



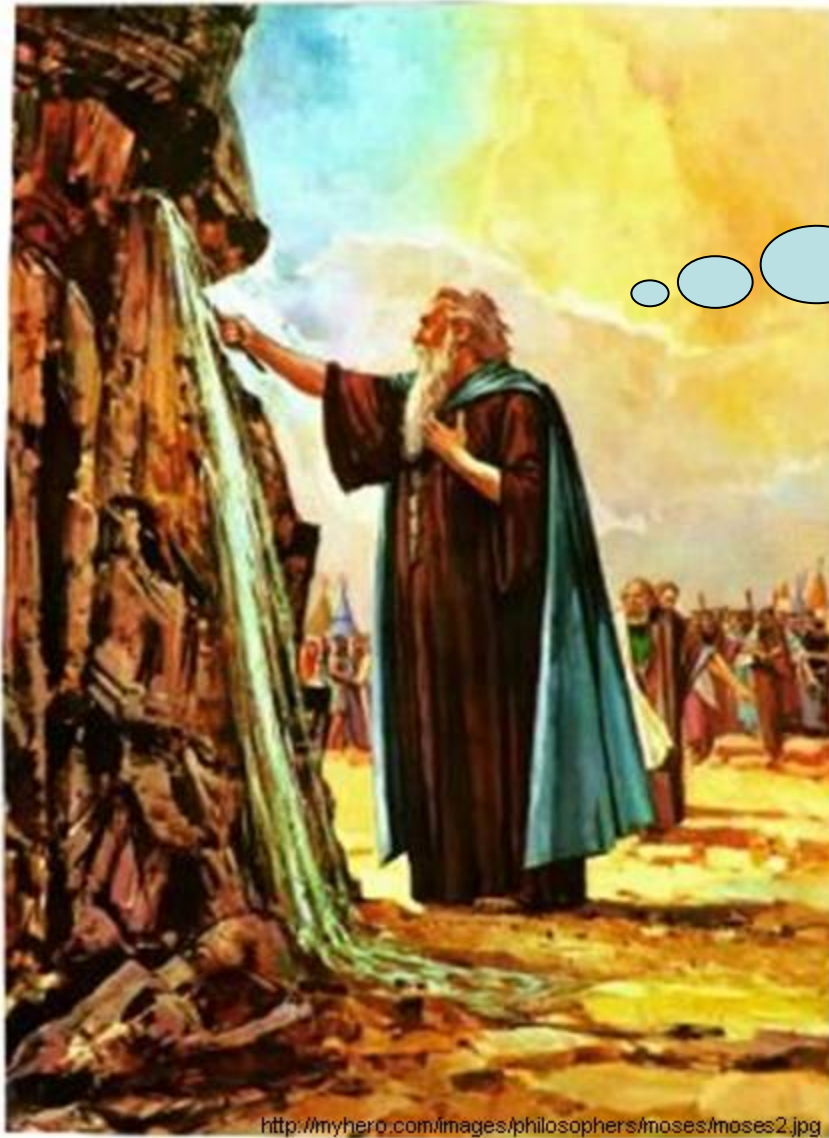
Accelerating Investment in Oil & Gas Exploration and Development

Atty. Eduardo F. Hernandez

President
Petroleum Association of the Philippines

Director
PNOC Exploration Corporation

Moses of the Holy Bible



*Oooops. This is water
... not oil! We must have
made a wrong turn.*

<http://myhero.com/images/philosophers/moses/moses2.jpg>



“ All oil are created equal”

Oil can be found depending on:

1. Geology or prospectivity
2. Fiscal Terms

All these are further subject to:

- politics
- hospitality of government
- citizens and indigenous people
- environmentalists
- corruption
- Religious
- NGOs



All must be balanced if a country is to have affordable energy



“A THOUSAND BARRELS A SECOND”

Peter Tertzakian: “the world’s oil industry is now pumping out crude oil at about the same rate that we are consuming it - 1,000 barrels a second”

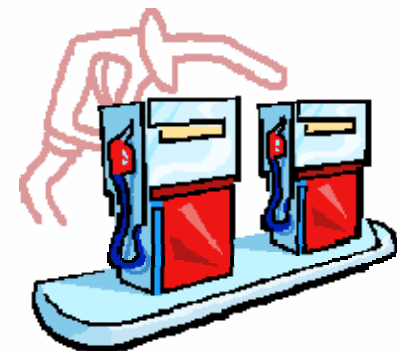


Price of oil:

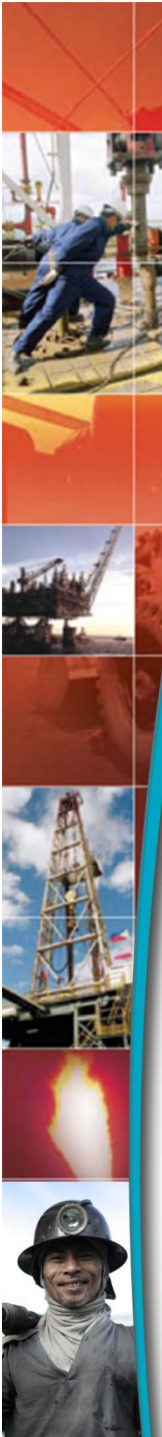
US \$100 from US \$40

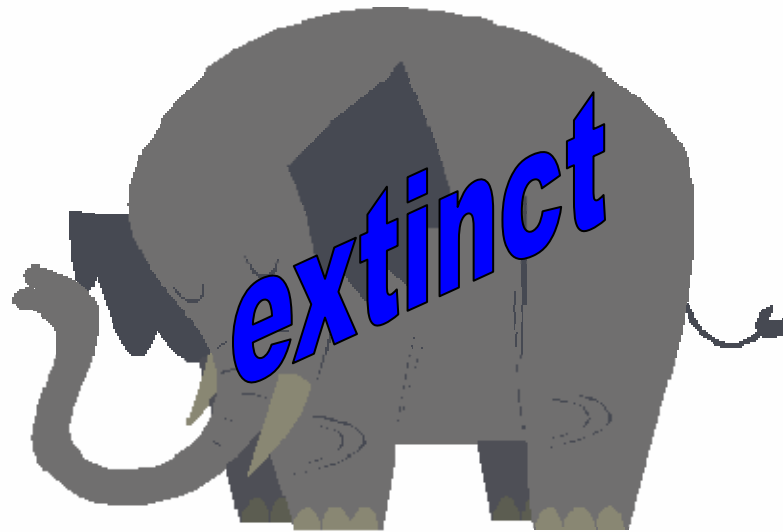
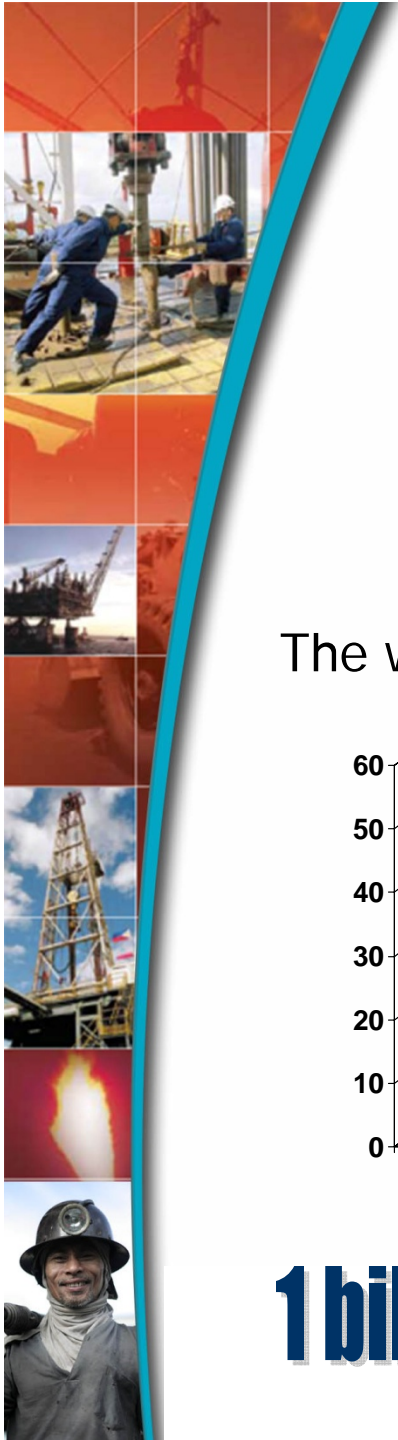


The worldwide demand for energy is growing at a pace never before experienced

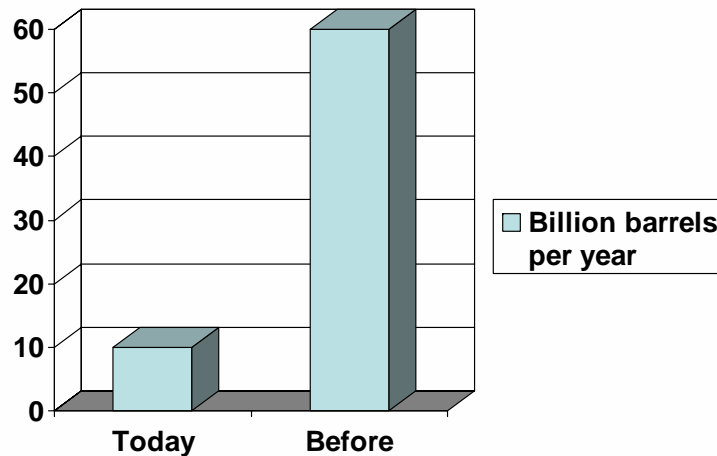


Oil experts: “prices of oil has reached the tipping point”





The world's elephant oil reservoirs are becoming extinct



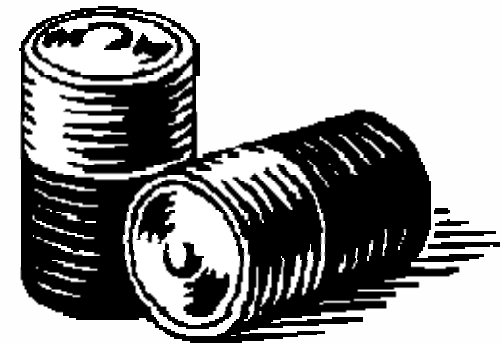
Today, the oil industry finds 10 billion barrels per year compared to 60 billion before

1 billion barrels of recoverable oil = 11 days



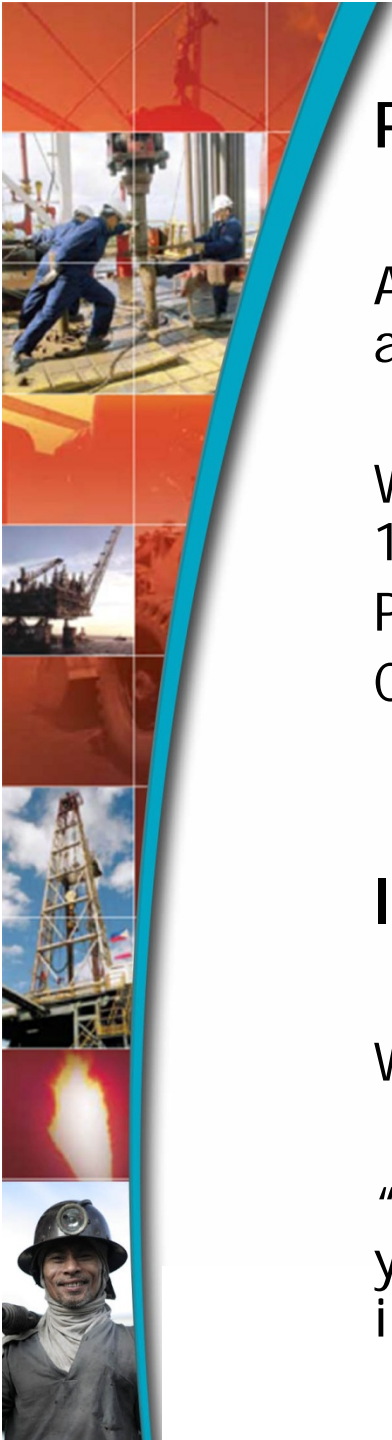
Oil companies have to go farther and deeper offshore

- Gulf of Mexico
- North Sea
- Coast of West Africa
- Sakhalin Island, North Pacific



Opportunity for:





Philippines:

A virgin and unexplored country awaiting to be drilled.

Wells drilled: 557 wells for the past 100 years

Producing wells: 17 wells

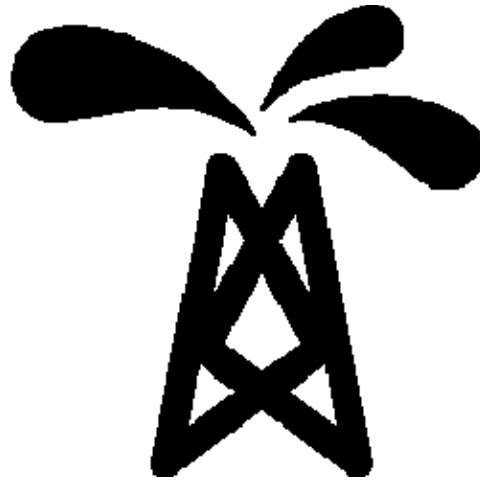
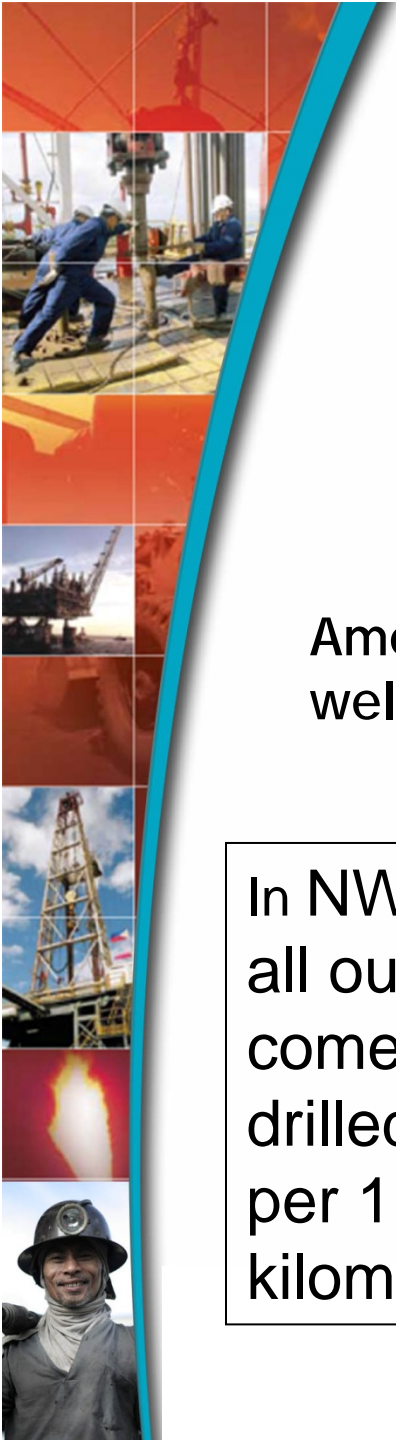
Currently producing: 4 wells

Indonesia:

Wells drilled: 400 wells for 1 year

“Our record of drilling for oil in 100 years is close to Indonesia’s record in one year.”





America: 1 exploratory well per 9.4 sq. mile

In NW Palawan, where all our oil production comes from, we have drilled only 1.6 wells per 1,000 square kilometers.



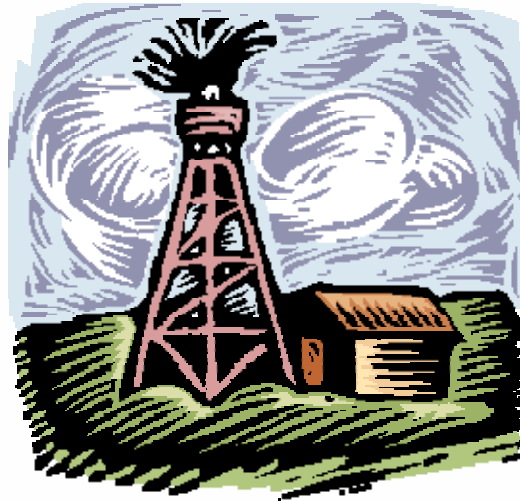
From 1991 to 2002:

Indonesia:	1,081 wells
Vietnam:	154 wells
Malaysia:	956 wells
Philippines:	less than 20 wells



We have been looking for oil with little success.

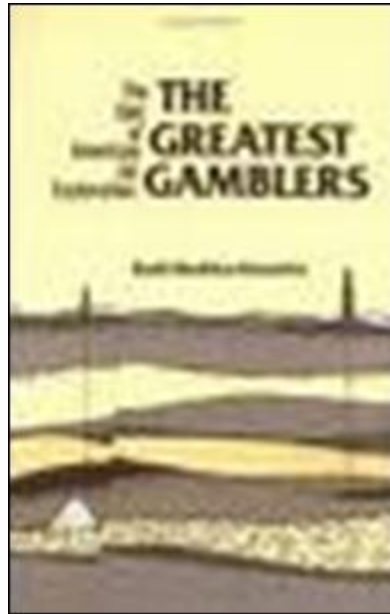
- Because we have not drilled enough wells to prove that our country has major reserves.
- Our last major commercial discovery was in 1992 with the drilling of Malampaya well - and that was 16 years ago.
- We must drill as many wells as we can to prove or upgrade our prospectivity.
- We must also have an attractive Fiscal Policy commensurate to our geology



Worldwide odds in drilling a well: **16:1**

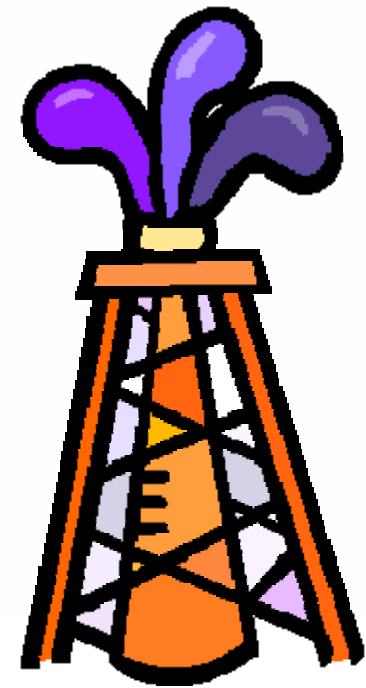
In 17 wells, 16 wells will be found dry and
will be abandoned

“The Greatest Gamblers” by Ruth Knowles



- Only 1 wildcat well out of 42 discovers 1 million barrel recoverable oil
- Only 1 wildcat in 158 wells discovers 10 million recoverable oil

- Only 1 in 427 wells - 25 million recoverable oil
- Only 1 in 706 wells discover - 50 million recoverable oil
- Elephants/giant oil fields - 210 have been discovered in America in 100yrs. of exploration



Why Dedicate a Book to 300,000 Dry Wells?



From the data gathered and analyzed from these dry wells, the major or giant discoveries were made possible

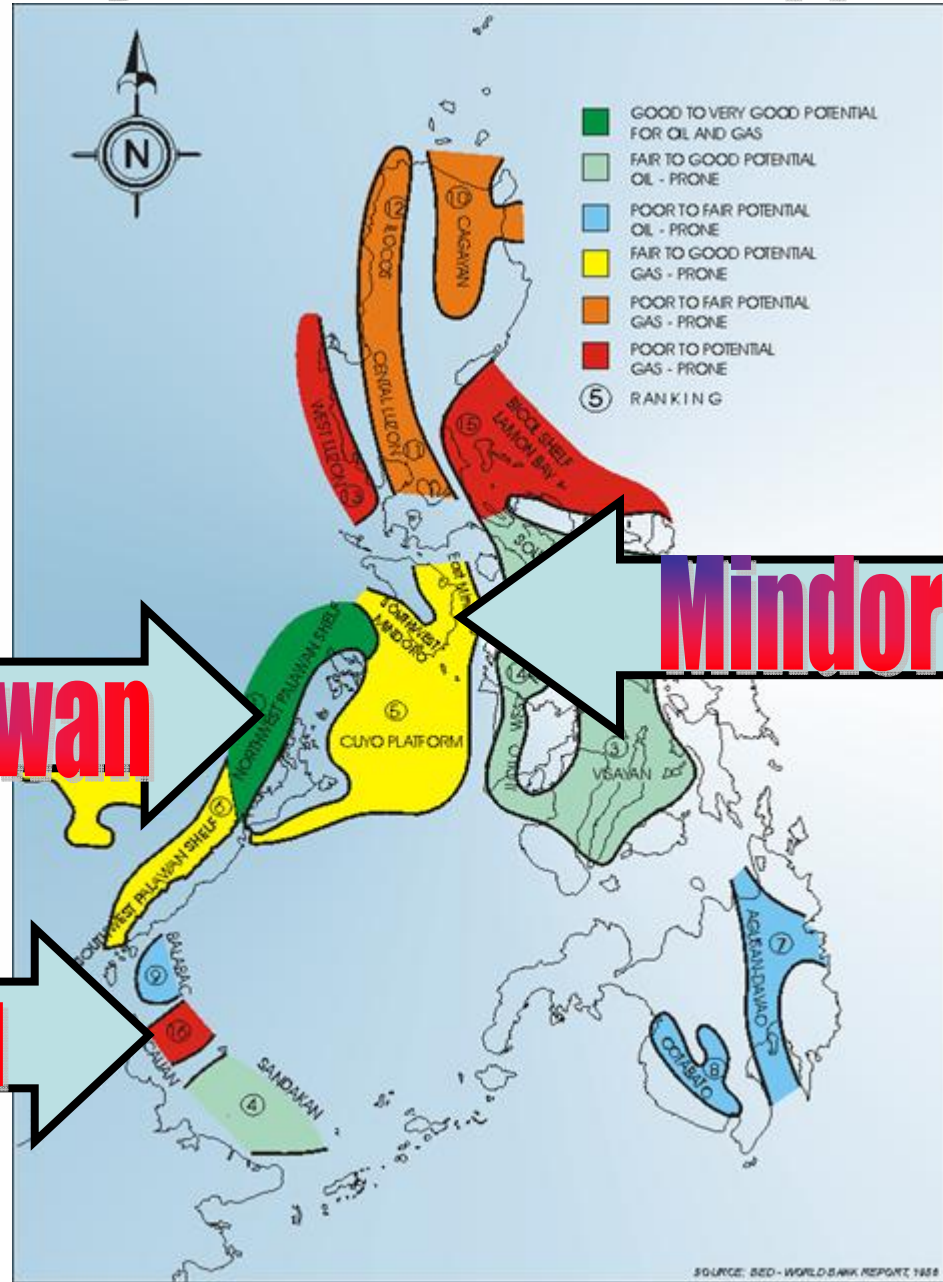
Oil is not for the faint-hearted. It is the Prize for the courageous.



AMOCO discovered the most oil, they also drilled the most wells



16 Sedimentary Basins in the Philippines



Palawan

Mindoro

Sulu



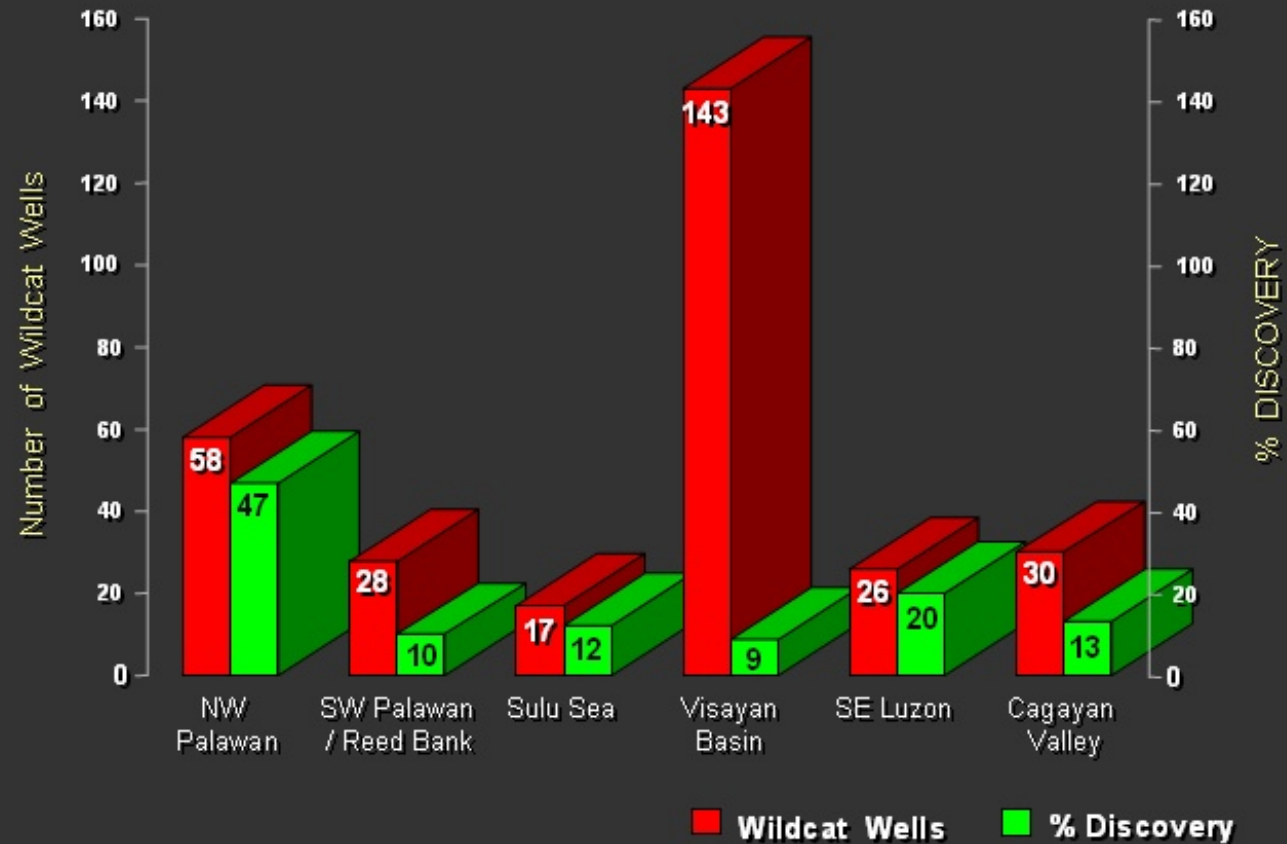
EXPLORATION DENSITY

BASIN	AREA (sq. km.)	No. of Wildcat Wells	Wells / 1000km²
NW Palawan	36,000	58	1.61
SW Palawan / Reed Bank	115,000	28	0.24
Sulu Sea	115,000	17	0.15
Visayan Basin	46,500	143	3.08
SE Luzon	66,000	26	0.38
Cagayan Valley	24,000	30	1.25

- NW Palawan – 58 exploration wells – 1.61 wells/1,000 sq.km. (Wildcat)
- Sulu Sea – large area but low density of 0.15 wells/1,000 sq. km.
- Visayan Basin – highest density of 3.08 wells/1,000 sq. km.
- Don't forget: These area are surrounded by oil rich basins of Indonesia, Malaysia (Sabah) and China.
- In the U.S. – 1 well for every 9.4 sq. km.

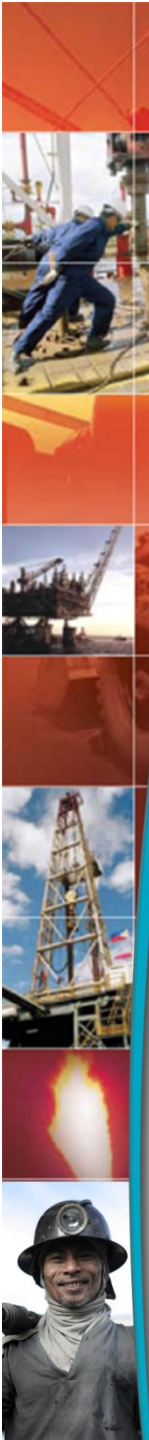


DISCOVERY RATES in the PHILIPPINES

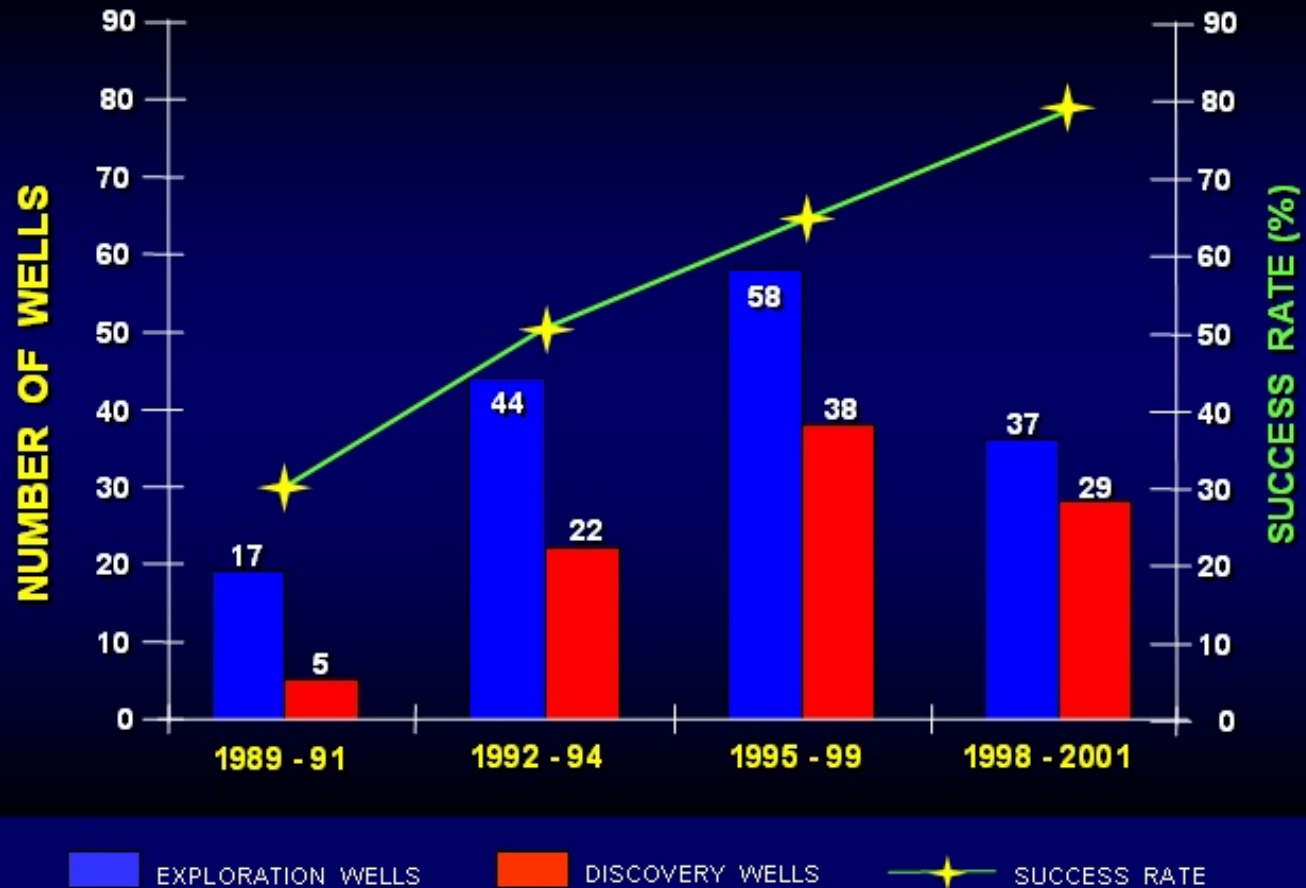


Discovery Rates in the Philippines:

- In NW Palawan – out of 58 wells, 47% is discovery (Wildcat well is exploratory well).
- In Sulu Sea – out of 17 wells, 12% is a discovery.

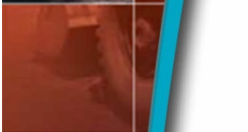


SUCCESS RATES in VIETNAM (1989 - 2001)



Success rate in Vietnam increased from 30% in 1989 to 80% in 2001 – due to more data available and improved fiscal terms like removal of ring-fencing.

Don't forget: The Philippines is surrounded by oil-rich basins of Indonesia, Malaysia (Sabah), and China





Oil exploration in the Philippines boomed in the '70s with the discovery of Nido (PCSI) and Cadlao (Amoco), and later Matinloc

The country then produced as much as **20%** of its fuel requirement



Then came the Malampaya Gas Discovery



Producing 10 million cubic meters of gas, equivalent to 60,000 BOPD





Today, production of
Nido and Matinloc is **800 BOPD**

Total Production (inception to date):

Nido:	18.1 million barrels
Matinloc:	11.9 million barrels
Cadlao:	11.6 million barrels

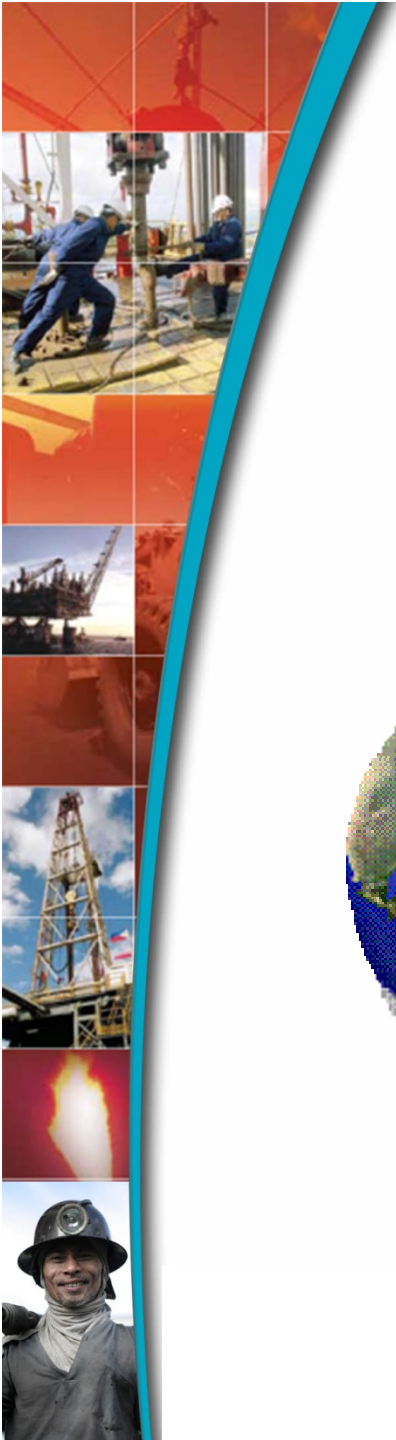
Today, production of

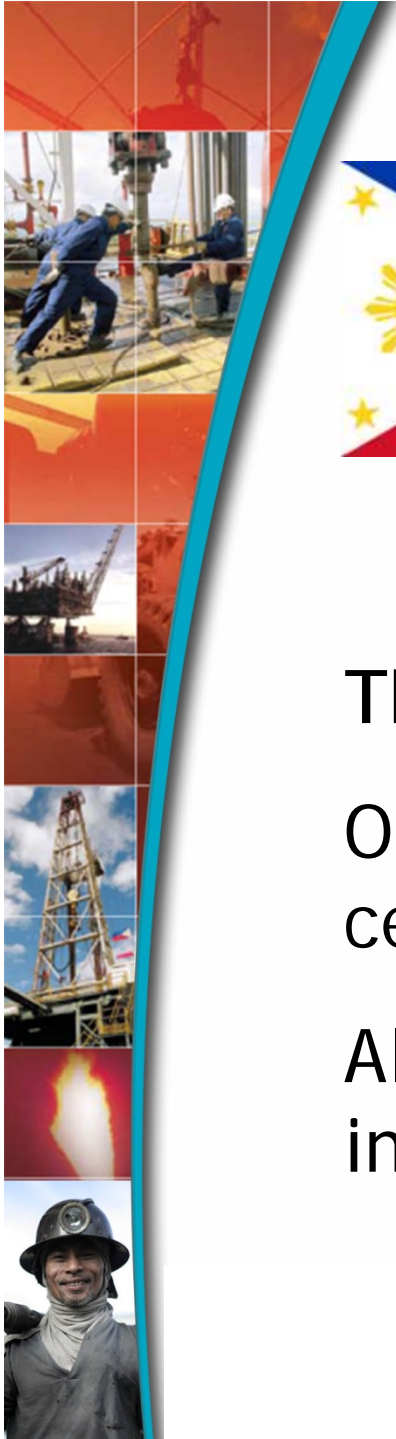
Malampaya is **10 million cu. m. (gas)**
or 60,000 BOPD (oil equivalent)

Environment is now conducive
for exploration because of
high prices



Even marginal wells with
heavy crude, low
production and low
reserves are now
economically viable





Ranked **7th** in
terms of prospectivity

The Philippines has a history of:

Only about 557 wells drilled over a
century

Almost 2/3 of these wells drilled with
inadequate technology

Our Fiscal Policy

- Used to be one of the best in the region
- However, our ASEAN neighbors have improved their fiscal regime
- “Why will investors come if they can find better terms in their own country or in oil producing countries?”
- Saudi, Libya and even Malaysia can afford to be more restrictive in their fiscal system, but not the Philippines.
- To attract investments in petroleum exploration, we must make our fiscal system more attractive than those of other countries.



Our Country's Energy Needs

- 46% plus of our energy (power, fuel and transport) requirement comes from Oil.
- Because of geothermal, coal, hydro, etc, our country is self-sufficient to the extent of 55.5%
- The rest is imported energy mostly in oil.
- The country needs around 325,000 BOPD
- 800 BOPD is produced locally; on top of the 10 million cubic meters per day (60,000 BOPD) from the Malampaya gas field

"We in the exploration sector would need Government's support to change this imbalance."





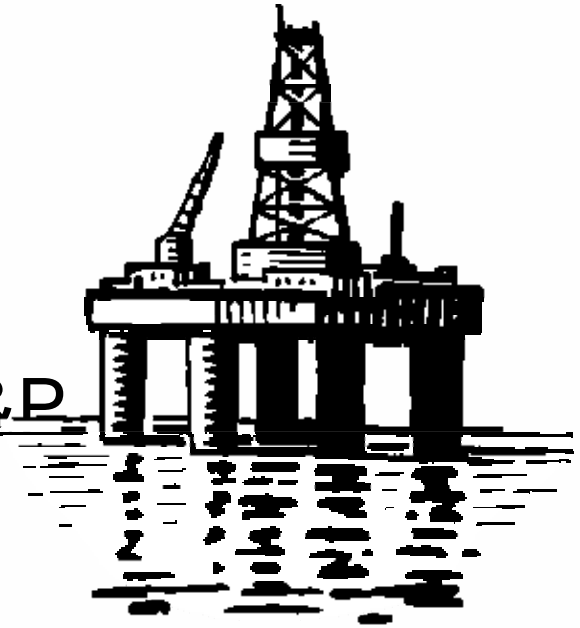
Our Fiscal System:

- Based on PD 87 of 1972
- Service contractor is entitled to deduct from gross income all operating and capital expense not exceeding 70%
- Also entitled to deduct the FPIA of 7.5%
- The net income is then split: 60% for the government and 40% for the service contractor
- The Service Contractor also enjoys exemption from income tax and is entitled to duty free exemption on importation



US\$ 3.2 B

Investments in petroleum E&P
(including Malampaya)



83% came from foreign
investors

How was the Income Split?

	Government	Service Contractors	Unrecovered Costs
SC 14	US\$ 81 M	US\$ 54 M	US\$ 214 M
SC 6	US\$ 42 M	US\$ 18 M	US\$ 28 M
SC 38 Malampaya	US\$ 1.8 B	US\$ 1.2 B	CAPEX fully recovered. OPEX only





Some important notes

- The government has been the main beneficiary in our oil exploration
- The government can still afford to give more to the service contractors in terms of service and fiscal policies
- “Certainly cannot legislate geology”

Oil is the largest industry in the world with monumental risks and rewards. History of oil - History of War and Peace; history of victory and defeat. In World War 1, Churchill (1st Lord, Admiralty) won against the German Navy after he converted the British Fleet from coal to oil. In WWII, Gen. Erwin Rommel, Desert Fox, lost in North Africa for lack of petrol. He did not know that right under him was to be discovered a world class oil deposit.

Oil is Economic Power; it can easily bring prosperity to our people depending on government (consider Nigeria, Venezuela - no trickle down).



Issues, Concerns and Recommendations

1. Removal of ring-fencing in Petroleum Service Contracts

- To encourage service contractors to drill more wells they should be allowed to cost recover expenses incurred in dry wells from successful discoveries in other service contract areas.
- Before, cross cost recovery is allowed for SCs in deepwaters, but such right expired in 1993 (PD 1857)
- Vietnam has already removed ring-fencing



Issues, Concerns and Recommendations

2. Philippine Energy Contracting Round held annually

- Concern: Areas not offered in the PECR cannot be acquired and an interested company must wait for the next bidding round
- PECR Should be held more often
- For blocks not taken during a bid round, the DOE should entertain negotiations from private companies interested to acquire rights to the same.
- With respect to blocks not offered at all during a particular PECR, the DOE should allow private parties to directly negotiate.



Issues, Concerns and Recommendations

3. Malacanang Approval of SCs/FIA of Foreign Companies

- There are very long delays in the approval despite endorsement by the DOE
- Given the busy schedule of the President, and that the DOE has already endorsed the same, the Executive Secretary should have the authority to approve.



Issues, Concerns and Recommendations

4. Slow Pace of Processing of Bidded Areas

- We propose a time or period from the submission of the required documents to the DOE for the latter to approve the Service Contract or Farmin Agreement.
- If the DOE fails to act upon this within a specified period, say 60 days, the contract shall be deemed automatically approved.
- SCs for the 2006 PECR have not yet been awarded



Issues, Concerns and Recommendations

5. Strengthen Evaluation Process of Service Contractors

- To ensure that contractor has unquestionable technical and financial capability
- Some service contractors lack even the most basic equipment (e.g. workstations), competent staff and resources
- Some contractors are there not really to explore but just to Farmout
- There should be proof of availability of exploration funds to ensure that they have the resources to conduct petroleum exploration in their respective SC areas.
- *“Show me the money”*



Issues, Concerns and Recommendations

6. Support from Other Government Agencies and LGUs in Exploration.
 - Service Contractors often encounter problems with the LGUs, DENR, NGOs, Environmentalists, indigenous people's group, etc.
 - There are also difficulties/delays in securing Tax Exemption Certificate for importations.
 - The DOE should, in behalf of the oil companies, secure the necessary endorsements and permits from relevant government agencies and deal with groups and personalities against the project.



Issues, Concerns and Recommendations

7. Declaration of petroleum as a strategic commodity thereby expediting issuances of clearances/permits required under the Indigenous Peoples Resources Act.



Issues, Concerns and Recommendations

8. EO 556 specifically prohibits PNOC-EC to enter into Farmin/Farmout agreements
 - Farmout is a normal practice in the upstream industry
 - Serves to minimize a company's exposure to the risks of the business as well as to draw together capital and technical expertise from other players.
 - Under EO 556, PNOC-EC cannot readily farmout some of its interests in its Service Contract areas without having to go through a lengthy and tedious bidding process.
 - This, ultimately, slows down the entire exploration efforts.



Issues, Concerns and Recommendations

9. Territorial Issues

- According to China, offshore areas like Spratlys and Kalayaan have the potential to contain 2 to 10 billion barrels of oil and 25 to 30 trillion cubic feet of gas.
- The Philippines, Vietnam and China have been separately issuing concessions in disputed areas (i.e. Reed Bank)
- Vietnam issued a concession to a US company, Conoco. China also issued a concession within their claim to another US company, Crestone.
- In 1998, DOE issued a concession to Alcorn, covering Kalayaan but restricted to table survey with injunction against physical presence



Issues, Concerns and Recommendations

9. Territorial Issues

- A Joint Marine Seismic Undertaking (Philippines, China and Vietnam) was entered into.
- When countries share a common economic bonanza, political disputes on territorial limits play second fiddle.
- While we may have the protection in our 1973 and 1986 Constitution on our territorial limits, it is equally important that we establish our baselines under the UNCLOS which will give us added protection. This should be done on or before the deadline on May 2009. In the meantime, the JMSU should be extended to allow more seismic studies to be conducted which will add to a greater understanding of the basin.



Issues, Concerns and Recommendations

10. Flexibility in Fiscal Terms.

- Current sharing terms are rigid
- Other countries with established petroleum production are improving their fiscal regimes
- Appropriate legislation must be enacted to give Government more flexibility in offering Service Contract terms



“If we do all of these, I am sure Moses thru the Secretary will lead us to the promised land of oil. And if you remember the biblical parable of the talents, the Lord will be very angry at us for keeping our talents buried in the ground. He will call us a foolish people. ”

THANK YOU