



IHS ENERGY™

ANYWHERE YOU GO, THE POWER TO KNOW.™

License Round Outline

July 2004

Geneva, Switzerland

IHS Energy Overview

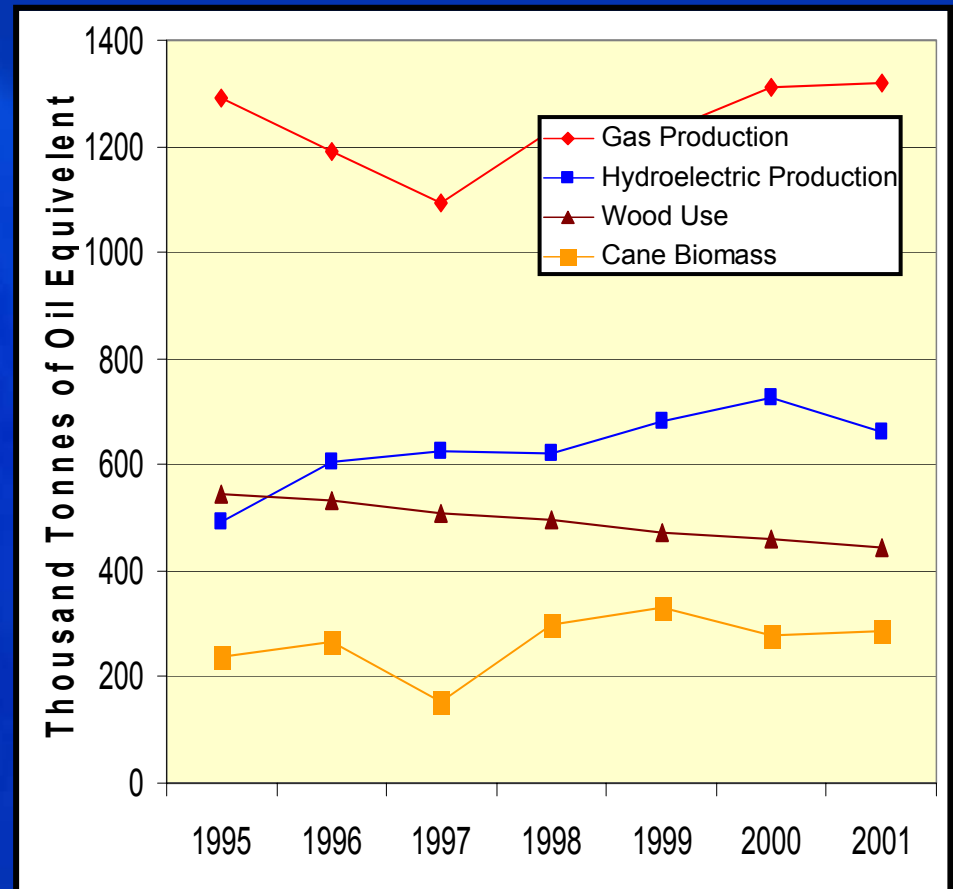
- More than a pure 'data-focused' company
- Deliver consulting solutions that suit the needs of our clients
- Access to all major E&P companies and most independents
- Vast experience on advising and helping National Oil Companies

How would IHS approach a License Round?

Country - Region - World Energy Sector

- Energy balance
- Supply & demand growth
- Natural gas development
- Infrastructure

Non-crude Energy Production



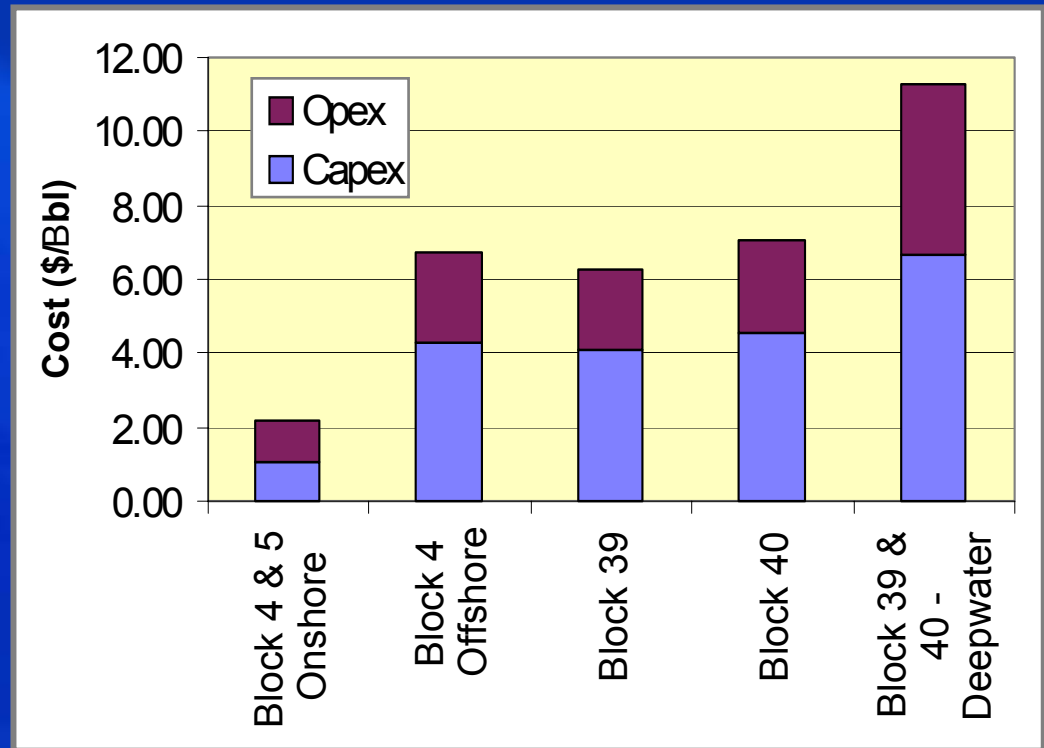
Competitor Country Rounds

- Type and timing of rounds
- Comparison of fiscal terms
- Potential interested companies
- Company strategies

Country	Bidding Round	2002	2003
Argentina	Every other month, all blocks are offered. Provincial Govts offering blocks – Neuquen 14 blocks remaining		
	Special Cooperation Area: Offshore Argentina-Falklands		
Brazil	5th Bidding Round – Marginal Fields		
Chile	ENAP Magallanes Basin Marginal fields JVs		
Colombia	Negotiations 6 block farmout/JV round		
Cuba	Onshore & shallow marine blocks, ongoing		
Algeria	6 Dev, Grassi Touil Gas Project, Phase 2	no date announced	
Angola	3 blocks Bidding Round, ultra deep	no date announced	

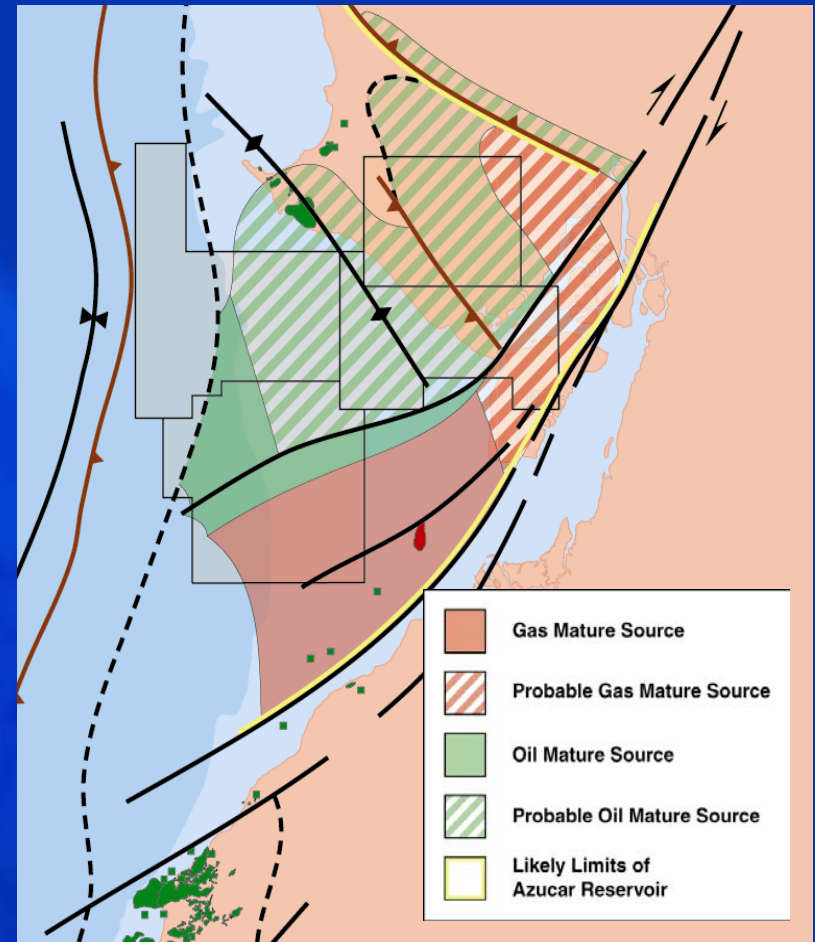
Block Economics

- Complete life-cycle economics
- Capex & Opex
- Independent evaluation based on IHS Energy data and costing & economics software (QUESTOR & A\$SET)

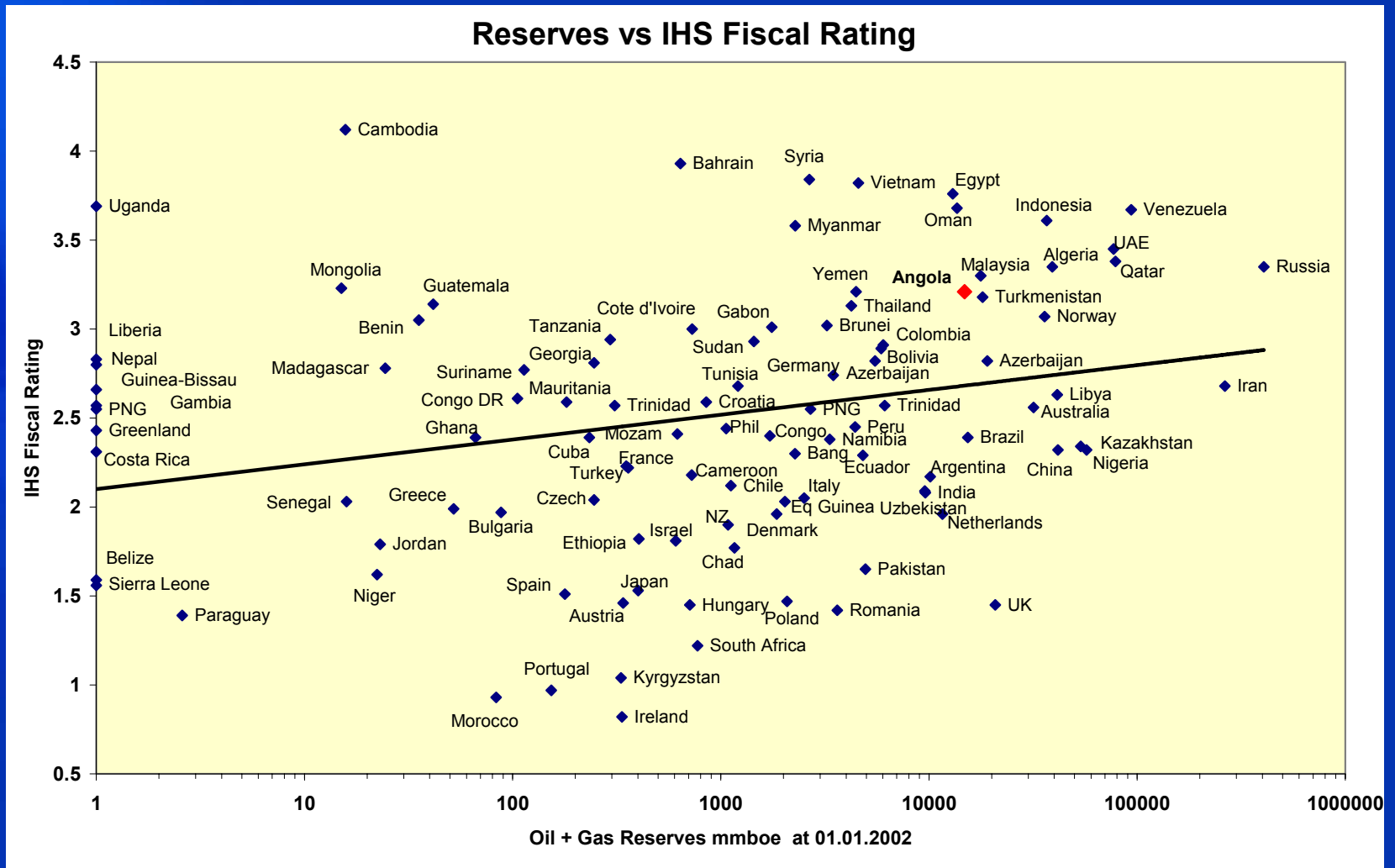


Block Hydrocarbon Potential

- Independent assessment based on IHS Energy data and research



Reserves vs. Fiscal Ranking



IHS Energy Lessons Learned

Successes and Failures Of Licensing Policies

1. Get the Fiscal Terms Right

- The most common policy failure, which leads to failed licence rounds, is to set unrealistic Fiscal Terms.
- This is due to:
 - Lack of preparation
 - Lack of geotechnical analysis and risk assessment
 - Failure to perform economic analysis
 - Failure to consider competitive position with respect to other countries

Examples of Failed Rounds

- These rounds failed due to unrealistic fiscal terms, which were subsequently revised and improved:
 - Namibia 99 0 bids
 - Cameroon 90 1 bid
 - Mozambique 00 0 bids
 - South Africa 94 0 bids
 - India 81 0 bids
 - Brunei 01a withdrawn and relaunched

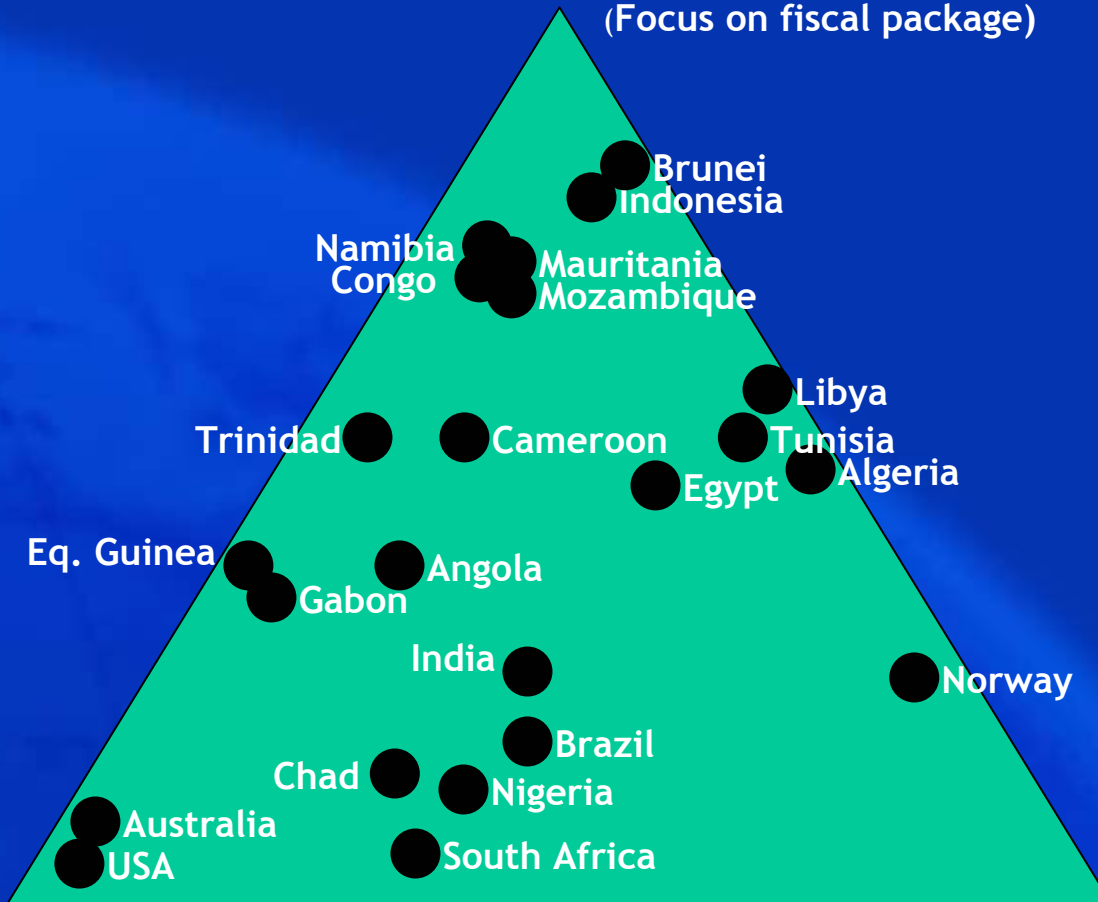
2. Identify Government Objectives

- License rounds can be used to implement government policy with respect to:
 - Raising Revenue (Fiscal Terms)
 - Encouraging Investment (Work Programme)
 - Industrial Development (Local Content)
- Objectives must be prioritized and aligned with bid ranking and award criteria
- Bidders need to know government priorities

Examples of Different Objectives

Maximize Government Take

(Focus on fiscal package)



Maximize
Investment

(Focus on Work Program
or encouraging investment)

Maximize
Local Content

(Focus on local content)

3. Make the Award Process Efficient

- Many countries waste too much time awarding and negotiating contracts resulting in delayed investment and revenues
- Companies unsure of the award procedure, or their fair chances of winning may, not offer bids due to the selection process

Examples of Inefficient Processes

- Too many negotiable fiscal terms
 - The more negotiable items there are in a contract, the longer it takes to negotiate
- Lack of transparency in award process
 - Companies are more willing to bid when they understand how the bids will be judged, and when they have confidence in the selection process

Examples of Inefficient Processes

- Algeria used to take 2-3 years to negotiate a PSC contract. Now, using bids against a fixed model contract, and a published set of award criteria, winners are announced immediately and contracts formalized in 2 weeks.
- India, Nigeria and Norway have sometimes given bias towards local companies, resulting in companies becoming reluctant to bid.

4. Successful Participation

- Successful participation in a developing E&P sector involves:
 - State or Private Company Equity Participation
 - Employment, Training and Technology Transfer
 - Development of support services sector
 - Local procurement of goods and services
- National Circumstances and Policy affect the success rate

State Participation

- State Participation can take different forms
 - Joint Venture between NOC and IOC (ex, Brunei, Egypt, Nigeria, Libya, Algeria)
 - State Operating Company (ex, Brazil, Libya, Norway, Algeria)
 - NOC with equity interest (Gabon, Cameroon, Congo)
- Of our sample countries, those which only have a financial interest have not developed their E&P sector as well as those which have an operating interest

Conclusion

- Adequate terms, promotional and marketing policy should be designed to call investors attention and be competitive.
- IHS Energy Consulting has the experience, technical expertise and tools to help meet the strategic interests of its client.