

Indonesia  
Oil and Gas

# Exploring the Black Gold\*

Investor survey of the Indonesian oil and gas industry

May 2008

\*connectedthinking

PRICEWATERHOUSECOOPERS 

# Table of contents

Introduction	1
Executive Summary	2
Survey approach	6
Supply and demand for oil and gas	8
Employment	14
Capital expenditures	18
Challenges facing the industry	24
Competitiveness	28
Other challenges	34
Conclusion	40
About PwC	44
Acknowledgements	49
Glossary	50

# Introduction

2007 was another spectacular year for the oil and gas industry, both in Indonesia and globally – and with commodity prices at their current high levels, 2008 and 2009 will see even better financial results. Globally, investor confidence in the oil and gas industry and its prospects has remained strong, fuelled by a sustained rise in commodity prices, and as witnessed by a year of significant growth in market capitalization. In Indonesia, profits in the sector have continued to increase in line with the rise in commodity prices. Total investment in the Indonesian oil and gas industry also increased in 2007, however spending on exploration continues to be only a fraction of the global spend despite generally favorable geological prospects. It is anticipated that renewed investor confidence will lead to increased exploration spending in 2008. In addition, several large projects currently under development should come on stream in late 2008 or early 2009, leading to increased production and thereby reversing the decline experienced over the past few years. With these recent positive improvements it is hoped that the Indonesian oil and gas industry has recovered and can continue to be a key contributor to the national economy.

This is the third edition of our survey of the Indonesian oil and gas industry, and where applicable we have analyzed trends in survey participants responses from prior reports. The survey responses come from companies representing approximately 89% of Indonesia's current petroleum production and therefore can be used to draw credible conclusions about the issues preventing the industry from reaching its full potential.

The survey shows that there have been improvements in some areas, but also indicates that taxation, intra-governmental coordination and contract sanctity continue to stifle investment.

We trust that this report will prove informative and would like to thank all the individuals who took the time and efforts to participate in this important undertaking.



William C. Deertz  
Energy Utilities and Mining Leader  
PricewaterhouseCoopers Jakarta



# Executive Summary



Photo source : Chevron Oil Products Indonesia

### Supply and demand for oil and gas

Survey participants believe that the demand for oil and gas will continue to grow, both globally and in Indonesia. The demand for gas is expected to increase at a greater rate than the demand for oil. This may be partially explained by increased environmental concerns and a shift to gas which is a cleaner energy as compared to crude oil fuels. The majority of the survey respondents indicated that the price of crude oil would increase or remain in the US\$ 81 - 100 per barrel range for the next two years; this is mainly due to the expected increase in the demand for oil.

### Employment

In line with the increased global demand for oil, the demand for human resources in the industry has increased significantly. The survey participants indicated that they expect to encounter difficulties in hiring and retaining employees in the coming years. One of the reasons behind this is the fact that a significant proportion of skilled local employees seek employment abroad (mostly in the Middle East) due to higher compensation levels.

### Capital Expenditures

Again driven by the high commodity prices, capital expenditures are expected to increase over the coming years. The majority of the increased expenditures will be spent on acquiring reserves and through increases in capital spending. The increases in expenditures will predominantly be funded by related party debts and parent company funding.

### Challenges facing the industry

There are a number of fiscal, legal and bureaucratic challenges which have hindered the achievement of Indonesia's full investment potential in the upstream oil and gas industry. With geological resources having been extensively exploited for more than three decades, it is understandable that their current prospects are not as compelling as they were in the past (due to declining find sizes or the need to move into more difficult environments such as offshore deepwater or more remote areas). It is therefore of the utmost importance for the Government of Indonesia ("GoI") to seriously address geology non-related challenges to attract higher investment in the upstream oil and gas industry.

From this survey, the five most critical challenges facing the industry are as follows:

**1 Contract sanctity**

2 Uncertainty over cost recovery and BP Migas / BPKP audit findings

**3 Taxation**

4 Interference from other government agencies, such as the tax authorities

**5 Security of assets, people and ownership rights**

The challenges highlighted in bold were also included in the top five challenges in our 2005 survey.

### Competitiveness

From this survey, the five most competitive features of the Indonesian oil and gas industry are as follows:

1. Geological opportunities (including access to acreage)
2. Political stability
3. Contract and project approval process
4. Regulatory framework
5. Environmental regulations

As in the 2005 survey, industry participants indicated that geological prospectivity remains Indonesia's most attractive feature. It is surprising to see that political stability comes in at number two as a competitive feature. This is a positive sign and will improve levels of foreign investment, however, this needs to be tempered with the survey participants' negative views on intra-ministerial coordination. The trained workforce is no longer included in the top five most competitive features. This is perhaps due to the "brain drain" described earlier.

### Other challenges

Indonesia usually ranks high in corruption listings. Fortunately, recent high-profile arrests have resulted in an improved perception of Indonesia's commitment to fighting corruption. Survey participants indicated that Indonesia is on the right path, but that it will take considerable efforts from the Gol to maintain the current course.





# Survey approach



Photo source : ExxonMobil Oil Indonesia Inc.



### Survey background

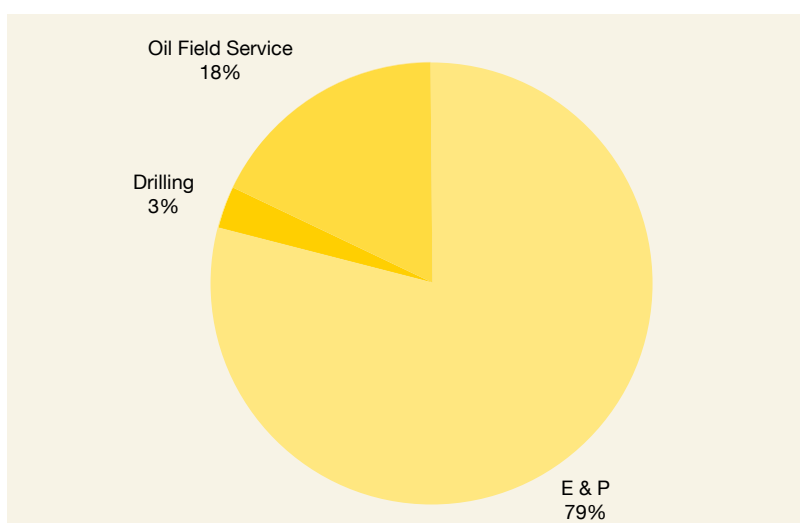
This is the third edition of the Indonesian oil and gas survey. The purpose of the survey is to inform the public and private sectors in Indonesia and abroad about Indonesia's upstream petroleum industry and to highlight some of the challenges facing the Indonesian upstream oil and gas industry in attracting optimal investment and achieving its full potential. Where possible, we have compared current results with the results from prior surveys to discover trends and to assess whether conditions are deteriorating or improving.

### Survey coverage

The 2008 report is based on the results of a confidential comprehensive survey circulated by PricewaterhouseCoopers to senior management (Country Managers, CFO, COO, Finance Managers, etc) of a wide range of companies operating in the Indonesian oil and gas industry (E&P, drilling, oil field services and seismic analysis companies). The survey questionnaire included both quantifiable and qualitative data sections. Because of the incompleteness of certain quantifiable data responses we have been unable to utilise this data in its entirety in our report.

The survey questionnaire was sent to 176 individuals working for 61 different companies active in the Indonesian oil and gas industry. We received a total of 36 responses, however, responses from several companies were aggregated and therefore represent the combined views of several executives. Although the response rate to this survey is relatively low, the completed surveys came from companies representing almost 89% of Indonesia's petroleum production in 2007. As such, the views expressed by the survey participants can be used to draw supportable conclusions about the issues that prevent the industry from reaching its full potential, and to make credible observations about investment and spending trends in the industry.

**Chart 2.1**  
**Survey Participants' Background**



# Supply and demand for oil and gas

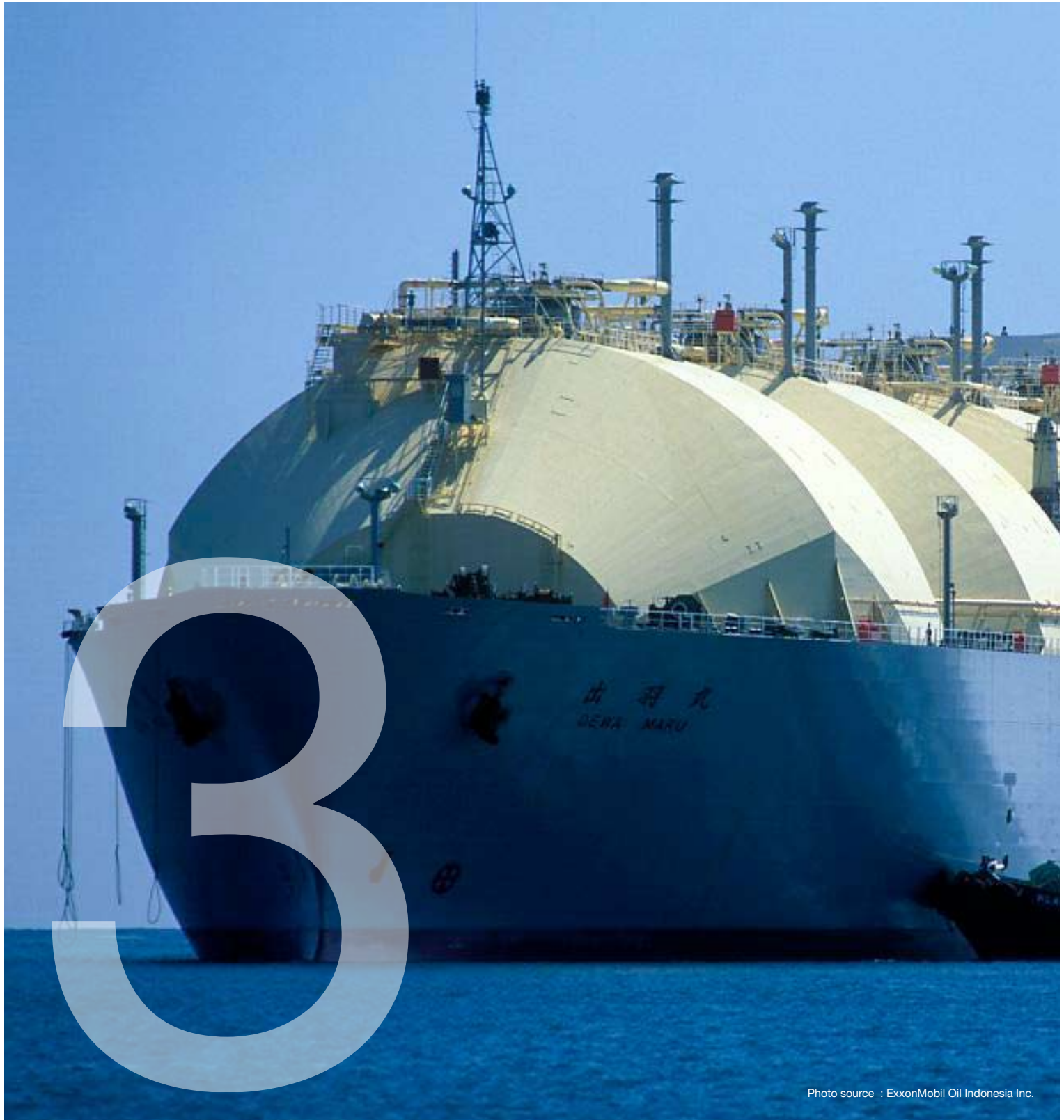
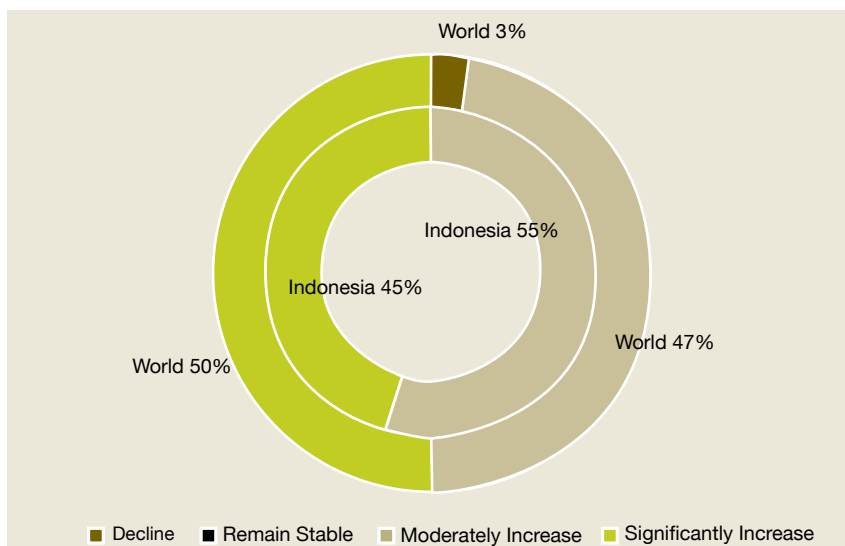


Photo source : ExxonMobil Oil Indonesia Inc.

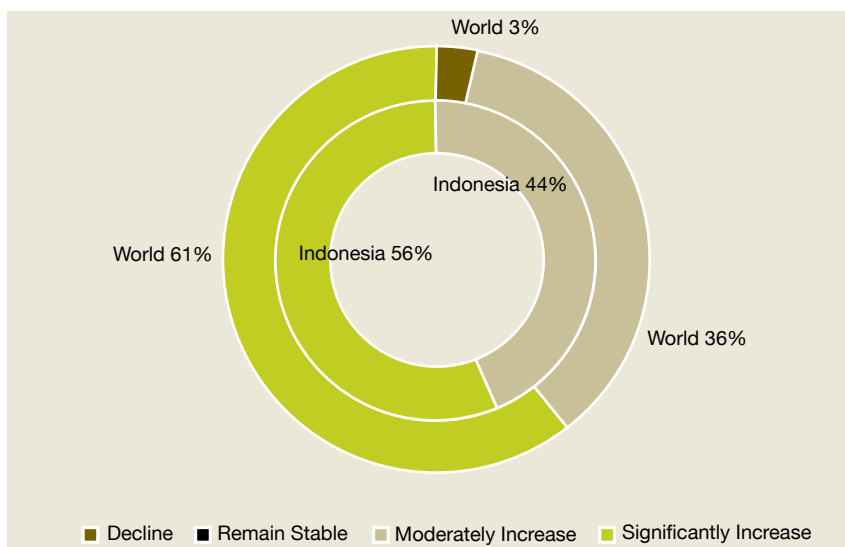
**A. Will Indonesian and world oil demand rise or fall over the next five years?**

**Chart 3.1**



**B. Will Indonesian and world gas demand rise or fall over the next five years?**

**Chart 3.2**



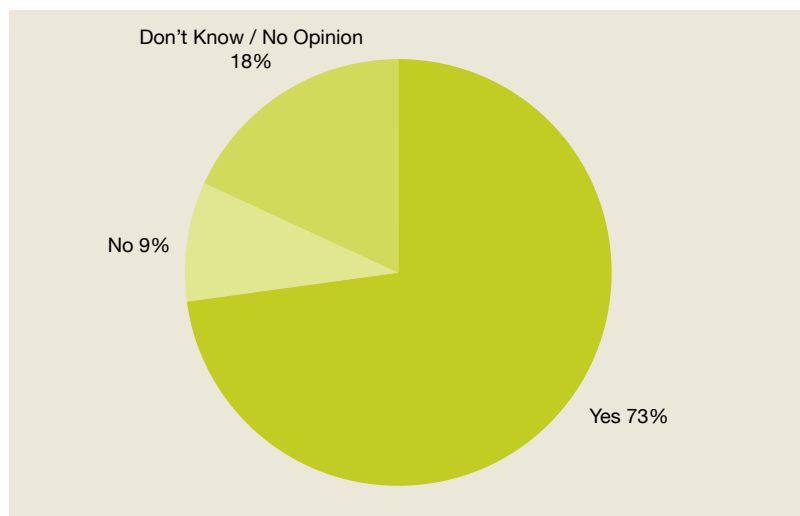
As expected, almost all survey respondents are of the opinion that the demand for oil and gas will continue to increase in the next five years. High commodity prices mean that difficult-to-reach areas and reservoirs are economically viable. Only a few participants expect the global demand for oil and gas to decrease.

As can be seen on chart 3.2, the industry participants indicated that the demand for gas, both globally and in Indonesia, would significantly increase in the next five years. This may be an indication of a shift towards cleaner energy.

It is interesting to note that survey participants expected the global demand for oil and gas to increase more than the demand for oil and gas in Indonesia. This may be due to the continuing increase in demand for oil and gas in countries like India and China.

### C. Are there significant Indonesian oil reserves yet to be discovered?

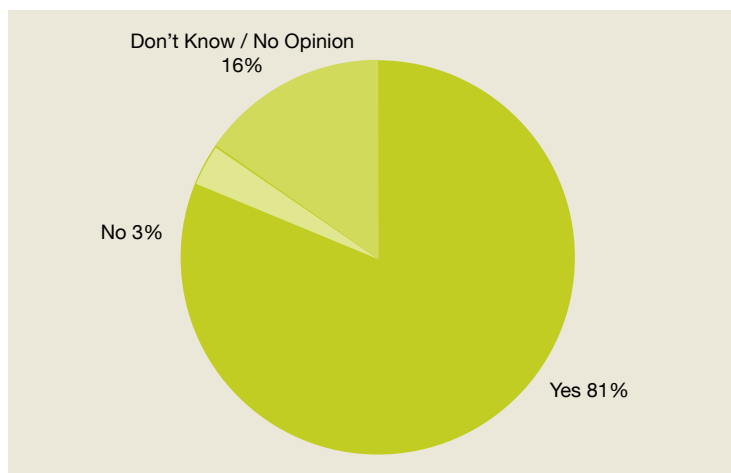
Chart 3.3





**D. Are there significant Indonesian gas reserves yet to be discovered?**

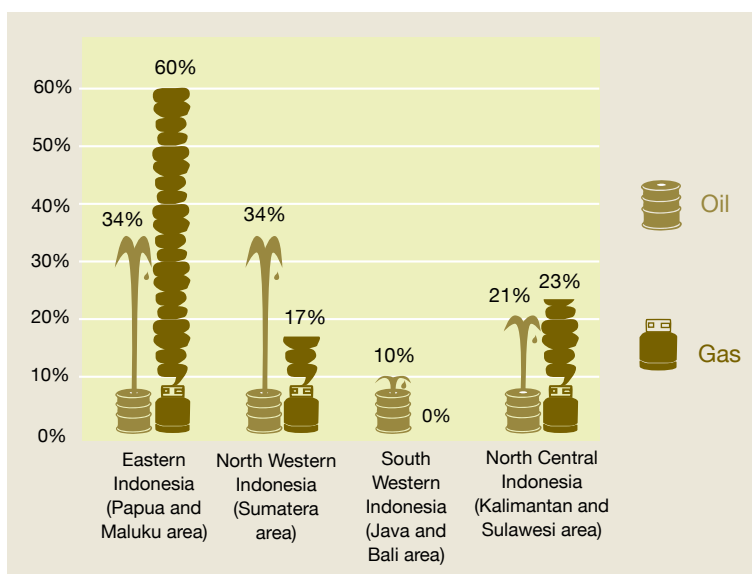
**Chart 3.4**



Most respondents seem to be of the opinion that there are still significant oil and gas reserves to be discovered in Indonesia. This is not surprising since the survey was restricted to companies currently operating in Indonesia, and if they didn't believe this to be the case it would be illogical for them to continue to operate here. Respondents indicated that they believed there were more gas reserves to be discovered than oil reserves. This is consistent with our findings in the 2005 survey. Overall survey participants believe that its geological prospects are still one of Indonesia's most competitive features.

**E. Which of the following areas offers the greatest potential for new discoveries of crude oil and gas reserves?**

**Chart 3.5**



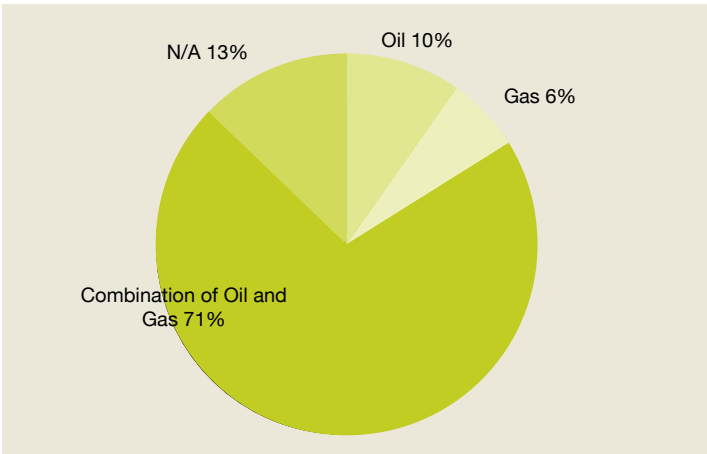
The majority of the respondents indicated that Eastern Indonesia (i.e. Papua, Timor, Maluku, etc) offers the greatest potential for new gas discoveries, whereas they were evenly divided as to whether Eastern Indonesia or North Western Indonesia offered the highest potential for oil discoveries.

The high expectations for gas in Eastern Indonesia is a promising feature of the industry.



**F. What will be the focus of your company's Indonesian exploration activities for the next three years?**

**Chart 3.6**



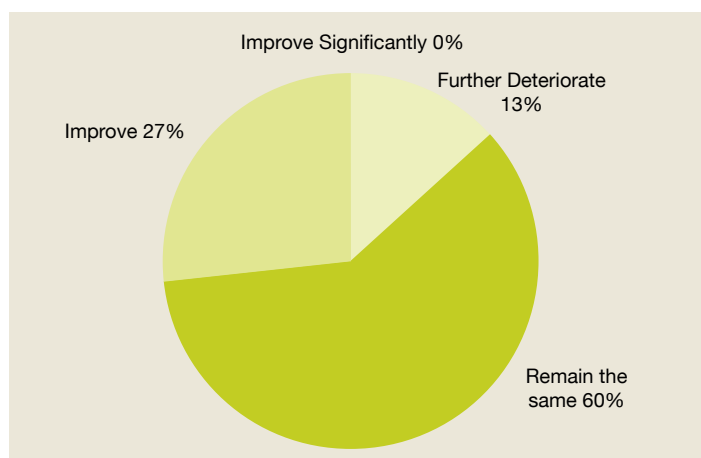
Given the expectations of survey participants that there are still significant undiscovered oil and gas reserves, it is not surprising that the majority of the participants indicated that they will focus on a combination of oil and gas exploration for the next three years.

*“Indonesia is an attractive exploration destination”.*

Survey participant comment

**G. Over the next 12 months do you expect the level of government regulation in Indonesia which affects the industry to improve or deteriorate?**

**Chart 3.7**



Fortunately, 27% of the survey participants think that the government will issue new regulations that will have a positive impact on the Indonesian oil and gas industry. However, 73% of the survey participants expect that the regulations that will be issued over the next 12 months will have a neutral or negative impact.

# Employment

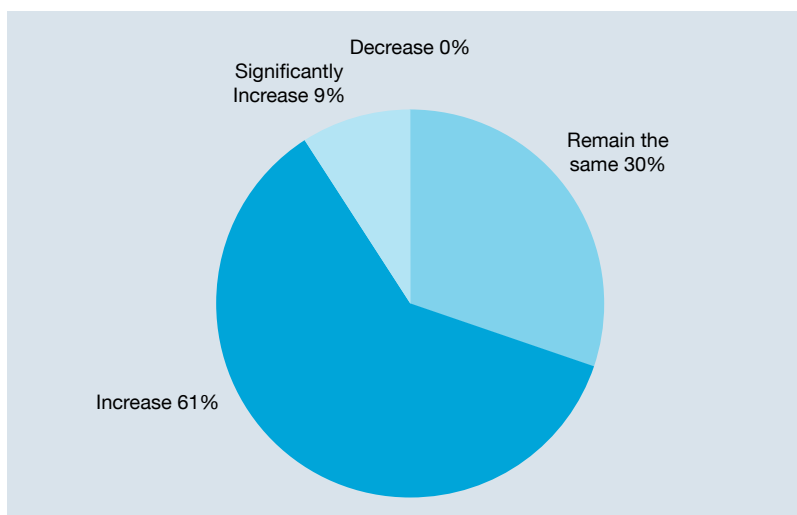


Photo source : PetroChina Indonesia Operations



**A. Compared to 2007, will the level of employment in the oil and gas industry in Indonesia increase or decrease?**

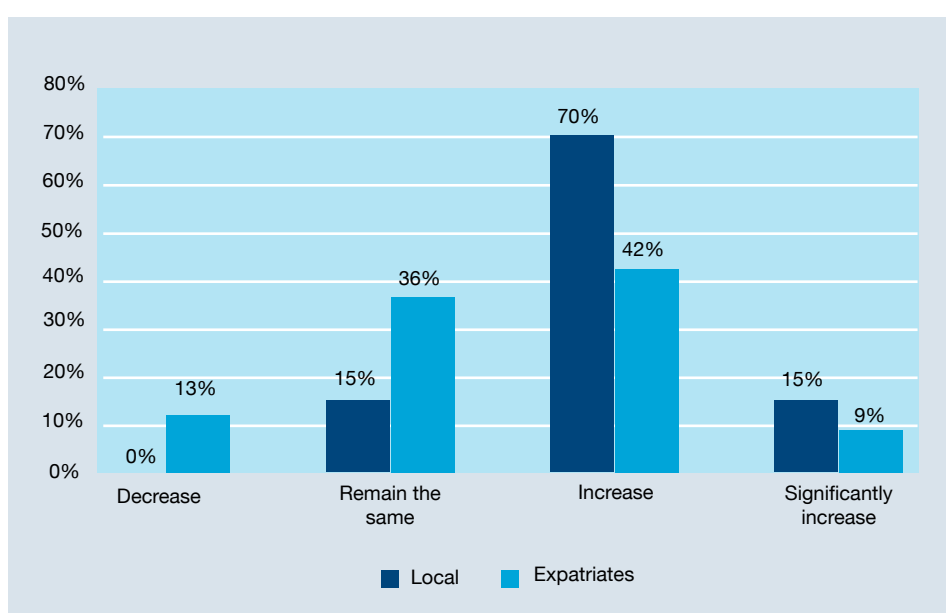
**Chart 4.1**



The high oil price, combined with significant undiscovered oil and gas reserves in Indonesia, undoubtedly give rise to the high percentage of survey participants who think that employment in the Indonesian oil and gas industry will increase over the coming years.

**B. Compared to 2007, will the number of employees in your company increase or decrease?**

**Chart 4.2**



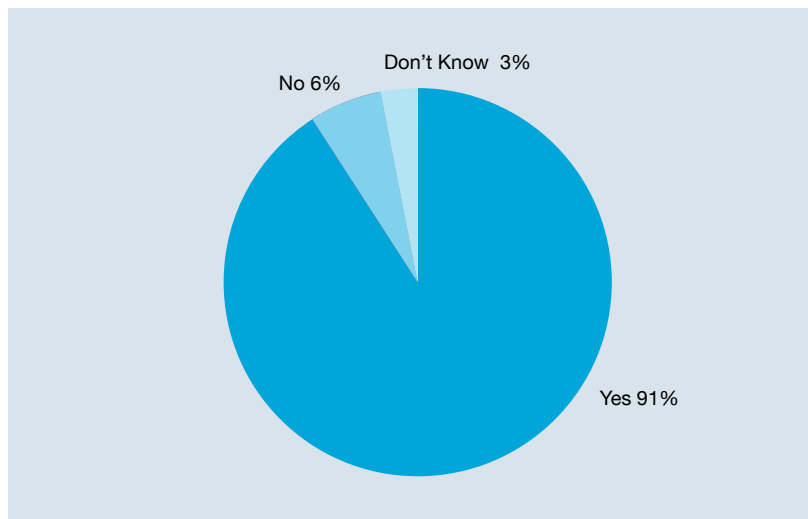
Unsurprisingly, survey participants see the number of employees working in the oil and gas industry in Indonesia increasing over the coming years. A large percentage of survey participants indicated that they expect to increase their hiring of local staff. However, a recurring theme in the comments made by survey participants was that they consider attracting qualified and talented staff to be one of the most significant challenges facing the industry in Indonesia and across the globe, both now and in the future. Consistent with our 2005 survey, several respondents commented on the trend for skilled (national) employees to leave Indonesia to work in other locations (mostly the Middle East). One possible reason behind this “brain drain” is the somewhat outdated salary guidelines from BP Migas, which result in skilled local employees seeking employment outside Indonesia.

*“Many of our best Indonesian staff have been leaving Indonesia to work abroad”.*

Survey participant comment

**C. Do you expect the industry to encounter difficulties in hiring and retaining employees in 2008?**

**Chart 4.3**

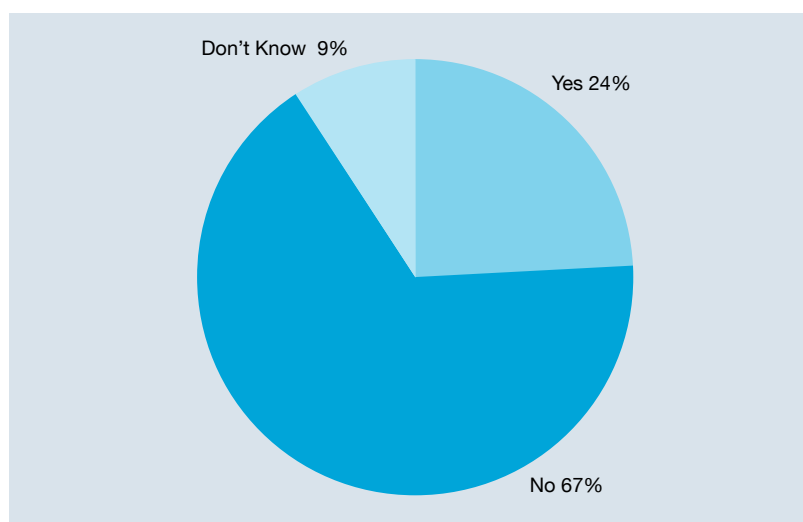


*“Attracting qualified talent is, and will continue to be, one of the most significant challenges facing the industry in Indonesia and across the globe”.*

Survey participant comment

**D. Does the Indonesian oil and gas industry have a sufficient number of skilled staff to perform these activities?**

**Chart 4.4**



*“Due to the surge in oil and gas activity, it has become extremely difficult to retain qualified staff, especially offshore drillers and supervisors”.*

Survey participant comment

Given the fact that the survey participants almost unanimously indicated that they expect to encounter difficulties retaining employees in 2008, it is worrying that they also indicate that the Indonesian oil and gas industry currently does not have a sufficient number of skilled staff. Although 67% of the survey participants indicated that Indonesia does not have sufficient skilled staff to perform the required activities, the trained work force remains a competitive aspect of the sector in Indonesia. The oil and gas industry has a long history in Indonesia which has resulted in a large, well educated workforce, especially technical professions such as engineers and geologists. The experience and exposure gained by the workforce through employment by international oil and gas companies has enhanced their competence and expertise in these companies' operations.

# Capital expenditures

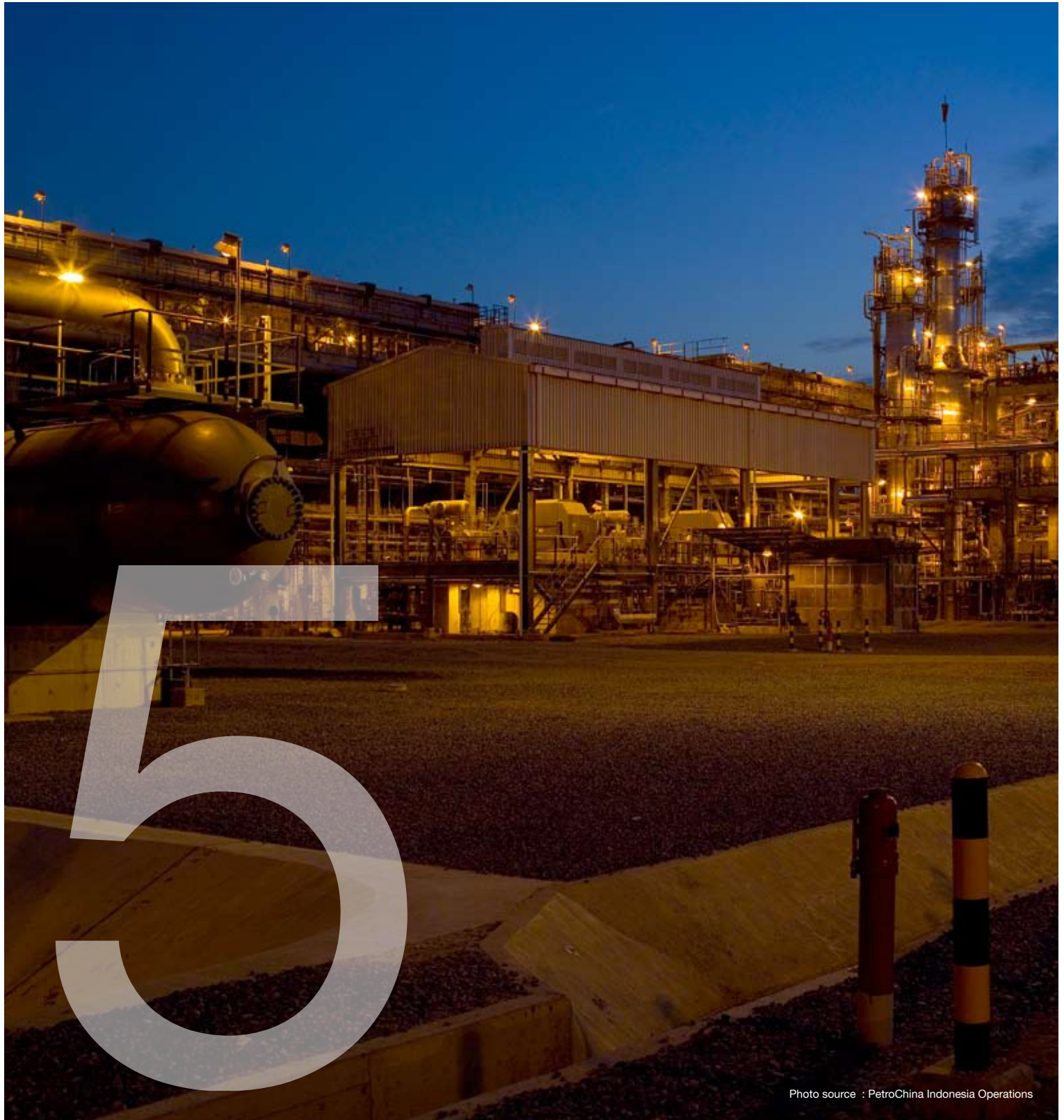
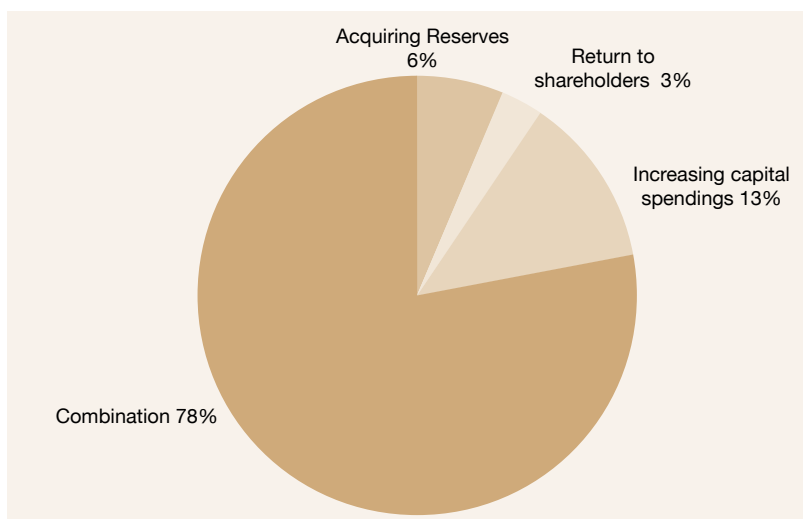


Photo source : PetroChina Indonesia Operations



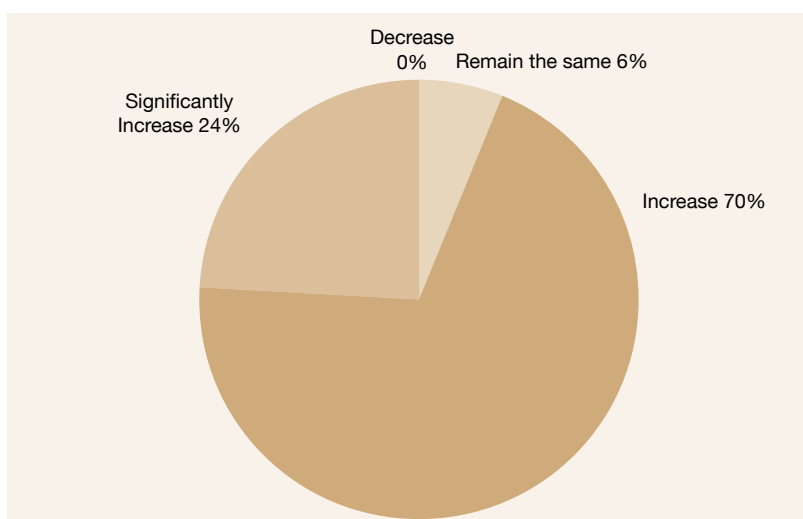
**A. Given the current price environment, on which of the following will the industry principally spend its increased cash flows?**

**Chart 5.1**



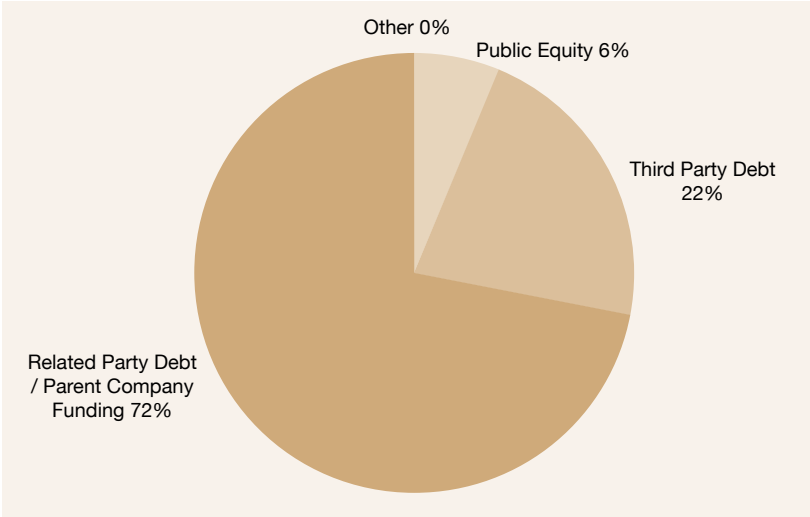
**B. Compared to 2007, how will the Indonesian oil and gas industry's need for capital change over the next five years?**

**Chart 5.2**



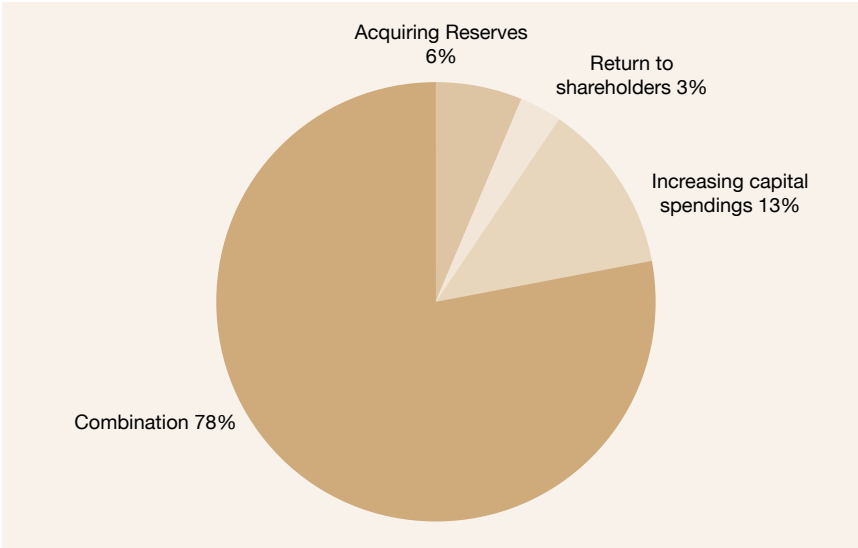
C. What will be the primary source of capital for the Indonesian oil and gas industry over the next five years?

Chart 5.3



D. Given the current price environment, on which of the following will the industry principally spend its increased cash flows over the next five years?

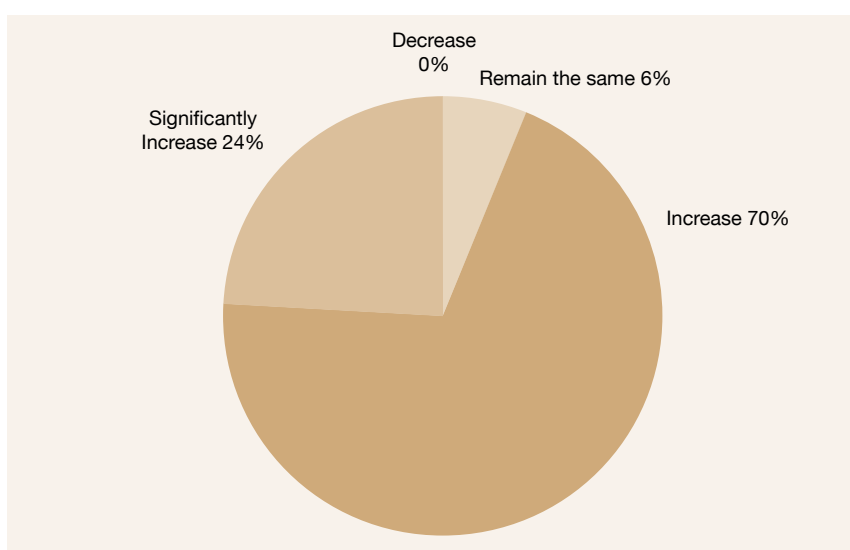
Chart 5.4



In line with an anticipated general increase in activities in the Indonesian oil and gas industry, the survey participants also indicated that they would significantly increase capital spending. As can be seen in Chart 5.3, the primary anticipated source of capital seems to be related party debt/parent company funding, which is not surprising as the industry is dominated by a few large international players. The survey participants indicated that they would spend the increased cash flow on a combination of acquiring reserves and increasing capital spending (see Chart 5.4).

**E. Compared to 2007, how will the Indonesian oil and gas industry's need for capital change over the next five years?**

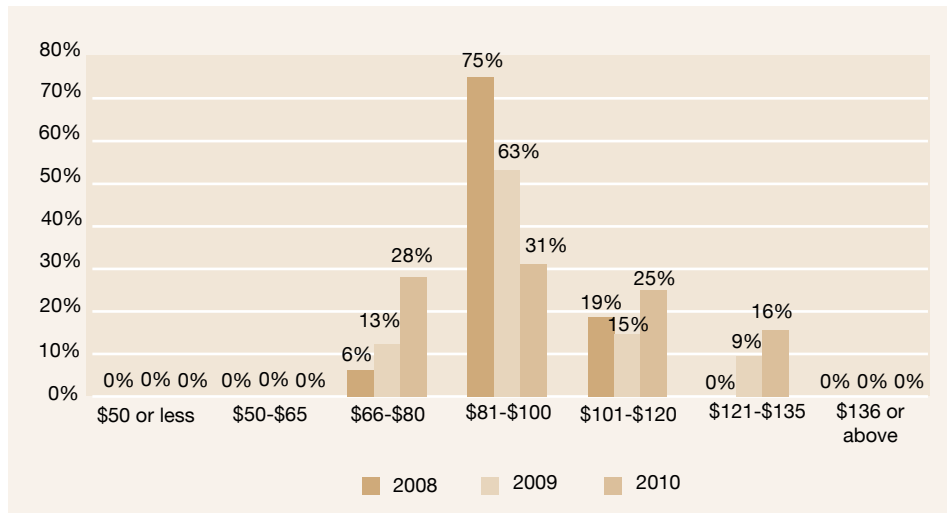
**Chart 5.5**



Not surprisingly, industry participants believe that the need for capital will continue to increase over the next five years. The anticipated increase in capital spending is undoubtedly linked to the high commodity prices.

**F. What do you anticipate the average price in US\$ per barrel of crude oil will be in 2008, 2009 and 2010?**

**Chart 5.6**



The majority of the survey respondents indicated that the price of crude oil would remain in the US\$81 - 100 per barrel range for the next two years (the survey was undertaken in early 2008 when oil prices ranged between US\$84.91 and US\$109.43 per barrel). Not surprisingly, the further into the future the projection is carried, the wider the range of responses from participants. For 2009 the majority of respondents believed that the oil price would still be in the \$81 - \$100 per barrel range, however 24% of respondents believed that prices would be higher than this, while 13% believed that they would decline somewhat. There is no consensus at all as to 2010 prices, as estimates range between US\$66 per barrel and \$135 per barrel with each price range receiving a significant percentage of the votes cast, although most respondents still believe that oil prices will be in the \$81 - \$100 per barrel range in 2010.





# Challenges facing the industry

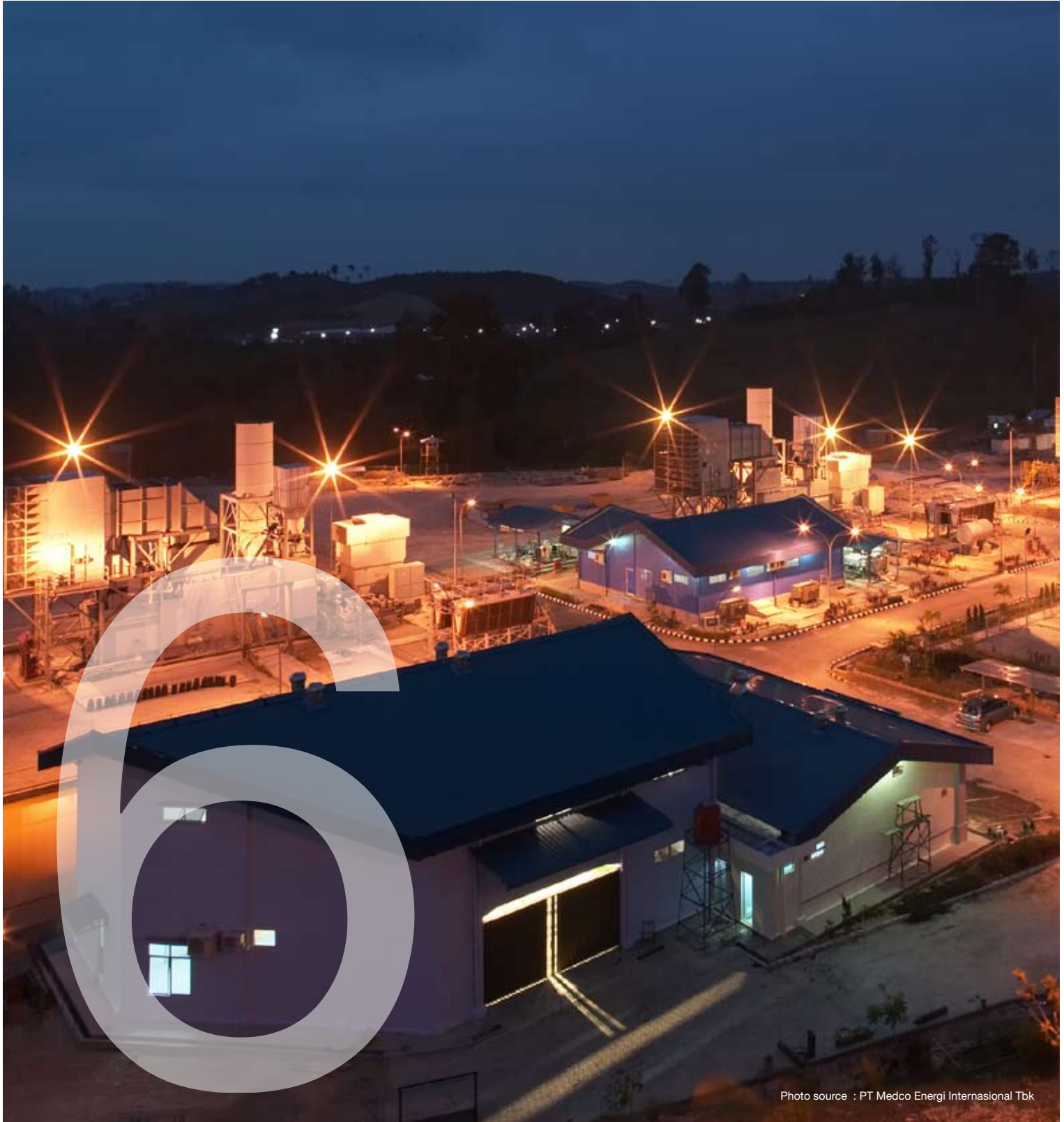


Photo source : PT Medco Energi Internasional Tbk

To gain an understanding of the most critical challenges facing the industry we asked survey participants to rate 15 different challenges confronting the Indonesian oil and gas industry, as well as indicating any other challenges they deemed relevant. 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 challenges confronting the Indonesian oil and gas industry:

Table 6.1

Critical Industry Challenges	
Confusion as to the roles of the central, provincial and regional governments	Relations with local government
Interference from other government agencies, such as the tax authorities	Confusion as to the role of Pertamina/BP-Migas and the Ministry of Energy and Mineral Resources ("MEMR")
Corruption, collusion and nepotism ("KKN")	Contract sanctity
Relations with local community	Confusion over Law No. 22/ Implementing regulations
Security of assets, people and ownership rights	Confusion over BP Migas regulations/"grand fathering" of prior Pertamina rulings
Labor regulations	Confusion over energy policy and supporting blueprints (gas utilization etc.)
Political risks	Uncertainty over cost recovery and BP Migas / BPKP audit findings
Taxation	

## Top five challenges facing the industry

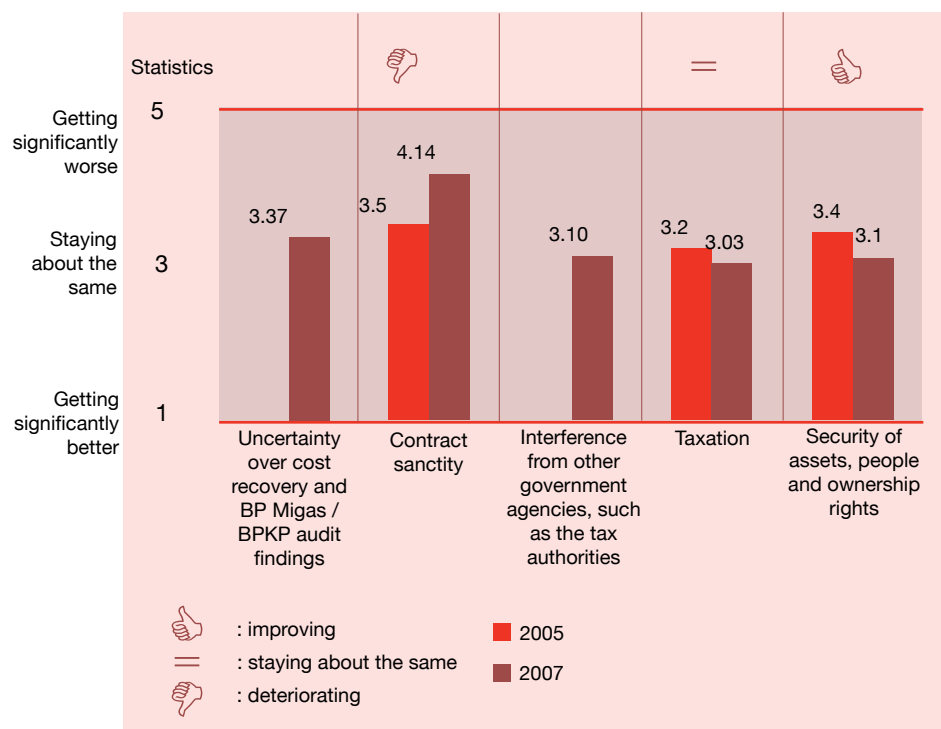
Table 6.2

Challenge	% of responses rated issue as "1 - Significantly Important"
Uncertainty over cost recovery and BP Migas / BPKP audit findings	37%
<b>Contract sanctity</b>	32%
Interference from other government agencies, such as the tax authorities	30%
<b>Taxation</b>	24%
<b>Security of assets, people and ownership rights</b>	28%

The challenges highlighted in bold were also included in the top five challenges in our 2005 survey

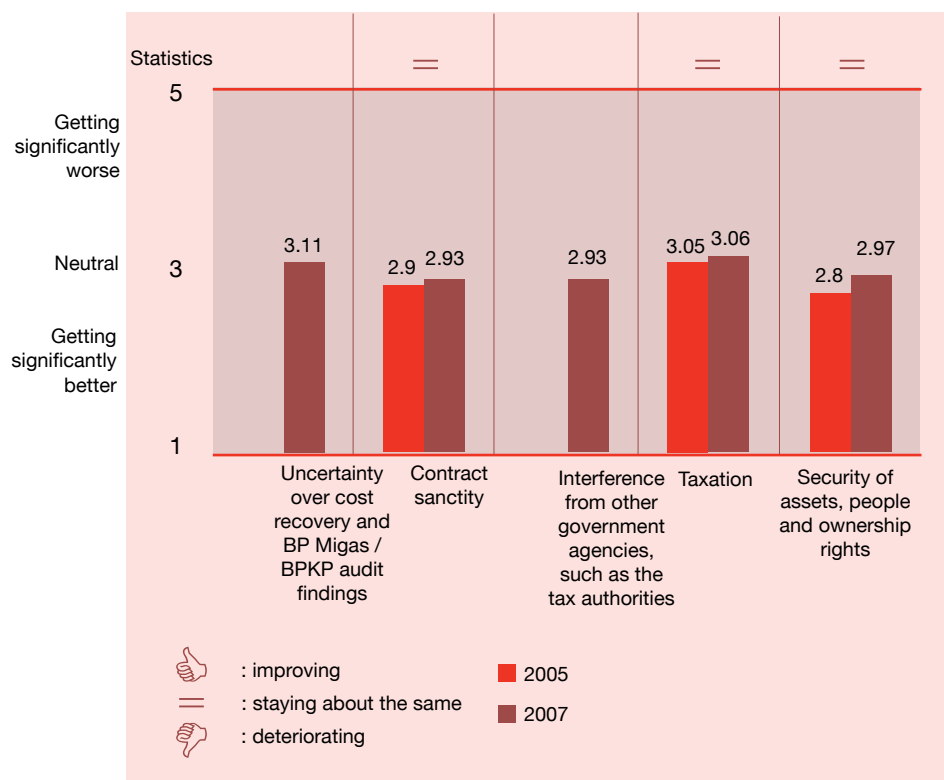
Survey participants' view on development of challenges over the next 12 months:

Chart 6.1



Survey participants' view on development of challenges (over the next one to five years)

Chart 6.2



As can be seen in chart 6.1, survey participants were generally neutral or pessimistic on the development of these challenges over the next 12 months. Survey participants were only slightly more optimistic on the development of these challenges over the longer term. The main reason behind this somewhat pessimistic view may be that many of the challenges confronting Indonesia, such as corruption and judicial reform, require structural changes and it will take a long time to implement real change.



# Competitiveness



Photo source : PT Medco Energi Internasional Tbk

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 is slipping. To gauge the accuracy of this concern, we asked the survey participants to rate Indonesia's competitiveness compared to other countries on the following features:

**Table 7.1**

Feature	
Geological opportunities (including access to acreage)	Infrastructure
Existing fiscal framework	Regulatory framework
Trained workforce	Risk premium (i.e. fiscal terms)
Ease of foreign ownership	Environmental regulations
Contract and project approval process	Political stability

#### What are the most attractive features of investing in Indonesia:

**Table 7.2**

Feature	Score
Geological opportunities (including access to acreage)	2.6
Political stability	2.9
Contract and project approval process	3.0
Regulatory framework	3.1

#### What are the least competitive features of investing in Indonesia:

**Table 7.3**

Feature	Score
Trained workforce	3.4
Infrastructure	3.4
Existing fiscal framework	3.8
Risk premium (i.e. fiscal terms)	3.8
Ease of foreign ownership	4.1

Ratings:

1 : Highly attractive

3 : Neutral

5 : Highly unattractive

We asked survey participants their views on the development they expected in the competitiveness of the country. As shown in charts 7.1 and 7.2, survey participants indicate that, although they don't expect that things will get significantly worse, they don't expect significant improvement either. This pessimistic view will not help to attract investors.

There were three attributes that the survey participants believed would improve in terms of the industry's competitiveness;

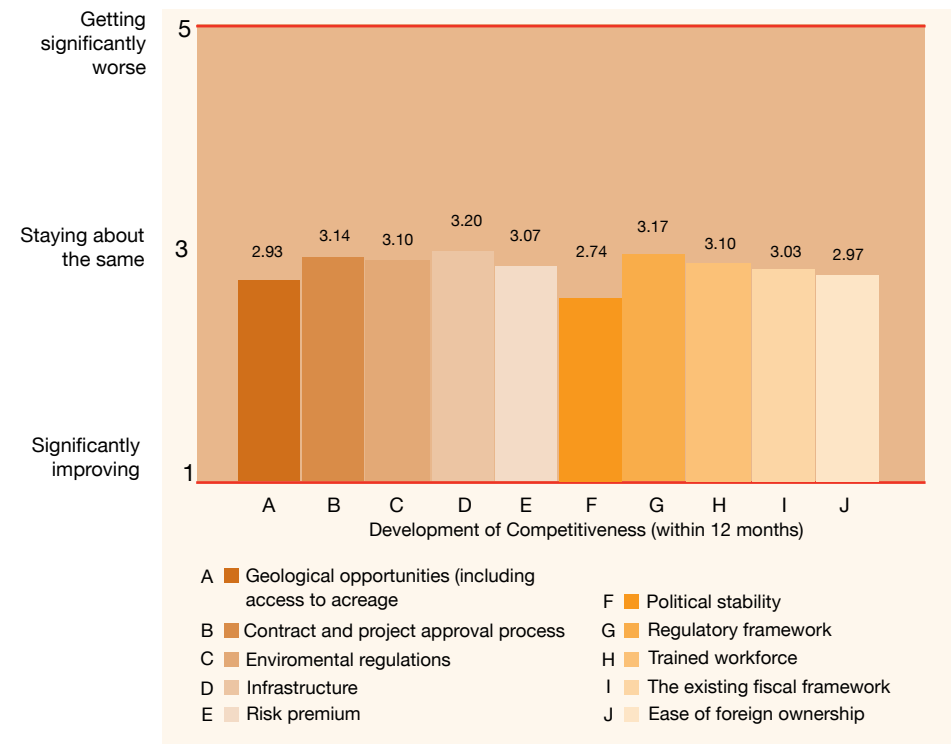
- Political stability
- Regulatory framework
- Risk premium (i.e. fiscal terms)

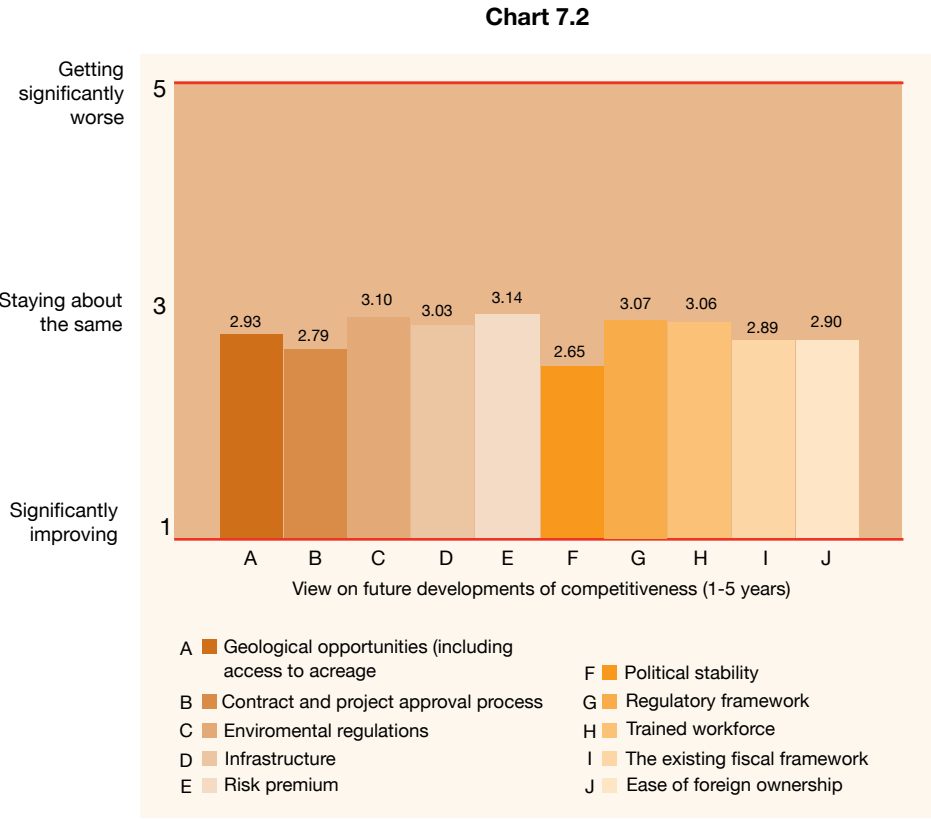
*‘The future uncertainty of inter-departmental government issues continues to be a great concern’*

Survey participant comment

In 2002 and 2005 PricewaterhouseCoopers undertook similar surveys and included many of the competitive features listed above. Although this is not true in all respects, we noted that there are quite a few features where Indonesia seems to have lost competitiveness compared with the results from previous surveys.

Chart 7.1



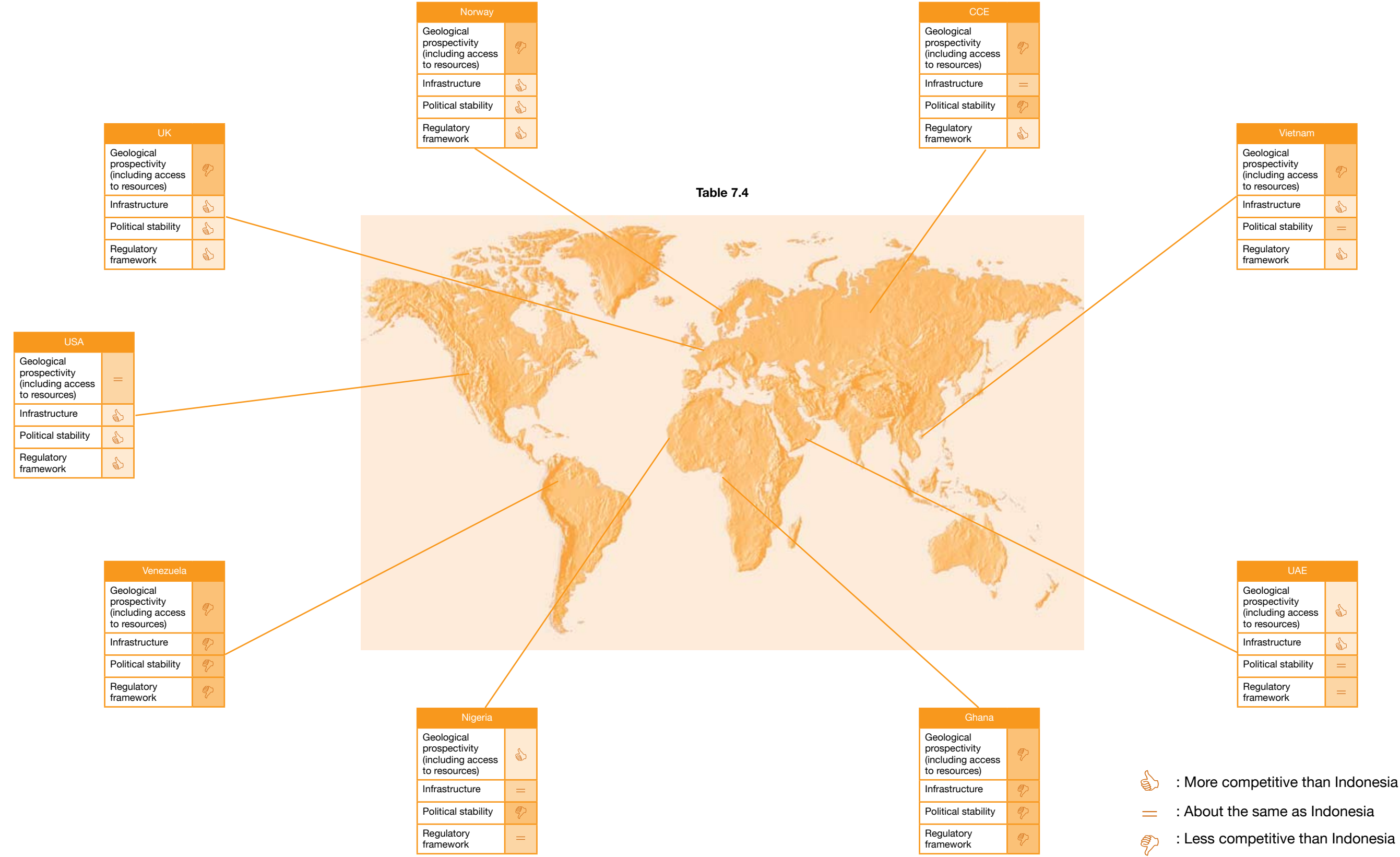


*'I do not expect the industry to significantly improve in the near term due to inter-departmental governmental issues, corruption and government policies.'*

Survey participant comment

Survey participants were asked to rate the relative competitiveness of different countries in comparison with Indonesia on four different categories, namely geological prospects, infrastructure, political stability and regulatory framework.

(Please see world map on next page for results)





As can be seen in table 7.4 on the previous page, its geological prospects remain one of Indonesia's most competitive features. Of the countries included in the survey, only Nigeria and the UAE are seen to have better geological prospects. Despite Indonesia's fledgling democracy, the country was rated favorably on political stability, with only the US and the UK being viewed more favorably. Not surprisingly, Indonesia was rated generally poor on infrastructure; this can be partly explained by the fact that it is an archipelago spanning over 3,000 kilometers. The GoI has an aggressive program in place to increase investment in infrastructure projects. Despite Indonesia being the originator of the Production Sharing Contract ("PSC") fiscal regime, the survey respondents generally viewed its regulatory framework unfavorably as compared to the other countries mentioned in the question. Survey participants viewed ongoing disputes and discussions over cost recovery as a negative factor in Indonesia's competitiveness.

# Other challenges

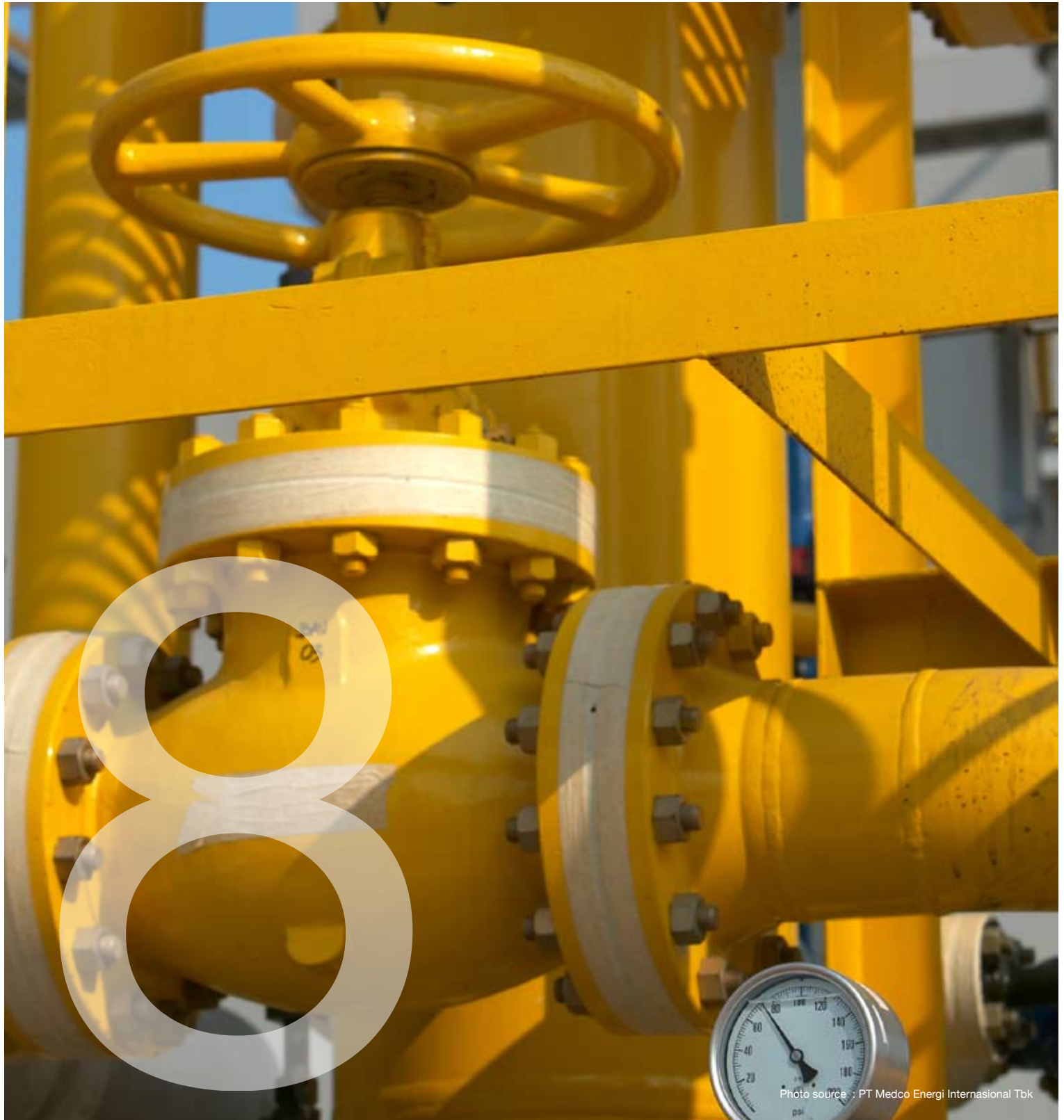
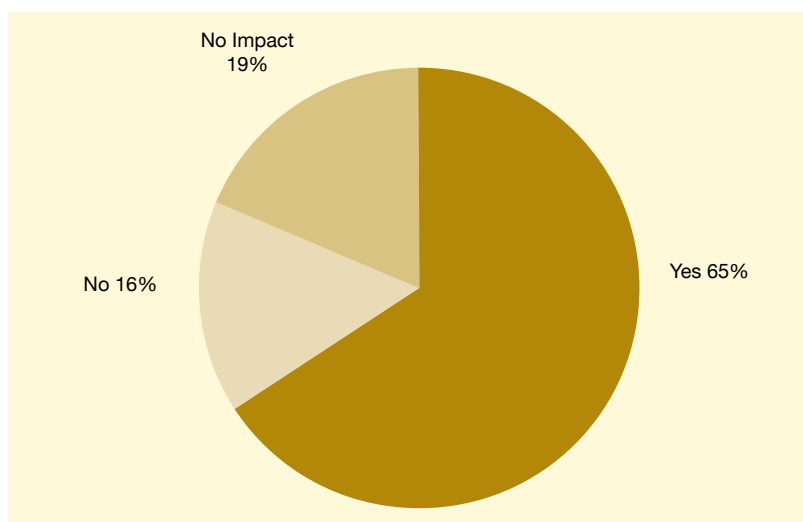


Photo source : PT Medco Energi Internasional Tbk

**A. There have been several high profile arrests in relation to corruption. Do you think that these will improve the perception of Indonesia's commitment to fighting corruption?**

**Chart 8.1**



In the 2005 survey, the Gol's approach to fighting corruption, collusion and nepotism ("KKN") did not seem to convince the survey participants that real actions had been taken to clean it up. As can be seen in chart 8.1, the majority of the survey participants indicated that the recent high profile arrests in relation to corruption are having a positive impact on the perception of Indonesia's commitment to fighting corruption.

*"Fighting corruption is a long journey for Indonesia but the country is definitely moving in the right direction."*

Survey participant comment

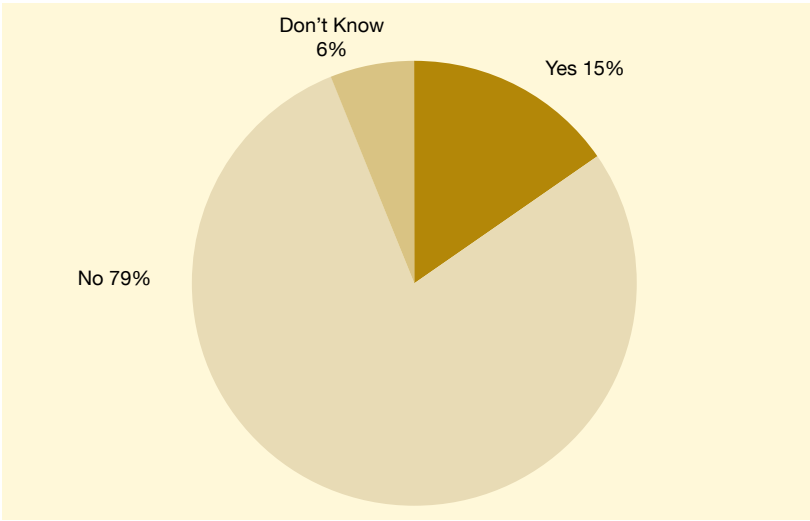
*"Arrests so far in relation to corruption are still only relatively 'small fish' and are therefore 'just for show'. The 'big fish' remain untouchable".*

Survey participant comment

The GoI issued its energy blueprint in 2006 calling for greater diversification of the country's energy mix. As part of this debate the country's policymakers have been discussing the development of nuclear energy to fuel a portion of Indonesia's future energy needs. We asked survey participants if they believed the country was ready for nuclear energy and if it possessed the requisite knowledge and expertise to operate a nuclear power plant.

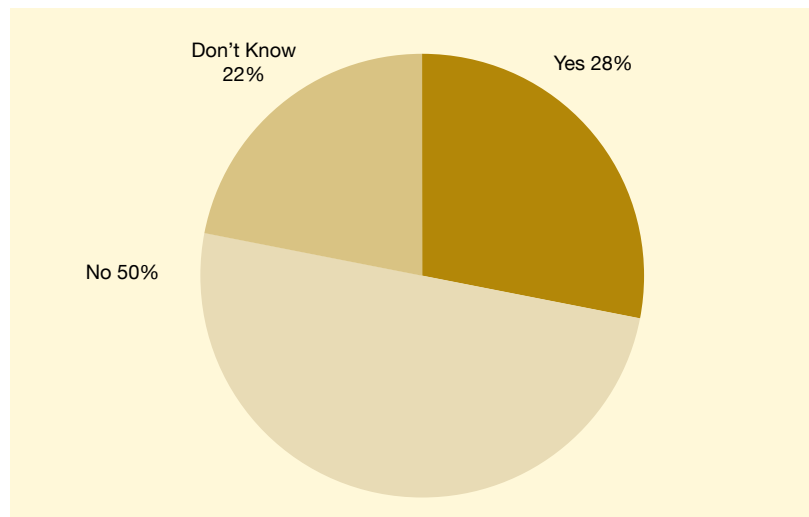
**B. Do you think Indonesia is ready for nuclear energy?**

**Chart 8.2**



**C. Do you think Indonesia has the knowledge and expertise to operate a nuclear power plant?**

**Chart 8.3**



*‘Answers are given in the context of nuclear being a short-term energy solution. However, long-term nuclear needs to be a real alternative and therefore Indonesia needs to start gaining expertise for use in the next 20-25 years.’*

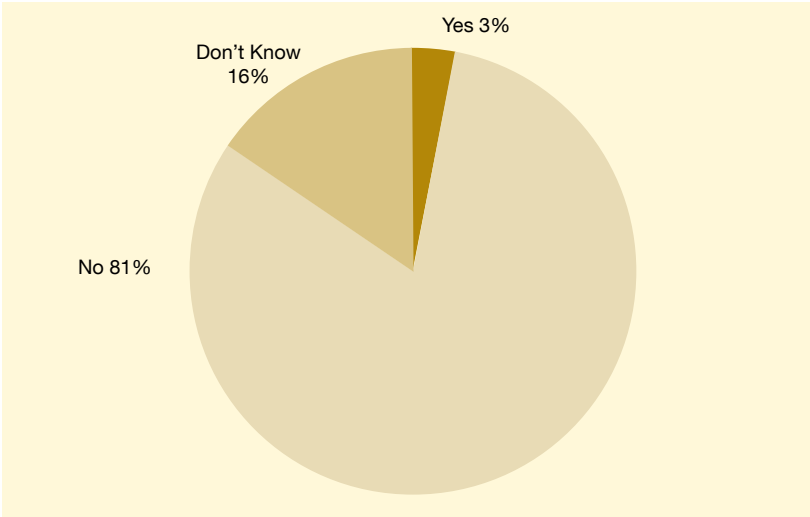
Survey participant comment

As shown in charts 8.2 and 8.3, survey participants clearly believe that Indonesia is not yet ready for nuclear energy. The main reasons behind this reluctance may be the lack of knowledge and the risks associated with volcanic eruptions and earthquakes. However, as Indonesia will eventually run out of oil, it is definitely something that should be considered in due course.



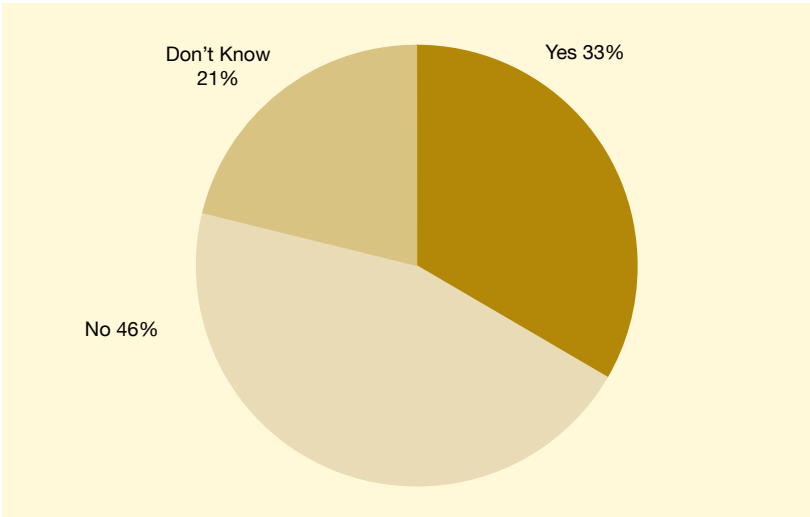
D. Has your company ever considered leaving Indonesia because of the issues described earlier?

Chart 8.4



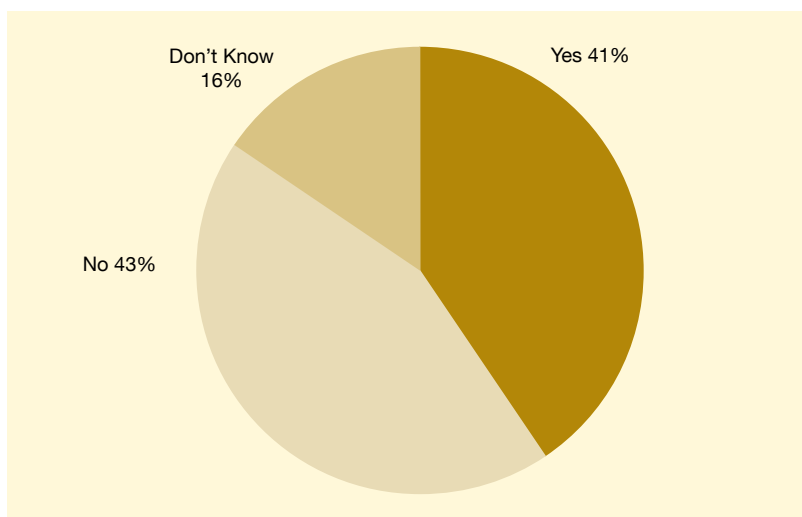
E. Are you satisfied with the current return on investment you are getting from your operations in Indonesia?

Chart 8.4



**F. Do you anticipate a significant improvement in returns from the oil and gas industry in Indonesia over the next five to ten years?**

**Chart 8.6**



Despite the problems and issues noted in the earlier sections of the survey, investors are not currently considering leaving Indonesia, mainly due to the good geological prospects. However, 46% of the survey participants indicated that they are not satisfied with the returns they are getting on their investment in Indonesia and 59% are pessimistic about improvements over the next five to ten years. The fact that investors are not considering leaving Indonesia yet is undoubtedly linked to Indonesia's good geological prospects in combination with high commodity prices. The question remains as to whether Indonesia will remain attractive for investors if commodity prices come down.

*“Indonesia will need to stay competitive in the face of increasing oil prices and resource scarcity”.*

Survey participant comment

# Conclusion



If one looks at Indonesia, it would be easy to conclude that it ought to be one of the wealthiest countries in Asia, having an abundance of natural resources: oil, gas, coal, gold, copper, timber, etc. But the sad reality is that, despite these strong selling points, Indonesia has not (yet) reached its full potential. Yes, it has achieved economic growth of 5-6% over the past several years, but this could easily have been in the 8% to 11% range, similar to that of China or India, given the right conditions. The big question is, why is Indonesia not reaching its full potential ?

High commodity prices make the oil and gas industry more attractive, but the question remains: are the high oil prices sustainable? The vast majority of the survey respondents indicated that they don't expect oil prices to come down in the next few years. Survey participants indicated that, although they don't expect the overall situation to get significantly worse over the next five years, they don't expect any significant improvements either. This pessimistic view will not help to attract much-needed investment.

On the other hand, most of the survey participants mentioned that their companies are not currently considering leaving Indonesia, despite not being very satisfied with the return on their investment there. This implies that if oil prices eventually do come down, there is a greater chance that foreign companies will cease their operations in Indonesia and search for more profitable investment opportunities in other countries. In our previous surveys, we have highlighted several challenges that were preventing the Indonesian oil and gas industry from attracting investment. Although there have been some minor changes in the top five, the most significant challenges remain. The major challenges that stayed in the top five of the least competitive aspects of the Indonesian oil and gas industry are:

- Contract sanctity
- Taxation
- Security of assets, people and ownership rights

Given that almost 30% of the survey respondents classified these aspects as "Significantly Important", there is a need for these challenges to be properly addressed. The GoI is currently actively trying to improve the taxation system in Indonesia, which is perceived as one of the areas where corruption rules. It is therefore good to see that 65% of the survey participants indicated that recent high profile arrests have a positive impact on the perception of Indonesia's commitment to fighting corruption. Survey respondents indicated that the GoI has definitely made a step in the right direction, but that the real challenge is to keep the momentum going.

Another area of concern is the increased global demand for skilled resources, of which Indonesia is also feeling the impact. Given the fact that the survey participants almost unanimously indicated that they expected to encounter difficulties in retaining employees in 2008, it is worrying that they



also indicated that the Indonesian oil and gas industry does not currently have a sufficient number of skilled staff. Although 67% of the survey participants indicated that Indonesia does not have sufficient skilled staff to perform the required activities, the trained work force remains a competitive aspect of the industry in Indonesia. The oil and gas industry has a long history in this country, which has resulted in a large, well educated workforce, especially of geologists and engineers. The experience and exposure gained by the workforce through employment by international oil and gas companies has enhanced their competence and expertise in these companies' operations.

The fact that survey participants believe that capital will continue to increase over the coming years is positive. However, it should be noted that although capital expenditures in dollar terms may be increasing, Indonesia's relative share of the "global exploration pie" is decreasing. If the Indonesian Government is committed to achieving its production target of 1.3 million BOPD in 2009, it is vital that Indonesia increases exploration and general investment, not only in dollar terms, but also relative to global spending.

It would not be fair to only look at the areas which need improvement. Indonesia has become more attractive for investors in some respects. This is partly due to the new initiatives of the Indonesian Government. The Government of Indonesia needs to stay focused on the issues highlighted in this survey and ensure that proper action is taken.

We believe that the President and the relevant ministries and government officials are aware of the need to develop an environment conducive to doing business, in addition to providing fiscal incentives. Based on the responses of the survey participants, it is clear that the industry is keen and supports the current government to take the necessary action to achieve such a business environment.





# About PwC

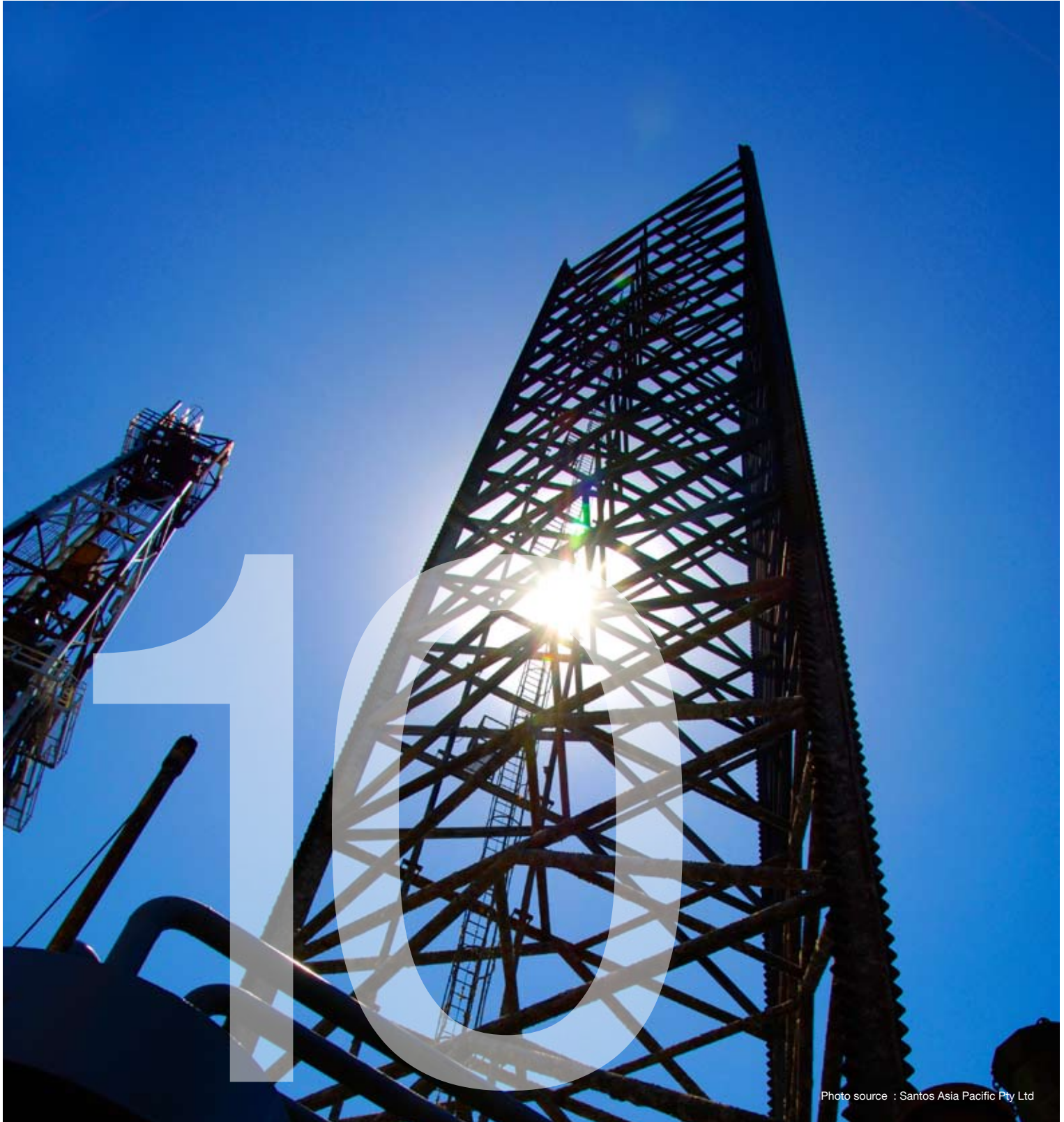


Photo source : Santos Asia Pacific Pty Ltd

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### PricewaterhouseCoopers - Indonesia

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- Within the current risk and control-oriented environment, the need for common standards and process simplification is a dominant theme in the EU&M sectors. PwC is assisting our EU&M clients with their needs across finance, accounting, trading and operational functions, resulting in improved management of their enterprises.
- We are committed to providing the highest quality professional services to every client we serve. Annual technical and industry training, internal quality control programs, and improved methodologies are just a few of the ways we ensure that quality is embedded into every service we provide.
- Our client service approach involves learning about the company's issues and seeking ways to add value to every task we perform. Our industry experience pervades our organisation, and as a result, we excel at helping EU&M companies to accomplish their strategic objectives.
- With over 30 years experience in Indonesia, our Jakarta office has grown to over 1,000 professional staff, including 30 Indonesian national partners and expatriate technical advisers, combining international and local knowledge, skills and experience.
- Our Indonesian EU&M practice comprises over 175 professionals across our three Lines of Service. This body of professionals has deep industry knowledge and provides us with the largest group of industry specialists in the Indonesian professional market.
- Through our involvement with the Indonesian Petroleum Association ("IPA"), we have helped to shape the industry as it progresses towards truly world-class standards.
- At PricewaterhouseCoopers, we help our clients to solve complex business problems by combining a global mindset and local resources with positive action.

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# Glossary

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 (The Financial and Development Supervisory Board/ The Government Auditor)
BPKP	Badan Pengawasan Keuangan dan Pembangunan (Government Audit Body)
COO	Chief Operating Officer
EU&M	Energy, Utilites, and Mining
Gol	Government of Indonesia
IPA	Indonesian Petroleum Association
KKN	Corruption, Collusion and Nepotism
LPG	Liquified Petroleum Gas
MEMR	Ministry of Energy and Mineral Resources
Pertamina	Perusahaan Pertambangan Minyak dan Gas Bumi Negara (The Indonesian State Oil Company)
PSC	Production Sharing Contract
US\$	United States Dollar
VAT	Value Added Tax



