High oil prices are here to stay, says GSF's Marshall

JON MARSHALL, PRESIDENT and CEO of **GlobalSantaFe Corp**, presented a lesson in energy economics at the 2004 IADC Annual Meeting in New Orleans in September, outlining the nuances of GDP growth, high and low commodity prices and which best benefits the industry, and what will be necessary to handle the growing depletion problem.

DEMAND GROWTH

Growth in worldwide gross domestic product (GDP), oil and natural gas demand and depletion is driving the E&P industry today with record high commodity pricing. As GDP increases, so does energy consumption. Within the industrialized world (US, Japan, Western Europe, Canada, Australia and New Zealand) there is a stable 2.5-2.9% increase in GDP from 1985 and projected through 2015. From 1970-2000, GDP was 3.3%.

Mr Marshall noted that GDP in emerging market countries, which is the world's countries excluding major industrialized countries, is growing at a much faster rate, ranging from 3.4% in the period from 1985-2003 to 5.4% in 2004.

"GDP growth into the future is going to come largely from the emerging markets," Mr Marshall noted, "even though we have a bigger base today within industrialized countries."

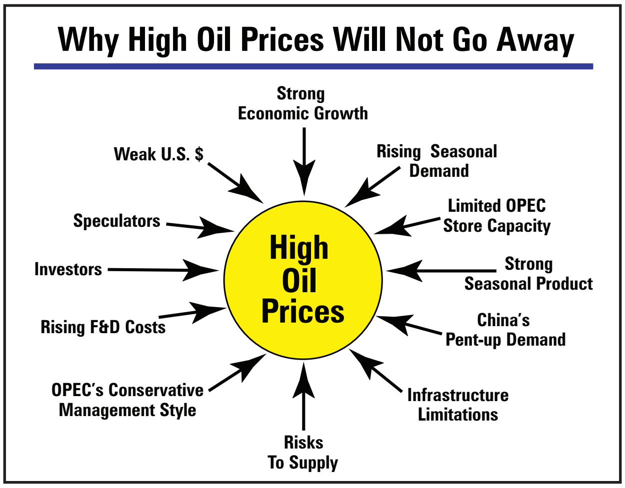
Mr Marshall said China is expected to double its GDP between now and 2015. "With our growth projection, they will be close to the size of the US by 2015 if they continue at a moderate pace."

Worldwide GDP is $46 trillion in 2004 and is expected to increase 54%, or 3.7% per year, from 2004 to 2015, rising to $71 trillion. "With those projections, total energy demand for oil, gas, hydro, nuclear, etc, is around 204 million b/d at a growth rate of 2.2% per year.

"This is very conservative," he continued. "We could easily be at 265 million b/d of oil by 2015, with the bulk of that demand growth coming from emerging markets."

The primary growth of natural gas and oil is in transportation. People drive 2.9 trillion miles per year in the US alone, he noted. "I think sometimes we would be better off with our incremental capital if we could go to China and build roads and manufacturing facilities for motorized transport," Mr Marshall said. "The balance of our business would do a lot better."

A large part of China's growth is in electrical generation, Mr Marshall noted, and as more electric generation comes on line they will have more capacity for industrial growth.



DEPLETION

"One of the things we have always talked about that never seems to have any real credence is depletion," Mr Marshall said. "Because of the excess supply that we have had in OPEC and non-OPEC, we have not really paid attention to what is happening in terms of depletion."

With a 5% decline rate in existing fields, a 1.6% worldwide historic demand rate and a 1.8% future demand rate, Mr Marshall said there is 56 million b/d of additional production that the industry will need to develop and supply by 2015. "That is a very, very high percentage of all the production we have today," he said.

In 1997, OPEC's spare capacity was about 1 million b/d and the perception was that the industry wouldn't be able to keep pace with world GDP growth and energy demand, Mr Marshall said. But what actually happened then was that Saudi Arabia decided it wanted more market share and it dumped incremental oil into the market place. In conjunction, there was the Asian financial crisis and a warm winter in North America and Europe.

Now OPEC is back in a situation where its spare capacity is slightly over 1 million b/d.

Russia is an interesting case in non-OPEC growth, Mr Marshall noted, with increased productive capacity moving from 6 million to 9 million b/d during the past four years.

"That growth was done through production technology," he explained, "it is not being done through the drill bit.

"They have taken existing oil wells and simply made them more productive by utilizing world class technology."

Mr Marshall also said that Russia will experience a decline in terms of incremental production, with some of that decline tied to pipeline constraint. There are also political concerns inside Russia.

HIGH OIL PRICES

High oil prices are here to stay for a number of reasons, Mr Marshall contends, but he does believe prices will be lower than those seen today. He also believes that lower oil prices will benefit the industry better than high prices.

Numerous factors will affect oil prices in the short-term, including strong economic growth, rising seasonal demand, limited OPEC spare capacity, China's pent-up demand, risks to supply and rising finding and development costs.

As a result, he said, oil prices will be outside its historical band of $18-$22 in which it has traded since the early 1900s in terms of today's dollars.

"One of the things that has occurred is that the world's economy has more structural support to withstand higher oil prices than it ever has," Mr Marshall explained.

"There is a lot more elasticity in the supply/demand curve with the world economy where it is today.

"However," he continued, "I fully expect that over time this will be the enemy of our business because it will impact demand. We have had a response to the US economy to every spike in oil price."

He envisions a scenario with lower oil prices that will benefit the E&P industry because oil companies get their growth from commodity price. "Oil companies have done everything on the cost side of the equation," he explained. "Mergers are essentially cost functions by driving huge costs out of the new company.

"They have done everything they can do on the cost side and now their growth has come from the prices," he continued. "Once the oil price falls to more moderate levels, their only mechanism for growth at that point is to squeeze more cost out of the equation or grow their top line, and the only way to grow their top line is through the drill bit."

GAS DEMAND

Worldwide natural gas demand is expected to increase 44% from 273 bcf/d presently to 393 bcf/d by 2015. The trend today is the displacement of oil by natural gas in electric generation, which is being done in a number of countries where they are developing gas fields in order to displace the use of oil that can be sold on the open market.

However, using a 5% decline rate of existing fields the industry is facing about 30% depletion. This results in a shortfall of 245 bcf/d of gas by 2015. This figure is approximately 90% of today's production. "That is going to take a lot of capital and a lot of drilling," Mr Marshall said.

"Perhaps the argument for higher sustained prices, not necessarily high absolute prices, is how efficient is our capital at finding these incremental reserves, the incremental production and how long it will take the industry to discover them."

INCREASING RIG ACTIVITY

Mr Marshall noted that jackup utilization is increasing. Ultra-deepwater activity is increasing faster than in moderate water depths and he predicts a possible undersupply of ultra-deepwater rigs beginning before year end and into 2005. He notes that these utilization rate increases will provide some leverage for drilling contractors.

In terms of drilling contractor margins, Mr Marshall said the drilling industry has come out of a trough recently and margins are at about 8% because the industry is spending a lot of capital.

"If margins go where we think, they we will be back up pushing 20% in a year or two," he explained. "As an industry, if demand continues there is no reason not to be optimistic. We have every indication of that.

"I don't want to be too optimistic," he continued. "I think we are at somewhere in the mid-70s kind of activity." ■