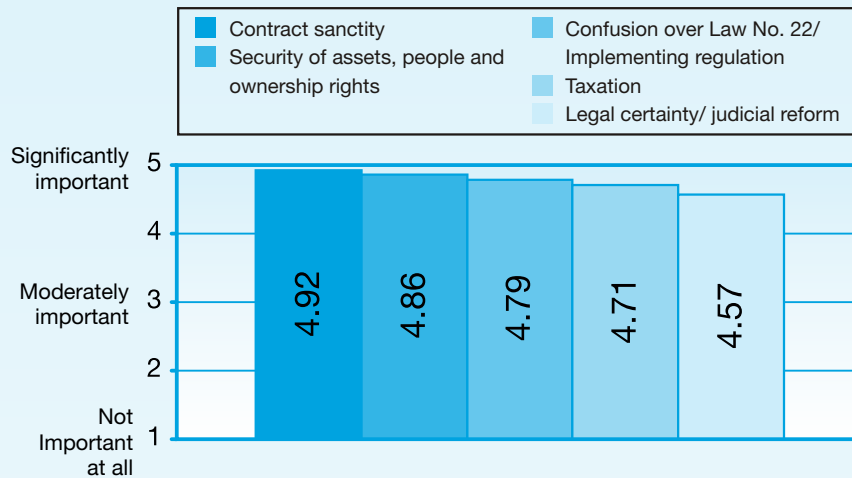
**The Top 5 Issues Confronting the Industry**

**Table 6.1**

Issue	% of responses rated issue as “5 Significantly Important”
<ul style="list-style-type: none"> <li>Contract sanctity</li> </ul>	86%
<ul style="list-style-type: none"> <li>Security of assets, people and ownership rights</li> </ul>	86%
<ul style="list-style-type: none"> <li>Confusion over Law No. 22/Implementing regulations</li> </ul>	86%
<ul style="list-style-type: none"> <li>Taxation</li> </ul>	71%
<ul style="list-style-type: none"> <li>Legal certainty/judicial reform</li> </ul>	71%

Chart 6.1 shows the top 5 issues facing the industry as rated by the survey participants. As the chart shows based on the average score for each issue it was an almost unanimous decision by the survey participants that these 5 issues were “Significantly Important”.

**Chart 6.1**  
**Top 5 Issues Facing the Industry**



The respondents’ insights on these issues as well as their thoughts on their resolution are discussed below.

**Contract sanctity and confusion over Law No. 22/Implementing regulations**

Law No. 22/2001 was enacted on 23 October 2001 and dramatically changed the regulatory landscape of the Indonesian oil and gas industry. Many new concepts were introduced in this law that would require elucidation in implementing regulations. Because of lobbying by “special interest groups” and protracted debates over interpretations the final implementing regulations were not enacted until 14 October 2004, almost 3 full years after the enactment of the Law No. 22/2001. This delay created significant legal uncertainty and confusion amongst investors and existing contractors and certainly discouraged investment in the sector. There are concerns that the implementing regulations do not honour sanctity of contracts signed prior to enactment of Law No. 22/2001. The concerns, amongst others, are over applicability of a gas domestic market obligation to PSC’s in effect prior to enactment of Law No. 22/2001, and not honouring the PSC’s in terms of VAT, custom duties and other fiscal terms. The GOI must address concerns over contract sanctity, by ensuring that the implementing regulations honour rights and obligations, in all aspects, of the contractors as determined under contracts signed prior to enactment of Law No. 22/2001. Although the current GOI has enacted temporary measures to clarify VAT and import/custom duty obligations more permanent solutions are needed via inclusion in an actual law.

The suggested solutions to address contract sanctity and confusion over Law No. 22/Implementing regulations issues noted include:

- The GOI should come out with an unequivocal statement in a legal binding form that all existing contract terms will be honoured. This statement should be backed up by actions by the various entities involved with the industry;
- Confirmation in a clear legal binding form that a gas domestic market obligation does not exist for old PSC’s and if deemed to exist for new PSC’s clear guidance on how this obligation will be measured for these new PSC’s;
- Improved coordination amongst the various GOI entities involved with the industry so conflicting interpretations and regulations can be avoided/minimized; and
- Amendments to existing laws or passage of new laws which remove investors concerns.



*“Sanctity of ALL PSC’s, existing and new, is highly questionable. The current PSC scheme is NOT truly a PSC, having been greatly modified/eroded over the years with VAT, DMO, FTP, regional taxes/imposts, import duties and is NO longer competitive or attractive compared to other countries (especially Asian) contracts. It is time to get back to the true PSC and review the PSC production splits and other factors mentioned”.*

– Survey participant comment

### Security of assets, people and ownership rights

Concerns over security of assets, people and ownership rights pertain to developments in recent years in various areas which either directly or indirectly have impacts on oil and gas companies, such as in the area of politics, law and regulations, and regional autonomy. As an example, as a result of growing regional autonomy, there were incidents where the local governments or communities took actions which disrupted oil and gas companies’ operations and jeopardized the security of people and physical assets in their areas, in demand for shares in the ventures. There were also concerns that assignments of working interest to affiliates or other contractors in the same PSC would be subjected to a mandatory offer to national companies. Certain companies are also operating in political conflict ridden areas which pose security risks on their assets and people, which also lead to higher operating costs.

The suggested solutions to address security of assets, people and ownership rights noted include:

- The central government needs to take a more proactive role in ensuring the security of contractors operations, particularly when conflicts arise with local governments and/or communities;
- Improved coordination amongst the various levels of government involved within the industry so that bureaucracy and duplication of efforts can be minimized;
- Improved socialisation with regional governments and all stakeholders by the central government of the roles and levels of involvement of the regional/provincial governments so that conflicts are minimized. This may involve workshops being held by the Central Government and PSC contractors to educate regional governments on the industry; and
- Greater transparency and communication of the local government revenue distribution.

*“The regional governments efforts to protest and block contract extensions and their demands to takeover PSC’s will destroy the nation’s efforts to efficiently maximize the productive yield of Indonesia’s resources”.*

– Survey participant comment

### Taxation

There have been concerns raised on taxation issues since the enactment of Law No. 22/2001 and the enactment of new taxation laws and regulations, where the new laws and regulations may violate the sanctity of taxation provisions regulated within existing contracts and previous tax laws and regulations existing prior to enactment of Law No. 22/2001.

The current fiscal regime is seen as being less clear than the regime under Law No. 8/1971. The main concerns relating to taxation are as follows:

- Tax audits by Directorate General of Tax (“DGT”) and government auditor. Long standing practices are being challenged which is causing confusion and uncertainty;
- VAT reimbursement not being met for new and old PSC’s, and tax court and supreme court rulings in

- favour of the contractors on a number of VAT assessment cases not being honoured by the DGT;
- Clarity on calculation of gain on sale of mineral interests and tax treatment of farm-ins;
- Procedures and obligation relating to import duties and taxes for new and old PSC's;
- Regulations on Non Tax State Revenue and PSC Income may violate sanctity of existing contracts; and
- Uncertainty in income tax calculation.

The suggested solutions to address taxation issues noted include:

- Provide fiscal certainty in income tax calculation, assurance to honour tax related provisions regulated within existing contracts and previous tax laws and regulations existing prior to enactment of Law No. 22/2001 and new tax laws and regulations. Preferably such certainty should be embodied in a law or laws. This may include a more definitive section in the PSC contract itself or a separate new tax code in the next tax law created by the GOI;
- Provide clarity and confirmation for BP Migas or the appropriate GOI entity to assume and discharge import duties and taxes for new and old PSC's, preferably embodied in a law or laws;
- Provide clear guidance on importation of goods and services embodied in a law or laws and understood by all GOI agencies/institutions;
- Honour court rulings in favour of contractors;
- Meet obligation to timely reimburse VAT, duties and DMO;
- Provide clear guidance on calculation and treatment of taxes relating to sale of mineral interest and farm-ins, again need to ensure honouring sanctity of existing contracts. This would preferably be embodied in a clear and coherent law or laws;
- Undertake more coordination amongst various GOI institutions, namely MEMR, BP Migas, MoF, DGT, Directorate General of Customs, and Government Auditor (BPKP).

*"The Directorate General of Tax and Ministry of Finance are only looking at short-term budgeting issues and not considering the long-term benefit to the country".*

**– Survey participant comment**

*"There are many conflicting tax regulations between the Ministry of Finance, Director General of Tax and Minister of Energy and Mineral Resources and there are no initiatives in place to resolve".*

**– Survey participant comment**

### Legal certainty/judicial reform

Indonesia is undergoing continuing reforms in all aspects of its statehood including laws and regulations. There seems to be lack of coordination amongst legislators and/or other GOI authorities which results in many regulations being contradictory between one and another, or being unclear on their impacts to existing contracts undertaken under previous laws and regulations. These conditions create legal, regulatory and fiscal uncertainties. Examples of concerns due to enactment of new laws and regulations which directly or indirectly may have impacts on oil and gas operations are as follows:

- Regional government regulations (Perda) which may be in conflict with central government regulations;
- Additional levies/duties imposed by local governments;
- Restrictive and costly manpower rules and regulations;
- Potential conflict with law and regulations on forestry;
- Potential impacts of law on water resources;
- Potential impacts of any relevant rulings by the constitutional court;

## major issues preventing the upstream oil and gas industry from attracting needed investment

- Potential impacts of new investment law;
- Potential inefficiency resulting from regulations on procurement; and
- Potential impact of bankruptcy law, as an example an international oil company was sued for bankruptcy due to a contract dispute.

In addition, investors have concerns over the respect for law from different parts of the GOI. Many investors have won binding decisions from the Tax Court and/or Supreme Court which have sometimes been ignored by the DGT. This sends the message to investors that there is no legal certainty, even when they are successful in the courts.

The suggested solutions to address legal and regulatory uncertainties include:

- Undertake more coordination and cooperation amongst legislators, ministers and other GOI authorities to ensure there are no conflicting provisions in the laws and regulations to be issued;
- Resolve existing conflicting laws and regulations amongst ministries and between central and local governments;
- Strive to ensure that laws and regulations provide a facilitating and enabling operating environment, not “command and control” but monitor;
- Ensure that new laws and regulations honor sanctity of existing contracts; and
- DGT to honor court decisions and send a strong message on the “rule of law”.

### The other issues still seen as important

As previously indicated although there were five distinct areas which survey participants thought were more critical than the other issues the remaining issues were nonetheless considered to be important as evidenced by the lowest average score of 4.1 (3 being “Moderately Important” and 5 being “Significantly Important”). As such we have provided a brief overview of each issue from the comments received from survey participants.

### Confusion as to the roles of the central, provincial and regional governments

Since the implementation of the Regional Autonomy Law there has been a structural change where the Indonesian Central Government has allowed provincial and regional governments more influence and control over commercial activity in their jurisdictions. Under Law No. 22/2001 the Central Government has retained overall responsibility for overseeing the industry, however, Law No. 22/2001 requires greater interface with the regional governments. Therein lays the problem as many regional governments have taken this initiative beyond the Central Government’s original intent. Examples of issues that have raised concerns, amongst others, are as follows:

- Imposition of new taxes, fees , etc. by provincial and regional governments which are seen as eroding and violating sanctity of the PSC and add an investment burden;
- Difficulties in gaining resolution on land indemnification disputes due to conflict of interest involving local governments;
- Demands for local working interests in projects and threats to block projects have worried investors and negatively impacted production; and
- Demands for ownership in old PSC’s or those PSC’s existing before Law No. 22/2001 was enacted.

Central Government leadership is needed to minimize the conflicts between local governments and the Central Government. Often times investors have difficulties with regional governments because of their lack of understanding of the industry and the contractual terms which are in place. The Central Government should educate the regional governments on the industry and how the PSC scheme works and what the regional government’s new role entails and what it does not entail. Eliminating this confusion will provide investors with greater certainty and operating efficiency. The Central Government and PSC contractors could hold workshops with regional governments to familiarize them with the PSC terms and the regional governments role.

### Local government relations

As previously mentioned regional governments have taken on an increased role over commercial activities in their jurisdictions. Investors often find it difficult to define who the local government is, and further the investors are concerned that the local governments are seeking more shares, which are reflected in various types of actions, such as imposition of new taxes, fees, and regulations as mentioned previously. Because of the increased interface required with regional governments developing effective relationships with these entities was viewed as important by the survey participants. The Central Government should designate a specific position or person in each region who has ultimate authority and will be the key interface for all oil and gas activities.

### Clarification of import/master list facilities and repayment of VAT

Under the previous oil and gas law, a PSC contractor utilized Pertamina's tax umbrella to import goods for upstream activities whereby Pertamina, effectively, paid import tax (article 22), duties and excise on behalf of the PSC contractors. With the enactment of Law No. 22/2001 and the establishment of Pertamina as a limited liability company, the treatment of imported goods for the upstream petroleum industry required a change. Clarification of the import/master list facilities was outstanding at the time of sending the survey questionnaire to participants.

In mid 2005 the MoF issued regulations on import duties for both pre and post Law No. 22/2001 PSC's. Nevertheless, there are still a number of issues which need to be resolved such as the applicability of the facility for existing TACs, inconsistency and incompatibility between the provisions in these new regulations with actual practices and provisions as per other laws.

Most importantly there has been no VAT or duty reimbursement to contractors for all of 2004 and 2005 year to date. The amount outstanding is significant in amount and is in violation of PSC's which require reimbursement within 60 days.

### Confusion as to the role of Pertamina/BP Migas and the Ministry of Energy and Mineral Resources

Clearer roles between these institutions need to be established. Investors perceive that the accountability and partnership for efficiency need to be improved between these organizations. A current example of the inconsistency and ambiguity between BP Migas and MEMR relates to the cost recovery of multiclient seismic costs.

### Labour regulations and relations

Investors perceive that worker protection rules are excessive. Labor policies have become a major impediment to achieving a cost competitive business in an international marketplace. These lead to decline in investors' motivation to invest and operating inefficiencies.

### Confusion over BP Migas regulations/"grand fathering" of prior Pertamina rulings

Survey participants voiced concerns that BP Migas arbitrarily imposes new interpretations on PSC operators that unfairly enhances the GOI's revenues and violates sanctity of contracts. BP Migas is also viewed as employing bureaucratic micro- management and seems to view "Control" as their key function rather than oversight as a "Regulator". Contractors expect a professional partnership relationship with BP Migas.

In addition, there are many rulings and decisions which were previously made by Pertamina when they had regulatory oversight responsibility for the industry. It's questionable if some of these rulings and decisions are legally binding or were within the scope of Pertamina's powers at the time, however, investors made investment decisions based on "good faith" reliance of these decisions. All Pertamina rulings should be "grand fathered" to alleviate investors concerns over contract sanctity. A clear set of rules and regulations needs to be developed for all new contracts so that there is only "one set" of rules going forward. Ultimately the "grand fathered" rulings will die a natural death.



### **Corruption, Collusion, and Nepotism (KKN)**

Although the new GOI has publicly voiced a commitment to eradicate corrupt practices from the economy and has started to investigate and charge individuals believed to have been involved with corrupt activities it is too soon to tell if substantive progress has been achieved. Despite the GOI's public statements to eradicate corrupt practices and recent actions investors perceive that the situation is getting worse. The general feeling is that despite the GOI rhetoric no "real hard" actions have been taken to clean it up. KKN is seen as being endemic in almost all parts of government. The GOI should continue to take greater measures to identify, investigate, prosecute and severely punish higher profile cases to set examples and demonstrate its seriousness, especially for those individuals involved in the industry.

### **Confusion over energy policy and supporting blueprints**

Investors have concerns that there have been no united accords amongst relevant ministries regarding the country's energy policy/blueprint. The MEMR should circulate the existing energy policy and blueprint and obtain agreement/"buy in" from all relevant ministries. Conflicting statements and actions, and lack of coordination to resolve were noted which led to confusion for investors.

### **Transparency in block bidding/evaluation process (e.g., Gazetal)**

Survey participants felt that the direct tendering of acreage was a step in the right direction, however, they thought improvements were needed in the transparency of the block tendering process in particular with regards to the time to evaluate blocks up for tender and defining the basis for tender award. Unfavourable transparency practises were seen to contribute to the lowest level of exploration activity in years. The condition negatively affects industry perception on doing business in Indonesia.

### **Clarity and consistency of message from GOI ministries involved in oil and gas**

Investors feel that unclear and inconsistent messages from GOI ministries involved in the upstream oil and gas industry contribute to the risk of investing in the sector. The particular area pointed out includes conflicting tax regulations or interpretations between MoF, DGT, MEMR, BP Migas and BPPK. Initiatives to resolve these conflicts were seen as being minimal.

### **Interference from other GOI agencies**

Particular concern for the investor is again in relation with conflicting tax regulations between MoF, DGT and MEMR. The DGT is seen to be only looking at short-term budgeting issues, but not on a long-term benefit basis for the country or considering contract sanctity or long standing practices. The GOI is actively encouraging increased investment in the industry but at the same time wants to tax it unfairly.

### **Political risk**

The recent direct election of the current president and vice president went smoothly and is viewed very positively by investors. The GOI needs to maintain this perception and continue to convert it into real action favorable for investment.

### **Community relations**

Investors take community relations very seriously and have good programs in place. Nevertheless they view that the GOI needs to strengthen implementing regulations and support these programs, rather than emphasizing in mandating methods or budgets. Lack of strong implementing regulations may cause investors to incur much higher and unanticipated costs to respond to various requests from the community.

### **Impact of constitutional court decisions**

The issue poses uncertainty to investors which perceive that the rules are always changing, which distracts investor's decision making. The revocation of the new Electricity Law negatively impacted investors. A positive point noted was that the institution issued a generally favorable ruling on the constitutionality of Law No. 22/2001 Articles 28(2) and 28(3) dealing with the mechanism used to determine oil and gas prices was determined to be in conflict with the constitution and therefore must be revoked.

## major issues preventing the upstream oil and gas industry from attracting needed investment

Although certain articles were rescinded or needed clarification the fact that the court did not revoke the entire Law as it had done earlier in its judicial review of the Electricity Law was viewed positively by survey participants.

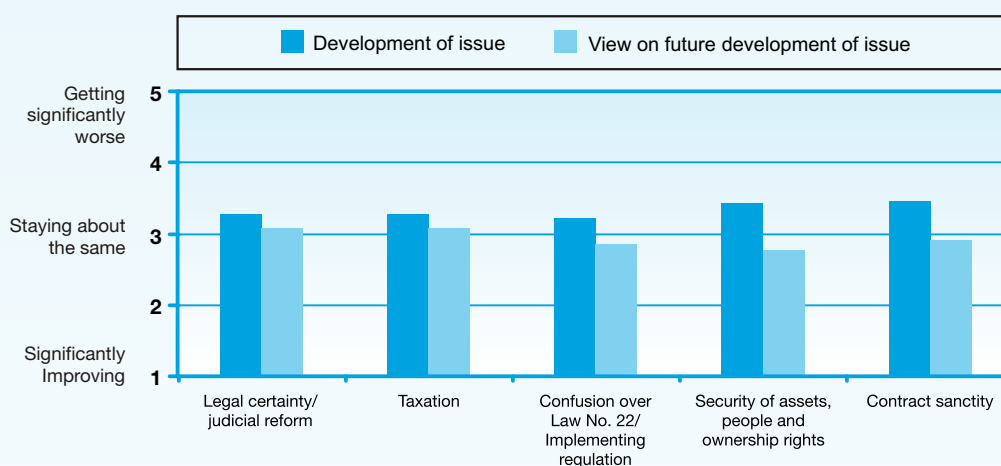
### Timely reimbursement of VAT

The delay in payment of ongoing VAT reimbursements continues to be a concern of investors. Nevertheless, the MoF has made positive moves by refunding long pending reimbursement cases (deferred VAT paid as a result of a tax assessment) in late 2004.

### Industry Executives Outlook on Development of Top Issues

We asked survey participants their opinions on the development of the top issues facing the industry. Generally survey participants were not too optimistic that conditions are significantly improving or are expected to significantly improve in the near term. Chart 6.2 depicts the survey participants' opinions on the development of the "Top 5" issues confronting the industry. Survey participants generally thought the issues were staying about the same or getting slightly worse. However, in all instances their views were that the conditions for each issue would improve in the near future. We believe that this optimism is an acknowledgment by survey participants that the current GOI has taken measures to improve the investment climate and therefore participants are cautiously optimistic for the future.

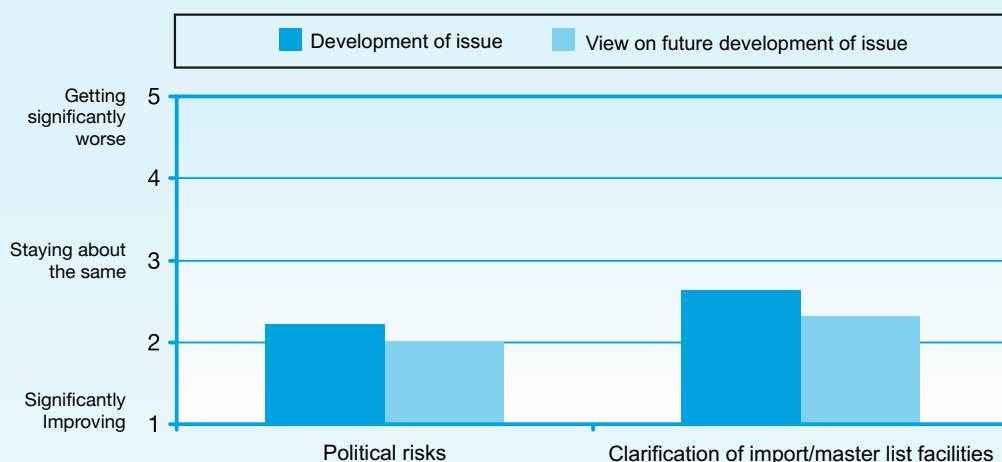
**Chart 6.2**  
Survey Participants Views on Development of Top Issues



### Optimism for improvements

Since the onset of the Asian economic crisis in 1998, Indonesia has been struggling with a plethora of economic, political, and social issues. The multitude of issues confronting the country only allows the GOI institutions the ability to tackle the most pressing issues first. Many of the issues confronting the country, such as corruption and judicial reform, require structural changes and can take a long time to implement meaningful changes. Despite the generally pessimistic views expressed by the survey participants on the development of the issues confronting the industry there were certain issues where optimistic views were expressed. Chart 6.3 depicts two issues which survey participants thought were generally improving.

**Chart 6.3**  
**Industry Issues with Most Optimism on Improvements**



Not surprisingly survey participants were most optimistic on political risks. This follows Indonesia’s successful elections in late 2004 where for the first time in the country’s history the President was democratically elected in a direct election. The successful elections and political reforms are finally being recognized by the investment community which was supported by the survey participant’s optimistic views on further improvements in this area. Survey participants were slightly more optimistic that the political landscape would continue to show improvement in the near future. This is a key and critical step because if the country has a good leader and team of effective ministers many of the challenges identified can be overcome.

The other area where participants were optimistic on current developments and future improvements was clarification of the import facilities available to the industry. With the recent regulatory changes there had been some confusion over the import facilities available to the industry and the process for utilizing these facilities. The GOI regulators recently issued new regulations which clarified the import facility procedures in the new environment. These recent changes were reflected in the optimism expressed by the survey participants for the development of this issue.

### Indonesia’s Competitiveness

Indonesia’s petroleum industry has for decades been viewed by international petroleum investors as an attractive destination for investment, however, in recent years there has been some concern that the country’s competitiveness may be slipping. To gauge the reliability of this concern we asked survey participants to rate Indonesia’s competitiveness compared to other countries on the below features:

• Geological prospective	• The existing PSC framework	• Trained workforce	• Foreign ownership regulatory
• Contract and project approval process	• Infrastructure	• Regulatory framework	• Domestic gas market opportunities
• Export gas market opportunities	• Overall competitiveness of Indonesia investment environment		

In 2002 PricewaterhouseCoopers undertook a similar industry survey i.e. CEO Survey – Upstream Oil & Gas/2002 Survey which included many of the above features. In general, the current survey revealed that in many areas the industry’s competitiveness has slipped when compared to the views expressed in the 2002 Survey.

## major issues preventing the upstream oil and gas industry from attracting needed investment

As Chart 6.4 depicts there were only three areas which the survey participants thought that the Indonesia upstream oil and gas industry was generally competitive when compared to other countries. Those three areas are: 1) geological prospectivity, 2) export gas market opportunities and 3) trained workforce.



N/A: Not covered in 2002 Survey

### What are the most competitive features for investing in Indonesia?

- Geological prospectivity
- Export gas market opportunities
- Trained workforce

The above three features rated slightly better than neutral for competitiveness.

### Geological prospectivity

When asked to rate Indonesia's competitiveness, survey participants agreed that geological prospectivity represents the most attractive feature of investing in Indonesia's upstream oil and gas industry, but it may not be as attractive as it was in the past. Sixty four percent (64%) of survey participants considered that geological prospectivity remains the top consideration for investing in Indonesia. Nevertheless this represents a decline compared to the ninety percent (90%) of survey participant's views in the 2002 Survey. The large decline in the perceived geological prospectivity of the country may be due to the lack of exploration conducted in the last several years and increasing opportunities globally.

This perception definitely puts more emphasize for the GOI to undertake measures to attract further investment in oil and gas exploration activities in Indonesia. With declining geological prospectivity, various incentive measures need to be considered to further attract interest for exploration activities, such as:

- Targeted frontier incentives;
- Elimination of upfront taxation on risk capital such as VAT and custom duties and taxes for new contracts;
- Reduced GOI take, especially for gas;
- Marginal and brownfield incentives; and
- Improved operating environment via enhanced "partnership" between investors and regulators.

The following survey participant quote may explain the decline in the perception of the country's geological prospectivity - ***"The available acreage is mature in many areas. There are inappropriate incentives to encourage investment"***.



## major issues preventing the upstream oil and gas industry from attracting needed investment

The GOI has recently announced new fiscal incentives (e.g., marginal field incentives, import/custom regulations, increased equity splits, etc) which are a step in the right direction, however, it is too early to determine if these measures alone are enough to significantly increase investment.

### Export gas market opportunities

Fifty percent (50%) of the survey participants agreed that Indonesia had a competitive position for exporting gas. The same opinion was not expressed for the domestic gas market where only thirty six percent (36%) of the survey participants felt that the country had a competitive domestic gas market. Indonesia has vast quantities of undeveloped gas reserves. Indonesia has historically used the vast majority of its gas production for LNG export (primarily to Japan, Taiwan, and Korea) and more recently for export via pipeline to Singapore and Malaysia. Recently the country has been successful in securing LNG contracts with China to be supplied from the Tangguh project slated to start production in 2008. There are also transactions contemplating LNG exports to North America which would further broaden Indonesia's gas exports. Furthermore with the expanding economies of Southeast Asia there are more opportunities for gas pipeline exports to peninsular Malay and other points of Asia if the regional pipeline system is realized or other developments undertaken.

With recent gas shortages in the domestic market certain members of GOI have discussed banning or limiting gas exports. This would be a most unfavorable development considering the high potential the country has for exporting gas.

### Trained workforce

Survey participants felt that Indonesia was slightly competitive (2.9 versus a 3.0 being neutrally competitive) when it came to a trained workforce. Compared to the 2002 Survey results there was a dramatic improvement in the perceived competitiveness of the workforce. The oil and gas industry has a long history in Indonesia which has resulted in a large, well educated workforce, especially engineers. The experience and exposures gained by the workforce in their employment with international oil and gas companies has enhanced their competency and expertise in oil and gas operations. This represents a valuable asset which should be consciously optimized by the GOI concurrently with implementation of other measures to attract oil and gas investments. However, one survey participant commented ***that with the recent lack of investment in the industry there may be the beginnings of a "brain drain" to the Middle East as activities accelerate there.***

### What are the Least Competitive Features for investing in Indonesia?

The survey also indicated other elements of the Indonesian upstream oil and gas industry which did not receive favorable ratings from the survey participants:

- Regulatory framework
- Contract and project approval process
- The existing PSC framework
- Infrastructure
- Domestic gas market opportunities

### Regulatory framework

Although there was a slight improvement from the 2002 Survey rating eighty-five percent (85%) of the survey participants believed that the regulatory framework is not favourable for investing in the oil and gas industry in Indonesia.

The concerns over the regulatory framework pertain to uncertainties in legal, regulatory and fiscal areas. Examples of these, amongst others, are:

- Uncertainties arising from transition from the "Old" to "New" Oil and Gas Law, including its implementing regulations (e.g., such as uncertainty over "grand-fathering" all prior tax practices);
- Numerous conflicting laws and regulations either at the central government level or between central

## major issues preventing the upstream oil and gas industry from attracting needed investment

- and regional government levels (e.g., such as national participating interest);
- New taxes (e.g., such as import duties/VAT); and
- Sanctity of contracts and adherence to contractual obligations (e.g., such as gas DMO);

### **Contract and project approval process**

Seventy-nine percent (79%) of the survey participants viewed the industry's contract and project approval process as being "not competitive at all" and getting worse. Procurement costs were a main criticism, as inefficiencies in bidding and procurement procedures as well as the GOI approval process tended to prevent the industry from being able to operate as efficiently as possible. Delays in obtaining contract and project approvals can add significant costs to projects. Over time these ingrained inefficiencies get factored into project economic analysis and prevent many projects from being assessed as commercial. The industry's rating for this feature deteriorated significantly from the 2002 Survey results possibly due to the changing regulatory environment and the uncertainties that this brought along with it along with the "micromanagement" of the new regulators.

### **The existing PSC framework**

In our 2002 Survey the PSC framework was seen as a highly competitive feature of the Indonesia upstream oil and gas industry, however, in our current survey the rating deteriorated significantly and is no longer seen as a positive competitive factor. The reasons for the deterioration in the competitive perception may be due to the long delay in enacting the implementing regulations for Law No. 22/2001 and the uncertainty which this created. Indonesia was the "creator" of the original PSC terms and there was a long held view within the industry that the PSC terms "were rock solid". In other words investors had confidence that the PSC contractual terms would be honoured. In the new regulatory environment there have been numerous instances that have called into question the willingness of the regulators to honour existing contracts and agreements. This condition has many investors questioning the existing PSC framework as an operating model. Law No. 22/2001 allows for alternative contractual arrangements besides the PSC and now may be the time for these alternatives to be fully considered.

### **Infrastructure**

Although there was an improvement in the rated competitiveness of Indonesia's existing infrastructure it was still not viewed as being competitive compared to other countries. The general view is that Indonesia's "easy discoveries" have already been found and developed and future discoveries will be in remote or difficult locations. Indonesia is made up of over 13,000 islands spanning over 3,000 miles. Many of these far flung locations lack basic infrastructure such as electricity, housing, roads, schools, medical facilities, airports, etc. In addition, the country lacks a comprehensive gas pipeline distribution network and power grid thereby adding to the difficulty of getting certain gas discoveries into the domestic gas market. The lack of basic infrastructure adds to the complexity of an investor's operations and the perceived commercial risks of a project thereby increasing his required "hurdle rate" for a project to be deemed commercial. This increase in perceived risks due to lack of infrastructure is surely preventing some projects from being developed.

The GOI is aware of these needs and is considering providing incentives for projects in locations lacking infrastructure and is actively promoting the development of pipeline infrastructures as seen in the South to North Sumatra pipeline, South Sumatra to West Java pipeline, and West to East Java pipeline, including LNG terminals as well as East Kalimantan to East Java pipeline. There are also plans to improve power production and transmission. However, more concrete actions are needed before these projects can be realized.

### **Domestic gas market opportunities**

The negative views expressed on the domestic gas market opportunities was not surprising considering the lack of a comprehensive gas policy/framework, continued fuel subsidies thereby not allowing domestic gas to compete on equal terms, security of payment by domestic buyers, and lack of infrastructure. Indonesia has vast quantities of undeveloped gas reserves, but these reserves may not be commercial when considering the above matters or risks. There are actions within the GOI to improve the

domestic gas market by completely eliminating all fuel subsidies, converting power plants to gas turbines to replace fuel oils and coal which can be more readily exported and expanding the country's gas pipeline network. Survey participants also acknowledged the GOI's domestic gas blueprint but felt further actions were needed to ensure a timely, successful implementation to this plan.

In addition, there were concerns raised over gas producers being obligated to supply the domestic market similar to the existing DMO for crude. In the past the DMO only applied to crude oil and not gas. There have been recent indications by the GOI that uncommitted gas for both old and new PSC's will have a gas DMO. For existing PSC's this causes concern over contract sanctity as a gas DMO was never contemplated when these contracts were executed. Going forward if a gas DMO will be mandated then there are concerns over the measurement of this obligation including the selling prices, credit risk, etc. and probably even more significant are the practical considerations considering lack of infrastructures in many parts of the country. To illustrate this point assume an investor makes a large commercial gas discovery in a remote location where there is no existing gas pipeline infrastructure or no local demand and as such the only alternative is to develop the reserves with a LNG facility. In this scenario some questions to ponder are:

- Will the GOI require LNG or pipeline shipments be made to the domestic market?
- How would this be achieved considering that the country currently has no LNG offloading facilities or large scale integrated pipeline system (we acknowledge that there are plans to construct LNG offloading facilities but the timing of this are uncertain)?
- When a gas discovery is too small to justify a LNG facility would the GOI require the investor to develop infrastructures such as pipelines to supply the domestic market? This requirement would clearly go against the "spirit" of the PSC being an upstream E&P activity.
- What pricing mechanism will be established?
- What security of payment will be provided?

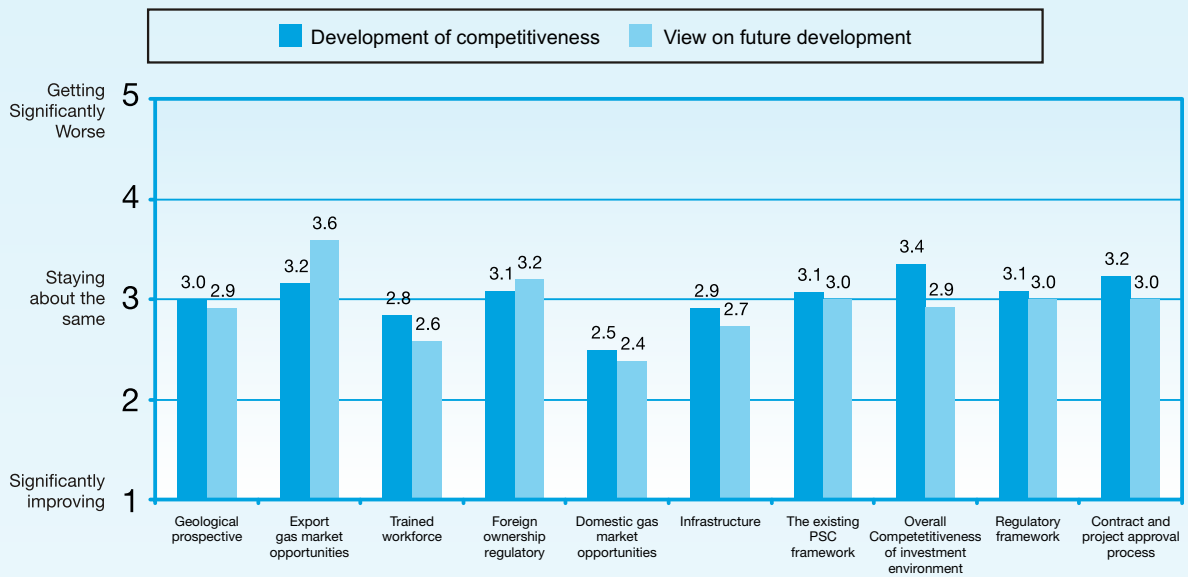
For the new PSC's the above are just a few of the many issues which would need to be thoughtfully considered before a regional gas DMO is implemented. Aside from the contract sanctity issue for existing contracts, on a go forward basis we do not believe a gas DMO requirement is an effective fiscal term for the GOI to consider. Because of the unique characteristics of commercializing gas it may be more effective for the GOI to simply focus on the appropriate equity splits for gas under the contracts. In effect requiring a gas DMO at below international market prices is simply another form of "government take" which can be more efficiently handled through negotiation of the gas equity splits.

The survey participants did not believe that the current domestic gas market was competitive for the aforementioned reasons. Once measures are undertaken to address these concerns the domestic gas market competitiveness could improve dramatically. However, as discussed in the next section survey participants were cautiously optimistic towards the future of the domestic gas market.

### Development of Industry's Competitiveness

We asked survey participants their views on the development of the issues confronting the industry. As shown in Chart 6.5 survey participants felt that the majority of the issues were staying about the same and no significant improvements were expected.

**Chart 6.5**  
**Development of Competitiveness**



There were three attributes that the survey participants believed that the industry’s competitiveness was improving, these are:

- Domestic gas market
- Infrastructure
- Trained workforce

**Domestic gas market**

The GOI has taken meaningful steps to reduce the fuel subsidies. In addition there are plans to expand the country’s gas pipeline distribution network which will facilitate getting gas to the domestic market. Finally, there are definitive plans in the works to convert existing power plants to utilize gas rather than fuel oil or coal. These steps are perceived as making the domestic gas market more competitive in the near term.

**Infrastructure**

As previously mentioned the planned expansion of the country’s gas pipeline distribution network is favourably impacting the industry’s competitiveness. In addition, with the implementation of the regional law and defined revenue sharing to local governments there should be more funds available for infrastructure projects in remote locations with petroleum projects.

**Trained workforce**

Survey participants are optimistic that the country’s workforce will continue to improve. With the number of multinational oil and gas companies operating in the country and the training programs they provide their employees it’s not surprising that the survey participants were optimistic on continued improvement in the country’s competitiveness in this area.



## Relationships Amongst Industry and GOI Organizations

### Company's relationship with key officials and organizations

Our survey also sought to identify the means to which these issues may eventually be resolved. We believe that relationships with GOI officials and institutions are critical for finding solutions for the oil and gas industry's major issues. We asked the survey participants to rate the effectiveness of their working relationship between their company and a number of GOI organizations. The good news was that generally the survey participants were neutral to positive on their organization's existing relationships with the various groups.

Not surprising the most favourable ratings for working relationship was viewed to exist with BP-Migas and the MEMR. We believe that these favourable views are because many of the BP-Migas and MEMR personnel have worked with the industry for a long time and therefore have developed effective working relationships over the years. In addition, because many of these institution's personnel have worked in the industry a long time they generally have a better understanding of the issues than personnel from other institutions, however, many have only bureaucratic backgrounds and this is the root cause of many operating problems.

The survey participants felt that their working relationships with the MoF and the DGT were the worst compared to the other groups, although only slightly higher than a neutral rating. Again, these ratings are not surprising given the recent attempts by the tax office to audit PSC operations (these audits are in addition to the existing audits) and the MoF's lack of or delay in paying certain reimbursements due PSC operators.

*“The Ministry of Finance and Directorate General of Tax have made NO efforts to reform and are widely viewed as being the number one obstacle to Indonesia and foreign investment”.*

#### **– Survey participant comment**

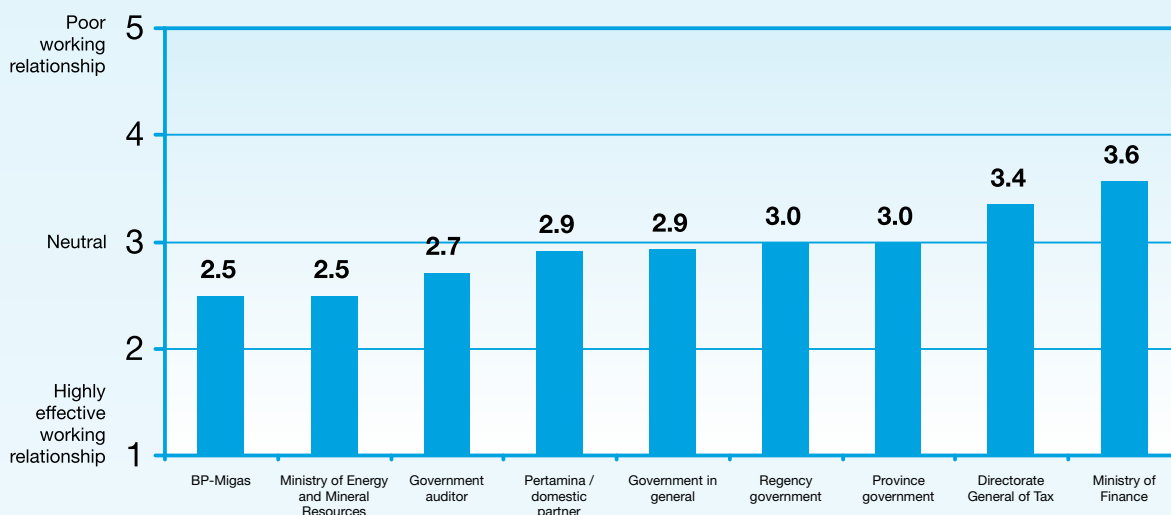
Historically PSC operations were subject to audit by BP-Migas (or Pertamina as the predecessor regulator)/BPKP whose focus was towards “cost recovery” rather than implementation of the general tax laws. Many of the industry tax treatments have been implemented and accepted in practice over a long period of time and may contravene the general tax laws. In the past when the PSC operations were subject to audit by BP-Migas/BPKP issues on taxation were generally not raised. Now that the DGT has been granted permission to tax audit PSC operations there are often disagreements over long standing treatments which is creating controversy between the PSC contractors and the tax office. This may partially explain the unfavourable impressions of the participants working relationship with the DGT, not to mention the DGT's stance on VAT Supreme Court rulings.

The MoF is responsible for paying certain reimbursements (such as VAT) that PSC contractors are contractually entitled to. There have been delays by the industry in being paid by the MoF amounts owed which can only be interpreted as being due to the GOI's poor financial condition. This has no doubt contributable to the unfavourable views of the working relationship between the survey participants company's and the MoF.

A common theme which came through in many survey participant comments was the lack of coordination, teamwork and cooperation amongst the various GOI institutions having involvement with the industry. There was a general view that many of the GOI institutions had “blinders” on when making decisions and didn't really consider or care what other GOI institutions had decided in their respective areas of responsibility. Decisions were often made based on the needs of the institution making them, such as the DGT which was purely focused on meeting its state revenue targets without considering the macroeconomic impact.

As an example, many participants noted that certain “cost recovery” decisions had been agreed with BP Migas (and formerly Pertamina when it had responsibility for regulatory oversight) and in the “spirit” of uniformity (i.e. Cost recovery for PSC purposes equals tax deductibility) should therefore be tax deductible, but often times upon tax audit by the DGT the tax deductibility of these costs were challenged. Participants noted that there needed to be better coordination and teamwork amongst BP Migas, MoF, DGT, and MEMR.

**Chart 6.6**  
**Current Relationship between Company and various groups**



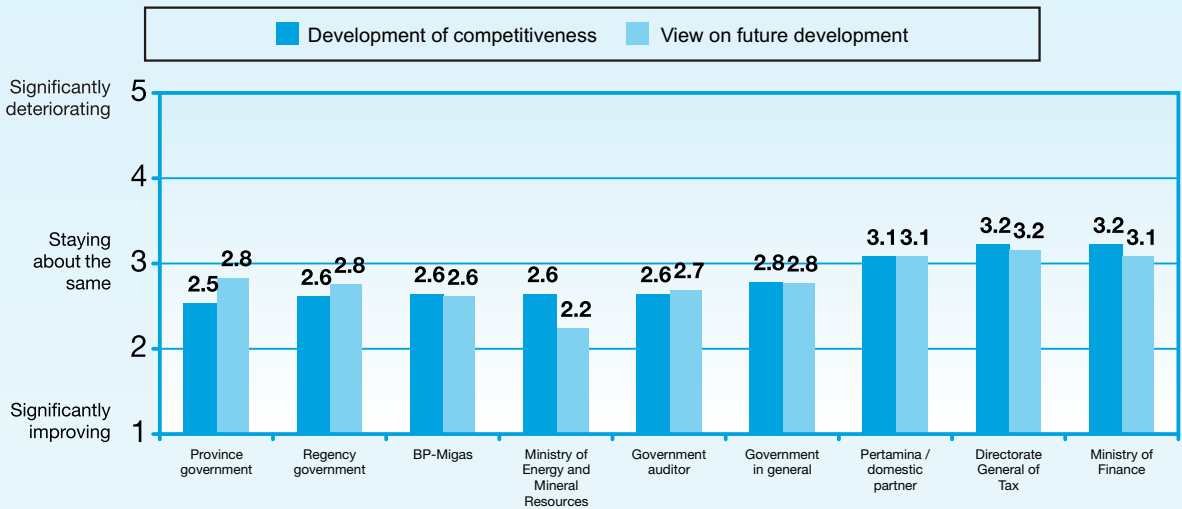
**View on development of working relationships**

When asked about the development of working relationships with the various GOI organizations the general consensus was that things were “staying about the same”. Improvements in working relationships were expected with the provincial and regional governments. In the past all oil and gas activities were coordinated through the central government. With the regional autonomy law it became more critical for investors to work with the local governments. The survey participant’s responses seem to indicate that investors are feeling more confident about developing effective working relationships with the local governments.

The survey participants were slightly pessimistic towards the development of their working relationships with Pertamina/domestic partners, the DGT and the MoF. The views discussed in the previous section relating to the DGT and the MoF are most likely applicable to the survey participant’s viewpoints on the direction of these working relationships. With Pertamina’s changed position there are natural conflicts from their previous role and relationships with oil and gas companies. We believe Pertamina’s changed position has created some tension between the oil and gas companies and itself.

The quality of working relationships between oil and gas companies and those GOI organizations needs to be enhanced to be able to address major issues in the industry.

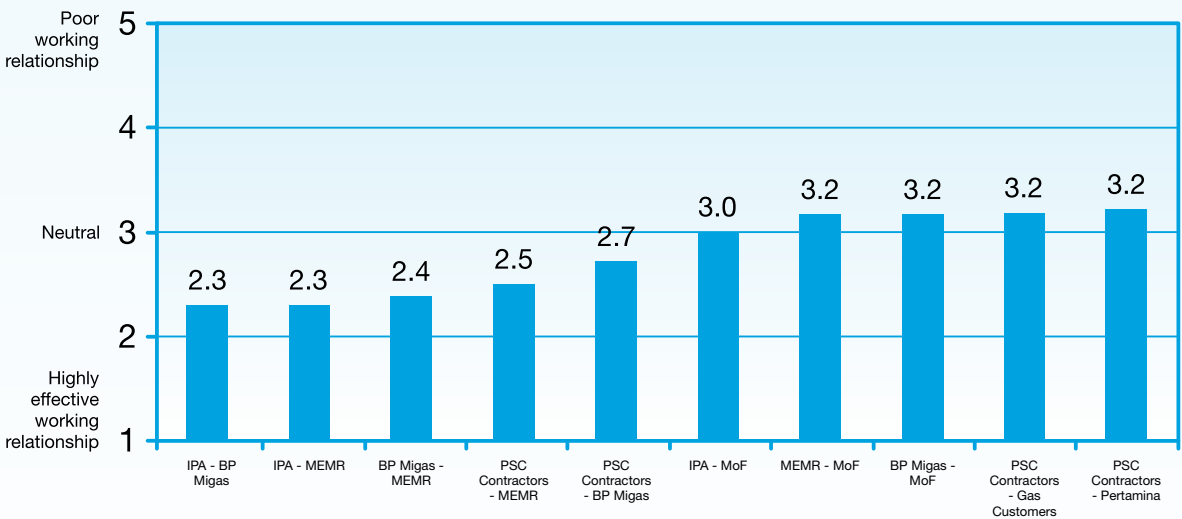
**Chart 6.7**  
Development of relationship between Company and various groups



**Relationship amongst industry and GOI organizations**

We asked survey participants to rate the perceived effectiveness of the working relationships amongst industry and a number of GOI organizations. More than fifty percent (50%) of the survey participants voted that the working relationships amongst the IPA, BP Migas and MEMR, and between PSC contractors and MEMR is effective. For working relationships amongst the other sets of organizations the general consensus was neutral or noted as not being effective. The effectiveness of the relationships between the IPA and BP Migas and MEMR were on top, voted by 62% of the survey participants. Meanwhile the working relationship between PSC contractors and Pertamina was voted as being the least effective. This is not surprising considering Pertamina’s changed role and its direct competition with existing PSC contractors.

**Chart 6.8**  
Relationships amongst industry and government organizations

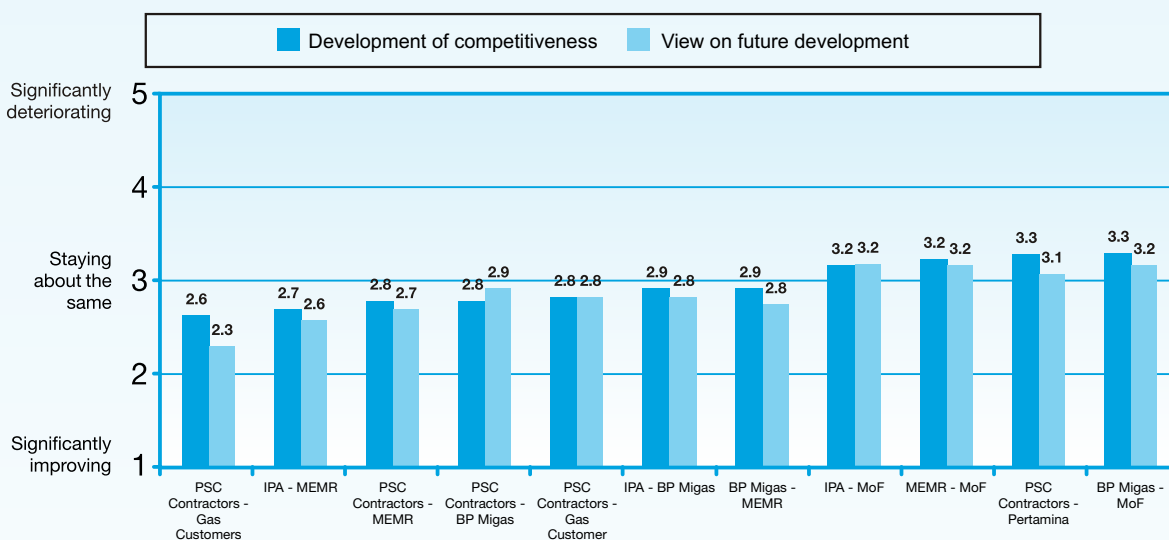


**View on development of working relationship**

When asked about the development of working relationships amongst industry and GOI organizations, the relationship between PSC contractors with MEMR and gas consumers got the highest number of votes, where 36% of the survey participants noted significant improvement in recent years. For the other relationships, less than 25% of the survey participants believed that there had been significant improvement in recent years. Survey participants felt that the future development for relationships between PSC contractors and gas customers would generally improve. This may be because of an anticipated change in roles towards gas customers. In the past all dealings with gas customers were performed by Pertamina in its regulatory oversight role. In the future there are likely to be opportunities for gas producers to deal directly with the gas customers which seems to be consistent with survey participant’s views on the future development of these types of relationships.

For the other relationships, only 25% or less of the survey participants believed that there will be significant improvement in the future, with the lowest votes being for relationships between BP Migas and MoF, IPA and MoF, and MEMR and MoF, where only 8% of the survey participants believed that there will be significant improvement in the future. The unfavorable view on relationships between BP Migas and MoF, and MEMR and MoF may have resulted from various regulations issued by the MoF affecting the oil and gas industry which have had negative fiscal results for the industry and contravened PSC contract terms and conditions.

**Chart 6.9**  
Development of relationship amongst industry and government organizations



The pessimistic views noted above further emphasize the urgent needs for the GOI to initiate actions to restore confidence of the investors and to address major issues in the industry. Restoring investor confidence can not be over emphasized as it will be critical to the future success going forward.

**Actions Which Would Spur Increased Investment**

**Prioritizing actions to spur increased investment**

There are a multitude of challenges confronting the Indonesia upstream oil and gas industry which are preventing it from attracting the needed investments. However not all of these challenges can be tackled by the various GOI entities all at once. Recognizing the need to prioritize these actions we asked survey participants to rank the criticality of the needed actions, the perceived ease of implementation and the likely impact on investment. In asking survey participants their viewpoints on these items we hope to assist the various stakeholders in prioritizing actions to spur investment in the industry.

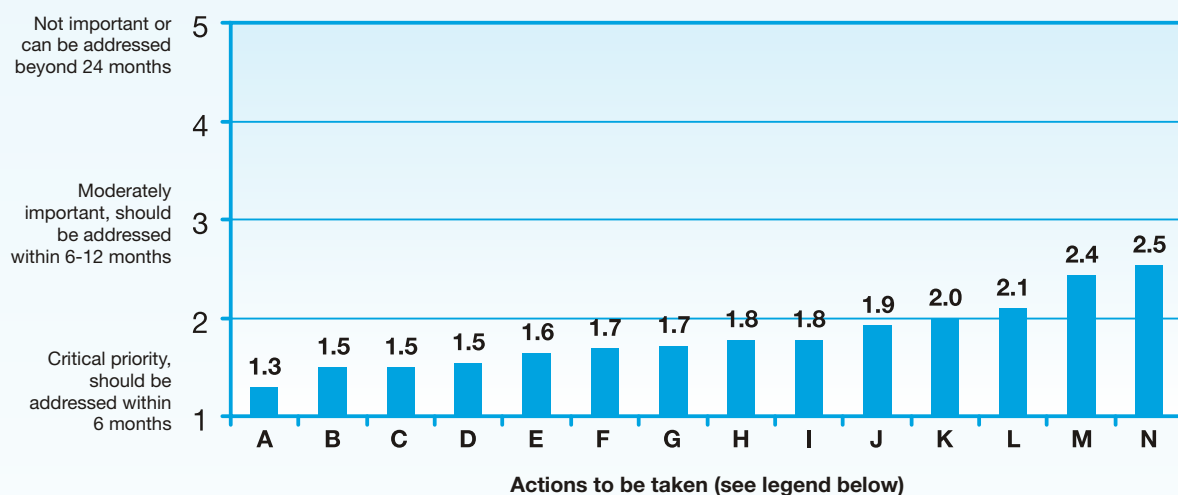


## major issues preventing the upstream oil and gas industry from attracting needed investment

We asked survey participants to rank the criticality of each of the below actions, along with the perceived ease of implementation and the likely impact on investment:

<ul style="list-style-type: none"> <li>Totally eliminate fuel subsidies</li> </ul>	<ul style="list-style-type: none"> <li>Harmonize conflicting laws and regulations</li> </ul>	<ul style="list-style-type: none"> <li>Provide confirmation of GOI commitment to honour existing contracts</li> </ul>	<ul style="list-style-type: none"> <li>Honour VAT repayment obligation and court decisions</li> </ul>
<ul style="list-style-type: none"> <li>Confirmation on procedures for BP Migas to assume and discharge import duties and taxes for new PSC's</li> </ul>	<ul style="list-style-type: none"> <li>Optimize process and eliminate unnecessary and lengthy bureaucratic procedures</li> </ul>	<ul style="list-style-type: none"> <li>GOI guarantee for gas payment obligation of State Owned Enterprise ("SOE")</li> </ul>	<ul style="list-style-type: none"> <li>Improved inter-ministerial coordination</li> </ul>
<ul style="list-style-type: none"> <li>Confirm that no gas DMO exist for pre-Law No. 22/2001 and clarify obligations for new contracts</li> </ul>	<ul style="list-style-type: none"> <li>Regulations which allow assignment to affiliates and other contractors in same PSC without triggering offer to national company</li> </ul>	<ul style="list-style-type: none"> <li>Role of BP Migas as regulator of upstream clarified to avoid unbundling of upstream facilities and conflicting jurisdiction with BPH Migas</li> </ul>	<ul style="list-style-type: none"> <li>Roles and responsibilities of BP Migas and BPH Migas clarified to avoid overlap</li> </ul>
<ul style="list-style-type: none"> <li>Investment incentives</li> </ul>	<ul style="list-style-type: none"> <li>Resolution of liability issues in gas "seller appointments"</li> </ul>	<ul style="list-style-type: none"> <li>Others (survey participants were allowed to write in their own actions)</li> </ul>	

**Chart 6.10**  
Prioritizing actions to spur increased investment



### Actions to be taken

- A Government's commitment to honor existing contracts (contract sanctity)
- B Harmonizing conflicting laws and regulations
- C Optimize process and eliminate unnecessary and lengthy bureaucratic procedure
- D Investment incentives (fiscal)
- E Honor VAT repayment obligations and court decisions
- F Confirm that no gas DMO exist for pre-new law and clarify obligations for new contracts
- G Confirmation on procedures for BP Migas to assume and discharge import duties and taxes for new PSCs
- H Improved inter-ministerial coordination
- I Role of BP Migas as regulator of upstream clarified to avoid unbundling of upstream facilities and conflicting jurisdiction with BPH Migas
- J Role and responsibilities of BP Migas and BPH Migas clarified to avoid overlap

- K** Resolution of liability issues in gas "sellers appointments"
- L** Government guarantee for gas payment obligation of SOE's
- M** Totally eliminate fuel subsidies
- N** Regulations which allow assignment to affiliated and other contractors in same PSC without triggering offer to national company

As depicted in Chart 6.10 survey participants generally felt that all of the suggested actions were important and needed to be addressed fairly quickly to spur a significant increase in investment. The top 5 actions deemed necessary to spur increased investment in the sector are as follows:

### **GOI's commitment to honor existing contracts (contract sanctity)**

Survey participants felt that the single most important action the GOI should take to spur increased investment in the sector is to honor all existing contractual terms. In conceptual terms this is a pretty basic notion however in practice it's a fairly broad based dictum. We believe anyone would be hard pressed to come up with a formal GOI public statement indicating that existing contractual terms would not be honored. Quite to the contrary, since the enactment of Law No. 22/2001 various officials have stated the GOI's intent to honor all existing contractual terms. If this is the case then why did survey participants choose this as the single most important action to increase investment in the sector?

We believe the answer lies in the actions of the various GOI entities involved with the industry. As is often said, "Actions speak louder than words" and seems to hold true in this situation. We firmly believe the current GOI has every intention to honor all existing contractual terms, however, this overarching principle has often been lost in the "day to day" dealings with the industry. We postulate that the single most important reason for this breakdown is due to the lack of inter-ministerial co-ordination, teamwork and co-operation. From the survey participant comments there appears to be a view that the various GOI entities involved with the industry work in their own "silos" and do not co-operate amongst themselves. A simple example can be seen when DGT tax auditors take exceptions during their audits of long standing "cost recovery/tax deductibility" positions which have previously been agreed and accepted by either BP Migas or Pertamina in their previous regulatory role. In this scenario we believe the DGT will argue that their "mission" is simply to enforce the enacted tax laws and ensuring the GOI meets it revenue targets and therein lies part of the problem. Without co-operation, teamwork and co-ordination amongst the various GOI entities involved with the industry such situations are understandable, particularly when you consider the often conflicting laws and regulations which will be discussed in the next section.

### **Harmonizing conflicting laws and regulations**

As mentioned in the previous "contract sanctity" section, conflicting laws and regulations often lead to different interpretations, implementations and enforcements amongst the various GOI entities involved with the industry. If one wants to be cynical, it could be postulated that this contradictory and vague environment is by design to allow more opportunities for interpretation and manipulation; however, we will ignore this possibility in this section and instead focus on other possible reasons for this situation. By international standards Indonesia's regulatory environment is immature. The Indonesia oil and gas industry is regulated by a hodgepodge of laws, regulations, decrees, rulings, ministerial letters, etc., each carrying its own relative ranking in the hierarchy of law. The fact that the industry is regulated by a myriad of different types of rules is not uncommon. The problem is that many of these rules were developed in isolation and often times contradict each other.

Because of the contradictions and vagueness in the current rules which the industry is bound to abide by the survey participants felt that the GOI needed to undertake a comprehensive exercise to codify all existing rules which pertain to the industry. To the extent possible these rules should be incorporated into a well articulated, comprehensive law or laws to provide investors with more certainty.

### **Optimize process and eliminate unnecessary and lengthy bureaucratic procedures**

Survey participants voiced their concerns over the lengthy bureaucratic procedures they must endure to get work programs, budgets, tenders and other items approved. In these situations the axiom "Time is Money" could not be more relevant to the central issue being raised by survey participants. One survey

participant commented that the various GOI entities view their central function as “Controlling” contractors rather than “Regulating” them. Another point raised by a survey participant related to GOI officials believing that contractors were “spendthrifts” and unless the GOI officials prevented this activity through overly rigid approvals process the contractors “would spend the country into bankruptcy”. These fundamental perceptions demonstrate that it may be time to reconsider the basic paradigm used by the GOI to manage the industry.

Because of the “cost recovery” element of the PSC there is no doubt that the GOI has a vested interest in ensuring that contractors undertake their operations in an efficient as possible manner. The central question which needs to be pondered is – what is the best alternative for achieving this objective? If the GOI views contractors with suspicion and mistrust then their current practice of pre-approving and scrutinizing every decision is warranted. However, we believe such a view would be misguided and inappropriate, particularly in the current environment where the GOI is actively trying to encourage increased investment. The GOI should take a more “shared economic interest” view toward contractors/investors. The internal controls and corporate governance embedded in any well run multinational oil and gas company should ensure that operations are undertaken in an efficient and transparent manner. In addition multinational oil and gas companies are “profit oriented” so they have every reason to undertake their operations in as an efficient and profitable manner as possible. The GOI should view itself as another stakeholder in the oil and gas operations, in many respects no different than any other non-operating partner in the venture.

Notwithstanding the previous comments, the GOI does have an obligation to ensure that operators undertake their operations efficiently. In the “spirit of a shared economic interest” we believe it would be more efficient for the GOI to rely on a “post audit” process to ensure that operations are undertaken properly. In order for such a scheme to work the GOI would need to develop comprehensive, clear guidance that contractors could rely on in undertaking their operations. This guidance would have to be comprehensive enough to avoid vagueness but flexible enough to be pragmatic. In other words, if a contractor met the “spirit” of the guidelines but “failed to dot an I” the “post audit” auditors should be flexible enough to “see the big picture” and not focus strictly on possible administrative mistakes.

A survey participant summed up the issue well by saying **“GOI officials believe they actually save the GOI \$X dollars by scrutinizing every plan of development to the nth degree, but in reality by delaying the project by 6 months it cost the GOI much more than the \$X dollars supposedly saved”**. For the aforementioned reasons we believe implementing a “post audit” system would have a very favorable impact on increasing investment.

Conversely, if changing the regulatory paradigm proves too radical the GOI could also be flexible in its audit or approval approach depending on existing conditions. In other words, in times of low investment such as currently exist, it would be more advantageous to rely on a post-audit or post-approval approach to encourage investment and get projects online faster. While during periods of more robust investment the GOI may choose to take a more involved approach to exercising its regulatory oversight.

In addition, the GOI should use a more risk-based approach to determining which contractors are subject to audit based on past audit results. Several survey participants expressed concerns that the government auditors attempted to audit every contractor every year despite “clean” audit results in prior years. In line with this concept the GOI could also implement an approval matrix which only required projects over a prescribed limit to have pre-approval.

### Investment Incentives

Survey participants felt that the GOI needed to increase investment incentives to make Indonesia more competitive compared to other countries. The GOI recently announced increased fiscal incentives such as increased equity splits, lowering FTP percentage and investment credits on marginal fields to stimulate increased investment activity. This is a step in the right direction however it is too early to tell if such measures alone are sufficient enough to significantly increase investment. In early August 2005 the GOI announced the awarding of nine oil and gas concessions out of thirteen blocks offered, generally on

## major issues preventing the upstream oil and gas industry from attracting needed investment

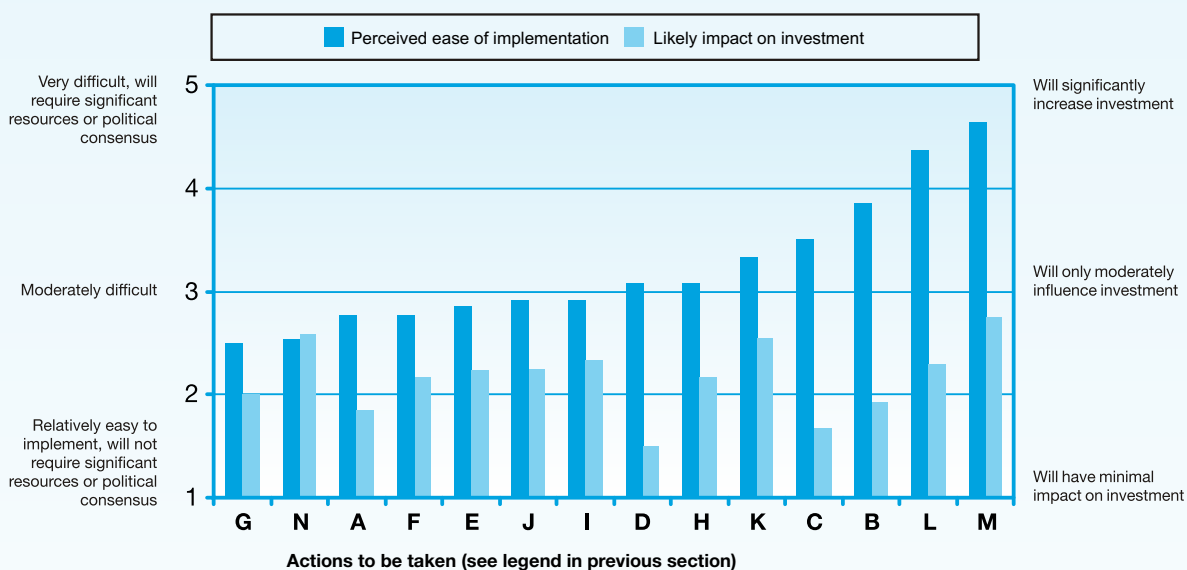
increased fiscal terms compared to previous tenders. The GOI should be applauded for these increased investment incentives which have no doubt attracted investor interest as evidenced by the awarding of nine concessions, however, the fact that four of the blocks either didn't attract interest or investors meeting the requirements seems to support the notion that further investment incentives or other measures are needed.

### Honor VAT repayment obligations and court decisions

The GOI has not been timely paying VAT reimbursements that investors are contractually entitled to. In essence these delays get at the central issue of "contract sanctity" previously discussed. This issue also extends to favorable court decisions received by investors and not being honored by the applicable GOI entity. While recognizing the GOI's budgetary constraints and difficulties there needs to be a more concerted effort to honor these contractual obligations. The delays in payment appear to be, at least in part, attributable to lack of inter-ministerial co-operation and teamwork as previously discussed. Survey participants felt that this lack of commitment to honor these obligations in a timely manner demonstrated the GOI's attitude towards attracting increased investment. If the GOI is unable or unwilling to honor existing contractual obligations in a timely manner then this is not a positive sign for future investment in the sector.

### View on ease of implementation and impact on investment

Chart 6.11



We asked survey participants about the perceived ease of implementing (i.e. not requiring significant resources or political consensus) the actions being proposed in this survey. The majority of survey participants recognized the potential difficulties in carrying out many of the suggested actions. These difficulties could stem from:

- having to build political consensus (due to the many political parties in the country with differing views);
- societal pressures (such as seen whenever the GOI attempts to raise fuel prices);
- lack of available resources such as manpower;
- budgetary constraints; and
- how endemic the problem or issue is (such as the deep rooted KKN problem in the country).



### The Most Difficult Actions

Survey participants felt the following actions would be the most difficult to implement:

- Totally eliminate fuel subsidies;
- GOI guarantee for gas payment of SOE's;
- Harmonize conflicting laws and regulations; and
- Optimize process and eliminate unnecessary and lengthy bureaucratic procedures.

Two of the above four actions were seen as being critically important by survey participants as discussed in the previous section, however, at the same time respondents believed that effecting meaningful change in these areas would be difficult. We will explore some of the possible reasons for these difficulties.

#### Totally eliminate fuel subsidies

By an overwhelming percentage survey participants felt that totally eliminating fuel subsidies would be the most difficult action for the GOI to undertake. Over the past few years the GOI has gradually reduced the fuel subsidies; however, as previously shown in Chart 5.2a the subsidy continues to be significant and is expected to double in 2005 to Rp 138 trillion with the current high oil prices. Below market fuel prices have a long history in Indonesia, going back to the days of the New Order under former President Soeharto. The raising of fuel prices back in 1998 was one of the impetuses that led to the demonstrations that eventually effected a change in government.

Since the onset of the economic crisis in 1998 the GOI has been trying to wean the country off of below market fuel price because of the economic distortions that it causes. However, every time the GOI has raised fuel prices there has been some form of public protest. The GOI has attempted to socialize the reasons these fuel price increases are needed but the general population has become too accustomed to below market fuel prices. We believe it is because of this deeply rooted "entitlement mentality" amongst the Indonesian population that survey participants felt that totally eliminating fuel subsidies would be difficult.

The current GOI should be commended for taking the difficult decision of reducing the fuel subsidies. Only by eliminating a large portion or all of the fuel subsidies will the economic distortions be eliminated or significantly reduced. Once the fuel subsidies are eliminated or significantly reduced alternative energy sources (such as gas, geothermal, coal, etc.) can compete on equal terms.

#### GOI guarantee for gas payment of SOE's

Survey participants rated GOI guarantees for gas payment obligations of SOE's as the second most difficult action to accomplish. Over the past several years the GOI has been privatizing SOE's. Within this context the GOI is pushing for SOE's to become more competitive and commercially minded. We believe it is because of the movement towards privatizing SOE's that survey participants felt that a GOI guarantee for gas payments of SOE's would be difficult. If the GOI is successful in creating a favourable business environment which leads to improved macroeconomics conditions then some of the concern over SOE credit risk may be reduced.

#### Harmonize conflicting laws and regulations

As discussed in the previous section, the industry is currently regulated by a hodgepodge of rules, many of which contradict each other. Survey participants acknowledge that harmonizing the conflicting laws and regulations will not be an easy task. Because of the numerous stakeholders involved in regulating the industry getting consensus amongst this group will not be easy. However, because of the importance to the industry this exercise needs to be undertaken as soon as possible. To the extent possible these rules should be incorporated into a well articulated, comprehensive law or laws to provide investors with more certainty.

#### Optimize process and eliminate unnecessary and lengthy bureaucratic procedures

Survey participants believe that eliminating lengthy bureaucratic procedures is important to making the industry more competitive. On the other hand, they recognize that achieving this goal will not be easy.

The industry directly employs approximately 300 thousand people. Although we do not have precise figures we believe the number of individuals employed by the GOI in overseeing the industry is likely at least this amount or possibly higher. As such any attempt to streamline the bureaucracy may result in a temporary displacement of a large number of individuals. A massive overhaul of the bureaucracy may result in large layoffs of employees which will likely result in large public protests. In addition, we believe there are certain groups with vested interests in the bureaucratic processes who stand to lose politically, socially and/or economically if wholesale changes are made to the current system. It would be naïve to ignore the impact vested interest groups could have on a complete overhaul of the system. It is because of these reasons that we believe streamlining the process will be difficult.

### Likely impact on investment

Unfortunately based on the survey participants responses there does not appear to be a “silver bullet” for any one single action which would significantly increase investment. Across all actions surveyed the participants felt that individually each item would only minimally or slightly less than moderately influence future investment. Based on the survey rankings along with the qualitative comments received we interpret this situation as indicating that survey participants feel that the GOI needs to address the highlighted issues in parallel, and not piecemeal as has been the case in the past.

As discussed earlier in the report, the GOI has implemented increased fiscal incentives to attract investment; however, the impact of this stimulus is marginalized when other areas competitiveness declines. An analogy that a survey participant provided is that **“for every positive step forward the industry takes (e.g., Increased fiscal incentives) it takes two steps backwards (e.g., increased bureaucracy, new taxes/levies, etc.)”**. As such despite recent positive steps taken by the GOI the overall competitiveness of the industry is deteriorating or at best staying about the same. In light of the increased global competitiveness for upstream oil and gas investment capital this is not acceptable if the country desires to attract its fair share of the global investment pool.





Section 7

# Conclusion





The purpose of our survey was to inform the public and private sectors in Indonesia and abroad about Indonesia’s upstream petroleum industry and help identify those business challenges and opportunities which the survey participants agree are the most significant to enhancing investment in the Indonesia upstream oil and gas industry. The global landscape for upstream oil and gas capital has gotten significantly more competitive in recent years and Indonesia’s “piece of the pie” has gotten considerably smaller. While it would be mere speculation to attempt to determine the true near and long-term economic impact to Indonesia of the issues raised in this report, from the survey participants comments it is clear that these issues contribute to increasing the risk premium that international investors apply to investments in Indonesia’s oil and gas industry. As higher risk premiums usually translate into greater required rates of return on investments, the impact of these issues could translate into decreased international competitiveness as Indonesia continues to seek foreign investment in the upstream oil and gas industry.

### At a Critical Juncture

The Indonesian oil and gas industry is at a critical juncture. The survey results present a mixed picture for future upstream oil and gas industry capital investment plans in Indonesia over the coming years. While Indonesia’s geological prospectivity continues to garner relatively high ratings, the resolution of the issues raised by industry investors may impact whether the country has the financial resources and latest technology to discover new oil and gas reserves to fuel Indonesia’s economy for years to come. The issues may also set the stage for whether Indonesia is successful in attracting new investment for building infrastructure and downstream assets integral to the country’s ability to service the needs of the country’s citizens and industry. Nonetheless, the results of the survey help to paint a better picture of the current status and outlook for the industry.

### The Trends

Despite recent efforts by the GOI to stimulate investment in the upstream oil and gas industry the trends are all generally deteriorating or stagnant. In Chart 7.1 we have outlined some of the positive and negative trends which the industry is experiencing.

Chart 7.1

Negative Trends	Positive Trends
<ul style="list-style-type: none"> <li>Oil and gas production is in a downward trend, the country became a net importer in late 2004</li> </ul>	<ul style="list-style-type: none"> <li>Gas reserves have increased slightly over the past several years</li> </ul>
<ul style="list-style-type: none"> <li>Despite high commodity prices and favorable geological prospectivity Indonesia’s “share of the pie” of global exploration expenditures is at historical lows The industry’s contribution to GOI revenue is in a downward trend</li> </ul>	<ul style="list-style-type: none"> <li>Within the last few years the country commenced gas exports via pipeline with upside for future exports</li> </ul>
<ul style="list-style-type: none"> <li>The fuel subsidy continues to be a strain on the GOI’s budget</li> </ul>	<ul style="list-style-type: none"> <li>The GOI has recently announced increased fiscal incentives (e.g., investment credits on marginal fields, lower FTP, higher equity splits)</li> </ul>
<ul style="list-style-type: none"> <li>Operating costs per barrel are on an upward trend</li> </ul>	<ul style="list-style-type: none"> <li>9 new PSC’s were recently awarded</li> </ul>
<ul style="list-style-type: none"> <li>Oil reserves are declining</li> </ul>	<ul style="list-style-type: none"> <li>Clear vision and target for oil production of 1.3 million BOPD by 2009</li> </ul>
<ul style="list-style-type: none"> <li>4 PSC’s recently put out for tender didn’t attract sufficient investor interest</li> </ul>	<ul style="list-style-type: none"> <li>A national energy policy and developing domestic gas blueprint</li> </ul>
<ul style="list-style-type: none"> <li>Deterioration in certainty of contract sanctity</li> </ul>	<ul style="list-style-type: none"> <li>High oil prices driving a global swing back to exploration</li> </ul>
<ul style="list-style-type: none"> <li>Regional government and local community actions and demands are negatively impacting investment</li> </ul>	<ul style="list-style-type: none"> <li>Significant recent settlement of VAT reimbursements</li> </ul>

## conclusion

Despite there being some recent positive signs for improvement in the industry we believe the overall trend would need to be characterized as deteriorating or at the very best stagnant. Unfortunately in the increasingly competitive global environment “standing still” is akin to going backwards.

The question which needs to be pondered is – ***“why was Indonesia unable to attract the needed investments for the industry to grow despite having favorable geological prospectivity?”***.

We believe the answer can be summed up in one simple concept – “risk vs. reward”. This answer may seem academic or trite but we believe this concept encapsulates the essence of what is plaguing the industry. Although there has been new investment and exploration in the industry over the past several years we believe much of this was due to “inertia” or simply because existing investors had projects in the “pipeline”. There have been very few “new” investments or exploration activities of significance over the past several years. At the end of the day we believe this phenomenon is because when investors are considering their upstream oil and gas investment options the Indonesian environment is no longer competitive when compared to other global opportunities. It is important to remember that when we are talking about competitiveness we are talking about a much broader concept than simply comparing the fiscal terms of the contracts. The GOI has recently increased fiscal incentives such that the new terms are generally favorable when compared to many other foreign locations, however, when you factor in all the other “business environment” elements (such as contract sanctity uncertainty, lengthy bureaucratic procedures, uncertainty from conflicting laws/regulations, etc) the country is no longer competitive.

To increase the industry’s competitiveness the GOI basically has two broad options – 1) increase fiscal incentives or 2) improve the “business environment”. These two broad options are obviously not mutually exclusive and can be implemented in varying degrees. Recently the GOI has chosen the first option and increased fiscal incentives but it is too early to determine if these measures alone are sufficient to significantly increase investment. From the comments we received from survey participants we believe the GOI also needs to address the “business environment” elements which have been discussed throughout this report. Theoretically the GOI could increase the fiscal incentives to such extreme levels that the negative aspects of the “business environment” are overshadowed, however, we do not believe this would be in the country’s best long term interest. Rather we believe in addition to fiscal incentives a concerted effort is needed to improve the overall “business environment” such that the competitive balance swings back towards Indonesia.

### Suggested Actions

Unfortunately there are no “silver bullets” to cure what ails the Indonesia upstream oil and gas industry. As the survey participant’s responses show not one single action alone will significantly increase investment. We believe that a concerted and coordinated effort is required by the GOI to improve the overall “business environment”. Arguably some of the “business environment” elements discussed are outside of the direct control or influence of industry regulators as they permeate the entire Indonesia economy, nonetheless, to the extent possible improvements in these elements need to be initiated by industry regulators.

### Actions to Continue

The GOI recognizes many of the issues discussed throughout this report and has implemented certain actions to improve the investment climate in the upstream oil and gas industry. Survey participants recognized these positive steps taken by the GOI which include:

- Increased fiscal incentives; the GOI should continue to reassess its fiscal terms to ensure the country remains competitive in the global marketplace;
- Improving the country’s infrastructure including gas pipeline distribution, and electricity production/transmission;
- Improved political landscape as evidenced by the direct Presidential election in the late 2004. The GOI needs to ensure the positive momentum continues with stable leadership and legislation change;

- Development of an Energy Policy and blueprint, the GOI needs to continue to push forward with an effective implementation;
- Investigating and charging of individuals involved with corrupt activities. The GOI needs to continue with its positive steps in this area.

### Actions to be Accelerated or Given More Attention

Despite the positive actions taken by the GOI to improve the investment climate further actions are needed to improve the overall “business environment”. The GOI should start putting serious and concerted efforts into improving the “business environment”.

The top five actions which we believe the GOI should undertake to optimize and improve the country’s “business environment” in the upstream oil and gas industry are:

- Harmonizing conflicting laws and regulations, including timely implementation of regulations;
- Improved teamwork, coordination and cooperation amongst GOI entities;
- Implementing judicial reform;
- Changing the regulatory paradigm to a “shared economic interest” model; and
- Completely eliminate fuel subsidies and implement effective gas regulatory environment.

### Harmonizing conflicting laws and regulations, including timely implementation of regulations

The industry is mired in conflicting laws and regulations which often lead to different interpretations, implementations and enforcements amongst the various GOI entities involved with the industry. Many of the rules which the industry is bound to abide by were developed in isolation and often times contradict each other. In addition, often times there are significant delays in issuing the final rules which results in increased uncertainty within the industry and delays in investment decisions. This fact was demonstrated by the “regulatory vacuum” created during the 3 year delay in issuing Law No. 22/2001 Implementing Regulations.

We believe the GOI needs to amend or develop codified laws which incorporate the various rules currently in place and addresses the contradictions and conflicts. Survey participants felt that to the extent possible the “rules of the game” needed to be actually embodied in laws to provide investors with more legally certainty. Although the concept of generating “concept based” laws which are followed by the detailed implementing regulations may work in a more developed regulatory environment this model is not well suited for the currently immature Indonesia regulatory environment. In addition, such a model is prone to abuses via unethical practices by regulators involved in the process.

Creating well articulated, comprehensive codified laws which incorporates the needs of all stakeholders will not be an easy task. However, we believe if the GOI devotes the necessary resources this task can be completed within a relatively short period of time. If this path is chosen it is imperative that the GOI balances the needs for the codified law or laws to be well articulated and comprehensive with the timeliness of its completion. A long delay could create further uncertainty amongst investors and an unwanted quagmire. Alternatively, if an exercise to codify the existing laws and regulations is not feasible then the GOI needs to ensure that the necessary regulations are issued to clarify investors’ uncertainties.

### Improved teamwork, coordination and cooperation amongst GOI entities

There are various GOI entities which interface with the industry, namely the MEMR, the MoF, the DGT, the Ministry of Manpower, BP Migas, Migas, BPKP, provincial government, regional government, Parliament Commission VII, etc. Arguably each of these organizations has different roles and responsibilities to perform. However, as communicated through the survey participants comments there is nothing more frustrating from an investor’s point of view as a governmental bureaucracy that doesn’t cooperate with itself. **One survey participant commented that - “often times it appears that each separate GOI entity has its own ‘agenda’ which often conflicts with another entity’s ‘agenda’”.** An example of this can be seen with the recent tax audits being performed by the DGT where long standing practices are now

being challenged. Many believe these “hard-line” positions are being taken by the DGT simply so they can satisfy their “agenda” of meeting revenue targets without any consideration of the macroeconomic impacts. In this example it can be argued that the DGT is simply fulfilling its government mandate and therein lies part of the problem. As discussed in the previous section harmonizing the laws/rules to eliminate contradictions and vagueness will go a long way to eliminate some of the perceived issues on non-cooperation and teamwork amongst the GOI entities.

### **Implementing judicial reform**

Judicial reform is a widely discussed topic in Indonesia and affects many facets of the business environment. An investor could have the world’s most well written, comprehensive law or contract in hand but without an effective mechanism to enforce its terms there is no legal certainty. A comprehensive examination of what ails the Indonesian judicial system is beyond the scope of this report; however, suffice to say that without improvement in this area the other suggested actions will only achieve minimal success. Investors need certainty that when disputes arise they can get fair and impartial decisions.

### **Changing the regulatory paradigm to a “shared economic interest” model**

A common theme we heard from survey participant comments was that of micromanagement and a “command and control” mentality by the GOI regulators. We believe if the GOI desires to significantly increase investment in the upstream oil and gas industry quickly that it changes the regulatory paradigm from a “command and control” to a “shared economic interest”. Because of the “cost recovery” element of the PSC there is no doubt that the GOI has a vested interest in ensuring that contractors undertake their operations in an efficient as possible manner. The central question which needs to be pondered is – what is the best alternative for achieving this objective? If the GOI views contractors with suspicion and mistrust then their current practice of pre-approving and scrutinizing every decision is warranted. However, we believe such a view would be misguided and inappropriate, particularly in the current environment where the GOI is actively trying to encourage increased investment. The GOI should take a more “shared economic interest” view toward contractors/investors. The internal controls and corporate governance embedded in any well run multinational oil and gas company should ensure that operations are undertaken in an efficient and transparent manner. In addition multinational oil and gas companies are “profit oriented” so their economic interests are to operate as efficiently and profitably as possible. The GOI should view itself as another stakeholder in the oil and gas operations, in many respects no different than any other non-operating partner in the venture.

Notwithstanding the previous comments, the GOI does have an obligation to ensure that operators undertake their operations efficiently. In the “spirit of a shared economic interest” we believe it would be more efficient for the GOI to rely on a “post audit” process to ensure that operations are undertaken properly. In order for such a scheme to work the GOI would need to develop comprehensive, clear guidance that contractors could rely on in undertaking their operations. This guidance would have to be comprehensive enough to avoid vagueness but flexible enough to be pragmatic. In other words, if a contractor met the “spirit” of the guidelines but “failed to dot an I” the “post audit” auditors should be flexible enough to “see the big picture” and not focus strictly on possible administrative mistakes.

We believe changing the regulatory paradigm would have a very favorable impact on increasing investment.

### **Completely eliminate fuel subsidies and implement effective gas regulatory environment**

The economic distortions caused by the fuel subsidy policies can not be over emphasized. Indonesia has vast supplies of gas reserves just waiting to be developed; however, these gas reserves are not commercial in the current environment of subsidized fuel. Completely eliminating the fuel subsidies will allow gas (and other alternative energy sources) to compete on equal terms with oil. The development of a domestic gas market will allow the country to change its energy mix and possibly avoid importing expensive crude and refined products. In conjunction with the elimination of the fuel subsidies, to ensure the development of a robust gas market the GOI needs to ensure an effective regulatory environment is implemented.



### Closing Remarks

Indonesia's oil and gas industry is at a critical juncture. If the GOI takes heed and implements meaningful actions to address the issues outlined in this report we are confident that the industry will reverse the recent trends. However, without meaningful action on the issues discussed we are fearful that the industry will continue its stagnant or downward trends.

We believe the current President and the relevant Ministries/Government officials are aware of the need to develop a conducive "business environment" in addition to providing fiscal incentives which address the above suggested actions. The industry is anxious and supportive of the current government to undertake the necessary actions required to achieve such a business environment.

Section 8

About

PricewaterhouseCoopers



## A Globally Integrated Firm

PricewaterhouseCoopers ([www.pwc.com](http://www.pwc.com)) provides industry-focused assurance, tax and advisory services for public and private clients. More than 125,000 people in 139 countries connect their thinking, experience and solutions to build trust and enhance value for clients and their stakeholders.

“PricewaterhouseCoopers” refers to the network of member firms of PricewaterhouseCoopers International Limited, each of which is a separate and independent legal entity.

Being part of a global partnership means we can direct investment to priority clients, sectors and markets and deliver leading edge ideas, products and services more quickly and effectively than our competitors. We work across borders without the constraints of geographic considerations and we work to a global standard and quality. Our global partnership structure enables quick decision-making and world-wide delivery of the best resources.

We are organized into industry groups, one of which is the oil and gas industry. Our industry focus ensures that our people have both a broad overview of the marketplace and a deep understanding of the industries and markets in which they specialize. Our Energy and Mining industry group has priority status in terms of investment and resources, reflecting our world-wide dominance in this market.

## PricewaterhouseCoopers is the Leading Adviser in the Oil and Gas Industry

PricewaterhouseCoopers is the leading adviser to the oil and gas industry, working with more explorers, producers, and related service providers, than any other professional services firm to ensure we meet the challenges of the oil and gas industry into the future.

Our strength in servicing the international and Indonesian oil and gas industry comes from our skills, our experience, and our seamless global network of dedicated professionals who focus their time on understanding the industry and working on solutions to the oil and gas industry issues.

Our commitment to the oil and gas industry is unmatched and demonstrated by our active participation in industry associations around the world and our thought leadership on the issues affecting the industry. Through our involvement with the Indonesian Petroleum Association and Indonesian oil and gas companies, we help shape the future of the industry.

We are proud of our strength in the oil and gas industry. This means we are the most committed firm to achieving oil and gas client’s needs and actively participates in the industry in all countries in which oil and gas activity occurs. We work closely with our oil and gas clients, offering the benefits of our experience, to help achieve their goals.

## PricewaterhouseCoopers in Indonesia

PricewaterhouseCoopers, through KAP Haryanto Sahari & Rekan which is the member firm of PricewaterhouseCoopers in Indonesia, have been committed to Indonesia since 1971. We have 650 professional staff that are trained in providing independent audit and advisory services to Indonesian and international companies. These resources are bilingual and have an in-depth knowledge of the local business environment.

Our oil and gas team in Indonesia brings together local knowledge and experience with international oil and gas expertise. This team is comprised of over 80 professional staff that provide services exclusively to the industry.



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## Section 9

# About the Indonesian Petroleum Association



Following the introduction of the production-sharing concept in 1966, Indonesia experienced a period of accelerated growth in petroleum activities, especially in offshore exploration. As the number of individuals and organizations participating in these activities increased it became clear that the establishment of an industry association would be beneficial to further development to the Nations resources as well as the petroleum community. Rather than forming separate associations or branches of other petroleum orientated international associations and societies, it was felt that the industry could be better served by one organization through which direct and free communication of all professional industry skills and disciplines could be realised. With this objective in mind, representatives from seven organizations - Pertamina, Lemigas, BP, Caltex, Jenny Joint Venture, Shell and Union Oil, formed a steering committee in 1969 for the purpose of establishing an association of individuals and companies connected with the Indonesian petroleum industry. The result was the charter of the Indonesian Petroleum Association (IPA), formally announced on March 24, 1971.

During the last 30 years the IPA has already achieved much in terms of bringing people with common interests together and contributing to Indonesia's national development. In the process it has assisted in the realisation of company member goals, the advancement of individual member's professional interest and has acted as a successful bridge between industry and the GOI. The IPA is the chosen vehicle to promote partnership in the Indonesian petroleum industry.

The IPA is a non-governmental, non-political, and not-for-profit national oil and gas organization. Membership is open to both organizations and individuals actively participating in the Indonesian oil and gas industry. The association serves as a link between GOI and the oil and gas industry; organizing lectures, seminars and training activities for the members; organizing periodic conferences on oil and gas in Indonesia; publishing proceedings and oil and gas information; and representing the Indonesian oil and gas industry at national and international meetings.



Section 10

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Section 11

# Glossary



BBTU	Billion British Thermal Unit
BCF	Billion Cubic Feet
BOE	Barrel of Oil Equivalent
BOPD	Barrel of Oil per Day
BP Migas	Badan Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi (Government Executive Agency for Upstream Oil and Gas Business Activities)
BPH Migas	Badan Pengatur Hilir Minyak dan Gas Bumi (Regulatory Body for Oil and Gas Downstream Activities)
BPKP	Badan Pemeriksa Keuangan dan Pembangunan (The Financial and Development Supervisory Board/The Government Auditor)
CEO	Chief Executive Officer
CoW	Contract of Work
DGT	Directorate General of Tax
DMO	Domestic Market Obligation
E&A Spend	Exploration and appraisal expenditures
FTP	First Tranche Petroleum
GOI	Government of Indonesia
ICP	Indonesian Crude Price
IPA	Indonesian Petroleum Association
KKN	Corruption, Collusion and Nepotism
LNG	Liquified Natural Gas
LPG	Liquified Petroleum Gas
MMCFD	Million Cubic Feet per Day
MEMR	Ministry of Energy and Mineral Resources
MoF	Ministry of Finance
MT	Metric Tonnes
OPEC	Organisation of Petroleum Exporting Countries
Pertamina	Perusahaan Pertambangan Minyak dan Gas Bumi Negara (The Indonesian State Oil Company)
PSC	Production Sharing Contract
SOE	Stated Owned Enterprise
TAC	Technical Assistance Contract
TCF	Trillion Cubic Feet
VAT	Value Added Tax











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