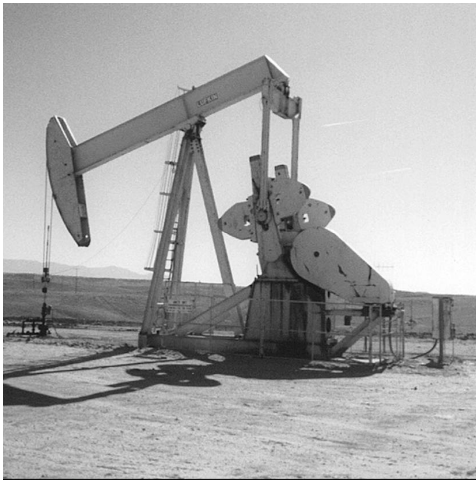

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How Tensions in Global Energy Supplies are Leading to a Re-alignment of Upstream Oil & Gas Portfolios

PORTFOLIO-SHIFT

Global tensions have E&P asset managers reconsidering their asset balance—in terms of location and type.

This supplement is a summary of the World Oil & Gas Forum conducted by Waterous & Co. for its clients March 11-12 in Houston, which featured speakers from 16 countries. Some participants have since been interviewed as media personnel were prohibited from attending this private event.

With the specter of military hostilities and continuing unrest in the Middle East and elsewhere, the upstream global A&D market has become increasingly fragmented by regional orientation, says Jeffrey Waterous, Chairman, Waterous & Co.

Jeffrey Waterous, Chairman, Waterous & Co.

"We are witnessing a very strong effort on the part of many international oil and gas companies to rebalance their portfolios, trying to avoid an over-weighting in any one region, except perhaps in North America," he says.

"It is a phenomenon driven sometimes as much by perception of uncertain politics as by economic fundamentals. Before these unsettling political conditions set in, North American buyers were the most active players overseas. Now, they are generally conspicuous by their absence. Energy security is becoming increasingly a factor in the business of buying or selling overseas reserves."

The withdrawal of so many North American buyers is creating a vacuum, filled very quickly by Asian and other non-traditional buyers. (i.e. Russian companies). The Asian players are concerned about security of supply, and in many cases are willing to acquire a position in assets operated by other companies; sometimes these "equity interests" could be relatively small. Many Russian companies want to have international activities outside the former Soviet Union.

"In fact, we are so focused on this more active buyer community in Asia, that we have decided to open a Singapore office to help our coverage of Asian companies," Waterous says.

Waterous & Co., which is a private firm owned by its employees, was started in Calgary, Canada, in May 1987. The firm globalized its A&D practice about five years ago, and now generates more than half of its revenue outside of Canada.

"We are the largest oil and gas A&D energy firm by far, with a global reach that compares to no one," says Waterous. "We are facilitating cross-border transactions all of the time that would otherwise not occur, because of our international infrastructure and resources, and our focus and dedication to this part of the energy industry."

The World Oil & Gas Forum is a showcase of Waterous' global reach and networks, with the line-up of speakers a demonstration of some of its relationships with people, which Waterous says are "truly unparalleled in their international positions and backgrounds."

Tensions in global energy supplies, leading to a realignment of upstream portfolios, was the appropriate theme for the forum, March 11-12, just before the beginning of the U.S.-led coalition war against Iraq.

The forum was held amid heightened tensions between the U.S. and Russia, Germany and France, over how best to ensure the disarmament of Iraq and topple the Saddam Hussein regime. Concerns about terrorism, security, and energy supply—high since the Sept. 11 attack on the U.S.—were extreme amid war talk and the persisting volatility in the Middle East.

A backdrop to the conference was the impasse between the U.S. and North Korea over North Korea's reactivation of its nuclear weapons program.

Further adding to the tensions of the day were the strained relationship between the U.S. and Iran, which possibly worsened with the U.S.-led coalition against Iraq and the perception that Iran may be next. The U.S.-imposed sanctions against Iran were extended in March due to U.S. allegations that Iran supports international terrorism, is trying to undermine the Middle East peace process, and attempts to acquire weapons of mass destruction.

Perspective on Balancing Views and Positions

The forum was officiated by Congressman Curt Weldon, Senior Member of the House Armed Services Committee, Chairman of the Military Procurement Sub-Committee, Member of the House Select Committee on U.S. National Security, who was introduced by Stephanie Jason, President of the International Forum Institute.

"The U.S. can be short-sighted in dealings with other countries, and it is important that Americans come to appreciate other cultures to improve relations. Energy is a key issue that can help tear down barriers with other countries," said Weldon.

Despite Iraqi-related tensions, the U.S. and Russia need to foster their cooperative efforts with energy serving as the centerpiece for the emerging relationship, said Weldon, R-Pennsylvania. His presentation was titled "Energy Security and the Threat of Global Terrorism."

Development of U.S.-Russian cooperation in energy should become a priority for international policy because of its capacity to address the risks of uncertain supplies and energy dependence, he said.

Weldon, whose efforts to improve U.S.-Russian relationships have been a lynchpin of his congressional career, urged a high-level presidential task force with representation from both the Russian and U.S. presidential administrations to be established immediately as part of the mutual effort to address the economic and energy components of the anti-terrorism campaign.

It is in the interest of the U.S. and Russia to bridge decades of political and business mistrust. The two former rivals have complementary needs, centered on Russia's huge oil and natural gas reserves, said Weldon, a congressman since 1987.

Russia needs massive investments from U.S.-based companies, and desires better access to the world's largest oil consumer. Meanwhile, the U.S. seeks to diversify its source of energy, particularly from areas other than the turbulent Middle East, or from members of the OPEC cartel.

Congressman Curt Weldon, Senior Member of the House Armed Services Committee, Chairman of the Military Procurement Sub-Committee, Member of the House Select Committee on U.S. National Security, officially opens the Forum.

Congressman Curt Weldon, left; Stephanie Jason, President, International Forum Institute; and Seyed Alavi, Director, Institute for International Energy Studies.

The drive to increase Russian oil imports to the U.S. has gained new urgency with growing turmoil in the Middle East. Currently, exports from Russia to the U.S. are sparse and a money-losing proposition, because the Russians don't have the pipelines and port facilities to efficiently move large amounts of oil to the U.S.

Russia, as the world's second largest producer and a major supplier of gas to Western Europe, represents an important stabilizing force for global energy security. Russia, which gets about half of its revenue from oil and gas, is eager to demonstrate to the U.S. and the remainder of importing nations that it can again become a dependable energy supplier. For that to happen, Russia needs massive investment. Russia's need for capital is about $8 billion a year, just to maintain current production levels.

From the U.S. perspective, the desire to make major long-term investments in Russia has never been stronger, but it has been inhibited by the lack of a legal and commercial frame to make the investments economical, Weldon said. Russia must offer long-term deals, locking in terms and taxes, or risk losing billions of dollars it needs to develop its own and gas reserves.

Russia may be warming to Western dollars, but there continues to be a resistance to permitting Western companies unfettered access to Russian reserves. Western companies want production sharing agreements, under which they are guaranteed larger profits and a certain share of a field's production. Russians are reluctant to grant such deals, and favor a joint-venture arrangement where any outside company would be expected to have to share profits with a Russian company, creating a more complicated relationship.

Weldon, founder of the Duma-Congress Study Group (with a focus on energy matters), said work of the intergovernmental group should be intensified to encourage approval in Russia to promote investment and taxation laws

that provide a positive environment for investment, such as full and appropriate finalization of the PSA legislation.

Marathon Oil's International Thrust

The biggest challenge for the energy industry is to gain access to profitable new resources to establish long-term, secure energy supplies, said Clarence P. Cazalot Jr., President and Chief Executive Officer of Marathon Oil Corp.

Successful finding and replacement of reserves is becoming increasingly more difficult and costly as legacy assets are in decline. For companies to achieve sustainable growth new levels of exploration and innovation will be required, and Marathon is practicing what it preaches, he said.

Clarence P. Cazalot Jr., President and CEO, Marathon Oil Corp., the luncheon keynote speaker, introduced by Jeffrey Waterous.

Marathon began a new era in January 2002 when USX spun off U.S. Steel into a stand-alone company and USX changed its name to Marathon Oil. That has enabled Marathon to implement a business model taking it beyond a conventional integrated oil business. Marathon's strategy reflects the world's increased focus on and demand for natural gas, a commodity with a volatile price uncertainty.

In February 2002, Marathon introduced a new component of its business model that it calls its "integrated gas strategy." This strategy offers an entirely different suite of opportunities for Marathon by linking the world's vast quantities of stranded gas with the key market centers where this premium energy source is needed.

Marathon believes this approach provides a third income stream disconnected from the volatility of traditional upstream commodity prices and downstream margins. "Integrated gas adds more stability and balance to our portfolio and provides a broader base for sustainable growth."

Like its integrated oil counterpart, integrated gas transforms gas resources into a range of downstream products including liquefied natural gas (LNG), ultra-clean fuels, special lubricants produced by gas-to-liquids technologies, and petrochemical feed stocks such as methanol.

Marathon replaced 262% of its worldwide production during 2002. The reserves were added at a competitive cost of $4.61 per barrel of oil equivalent (BOE) through purchases, discoveries, extensions, revisions and improved recovery. The company's total reserves increased by 237 million BOE at year-end 2002 to 1.28 billion BOE.

"Marathon's reserve-replacement performance was one of the company's key achievements during 2002 and reflects our commitment to create a foundation that will fuel continued value growth," Cazalot said.

For 2003, Marathon has approved a capital, investment and exploration expenditure budget of almost $2 billion, or about 8% more than actual expenditures during 2002, in which it produced oil or gas from nine countries. The budget includes exploration and production spending of $1.1 billion.

"This budget reflects Marathon's continued emphasis on expanding the development of our international upstream portfolio with assets that enable us to realize long-term, value-added growth." Its international business accounts for about 65% of the company's total upstream budget, compared with about 53% the previous year.

Cazalot's comments came on the heels of a report from the American Gas Association that revealed that in 2002, for the first time in four years, U.S. gas reserves did not increase, despite intense drilling. The AGA says total domestic reserves actually finished 2002 slightly below where they ended the previous year, at about 183.5 trillion cubic feet (Tcf).

It also reports that about 77% of the gas produced in 2002 was used to replace reserves, but market demand, caused by increased usage for power generation, was still strong. Despite an overall economic slump, gas demand was still so strong that net reserves declined.

Venezuela: Shaken, not Stirred

From a zero export level now, Venezuela expects to become a major international exporter of natural gas by 2008, says Luis Vierma, Venezuela's Vice Minister, Ministry of Energy & Mining, who was introduced by Maria Pineda, Managing Partner, Energenz, and Special Advisor to Waterous & Co. Most of that gas will be converted to LNG for international transport, with the U.S. East Coast being a primary destination.

Venezuela's untapped gas reserve base, estimated at 147 Tcf excluding unexplored offshore sites, provides enormous opportunities for international companies forming joint ventures with state-owned Petroleos de Venezuela (PDVSA), he said. Traditionally, a major oil exporter, Venezuela has produced little gas to date. That gas has been used for internal consumption, reinserted into the reservoirs or flared.

Vierma said future offshore developments will provide the impetus for future gas exports. Proven offshore reserves total more than 17 Tcf, with expectations of much higher

levels with more exploration. Just the first phases of exploration offshore exploration activity will require about a $7-billion investment, he said.

The Deltana platform project, offshore Venezuela, is sparking most of the international enthusiasm. Vierma said most experts believe proven reserves from that area will soar from 7 Tcf to about 40 Tcf with more exploration. Various blocks are now being awarded to international companies in association with PDVSA.

Vierma, who holds a master's degree in petroleum geochemistry, describes himself as a technical person, and downplays the political turmoil in Venezuela and potential risks for investors. "Regardless of the political regime, the gas and oil will be there and is important to the country's economy."

International enthusiasm and investment in Venezuela is on the rise, he said. Repsol, for example, is transferring the investments it had been making in developments in Argentina to Venezuela, he said.

Venezuela's oil industry has recovered from the 60-day strike that affected the entire country and led to a temporary 90% drop in oil production levels. Oil production of about 3.45 millions barrels per day, slightly exceeded November, pre-strike levels, he said.

Venezuela should adhere to its constitution concerning the referendum, and not be unduly influenced by international pressure, Vierma said.

It was under Chavez's pro-nationalist administration that Venezuelan law prohibited an international company from holding more than 49% working interests in new oil developments. Nevertheless, Vierma said great opportunities exist for international companies that form joint ventures with PDVSA.

Vierma is adamant in his support of Venezuela's active participation in OPEC. Without OPEC management of supply from participating exporting countries, there would be even greater supply and price fluctuations, which in the long run would not benefit the producers or the buyers. OPEC's efforts to manage production so that oil prices remain $22-$28 per barrel are in the interests of all, including the U.S., he said.

Keynote Speaker Luis Vierma, Vice Minister, Ministry of Energy & Mining, Venezuela, was introduced by Maria Pineda, Managing Partner, Energenz, and Special Advisor to Waterous & Co.

"Most of the companies that visit Venezuela are the huge companies. This conference provided an opportunity to meet with representatives of smaller companies that I had not previously met to explain to them the many opportunities that exist for smaller companies in my country."
—Luis Vierma, Vice Minister, Ministry of Energy & Mining, Venezuela

Mosbacher's Concern about U.S. Gas Supplies

Natural gas supply shortages in the U.S. will be long-lived as the depletion rates of domestic assets accelerate and gas demand continues to rise, says Robert Mosbacher, Chairman of Mosbacher Energy Co. and former U.S. Secretary of Commerce, who was the keynote dinner speaker introduced by Jeffrey Waterous.

Noting that gas productivity this year has declined at a rate of about 28%, Mosbacher expects the shortage will be exacerbated before it improves. Shortages are intensifying, even during an economic slump. Once the economy recovers, the supply and demand gap will widen.

There is no quick fix on the horizon, Mosbacher told attendees. Even with high commodity prices the number of active drilling rigs is less than 1,000 and was as low as 850 just six months ago, as attractive, affordable prospects—particularly onshore—continue to dwindle, as does external financing, particularly for the independent producer. Mosbacher said the small, private independent producer may be becoming an "endangered species."

Oil in the U.S. market, unlike gas, is a fungible commodity influenced by international supply fluctuations. Until international LNG becomes a more significant source of gas supply, the U.S. will be largely a U.S.-Canadian market because of the transportation component of gas, he said.

The U.S. gas market is nearly exclusively supplied by domestic and Canadian production. Mexico is expected to import more U.S. gas at least for the next five years before that trend might eventually reverse with Mexico becoming a net exporter again.

Mosbacher said he does not expect producers to have access to reserves offshore California and Florida any time soon, and that access to Alaska's Arctic National Wildlife Refuge (ANWR) is also problematic in the near term.

In the long term, some of those areas will likely become accessible, but the timetable is more driven by politics than economic certainty. Canadian gas accounts for about 15% of U.S. supply, but that percentage is likely to decline until the McKenzie Delta and/or Arctic Canadian gas can make

its way to market via pipelines still to be constructed.

Despite all the hype about LNG being imported to the U.S. from international suppliers, the reality is that it will take another decade before those proposed projects are built and make significant inroads in the U.S. market, he said.

A few years ago it was a trend among U.S.-based exploration and production companies, even the small producers, to have international portfolios. That trend is reversing itself as many producers have learned the hard lessons of international political risk and the time value of money tied up in international projects, often with long lead times before yielding any cash flow. With turmoil in Africa, the Middle East, and elsewhere, more midsize and small U.S. producers, despite the decline in attractive domestic opportunities, are still opting to focus their operations closer to home. Mosbacher said his company illustrates that trend, having divested portfolios in Venezuela, Colombia, Indonesia and the U.K.

In the past, as former chairman of the National Petroleum Council, Mosbacher has lectured frequently about the need for a national energy policy and energy independence. Now, he concedes that energy independence for the U.S. is probably unattainable, so the best it can do is to diversify its sources of supply. Active as finance chairman or co-chairman in every Republican presidential campaign since Gerald Ford, Mosbacher says that political risk is a factor that every astute businessperson must consider.

He expects oil prices will stabilize at an average of about $25 per barrel, while natural gas prices in the U.S. will stabilize at $4 to $6 per thousand cubic feet, and that the days of $2 natural gas are over. He cautions, however, that business obituaries are filled by those who guessed wrong and believed too strongly in their own estimates.

Jeffrey Waterous, Chairman, Waterous & Co., left, and keynote speaker and former U.S. Secretary of Commerce Robert Mosbacher, Chairman, Mosbacher Energy Co.

Asia Panel: Linmin Gu, President, Sinochem USA Inc., Houston; Hideki Hayakawa, General Manager, Japan National Oil Co., Houston; Douglas R. De Filippi, Managing Director, Waterous & Co., Houston; Hilmi Panigoro, CEO, PT Medco Energi Corp. Tbk., Jakarta.

"More focused and personalized than other conferences. The program increased everyone's understanding and provided an excellent networking opportunity."
—Hilmi Panigoro, CEO, PT Medco Energi Corp., Tbk, Jakarta

Asia's Different Complexions and Consumption

Indonesia has no choice but to try everything to attract foreign investment, said Hilmi Panigoro, Chief Executive Officer, PT Medco Energi Corp. Tbk, Jakarta. Panigoro said declining oil production could be reversed with investment and that removal of Pertamina's monopolistic role will allow the government to make available new blocks for the industry to bid and present opportunities for foreign E&P companies.

Panigoro was joined on the Asian panel by Hideki Hayakawa, General Manager, Japan National Oil Co.; Linmin Gu, President, Sinochem USA Inc.; and Douglas De Filippi, Managing Director, Waterous & Co., Houston/Singapore.

With Asian consumption as a whole continuing to outstrip existing and projected sources of all forms of hydrocarbon supply, focus is on the well-capitalized, larger NOCs in Asia to expand, panelists said. Security, diversity of supply and direct participation in hydrocarbon projects are leading China, Japan, Korea and Malaysia to seek supply from all quarters of the world. For many smaller domestic players, strategies of opportunistic in-country acquisitions and nimble exploitation are prominent and made possible through the departures or dilutions of interests of many North American and European portfolios.

China's remarkable economic growth (soaring from US$3.14 trillion in 1993 to US$10.24 trillion in 2002) has caused growth of its oil consumption to far outpace production. Consumption has increased nearly 6%, while production has increased about 2%. China, which had virtually no oil imports in 1994, is expected to import 60% of its oil by 2010.

Not surprisingly, Chinese companies have been the most active buyers of oil reserves, with a focus on Indonesia illustrated by CNOOC's pur-

chase of Indonesia Repsol and PetroChina buying Devon Indonesia. Chinese companies also have equity ambitions in the Middle East, North Africa and South America.

Japan is attempting to reduce its dependence on nuclear generation and Middle East-produced oil, leading to a shift to gas as an increasing source of its energy supply, panelists said. Gas currently accounts for just 12% of Japan's consumption, but its short-term goal is to increase that to 20%. Japan is the world's largest LNG importer, as LNG provides nearly 100% of Japan's gas supply. There is no crossborder pipeline in Japan, but Russia is increasingly being eyed as a possible future supplier because of its proximity to Japan and relative political stability.

David J. Gair, Vice President, M&A, BP Plc, London.

"It was useful to hear directly from representatives of a number of companies and countries, comparing what they said to what I thought was going on in their organizations based on press comments. It was a real coup for the forum to have the Vice Minister of Energy for Venezuela as one of its speakers. Also, I appreciated meeting Paul Rodzianko of Access Industries, a major shareholder in TNK with whom BP recently announced a major transaction." —David Gair, Vice President, Mergers & Acquisitions, BP Plc, London

Shuffle of European Legacy Assets

A number of major producers are divesting some of their more mature "legacy" assets, giving rise to opportunities for new entrants to move into these still-prolific areas. While the North Sea will remain a core area for companies such as BP and Total, these majors are also developing new profit centers in a number of countries.

Eastern Europe, particularly Russia and the former Soviet Union states have become increasingly attractive with an improving economic environment enabling large investments.

These were among points made by panelists David Gair, Vice President, M&A, BP Plc, London, and Victor Obadiah, President and CEO, TotalFinaElf E&P New Ventures, Houston, on the European panel, which was moderated by Simon Ashby-Rudd, Managing Director, Waterous & Co., London.

The majors have learned not to place too large a percentage of their overall portfolios in any one country, or region, as European producers are increasingly less dependent on home-based assets. Europe, for example, accounts for just 36% of the production of Total, Obadiah said. Still, for that company, Europe accounts for the highest percentage of its total production, although Africa, prompted by West African activity, is closing in with 28%, compared with 18% in the Middle East.

South America, Asia and North America are all in the single digits. Total has to be highly selective as its technical committee assesses about 250 new opportunities annually, with the company making 15 to 20 major investment decisions, Obadiah said.

Although remaining active in the North Sea, BP's divestiture of its Forties Field assets to Apache is illustrative of BP's view that greater opportunities exist elsewhere and that it needs to balance its resources to support both the development of new profit centers and the securing of the long-term viability of its current core areas, Gair said.

In addition to Russia, where BP has just announced the formation of a new venture with TNK, BP is focused on developing five new profit centers, in Trinidad, Angola, Azerbaijan, Indonesia and the deepwater Gulf of Mexico. As BP implements its strategic drive it has recently announced disposals of assets in the U.S. (the Gulf of Mexico and the Permian Basin), Venezuela, Thailand, Malaysia and the U.K.

Russian and Western Companies Tango

M&A activity centered on Russian reserves and companies seems to signal the coming of age for Russian capitalism. Russian companies are looking to become global, and global companies are increasingly looking at Russia.

Consider these three examples: Russia's largest oil producer, Yukos, is acquiring Sibneft, the No. 5 Russian company. Combined, the newly formed company, YukosSibneft, will be the world's fourth largest private producer of oil.

Meanwhile, BP and the Alfa Group and Access-Renova (AAR) have formed a partnership to combine their interests in Russia to create the country's third biggest oil and gas business. The new company will incorporate TNK and Sidanco. Also, Marathon, through its acquisition of Khanty Mansiysk Oil Corp., a U.S.-based company with operations in western Siberia, is making its first foray into Russia.

Worldwide interest is Russia is intensifying as that country emerges as the world's premier non-OPEC producer. Russia currently produces about one- third of the world's natural gas and holds about 25% of the globe's gas reserves.

Russian oil exports have steadily risen since 1993, when they bottomed at 3.2 million barrels per day. They are projected to climb to more than 5 million barrels per day by year's end. In comparison, Saudi Arabia exports about 7 million barrels of oil per day.

Russia's oil exports mostly go to nearby Europe, with only a token amount reaching the U.S. Shipping costs create a lower netback for Russian crude destined for the U.S., than for Europe. Russia is considering building a deepwater port that would allow larger tankers to ship more oil affordably to the U.S., but that project would cost about $2.5 billion and need U.S. expertise and investment.

Vladimir Matias, Head of Project Finance and Private Equity, International Moscow Bank (HVB Group), says the opportunity for international investment in Russia's petroleum industry is unprecedented. While conceding that ongoing debates over production sharing agreements (PSAs) have been an obstacle, Matias believes that through joint ventures and the existing tax structure with corporate income rates at 24%, Russia still offers attractive opportunities, even without PSAs.

Russia and the former Soviet states present vast underpriced, long-term assets, currently trading at $1 to $2 per BOE on a total reserves basis. That results in an increasingly active consolidation and restructuring market with attractive investment opportunities particularly from distressed midsize and small producers, Matias said. HVB Group, which helped arrange the SeverTek joint venture between Lukoil and Fortum and recently led a Gazprom financing, has formed an alliance with Waterous & Co. for A&D services.

Matias notes that Russian companies have traditionally dealt with Iraq and that those relationships and knowledge of the reserves would be of benefit to any potential partner, from Western countries or elsewhere. Russia-based companies are also increasingly interested in E&P activity in the Middle East and in North Africa, he said.

The U.S. will have to compete with other regions as Russia's share of European energy supply is expected to reach about 70% by 2020 and Japan is being increasingly eyed as a possible destination. But Matias said that while Russia and OPEC have separate agendas, and sometimes strained relations, Russia shares OPEC's objective of managed production resulting in oil prices ranging from $22 to $28 per barrel, with about $25 being the optimum price.

Russia Panel: Dr. Jan-Hendrik Rover, Head of Equity Funds, Project and Asset Based Financing, HVB Group, Munich; Vladimir Matias, Head of Project Finance & Private Equity, International Moscow Bank (HVB Group), Moscow; Paul Rodzianko, Senior Vice President, Access Industries Inc., New York.

"The forum gave an excellent global view. Absolutely great in many aspects. The mix of representatives provided a unique opportunity to communicate in a very open way. The high caliber of representatives helped with the understanding of rationale of some other companies, and even entire regions."
—Vladimir Matias,
Head of Project Finance & Private Equity, International Moscow Bank (HVB Group)

Matias also gave a presentation on behalf of Nikolai Bogachev, President, Tambeineftegaz, Moscow. Other panel participants were Paul Rodzianko, Senior Vice President, Access Industries Inc., New York, a major shareholder of TNK; and Jan-Hendrik Rover, Head of Equity Funds, Project and Asset-Based Financing, HVB Group, Munich.

Middle East Wildcards

Post-war Iraq is the latest wildcard in the petroleum-rich Middle East. Iraq's reserves, because of economic sanctions, are under-explored and under-developed, with insufficient investments. The world is waiting to see what government and economy emerges.

Despite under-investment, Iraq still holds the second-largest proven oil reserves in the Middle East, behind only Saudi Arabia. Dunia Chalabi, responsible for the Office of the Middle East & Africa, International Energy Agency, told attendees that oil production in Iraq peaked in 1979 at 3.5 million barrels per day, and was down to just 2.1 million barrels per day in 2002.

The production target for Iraq is 6 million barrels per day within six to eight years, she said. An investment of about $38 billion is needed for that target to be met. The source of such huge investment will likely be strongly influenced by the government that emerges.

Even without increased production from Iraq, the Middle East is the globe's petroleum kingpin and is likely to stay that way for the foreseeable future. In fact, Chalabi says Middle East OPEC producers will capture most of the world's increase in oil demand after 2010.

Worldwide, she says, natural gas demand is projected to grow the fastest in absolute terms and nonhydro renewables fastest in percentage terms, but oil is projected to remain the dominant fuel at least until 2030, with the Middle East providing much of the world's supply growth.

Middle Eastern OPEC members hold 63% of the world's oil and gas liquids reserves, with Saudi Arabia, Iraq, Iran, the UAE and Kuwait the largest holders among reserves.

Iran is interested in expanding its participation along the integrated value chain, with particular interest in attracting investments for expanding its petrochemical industry. Iran not only wants to increase its volume of oil and gas exports via new pipelines and LNG projects, it also wants to be a bigger piece of the petrochemical industry. Its 800 Tcf of gas reserves are largely untapped.

Seyed Alavi, Director, Institute for International Energy Studies, Iran, and a former longtime senior officeholder for the National Iranian Oil Co., said Iran plans to increase its petrochemical production from levels of about 1 million tons, seven or eight years ago, to 20 million tons by 2005, and eventually by more than 30 million tons. That will require about $10 billion of investment.

The ILSA sanctions prohibit U.S. companies and their foreign subsidiaries from conducting business with Iran, a prohibition that Alavi says is in the interest of Iran and the U.S. to lift. Alavi, who had not been in the U.S. for over 24 years, and whose presence was facilitated by Stephanie Jason, President of the International Forum Institute, made a special contribution to the forum.

Chalabi and Alavi were joined on the Middle East panel by Omar Shawaf, Vice Chairman, Saudi Consulting Services, Riyadh, the largest civil engineering firm in Saudi Arabia, and active in infrastructure projects including gas to power facilities, and by Jeffrey Waterous, Chairman, Waterous & Co.

Middle East Panel: Seyed Alavi, Director, Institute for International Energy Studies, Tehra; Dunia Chalabi, Office of the Non-Member Countries, Middle East & Africa, International Energy Agency, Paris; and Omar Shawaf, Vice Chairman, Saudi Consulting Services, Riyadh.

"The conference was extremely well-organized and structured and featured a diverse mix of all of the industry."
—Dunia Chalabi,
Office of Non-Member Countries,
Middle East & Africa,
International Energy Agency

Africa Panel: Tom Schull, General Manager, Global Exploration, ChevronTexaco, San Francisco; Willem De Meyer, General Manager, E&P, PetroSA, Cape Town; and Charles Tchen, Special Advisor to the Director General, Ministry of Energy, Gabon.

Africa, a Diamond in the Rough

Africa is a multifaceted diamond, with a variety of untapped opportunities, but the lack of energy infrastructure and political stability present huge challenges, panelists agreed.

Willem De Meyer, General Manager, E&P, Petro SA, Cape Town, the state oil company of South Africa, told attendees that prolific oil provinces in Angola, Nigeria, and Equatorial Guinea, and deepwater plays offshore Angola and Nigeria, along with stranded gas in Angola, Nigeria and East Africa, offer a varied source of opportunities.

Developers must realize, however, that for the host governments, the oil and gas resources are viewed as a resource that must be turned into local economic wealth, while exercising environmental preservation and encouraging social development.

De Meyer was joined on the Africa panel by Charles Tchen, Special Advisor to the Director General, Ministry of Energy, Gabon; Tom Schull, General Manager, Global Exploration, ChevronTexaco; and Jeffrey Waterous, Chairman, Waterous & Co.

The U.S. is increasingly focused on West Africa—and not just Nigeria and Angola—as it scours the world for new, non-Middle Eastern oil supplies, the panelists said. The region is particularly interesting to the U.S. because, with the exception of Nigeria, none of the West African producers is a member of OPEC.

The region's political instability was underscored by demonstrations in Nigeria after the reelection of its president, amid widespread accusations of voter fraud that prompted mass demonstrations. Though it is one of the world's largest oil exporters, Nigeria remains desperately poor and has a history of coups and unrest.

Latin America: Distinctive Montages

Latin America, from an oil and gas perspective, can be described as consisting of various neighbor-

ing regions with distinct characteristics in which the players seek differing objectives. Such is true when comparing the Southern Cone region, with Brazil, Venezuela and Andean countries, said Latin America panel moderator Arturo Vilas, Managing Director, Waterous & Co., Buenos Aires.

The Southern Cone, broadly defined as Argentina, Bolivia, Chile and Southern Brazil, was characterized by Alejandro Bulgheroni, chairman of Pan American Energy, as a region with significant gas reserves of about 115 Tcf, representing more than 60 years at current demand. That region's combined GDP of US$886 billion places it at a level surpassing Canada, and slightly lower than France.

The combined population of the Southern Cone, about 244 million, exceeds Canada, France and the U.K. combined. But, the region's per-capita energy consumption is less than 15% of Canada's.

Gas accounts for about 50% of Argentina's consumption, compared with just 6% in Brazil. Those figures, Bulgheroni suggested, combined with an excellent gas transportation infrastructure, position the Southern Cone for steady growth of gas consumption and overall energy intensity of its economies.

Renato Bertani, president of Petrobras America, discussed the expected developments for the Brazilian oil industry following the recent inauguration of a Labor Party government. Under the new administration, Petrobras, a publicly traded company where majority control is held by the Brazilian government, will try to balance economic development with increased concern for social issues.

Petrobras, however, is expected to continue the implementation of its aggressive growth targets, projecting production of 2.6 million barrels per day by 2005, up from the current 1.8 million. The growth is to be achieved through partnerships with international companies, consolidation of its international expansion and selective growth. That will lead to company investment totaling US$31 billion between 2002 and 2006, with US$15 billion in the E&P sector.

Internationally, the company has an E&P presence in 12 countries in North, Central and South America, and in West Africa, and has 11 billion BOE of proved reserves, and produces 1.75 million BOE per day—an increase of 70% since 1997.

Latin America Panel: Alejandro Bulgheroni, Chairman, Pan American Energy, Buenos Aires; Steven Crowell, CEO, Pluspetrol Resources Corp., Buenos Aires; and Renato Bertani, President, Petrobras Amercia Inc., Rio de Janeiro.

Robert S. Boswell, Chairman and CEO, Forest Oil Corp., Denver, addresses the Forum.

Steven Crowell, Chief Executive Officer, Pluspetrol Resources Corp., Buenos Aires, discussed the Andean countries of Peru, Ecuador and Colombia, with particular focus on Peru. The company, since 1995, has consolidated its operations in that country and is now Peru's top oil producer.

Pluspetrol is one of the key sponsors of the Camisea gas project. Showing proven reserves of almost 9 Tcf of gas and 600 million barrels of liquids, Camisea is located across the Andes mountains, about 400 kilometers east of Lima, in an environmentally sensitive region. Construction started in 2001 and commercial operation is scheduled for late 2004.

North America: U.S. and Canada Compared

North American companies are well poised for growth as a result of healthy cash flow fueled by strong prices, a panel of three leading independent producers agreed.

Sizeable capital budgets for both exploration and acquisitions are common throughout the North American industry today. With declining gas reserves and production in North America, a looming gas supply crunch is causing many companies to focus on gas reserve replacement.

A number of U.S.-based companies have retrenched from areas of high perceived political risk during the past 18 months, and whether this is a short-term phenomenon is yet to be seen. While adopting a variety of strategies, most companies have pursued concentrated portfolios with a strong North American presence, although more companies are setting their sites on opportunities in South America and Africa.

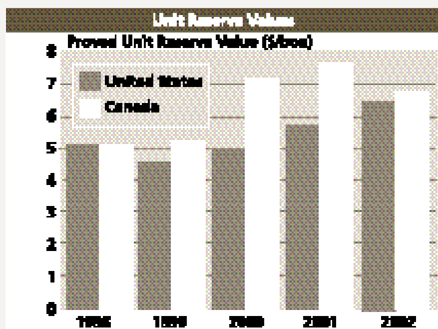
Panelists on the subject of North America were Robert Boswell, Chairman and Chief Executive Officer, Forest Oil Corp., Denver; Duane Radtke, President, Dominion E&P Inc., Houston; David Trice, President and CEO, Newfield Exploration Co., Houston; Craig George, President and CEO, Vintage Petroleum Inc., Tulsa; Scott Sheffield, Chairman, President & CEO, Pioneer Natural Resources USA, Irving, Texas; and Adam Waterous and Christopher Slubicki, Senior Managing Directors and Principals, Waterous & Co.

Strong demand and undersupply of quality prospects in North America make for a seller's market for quality oil and gas asset offerings, said Adam Waterous, senior managing director, Waterous & Co. Asset and corporate offerings, which were scarce in 2002, will increase this year, he said, in presenting study results.

Strong commodity prices have given the North American exploration and production industry strong cash flows, causing companies of all market capitalization categories to be actively pursuing mergers and acquisitions. Potential buyers are flush with cash flow. Plus, increased equity financing—from both public and private sources—has provided potential buyers with additional ample capital to make acquisitions.

Interest rates remain very low by historical standards, further lowering the cost of capital and providing incentives for companies to be more aggressive in acquisition pursuits.

Christopher Slubicki, Senior Managing Director, Waterous & Co.; Craig George, President and CEO, Vintage Petroleum Inc.; Adam Waterous, Senior Managing Director, Waterous & Co.



The challenge for buyers is to obtain quality assets in an undersupplied market.

Internally generated cash flows are providing the majority of capital for companies at present, even as the opportunity for external financings and public market support for oil and gas stocks is returning, Waterous said. Equity issues in the U.S. and Canada, while improving, remain low relative to previous years, and have not reflected the strength in commodity prices, Waterous said.

Gas transactions, in both the U.S. and Canada, are in greater demand than oil assets, and U.S. assets are receiving more interest per offering than are Canadian assets. More than 60% of U.S. asset transactions are gas-weighted, compared with about 50% in Canada. Asset transaction activity in the U.S. averaged about $7 billion per year, compared with $3 billion in Canada.

Larger companies are the most significant group of buyers of assets, however smaller companies are more active in Canada than in the U.S. U.S.-based buyers accounted for about 6% of the companies acquired in Canada during 2002, a dramatic decrease from the 80% in 2001. Proved reserves for U.S. asset transactions have averaged $5.40 per BOE during the last few years, compared with $6.45 for Canadian assets, Waterous said. Production values for U.S. asset transactions have averaged $20,500 per BOE per day during that time period, compared with $17,000 for Canadian asset transactions. ■

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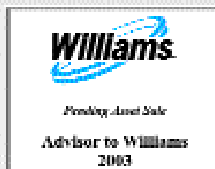

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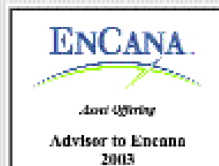

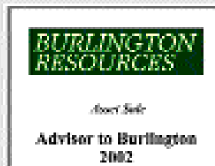

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