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Abundant Supplies A Lingering Problem

By Stephen Rassenfoss

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"We are living in an age of abundance." That observation by Michelle Michot Foss, chief energy economist for the Bureau of Economic Geology at the University of Texas, Austin, set the tone for a discussion of why oil supplies are likely to remain high and prices low.

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abundant supplies because the demand growth is outstripped by countries and companies that continue to expand.

Scott Sheffield, CEO at Pioneer Resources, said the company expects to continue adding 30% more oil and gas production each year in the Permian Basin where it has lowered its breakeven price to USD 25/bbl.

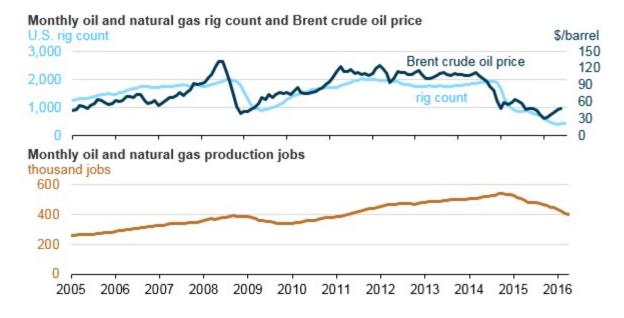
Dan Dinges, the CEO of Cabot Oil and Gas, is impatiently waiting for pipeline construction to allow Cabot to move more gas to major markets from its wells in the Marcellus formation. When those outlets grow, the company plans to use its cash hoard to expand, with plans to double its production there.

The message to the engineers and geoscientists at the session was that their success at producing more oil and gas from lower-quality reservoirs for less has loosened the restraints on continued supply growth.

"We have no resource constraints. We have economic and technology restraints" on how much is produced, said Mike Lynch, president of Strategic Energy and Economic Research.

The economic pain of lower prices is obvious. There has been a nearly 78% drop in the number of drilling rigs working in the US from the peak in October 2014, and 142,000 jobs lost in exploration during that period, according to a report released in early August by the US Energy Information Administration.

But it said the contraction has had little effect on US production, with oil production off 2% and gas output unchanged. Globally, production is up, with more oil flow from Saudi Arabia, Iraq, and Russia. OPEC countries could export even more with 4.5 million B/D of OPEC oil off the market in countries like Libya and Nigeria.



Source: US Bureau of Labor Statistics, Current Employment Statistics and Baker Hughes North America Rig Count.

Note: Rig counts are US totals for oil and natural gas, including offshore. Weekly rig count data are converted to monthly data by taking the average weekly readings each month.

There remains an enormous supply of oil in storage around the globe in hardto-track places, such as oil tankers anchored offshore. Gary Ross, executive chairman of PIRA Energy Group, predicted the oil in storage in the US, which is an available indicator of total storage, is likely go down to 380 million bbl by year end, from around 500 million bbl in early August. But during the first half of 2016 it was up a bit.

Lower oil prices have encouraged more oil demand, but appear to have done little to stimulate the global economy. The push to reduce fossil fuel use through alternative energy sources and conservation could put a lid on future growth.

Foss said Saudi Arabia sent one of the largest delegations to the conference that produced the Paris Agreement to reduce greenhouse gas emissions, which she saw as an indication that even oil exporting countries are seeing the inevitability of change. "After many years of listening to this, they have decided it is true and they are cashing out," she said.

Deep cuts in exploration spending are expected to reduce supplies in the

coming years, but Ross pointed out "the industry is still spending USD 400– 500 billion a year and they are getting more bang for their buck."

He added, "What scares me in this USD 40–50 range is: Are we going to continue to see the rig counts keep rising?"

There were 481 drilling rigs working in the US during the week ended 12 August, up from 404 in May, according to the Baker Hughes rig count. Longer term, Ross said, "The question is will we get to USD 60, or get to USD 50 and hang around there?"

Growth Plans

Advances in technology continue to allow more production for less. Cabot's CEO pointed out that for each of its rigs working, it is finding far more gas per year than it did a few years ago "The lowest price producer is the one who is going to be the winner," Dinges said.

For those on the losing side, the consequences are severe. The number of North American companies that have filed for bankruptcy since the bust reached 173—90 operators and 83 service companies—as of 1 August, according to Haynes and Boone, a law firm tracking filings.

Balance sheets typically determine the winners and losers. The rapid growth of the US unconventional oil business was fueled by borrowing, leaving many companies paralyzed by their debt load. "The amount of debt in this industry is the highest since the early 1980s," Sheffield said, adding, "Were it not for the debt levels of these companies, we would be seeing a lot more activity."

Pioneer is showing what a company with USD 3.3 billion in cash on hand can do by keeping 17 rigs running in the Permian. The cost of drilling and completing those wells means the company continues to spend more cash than it generates. "We are using that cash position to grow the business over the next few years," he said.

Cabot, which has one rig working in northeast Pennsylvania, is planning to expand as well, Dinges said. A June investor presentation by Cabot offered a

plan to double its production by 2018, if the demand materializes from planned pipeline projects and other users.

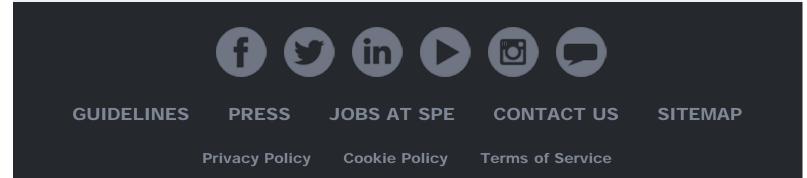
The timeline is not a sure thing, with energy projects facing increasingly tough opposition from environmental groups, but he predicted that in 2017 and 2018, "you will see a ramp up in activity."

Both CEOs said they were concerned that the exodus of talent and rapid loss of drilling rigs and completion equipment could hinder growth in US shale production when supplies tighten and prices finally recover.

Talk of short supplies may seem no more realistic that the price crash did back when oil was selling for USD 100/bbl. But Lynch, who is an economist, said when it comes to oil prices, surprises are to be expected because "technology marches on, forecasting does not."

Stephen Rassenfoss is the Emerging Technology Senior Editor for the Journal of Petroleum Technology.





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