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GLOBAL NAV

# GLOBAL BOARD BRIEF ENERGY

## Responding to the Unpredictable World of Energy: Making Sure Your Company has a Flexible Strategy

CORPORATE BOARD MEMBER MAGAZINE

FULBRIGHT & Jaworski L.L.P. Attorneys at Law

# RESPONDING TO THE UNPREDICTABLE MAKING SURE YOUR COMPANY HAS A

For directors of energy companies and non-energy companies alike, dealing with energy prices over the past two years has been like riding blindfolded on a rollercoaster. The trip started at the beginning of 2007 with oil at less than $60 a barrel. The coaster kept climbing in mid-2008 past $140 with no one able to see the top but someone yelling that $200 was ahead. And then, suddenly, came the steep dive back to the starting point and beyond.

For those who want to be better prepared for the ride to come, the unfortunate reality is that the blindfold stays on—energy prices are very difficult to predict. Add into the mix the uncertainty posed by the global economic crisis and the possibility of new regulation prompted by a rising tide of environmental sentiment and you have a forecasting landscape abounding with possibilities. The only thing that is certain is that companies need to have a flexible energy strategy and that directors of companies outside the energy industry need to understand a broad range of energy-related issues to ask the right questions. Understanding and managing the risks created by volatile energy markets is now as important as managing other key risks for most companies.

In this Board Brief, *Global Navigation* explores some of the possible implications of the recent volatility in energy prices, especially in light of the global economic crisis. Naturally with a topic as broad as energy, no such survey could hope to be complete. But the experts we interviewed, including energy directors, academics, think-tank leaders and lawyers involved in the field, offer some intriguing insights into what the future may bring.

Among the points they make:

• Reduced investment in developing new supplies, spawned by dropping prices and tight credit, may be setting up another dramatic spike in prices once the economy recovers—“the next oil crisis” in the words of one expert.

• The nationalization of energy resources, long a topic of concern for energy companies worried about where to find new resources, may become less of a pressing issue.

• Reduced revenues for countries heavily dependent on petro-dollars—such as Iran, Venezuela, Mexico and Russia—are creating pressures that could significantly alter the global political picture.

• Downward pressures on investment are being exacerbated by uncertainty about the regulatory environment, again with potential consequences for supply and price down the road.

• The credit crunch is adversely affecting the development of alternative energy resources in the short-run, but the long-term future looks bright enough that there may be a risk of an investment bubble after the economy recovers.

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## POST-RECOVERY SUPPLY AND PRICE: CRISIS REDUX?

The financial problems and responses that unfolded in the last half of 2008 were so dramatic and fast-moving that it was sometimes hard to remember that recovery will come, and that when it does companies must be prepared to seize opportunities and meet new challenges that may be difficult to predict now.

Preparing for changes in energy supplies and prices are a case in point. Will recovery mean the return of $145 a barrel oil? $80 a barrel? $200 a barrel? No one, obviously, knows. And the overheated pronouncements floated in mid-2008 that oil was unlikely to ever again go below $100 a barrel underscore the hazards of forecasting.

Nonetheless, experts point to several factors that will impact long-term supply.

While falling prices for oil are good news for drivers at the pump and anyone else who buys it, the flip side is that relatively low prices make some production projects uneconomical.

“We’ve already seen something like 4 million barrels a day of high-cost oil projects canceled around the world or delayed,” said Charles Ebinger, Director of the Energy Security Initiative and a Senior Fellow at The Brookings Institution.

That will create a problem when the economy recovers and along with it the demand for oil, Ebinger believes. “When you look at what we haven’t replaced because we have a period of time where we aren’t drilling I think we’ll see prices rise quite dramatically,” Ebinger said. “In a way I think we are setting ourselves up for the next oil crisis.”

The global credit crunch, as well as price

# WORLD OF ENERGY: FLEXIBLE STRATEGY

volatility, has put pressure on energy companies, making decisions about whether to go ahead with projects particularly complex for energy board directors.

"In strategic planning and project approval board members need to understand at what point do expenditures become uneconomic. And most companies will do that. But when you analyze the risks associated with commodity prices, the potential lack of access to credit markets and potential liquidity requirements associated with derivatives and credit downgrades, it could get ugly real fast," said Peggy Heeg, co-chair of the Corporate Governance Practice Group of the international law firm of Fulbright & Jaworski L.L.P. and a member of the firm's Corporate and Energy Practice Groups.

"Especially in this environment, board members should engage in risk analysis, risk oversight and scenario planning. Board members should force management to understand and present to the board risks facing the company under various scenarios," Heeg said. "The board may decide to forego a project that it otherwise would have gone forward with."

Another factor in the long-range supply picture is the failure of some countries to have invested in their energy infrastructure when higher prices brought them lots of revenue. Now that revenue is shrinking substantially, it is harder to make those investments, with consequences for supply when demand picks up. Ebinger counts Russia, Iran, Venezuela and Mexico as among those in this camp.

"You look at countries like Russia, which had unprecedented revenues that weren't particularly well spent. Now it looks as if Russian production is going to have some serious problems because they haven't kept up the pipeline networks, they haven't modernized the equipment of Gazprom, so at a minimum they have to spend billions on retrofitting their industry to remain a world-class player," Ebinger said.

It should be noted that volatile oil prices are nothing new and are something that energy companies anticipate in making capital investments.

"Volatility in oil and gas prices has always been around," said Mary R. (Nina) Henderson, a director of Royal Dutch Shell Plc. "We're in one of the periods of very high volatility. Accessing these resources requires long-range planning and investments over the long term even within that volatility or when you need the resource, it will not be available.

"So during this financial and global downturn right now we're likely to be in a situation where some things will be delayed, which may limit supply and which may have consequences later on for increased volatility. No one can predict such future impacts now. With these realities, affordable investments, consistent with well thought out financial parameters, must continue over time."

The major oil companies have long time horizons for development projects and "don't really respond very quickly to short run movements in price," said Kenneth B. Medlock III, a Fellow in Energy Studies at the James A. Baker III Institute for Public Policy at Rice University in Houston.

Energy companies develop internal guidelines about what long-range average prices are needed to make a project financially attractive. "A lot of the companies are using internal guidance that is certainly no more than $70 a barrel but in a lot of cases between 40 to 60, depending on the company," Medlock said. "So when the price jumped to 146 you didn't see a big rush to drill in the sense that these companies weren't acting like prices were going to be that high forever."

What may happen, though, in the coming year is a shift in ownership of resources as pressure mounts on smaller independents or mid-sized companies that find that they do not have the financial wherewithal to develop promising acreage, Medlock said.

"Some of the majors in a lot of cases are very laden with cash right now," he said. "So what you have is a company that is debt-burdened sitting on a golden opportunity and the majors can swoop in and pick up these assets for pennies on the dollar and basically expand their reserve bases without doing any exploration activity."

### NATIONALIZATION: PRESSURE MAY EASE

It wasn't long ago that loud alarm bells were being sounded about a growing trend of energy-

## QUESTIONS THAT DIRECTORS OF COMPANIES WHOSE PRIMARY BUSINESS IS NOT ENERGY MIGHT WISH TO ASK

- How do we use energy? How do our suppliers use it? Does our energy strategy identify risks at all levels of pricing and account for changes in government policy?
- What are our assumptions about energy supply and price? How quickly can we respond to assumptions that don't pan out?
- Who are the people who are in charge of our energy strategy and how extensive is their scenario-planning? Who do they report to?
- Are there ways we can hedge against volatility in energy prices? Given recent problems in the financial markets, have we adequately assessed the risks of hedging strategies?
- How does energy price volatility affect the return on our "green" strategy? Do our past and planned investments in this area still make sense?
- What are the ways that regulation of energy, such as mandated reductions in consumption, could affect our products?

resource nationalization in places like Venezuela and Russia, with global energy companies concerned about the shrinking availability of opportunities to secure new supplies.

But the current drop in prices might result in some relaxation of restrictions on foreign investment/ownership, according to Frank Verrastro, Director and Senior Fellow of the Energy and National Security Program at the Center for International and Strategic Studies in Washington.

The nature of policy changes, if any, may hinge on how those countries view the size of revenue reductions and their duration, Verrastro said.

When prices are high and energy resources are under government control, Medlock said, "Lots of social welfare programs can be funded and that makes the public very fond of high oil prices and very fond of owning the national wealth."

When prices fall, "the constituency starts to see the funds for these various social programs begin to disappear," Medlock said. "Usually that brings with it the winds of change politically. You could see the balance of power begin to shift in those countries to different parties, different political officials. Once that happens then the whole attitude toward foreign investment in domestic resources could change very quickly."

"It's not prices fall and then bang it happens. Prices have to fall and stay low for a long enough period of time for the pain to be felt. So if next summer prices are back up to 150 then this is all meaningless. If prices stay say in the 50, 60 ballpark I think you could see a lot pressure on those governments to change the way they are behaving," he said.

Gürcan Gülen, Senior Energy Economist at the Center for Energy Economics at the University of Texas at Austin, agreed that it will take some time before the consequences of price drops on nationalization are apparent, but he also said there is a possibility that nationalization could actually increase in some cases.

"I would guess that it is too soon in the price cycle to reverse any nationalization trend," Gülen said. "Oil prices probably need to stay at $40-50 range for a lot longer in order to re-evaluate nationalization; in fact, it is conceivable that national oil companies will end up with more responsibility as international oil companies pull out or don't invest in marginal or new fields."

Ebinger said he does not expect to see change either way on the resource nationalization front.

"I would bet five or 10 years out the share of state-owned resources versus privately accessed resources is not going to be that much different."

### POLITICAL CONSEQUENCES: LESS REVENUE, LESS POWER?

The drop in prices may have an impact not only on receptivity to foreign investment, but also on the internal stability of some countries and/or their place in the world.

Four countries most frequently mentioned in that category are Mexico, Iran, Venezuela and Russia, all of which have done comparatively little investment in their energy infrastructure. That means that they face a double whammy on revenue—their production capacity is diminishing at the same time as prices have dropped.

That falling revenue means, "the funds for these various social programs begin to disappear," Medlock said. "I think you're really going to see that come to a head in places like Iran and Venezuela where there hasn't been a significant amount of investment in domestic resources,

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largely because of nationalism and in Iran also because of sanctions from the West."

"Most people say Iran needs at least $70 a barrel to support a lot of its policies—particularly its social policies which heavily subsidize energy—to keep the masses of people happy. They aren't going to have $70 oil," Ebinger said. "So something's going to give there in terms of cutbacks on subsidies and there will probably be social unrest because of that.

"Chavez in Venezuela, same thing," Ebinger said, referring to Venezuelan President Hugo Chavez. "He's been so profligate in spreading money around not only in Venezuela but around Latin America to build his influence. Most people say he needs between $60 to $65 a barrel oil to continue his social policies.

"The country that I am most worried about is Mexico. They've become a big petroleum product importer at the same time that their crude exports are falling because, having not invited in a lot of foreign capital, their industry is very antiquated and I think the prospects of serious social unrest in Mexico are very, very real." The possibility of social unrest in turn raises another possibility—a surge in emigration to the United States, Ebinger said.

The pullback can already be seen in Venezuela, which said in November it was re-evaluating $7.5 billion in planned spending on refineries in Nicaragua and Ecuador.

Over time, the reduction in these countries' economic power could mean a fall off in their international political standing. The consequences of that are, of course, difficult to predict, but Ebinger can envision a scenario in which it creates an opening for reducing tensions with Iran.

Declining energy revenues also could affect Russia's role on the world stage. That could play out in a variety of ways, Ebinger said, ranging from reduced Russian influence in several areas to a defensive reaction in which Russia presses harder on neighbors that used to be part of the USSR.

### REGULATION: UNCERTAINTY CUTTING INTO INVESTMENT

The downward pressures on energy investment are being intensified by the uncertainty of the regulatory environment.

Prominent in that arena, of course, is the issue of climate change and how regulations on carbon emissions will play out under a new presidential administration.

"Once you know what the regulatory framework is, it's much easier to operate and much easier to predict what could happen. But right now we don't know what that framework will be," Medlock said.

"That is really to the dismay of companies that are trying to make long-term strategic decisions in that space. Because if you don't know what the rules of the game are going to be, then it tends to mean you are going to scale back on what you would otherwise do. You're going to delay investments until something is known with a little more certainty."

"Especially in the coal sector you've seen companies really pull back a little bit on what they

## QUESTIONS THAT DIRECTORS OF ENERGY COMPANIES MIGHT WISH TO ASK

- Given the capital-intensive nature of our business and the extreme volatility of the financial markets, have we done adequate scenario planning for changes in our credit structure? Are we sufficiently prepared for unusual scenarios in our use of derivatives to hedge energy prices?
- If the current economic problems become long-term globally what does that mean for strategies based on international growth? What opportunities does it create?
- What is the basis for our projections about trends in energy prices? If there is a consensus of forecasts about the trend, have we sufficiently prepared for the possibility that the consensus is in error?
- While energy prices have returned to earth from their recent spike, are we adequately prepared for the political consequences of further volatility, particularly as regards the charges of market manipulation? Do our compliance programs and operations sufficiently account for changes in the regulatory environment?
- As enforcement of FCPA increases, particularly among energy companies, do we have formal FCPA compliance programs with detailed policies, procedures and education to train our employees on the nuances of a sometimes unintuitive law?

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planned—last year there were a massive number of megawatts cancelled—and I suspect that trend will increase," Medlock said.

One question is how much emphasis to place on developing clean coal technology versus development of renewable energy sources, such as wind and solar.

Clean coal technology refers to carbon capture and sequestration—basically capturing carbon during combustion and then injecting it into, say, an old oil field. The technology is in the research stage rather than implementation.

"It's a next-10-year issue," said Leonard J. Kujawa, a director of the James River Coal Co. and a former director of American Electric Power Co. "The electric companies are pleading for time to develop the technology. If mandates come out of government to reduce carbon, the ability to deal with it in terms of coal is really at this time not possible."

The debate over clean coal technology has many dimensions, of course, and the choices the United States makes in regulation could impact the development of these technologies, with fallout, for example, on the ability of India and China, both heavily reliant on coal, to deal with their pollution issues.

And the issues go beyond the environment.

In coal, for example, a big issue is increased safety regulation due to a few mine accidents. The price of coal tripled from the fall of 2007 to the fall 2008 before dropping off, and those price levels have meant that investment hasn't been substantially affected by safety regulations, Kujawa said, although it could be at lower prices.

Energy companies must also deal with a more complex regulatory environment on market manipulation and heavier enforcement of the Foreign Corrupt Practices Act, which prohibits bribery to gain business abroad and requires companies to maintain proper internal controls.

"The energy industry is so highly regulated that it's very difficult for employees to understand all the regulations they must operate under," said Fulbright's Heeg. "What may be perfectly appropriate in one country under their culture and laws is not legal under the FCPA. I see such wide variations in companies on their compliance and ethics programs. Some companies have very sophisticated programs and other companies wrongfully take the approach that 'we've got ethical employees. We've got a code of conduct and we only hire ethical people and that's good enough.' A lot of these laws and regulations are not intuitive and it really takes significant focus and resources to make sure your employees understand what the laws are and what's expected of them."

The need to comply with these laws creates an uneven competitive environment when U.S. companies go up against counterparts from countries that do not have such laws or do not enforce them, said Michael Irvin, who heads Fulbright's Global Energy Department. In addition, government entities in foreign countries may not want to include language in contracts that deals with FCPA requirements.

The issue of market manipulation was much hotter back when oil was above $145 a barrel. But it will return when prices spike again, Heeg said. "Any time you have energy prices go up you have a politician yelling that it must be market manipulation," she said.

The regulatory environment is complex, in part because three federal agencies are charged with investigating market manipulation: the Commodity Futures Trading Commission, the Federal Energy Regulatory Commission and the Federal Trade Commission.

"The dollars are huge. Especially with the FERC. They now have the highest penalty authority of any other federal agency," Heeg said. "They can impose a penalty of a million dollars a day per violation."

"Boards need to exercise oversight over compliance programs and ensure that the programs are effective," she said.

"It is appropriate for them to ask what are the primary laws that we could have problems with given our business? … And then what programs do we have in place to deal with those laws, what resources are allocated to compliance to deal with those risks and do we have periodic auditing and reporting to the board about what they are finding?"

"If you hear, 'Oh, we have a chief compliance officer who has a secretary,' then it's probably not enough."

The change in presidential administrations

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likely will result in changes in the regulatory policies and priorities of the FERC, the CFTC, and other agencies that regulate energy markets, said Lisa Tonery, a partner in Fulbright's Energy Department. "However, no one is expecting a decrease in market manipulation and other enforcement investigations with the new administration," she said. "It is more important than ever in this turbulent economic climate for energy companies to understand the rules of the road so that they can differentiate a clever deal from a transaction that a regulator might consider to be market manipulation because there is not a lot of sympathy on the part of regulators if you stray over the line."

### ALTERNATIVE ENERGY: TIGHTENED INVESTMENT WILL BE SHORT-TERM

Investment in alternative energy tightened as a result of the credit crunch, like most everything else, but that is not the whole picture.

While progress towards addressing climate change has slowed, the economic crisis has also reduced industrial production and hence reduced emissions, Verrastro said. That provides some breathing room.

What's more, the slowdown may reduce some costs of switching to alternative energy by reducing the costs for steel, labor, rigs and infrastructure, he said. Companies looking to establish new lines of business may wish to take advantage of the lower costs of acting now.

And while the credit crunch is definitely impacting some investment in alternatives, this is a temporary crunch, UT's Gülen said. "In fact, there are those who see an opportunity for alternative technologies in the current economic downturn by casting them as the key investment target for fiscal stimulus of the government."

Price volatility for traditional fuels has not had much impact on the alternative fuel picture. That is because a substantial portion of the push for alternative fuels is driven by governments responding to political pressures to address climate change, Medlock said.

In fact, Medlock sees such a bright investment picture for alternative fuels once economic recovery comes that it could even be the source of the next stock market bubble. Enthusiasm for alternative energy could spur over-investment and create artificially high stock prices that would have to be brought back to reality when some percentage of the alternative strategies failed, he speculated.

### CONCLUSION

As this Brief demonstrates, the range of energy scenarios is quite broad. And as recent price volatility has shown, developments can be sudden and unexpected.

That makes it essential for boards to insure that their companies—be they in the energy sector or not—have thought through a wide variety of scenarios, that their companies have planned for those scenarios, and that they have the flexibility and agility to enact those plans as needs arise.

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