A World Without Easy Oil: What now?

Posted by Dave Cohen on December 4, 2005 - 11:56pm
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Editor's Note --
Naturally, I was astonished when I was invited to participate in this roundtable discussion concerning the End of the Era of Easy Oil. So, I caught the redeye to New York City last month and was able to get back the same day in time for my 5:00 pm personal happy hour.
Enjoy.

International Herald Tribune
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The era of easy oil is over. What that means for car companies, policy makers, investors, consumers and the future of U.S.-China relations, however, is far from clear. The International Herald Tribune gathered a round table of experts in the board room of The New York Times on Nov. 15 to discuss these ponderables, along with Ford Expeditions, prairie dogs and the odd possibility that gas may, in fact, be too cheap.

Participants in the discussion, which was moderated by Erika Kinetz, were:

Herman Franssen, senior fellow at the Center for Strategic and International Studies and president of International Energy Associates, an energy consulting company in Chevy Chase, Maryland;

Roger Diwan, managing director of PFC Energy, a consulting firm based in Washington;

Irving Mintzer, member of the Global Business Network, a consulting and research firm, and executive editor of Global Change magazine, and

Adam Sieminski, chief energy economist for Deutsche Bank.

Dave, a completely unqualified contributing editor at the popular peak oil community website The Oil Drum.

Is the era of cheap oil over?

Herman Franssen: In our business you can make a case for anything you want to prove. If you want me to prove that nuclear is the only option for the future, I can prove it. If you want me to prove we don't need the Middle East, I can prove that. All these forecasts are made on assumption upon assumption. What really counts is what's behind the assumptions. There are a lot of things going on in the world today that suggest that, indeed, the era of cheap oil, as expressed by below $35 a barrel, in today's terms, is probably over.

Roger Diwan: The question is, What's cheap? Is oil expensive, really, right now? Has it had a big economic impact at $60? We had $70 oil three months ago and we're still smiling.

Irving Mintzer: We're going to see a period of extended volatility where price swings, even between $40 and $70 a barrel, become not uncommon. And we may see spikes periodically caused not so much by changes in resource availability or technology, but that relate to supply cutoffs or political difficulty. We're going to be living with a period in which it is increasingly difficult to make reliable long-term investment choices on the presumption that you know what the price of oil is going to be.

Adam Sieminski: I think the era of cheap oil is over. But I'm more certain that the era of easy oil is over. The industry is faced with rising costs. The world is going to be increasingly dependent on places like Iran, Iraq, Venezuela, Nigeria, Russia and Saudi Arabia. That points toward prices staying higher. It certainly means that both private and state-owned oil companies are going to have to work harder to meet global demand.

Dave: Definitely, it's over. In fact, oil is almost certainly underpriced as oil investment banker Matt Simmons has pointed out. And given Irving Mintzer's remarks about price volatility and the difficulty of making long-term investment decisions based on price, that would seem to make our future supply security even shakier than it already is.

Are we in for a protracted period of strong demand and tight supply?

Diwan: What you have here is an industry which has not invested over the last 20 years, and it's facing the cyclical uptrend in demand and it finds itself structurally now short of capacity, of people, and of places to go.

Franssen: To get the Chinese to the level of per-capita consumption that Taiwan is today, Chinese consumption would be 49 million barrels a day. The whole world is consuming only about 85 million a day. That is physically impossible.

Mintzer: I think the solution is a change in the perception here in the United States, and to a lesser extent in Europe, about how much car we need and for what. If cars are going to continue to be the crutch upon which we rest the sex life of American males and the sense of security of American females, then we need a lot of steel and a lot of glass and a lot of oil.

Franssen: That perception is not going to change at $3 per gallon of gasoline.

Mintzer: I'm pretty sure it'll change at $5. It seems to me that if, and only if, that perceptual change can take place at the front end of building this infrastructure for transportation and a vehicle fleet in China, is there likely to be room in the world market to allow for growth without dramatically increasing the likelihood of conflict over access to resources.

Sieminski: In the 1970s, most economists were convinced that if energy and oil consumption didn't grow at the same rate as gross domestic product, we would have dire economic consequences. With the price increases of the 1970s, followed by shifts in policies, the developed countries moved toward a much greater efficiency of all forms of energy consumption relative to economic output. So although I absolutely agree that China will be consuming a lot more oil, it's very possible that China will find ways to improve patterns of use. Otherwise we'll face higher prices because there won't be enough supply to go around.

Diwan: All four of us assume that there will be a shift in policy in China to adapt its energy. And I think all four of us are having trouble understanding how the United States will shift its policies. There is the belief that the market will do it. Well, in the '70s the market didn't do it. The French didn't go nuclear because the market told them to. The Chinese are not going to become more efficient because the market is telling them to.

Dave: Irving Mintzer is certainly right when he mentions that we need a change in perception in the US concerning our transportation usage. Maybe $5/gallon will do it? Concerning our troubling American policies cited by Roger, I should mention that Stuart Staniford at TOD has modelled this and found that "reductions in oil intensity came [from the 70's onward] primarily from fuel switching away from oil for heat and power applications, and increases in vehicle fuel efficiency". And now, it's hard to see where more efficiency might come from without drastic changes in our driving habits and "non-negotiable" way of life.

Mintzer: Even if the Chinese implement the efficiency and emissions standards they've recently legislated, the middle class will continue to increase their demand for oil and they will have to continue to increase their imports. One provocation for rethinking U.S. energy policy will be when Chinese investment in Canadian tar sands and Venezuelan oil development make it increasingly difficult for us to get access to the resources. The problem with the Chinese is that they don't know that the Canadian oil is ours. And neither do the Canadians.

Diwan: You hear things like that at the U.S. Department of Energy: "What are the Chinese doing in Canada and Venezuela taking our oil?"

Dave: Yes, what *are* these Chinese doing messing around with the oil production in Our Hemisphere? This is a serious problem and there appears to be some "blowback" concerning oil and the globalized economy everyone was so enthused about in the 90's. I have suggested facetiously that we make Alberta the 51st state and others have suggested that Hugo Chavez should be assassinated but these are not real solutions to our problem, are they?

But the real problem as I see it is that everyone here is focusing on increasing Asian demand from China but what about the supply side? There is a similar concern about the elasticity of demand in the United States aside from whatever China might do. But as regards new production, many of us at TOD are dubious about increased oil production capacity in the world market simply as a function of price and EOR technology. Not to mention large decline rates in existing production (for example, the North Sea) which no one here has brought up.

There has been a fair amount of talk lately about the end of oil. Are we running out of oil?

Franssen: We're going to run up against a plateau of non-OPEC oil, perhaps sometime after the turn of the decade. That perception has become generally accepted by the industry. The "peak" oil people will say once we reach that peak, it will start coming down. The "plateau" people believe technology and price will keep a plateau for a much longer period of time. That's the debate.

The ministers of the Middle East give us a beautiful case not to do anything: Don't worry, whatever you need, we will produce it. I've lived in the Middle East. They never like to say "no" to the foreigner. They will tell the foreigner, "Inshallah, Inshallah." Can you produce? "Inshallah." To the foreigner it mean yes, yes, yes. But he doesn't say he can do it. And none of their detailed assessments tell you that they can do it. So are we going to build our future on the perception that they can double production over the next 20 years?

Sieminski: The world has been running out of oil since the first barrel was produced. About every decade for the last hundred years, stories have circulated suggesting that we're running out of oil. At the end of the decade, it turns out that we end up having more than we thought. I suspect that this is still going to be true for the next two, three or four decades. Oil might get more expensive, but then recovery rates improve. We're not running out.

Clearly the transparency issue has everybody worried because they're trying to get a feel for how long we have before we have to really start to worry about it. The serious worry is still, I think, well ahead of us.

Mintzer: I think the place to start the serious worry is now because the length of time you have to put the alternative in place is going to be considerable.

Dave: Certainly we're not running out of oil but we are looking at peak flows, even if CERA's "undulating plateau" lasts a bit longer than those talking about an imminent peak think it will. This simply means that measured by millions of barrels per day, there will come a time, maybe soon, when the world oil supply on any given day will reach its high point and never increase *ever again* from that point. I think we can all agree that this could certainly have devastating effects on the US economy if opportunities for increasing the efficiency of our usage are indeed limited, as they appear to be. The background and consequences for all this are clearly outlined in the Hirsch Report.

As regards "Inshallah", transparency and the statements of various OPEC oil ministers, especially those of the much esteemed and beloved Ali Al-Naimi of Saudi Arabia, many of us at TOD simply don't believe them. It's "All Hat, No Cattle" as they say in Texas. Culturally, this skepticism may be seen as a question of "manhood" as expressed in large, inflated but unproven reserves numbers as opposed to real increased oil production capacity from these Middle East countries.

I see advertisements from, for example, BP, Chevron and Ford touting energy efficiency and investment in alternative technologies. Even President George W. Bush has encouraged conservation. Is their money going where their mouths are?

Franssen: I think at the majors it's largely a public relations game.

Sieminski: It might not make sense for companies to be investing in alternatives to something that the market is pricing at very low levels.

Dave: Clearly, TOD contributor and oil industry insider Bubba has little or no faith in the "public relations game" that Herman Franssen mentions as Bubba stated with regard to BP's CEO John Browne's recent remarks. In fact, he has made the case that two of them, Chevron and Shell, are close to admitting the reality of peak oil. There is no significant evidence right now that the oil companies are investing heavily in alternative (solar, wind, and the rest) energy sources.

Why have oil companies had such a hard time investing in production? They've got a ton of money right now.

Franssen: They're not finding enough from exploration. One of my Houston friends put it very clearly. He said, "We're no longer finding the elephants; we're finding the prairie dogs." It is much easier for a company to pick up a small company with brilliant engineers and geologists than to go out and explore. And they no longer have the talent pool.

Dave: Herman Franssen is absolutely right. There's simply less and less money to be made from further E&P activities. Outside of the discoveries in Caspian Sea region, West Africa or Brazil, which were made some years ago, there are most likely only small reservoirs left to find and exploit.

What kind of opportunity does this create for other players?

Franssen: A lot of opportunity. The biggest prospects now are actually for medium-size and smaller companies.

Dave: Investing in these "medium-size and smaller" companies is a good idea at this point since they will no doubt be acquired by the majors--given the increasing futility of new E&P activities--and this will be a substantial financial boon to their stockholders.

You mentioned increasing dependence on OPEC oil. What are the members of the Organization of Petroleum Exporting Countries prepared to do to increase production? Can they do it without foreign investment?

Diwan: Nigeria, no; Saudi Arabia, yes.

Mintzer: Iraq, no. The question for me is only partly, How many more straws could they stick in the sand and suck out more oil? It's the geopolitical environment of the Persian Gulf.

Franssen: If you believe the U.S. administration, we're going to have perfect democracies all over the region in the next 10 years.

Mintzer: I think we're going to live in an increasingly turbulent world where what we face is not just shocks in terms of price and supply with respect to energy, but interactions between unexpected extreme weather events and energy - whether it's ice on an Ohio electricity line or a series of hurricanes in the Gulf, political turmoil in the Middle East or a decision by Hugo Chávez that he'd rather learn Chinese than English.

Diwan: In the Middle East, the last 20 years have been pretty rocky. It's always pretty turbulent.

Sieminski: Roger, I absolutely agree with you. I think that the fall of the House of Saud has been predicted almost as often as the peaking of the oil age. Neither one has come true yet.

Diwan: I'm more confident in the House of Saud than in the oil.

Dave: Me too, especially considering that the Saudi's have a doomsday device (as in Dr. Strangelove) to boobytrap their own oil production in case of a coup or external attack as outlined in Gerald Posner's book Secrets of the Kingdom.

Sieminski: Oil is expected to grow. The International Energy Agency now thinks that we may end up with a plateau at 100 million barrels a day of oil production in 2030, rather than the 120 million that many people looked at before. Natural gas will probably grow faster in supply and demand than oil over the next 25 years. The fastest-growing fuels will be alternative sources: solar, wind, others. Unfortunately, even over the next 25 years the market share of alternative fuels is going to stay relatively small. The world in 25 years in energy seems to look very much as it does now: more natural gas, probably more coal and more nuclear and a little bit less oil growth.

How has the war in Iraq affected global oil markets and security?

Sieminski: The Iraq war was not fought for oil, at least not from a financial standpoint. It has cost us a lot more to have American troops over there than we would have paid just to buy the equivalent amount of oil produced in Iraq. Before the war, Iraq was producing about three million barrels a day. They're producing about two million barrels a day now. The instability in the country has prevented a rapid move of foreign capital and even Iraq's own money into the oil sector that might help them grow their production and help their economy and help meet world demand growth. So the potential of Iraq, looking out over the next 10 or 20 years, is significant. There are many geologists who believe that Iraq might have as much oil as Saudi Arabia.

Dave: I don't think your question should be restricted to just the OPEC countries. Putin's policies in Russia are discouraging outside investment and Russia has been largely responsible in recent years in providing oil to meet increasing world demand.

But Adam, do you really believe the Iraq war wasn't primarily about oil? This seems quite naive based on the evidence. In this context, how can we trust the IEA's longer term forecasts as you mentioned above? Fatih Birol, their chief economist, believes that "Iraqi crude output will grow to 3.2 million b/d in 2010 and rise further to 5.4 million b/d in 2020 and 7.9 million b/d in 2030." Given that it appears that Iraq is a total geopolitical snafu with little hope of getting better in this decade or beyond, how can you believe what the IEA is saying in general if the skepticism about Iraq's future production expressed here is justified? Historically, conflicts like that in Iraq don't magically resolve themselves--they stay unstable for a long, long time. A civil war there between the Shia and the Sunni Arabs is definitely possible. Already, the Kurds are cutting separate deals with Norway among others to develop the northern oil fields there.

Franssen: The result of the war has been that Saudi oil has become more important than ever.

Mintzer: There's another dimension to the Iraq picture, and that is by our going into Iraq, we displaced a $1 billion investment by the Chinese to develop Iraqi fields. That has motivated the Chinese to do things like buy into the Canadian oil sands and to look into buying Unocal. And it has encouraged them to invest in highly volatile oil provinces that are in opposition to the United States, including the Sudan.

Diwan: Who owned the oil is immaterial. It's a global market and the Chinese could be in Canada and if oil prices go to $150, it doesn't matter if they're in Canada or they're nowhere, they still have to pay $150. The fundamental issue is supply security. And the problem is that most politicians believe that supply security is to control the oil, which is totally irrelevant.

How well equipped is our system to manage the risks of world oil markets?

Diwan: Much less than it was five years ago, when the United States was actively managing the world economy and the conflicts through international institutions.

Franssen: Another important issue is the predicament in developing countries. After World War II we built suburbia on $1-a-barrel oil. Europe recovered after the war on $1-a-barrel oil; Japan recovered on $1-a-barrel oil. The Asian tigers built up their economies on less-than-$20-a-barrel oil. If the world is now in a mode of $40-plus oil, can developing countries build up a lifestyle that we have been taking for granted for the past 50 years? And once they know they're left out, will they say, "You can have your Ford Expeditions, while we live our miserable life"?

Are there any major misperceptions out there you would like to correct?

Sieminski: There are way too many conspiracy theories that involve oil.

Diwan: Between conspiracy and incompetence, I'll always choose incompetence as an explanation.

Dave: Agreed. Wishful thinking and denial are also problems. I might also add that abiotic oil is a myth and blind faith in price & technology as expressed in bestsellers like Steve Levitt's Freakonomics is a dangerous religion.

Thank you all so much for coming