



Interview with Matt Simmons

By [Steve Andrews](#) • Published on April 6-20, 2009

ASPO-USA's Steve Andrews recently hooked up with Matthew R. Simmons, chairman of Simmons & Company, Int'l, for a lengthy interview.

Question: *How has demand for your presentations and TV experiences moved up or down with the price of oil?*

Simmons: The flow doesn't seem to be as intense as it has been periodically. There was one point late last May when there were five different programs doing something on oil and I just happened to be in New York for three days, so I've never had a busier back-to-back-to-back. I've done three live interviews the last three weeks and I was interviewed six times last week in Europe.

If you saw the story in [*we'll call it X*] a few weeks ago, their bureau guy in Houston had finally gotten the green light to do a major story. When he came over he said, "I can't tell you how many times I badgered my editors to let me do a story about you and peak oil, but they didn't want to touch it with a barge pole. 'That's just something we don't want to associate ourselves with.' Then, with oil prices collapsed, I got a call a few weeks ago saying, 'okay, we're finally going to let you do your story on Simmons. We want to do a story on how much crow he's had to eat since he was so wrong.' Had oil prices collapsed, I could not have caught their interest to do the story. And this story finally taught them something about what this issue was all about."

Question: *The Economist, which ran their famously wrong story "Drowning in Oil" 10 years ago this March, recently did a story on you. How did that go?*

Simmons: The writer said that, "my editors were really quite surprised." He did a very balanced job of reporting, and he said they had never really heard the peak oil story before.

In the case of "Drowning with Oil," I got a call in late February 1999 from their writer who introduced himself as being new at the energy desk but a long-timer at *The Economist*. He said, "I've been working on a major story for the better part of a month, and people I interviewed said I ought to interview you because you would have an opposing view." He said, "the story is we're going to have \$5 oil for a decade or two because Saudi Arabia is sitting on a \$100 billion war chest, and once and for all they're going to lower the price of oil to \$5 and keep it there long enough to knock out the Caspian and other stuff, including any form of alternate energy before it gets out of hand. "What do you think of that?" And I said "it's the dumbest thing I've ever heard of. The oil and gas industry is suffocating on a price as low as \$10-\$12. Saudi Arabia doesn't have such a war chest. Mexico and Venezuela are hurting. If we keep oil prices this low for another year to 18 months, we'll lose 4 million barrels a day of supply. Then we'll have an oil shock." And he said, "oh, you can't be right. I've talked to Shell, Exxon, Amy Jaffe, Dan Yergin-everybody."

The next week in Europe, I spotted a kiosk with *The Economist* with "Drowning in Oil" on the cover. I read it in the cab and realized this is twenty times worse than I ever would have thought. That was on Tuesday. On Friday, the oil ministers of Saudi Arabia, Mexico and Venezuela brokered a deal to take 2.1 million barrels a day off the market. When they cut, they actually cut into a balanced market. Within 18 months, oil was up around \$30 and we were dumping 30 million barrels from the Strategic Petroleum Reserve into the market to cool it down before the election.



The writer didn't start out with a hidden agenda. He simply wondered what the implications of these low oil prices are. This was the era when the majors believed that technology had brought the cost of oil way down for a decade or two to come.

Question: *Have the media treated you fairly?*

Simmons: A few people have been trying to paint me into a corner for a long time. But by and large, I've been treated unbelievably fairly by the media. And I think one of the reasons is based on the feedback I get, which is "thanks for the easy way of describing these things so they aren't so mysterious. And you have facts-most people don't." My thinking: do your analysis first; second, check it again; third, don't rely on a third party; then, if that's what you conclude, go ahead and speak out with the courage of your convictions.

Question: *Do you recall when you started studying the peak oil story? It was sometime in the 1990s?*

Simmons: I wasn't studying the peak oil story then. In 1989, I began pondering-as it was clear to me that the worst was over in terms of the smashed rig count-when it would have a deleterious impact on oil supply in the US. At that time, it hadn't had nearly the detrimental impact that I would have thought. We started running correlations of wells drilled vs. reserves added. It appeared that there was a two- or three-year lag; there's almost a perfect correlation of when the decline starts... That's when I realized how few people knew that if you don't drill, it eventually shows up. Then in the early 1990s I started hearing the first of what became a loud chorus of commentators about how modern oil-field technology had been the game-changer-that we only needed one rig for what we used to do with 8 rigs because of horizontal drilling. And because of 3-D seismic we no longer drill dry holes. Since our firm did all the investment banking in all those technologies, I felt 'what an unadulterated bunch of baloney. None of this is true.' That's when I started realizing that few people in the industry really appreciated what decline rates were. So I spent an enormous amount of time during the 1990s trying to analyze depletion data: the rates of decline. As the fields started using those technologies, the decline rates accelerated.

At that point I still didn't understand what the peak oil issue was all about because I automatically assumed that we had so much oil in the Middle East that we'll never have peak oil. But I thought if we don't spend a ton of money in the Middle East, we'll have peak capacity. And what's the difference? We have it in the ground but we can't use it. So it was probably when I started doing the study on the world's giant oil fields that I started glimpsing maybe the Middle East is an illusion too.

Question: *When did you publish that giant oil fields paper? We still view it as a ground-breaking paper in the long-evolving peak oil story.*

Simmons: December 2001, I believe. I was speaking at a Council on Foreign Relations event in the winter of 2002 and Ken Deffeyes came up from Princeton and told me, "Your giant oil fields study is the most important work since Dr. Hubbert did his original analysis. It's the first time that anyone's looked at flow rates." It certainly gave me some context for when I finally spent a week in Saudi Arabia; you hear about that handful of enormous fields...well, take note because that's all they have.

So it was the late 1990s [the interest in peak oil]. But again, my fascination was, how do we replace these decline curves? As flows start to slip, unless you start spending a lot of money in the Middle East, I don't care much oil you have in the ground. And by then, I started to realize that I don't think "reserves" mean anything. Because I've watched, being on several boards of oil companies reporting 130-140% proven production



additions than they produced over the years, while in five years production growth has gone to zero. I asked, are you sure these numbers mean anything?

Question: *What are the big differences between the demand drops post-1978 and today?*

Simmons: They're as comparable as the Crimean War and the Vietnam War. I recently heard Leo Drollas and Ed Morse presentations in which they lamented that "we should have learned from 1979 that high oil prices kill demand: they always have, they always will." I have told people over the last few months that today has no earthly resemblance to what happened in 1979. When oil prices were still rising in 1979, the world was seriously rolling out the only new form of energy in the 20th Century-atomic energy. It had been building for 15 years and that wasn't in response to \$30 oil. In 1979, we were still bringing in oil from three of the last great frontiers, all discovered in 1967-69: Western Siberia, the North Slope of Alaska, and the North Sea. High oil prices kept those expensive projects afloat.

Crude oil demand grew from 46 million b/d in 1970 to its then-all-time high of 62.7 mb in 1979. The enormous swing in price-from \$2 a barrel to \$35 a barrel, from 1970 to 1979-didn't slow demand. By 1983, demand did drop to 53.3 million b/d. The four major demand reduction drivers were fuel-switching to nuclear, fuel-switching to coal, vehicle efficiency and off-shoring heavy industry. So only a fraction of the decline in demand came from what everyone has said for two generations: "high oil prices worked...consumers changed their habits." With respect to demand today, some of the OECD countries are now very mature and haven't been growing their populations or economies. Japan and parts of Europe are pretty gray, pretty mature, so we shouldn't be expecting robust growth in either their economies or in oil demand.

Over the course of the 12 months preceding the price collapse, when we had oil going from \$70 to \$145 and backing off to \$120, we had only a deminimus change in a few of our key demand markets for oil, even though we were capping off a decade-long rise of 15-fold in oil prices. That's a little reminiscent of the 1970s, when oil prices rose 10-fold, though demand rose until the end. The higher that oil prices went last year, the more that people who had staked their careers betting this would never happen said "supply is going to soar, and demand must be falling."

Along came June-July-August numbers out of the EIA, which are the only sort-of-reliable near-term estimates we have on demand. People started to observe that we've finally seen a crack in gasoline demand, starting to decline year-over-year. All sorts of stories started circulating how gasoline demand has finally turned down for the first time since 1990.

In July in Maine, which is peak tourist season, many of the gas stations we passed were down to one pump in operation. When I asked why, I was told their supply was being allocated, restricted. At least one of the distributors had small gas stations on credit watch, since they were lending them product to the tune of \$400,000, leading to large exposure for skinny margins. So they were limiting supply to avoid write-offs from dealers that might go bust.

In the spring of 2007, I spoke with Linda Cook at the EIA event in April. I said that with gasoline stocks at such unbelievably low levels, we need to be concerned about potential shortages leading to a panic that people would respond to by topping up their tanks, which could dry the system dry in two or three days. I asked her if they had ever considered this, and the need to possibly print up rationing tickets. She did, and said she was laughed at-"Linda, you're hallucinating." She said she had been noticing that at service stations in the Beltway



area, when she looked at the last purchases on the pumps, a lot of them were at \$5 or \$10, rather than filling up. People were driving around with just-enough gasoline in order to avoid having to pay for a full tank. Last summer, AAA reported that they had a 17% increase in their use of tow trucks for people who had run out of gas.

Then came September, and we had the big collapse, because we had two back-to-back hurricanes. Right after Ike hit, Houston was without power for the better part of two weeks. Refineries, with their own generators, were without power just long enough that we had service stations with outages that spread all across the south, as far up as Maryland. Only the Atlanta part of the story was covered, other than by local news, because the national news was being totally dominated by failures of Lehman Bros., AIG, Merrill Lynch, etc. Had we not had the financial meltdowns, those other stories would have been covered, then motorists would probably have topped up their tanks and we would have run out of gas.

EIA's weekly data in September was total junk because nobody was around in the Gulf Coast to measure it. In late October, by the time they released their monthly report for September, it showed a gasoline decline of 11%. People were saying, "high prices started this avalanche, but it's cascading."

At the recent Yamani Conference, Paul Horshnell, who does a fabulous job, said that we've seen the worst of the demand destruction in the US, which clearly had to be impacted by the hurricanes. But when you look at the IEA's demand drop for 2009, two-thirds is coming from the US, based on the assumption that the third quarter wasn't an aberration but a trend. Yet if you look at gasoline consumption over the last five months, gasoline consumption is up 2%, then down 2%, then up again. Diesel fuel is still down about 10%, but most of that is exports. Then jet fuel is down 10%. Relative to the price collapse, you would expect a major drop as opposed to the modulation we've seen. It's more or less unchanged, vs. a headline story.

But what I'm now sure of is that, in North America-in the only easy place in the world to stop drilling-we have stopped drilling. Hopefully we're getting towards the bottom of the decline, but the decline has been savage. Around the rest of the world, we're slowing down every planned project that is supposed to be getting started, and a lot of things needed to complete ongoing projects are being put on hold. There is an enormous effort by the major oil companies to use this low-price environment to finally get oil services inflation under control. While there is a lot of lip service going around that their budgets remain unchanged, the fact of the matter is that they're killing their contractors. BP apparently sent out a letter to all their suppliers saying "BP has a large budget for this time of year, but if you want part of it drop your costs by 30%."

Question: *Even with all the storage topped up and all the so-called floating storage...?*

Simmons: The latter is a bunch of BS. First of all, to play that game, it would basically mean that for the idea of possibly capturing some found money, you somehow airlifted oil out onto a tanker and you figured that somehow or other you'll deliver it at Cushing. The near-month price for WTI was the only month that had this sharp contango; the others were way higher. Do you know how much it would cost to store 80 million barrels? Over \$5 billion. It's an extremely expensive game to play, which is why no one does it, other than in the minds of oil traders. Every time the price collapses, you gotta have a reason for it.

Our finished supplies of gasoline are down to 89 million barrels. We're back to where we generally are after a long savage hurricane. So we better hope that motor gasoline demand is way down because our stocks are



very skinny. Stocks of crude are back where they were in April-June of 2007. They are on the high side of the historic averages, but for the last five years we've bounced around the lowest levels we've ever had. Back in 2007, we weren't saying we're drowning in oil.

If we don't see a snap-back in prices for three to six to nine months, we should start preparing ourselves for a very large loss in supply, and brace ourselves for a shortage, unless suddenly demand does start to plunge, which so far it hasn't done. If oil prices just stay unchanged for 18 months, or just bounce around with no confidence, then the industry will say, "Oh, that was a mistake, we need to start drilling!" The lag time in getting started is another 18 months. In 30 months, we could find crude oil supply-which was 72.2 million barrels a day in the fourth quarter, according to EIA estimates-down to 66.5 million b/d, with worst case at 59.6 mb/d. That's obviously an utter catastrophe.

So, the difference between today and 10 years ago, when we had the "Asian flu," is that the rig count recovered very quickly back then so we only had about 9 months when things could have really started to hurt. It snapped back so sharply. Also, back then we didn't have decline curves nearly as vicious as we do today. The market in 1997 was tight as a drum until about the end of the year. It started weakening as 1998 progressed and then the surprise collapse grew momentum. In September 1998 I remember talk of stacking rigs, but six months later we were off to the races.

[Footnote: in December 1998, the EIA forecast that demand and oil prices would remain lower-the \$14 range was cited-through 2007, thanks in large part to the Asian flu.]

Question: *Can you compare the early stages of the Obama energy policies to the Bush energy policies.*

Simmons: They are as strikingly different as you could get in that the Bush attempts at energy policy were very concerned about shoring up and diversifying our supply, and returning to the need to figure out nuclear power because of signs that maybe our natural gas supply had flattened out. From the early signs we've seen from the Obama energy plans, it's basically we need to end our addiction to oil because of climate change, and create a green revolution that will strengthen the American economy. I haven't seen anything in print that would indicate that any of the people in the Obama administration have the vaguest concern about supply, other than the detrimental impact that supply might have on climate change. So it's sort of a Tom Friedman-driven view. The only guy in this administration who is apparently steeped in concern about supply is General James Jones, National Security Advisor. As smart as those guys appear to be, I don't think that any one of them is about to have the epiphany that-as serious as climate change might be-if we have a supply collapse, the game's over.

Question: *Another major price spike in the offing?*

Simmons: We didn't have a "price spike;" we had a decade-long rise of 15-fold in oil prices. During the entire decade, we have every lame-brain excuse you can imagine as to why oil prices were temporarily artificially high: the war premium, the risk premium, the labour unrest in Venezuela, the militant unrest in Nigeria, the lack of a quick response from Iraq when the war ended, all the projects that should have been done a decade ago that are just coming on stream, the weak dollar, hedge funds, speculators, abnormal growth in China. The only thing people forgot to look at is fundamental supply and demand. And what they should have looked at is the fact that, from 1997 through 2007, petroleum demand grew by just a shade under 13 million barrels a day and crude oil supply only grew by about 7 mb/d; and most of the growth was in the first half of the decade. So, we



created a very tight market. And too often we topped up the market with stock withdrawals...and the price went up 15 fold. But the 15-fold rise didn't really trigger an intense re-examination of our whole oil system. About 1 millionth as many people are worried about peak oil as those worried about climate change.

With the benefit of hindsight, some of the numbers that were being bandied around during the 1990s, about how much permanent oil demand we had lost because of the Asian flu, were box-car-like numbers-demand is going to be off 5 or 6 or 7 million b/d. Demand in Asia was growing like a freight train: from 1993, demand for "other Asia" grew from 5.2 million b/d to 5.6, to 6.1, 6.5, 6.9 (1997), 6.9 (1998), 7.4 in 1999, 7.6 million b/d in 2000. So in fact the Asian flu just slowed demand down for 9 months....I kept saying, how sad to destroy the industry on the illusion of a glut. Now, it's how sad to destroy the industry on the illusion of plunging demand. How sad.

...The only number we ever get about *real* gasoline demand is when the states collect gasoline taxes and total them up. It's published by the Federal Highway Administration in about the middle of the summer.

...When the US got our total petroleum demand up above 20 million b/d in 2005 - 2007, we literally couldn't supply it. We had to run our refineries at an unsustainably high rate, we had to assume that crude oil supply would start to grow again or at least stabilize. Our maximum capacity to import crude oil is 10 to 10.5 million barrels a day; it's all we have the pipeline to do. We import finished products, but we export some as well. So when we get up around 20 million barrels a day, we make up the difference by stock liquidation. Something had to slow demand down. A sustainable figure is more like 18-19 million barrels a day than 19 to 20. So, gone are the good old days when we used to have booming demand: we can't supply it.

Question: *When you look back on all the analysis that you've done, what do you think were your best and worst calls?*

Simmons: Most of my analysis hasn't been 'calls' but just ominous warnings that we need to prepare ourselves for the worst and hope it's not that bad. And the calls, per se, were that we were grossly underestimating demand. Going all the way back to the first five years of the 1990s when everyone was saying we've peaked in demand at 66-67 million barrels a day, I would say that what you're looking at is the collapse in demand of the former Soviet Union and Eastern Europe that has totally counterbalanced the growth everywhere else. Unless you were willing to believe the FSU decline would go below zero, that will end. So the major assessment of the needs of China that I did back in 1997 was enormously valuable for me. I don't know how it worked for everyone else, but I'm looking at how my education grew. The paper I did, "Could the Club of Rome Have Been Right?" [*in 2000*], when I looked at countries that went from being poor to being not wealthy but not poor any more-you can make book on oil demand rising. Then came my "The World's Giant Oil Fields" paper. But then it was just a relentless study of facts and figures about depletion and trying to understand why this depletion happened-what's mechanically going on, the cause of that, and what we can do to mitigate it. And finally wading into the reality of Saudi Arabia's oil, reading those stacks of technical papers that forced me to finally close the loop of what a lot of this stuff mechanically actually meant, like someone finally understanding what makes your toilet flush.

My worst call? The one I got severely criticized for being just one of the goofiest things for quite some time was back in 1997. In preparation for giving a keynote address to the National Association of Drilling Contractors, I took on the rumor that the offshore drillers couldn't stand prosperity and that, one more time, they were going to overbuild the fleet...as they were adding five new rigs. I got so tired of hearing this naiveté that I spent the



weekend preparing a talk. I was pleased with the talk and turned it into a white paper—"The Case for Rigs." I asked that, if we wanted to have a healthy offshore drilling fleet by 2007—and we've better, since the offshore was responsible for 101% of all of our growth—how many rigs would we need to add between now and 2007 if we wanted to have a robust new fleet? Most of it was for replacing the old rigs. I said that if we're dumb enough to actually not do that, then our roof is going to rust away. I showed a need for 450 offshore rigs, and people thought that was the most astonishing thing they had ever heard. Then, when the oil price collapsed, that was deemed to be one of the classic bumble papers ever written. And now we're sitting on a fleet of 500 offshore rigs that average 29 years in age, and they are rusting away. I think it's actually unsafe to have crews on the oldest rigs. One of these days, a leg will rip apart and the rig will flip over and 250 people will die and that will be our Piper Alpha [*the UK rig disaster in the North Sea that was caused by a fire in July 1988*].

Question: *So people viewed that as your "Drowning in Oil" misstep?*

Simmons: I didn't ever think so. I was talking about what would happen by 2007.

Question: *My last question: have you been surprised by the gas industry's growth in shale gas?*

Simmons: I've been surprised by the hype that assumes there's been major growth in shale gas. I don't think there has been any data of any reliability that proves we've actually had the growth in shale gas that we think we have.

Question: *Some people here in the industry in Colorado are promoting it big time. They see it as a game changer. Couldn't they be right?*

Simmons: I've never seen the industry hype something crazier. Here are some numbers that I find enlightening. Of all the shale plays, the only one that we have significant production history on is the Barnett Shale. In the Haynesville, I think there are around 20 or 30 well-tests so far, and I don't know that there are that many in the Marcellus. Consider these figures in the March 22 Barnett Shale Newsletter. It shows Barnett Shale total natural gas production by year, 1982 to 2008, all counties and fields in the Fort Worth Basin. In 2004-3890, then 4973, then 6542, then 9180, then finally 12104; and I thought, gee, we increased production X%, but then I realized that's the number of wells! In 2008, we went to 4.8 Bcf a day, from 3.56 the year before—or up 1.24 Bcf/day. We're looking for an increase of 8 Bcf, according to the EIA numbers, so the Barnett Shale did 1/6th of that.

Here's another interesting set of numbers. All the big natural players have all now reported their results. The top 10 players increased their production in 2008 over 2007 to the tune of 685 mmcf/day. Unfortunately that was mostly offset by the top 10 gas decliners, led by ExxonMobil, BP, ConocoPhillips, Chevron, RoyalDutch/Shell, Marathon, Newfield, Hess, and they dropped 601 mmcf/day. So we netted out a plus 84 mmcf/day. Then you have about another 800 coming from about 40 individual reporting companies, but none of them are big enough—even if they tripled their production—to really make a difference. So that means that to match the growth that the EIA believes happened, then the residue—these hundreds and hundreds of mom-and-pop operators—would have to have grown their cumulative production twice as fast as the top 10, which obviously didn't happen.

The EIA started reading the hype. And even though they probably have been puzzled that the number of gas wells completed went from 8,000 to 10,000 a year up to last year's 33,000, and all we did was tread water for nine years. So right at the end of the year last year they started showing month-to-month growth year-over-



year of 5%. Then in January they knocked their model up to 9%, so every month it was up 9%, year-over-year. They just knew, because they read the hype. We won't have any real numbers until the states report what they collect, in the 3rd quarter of 2009. But I think we have the numbers in [from the companies] to say that we barely grew supply. Too bad we destroyed the industry.

Barnett Shale also has a production profile where peak initial production happens virtually when you come on stream, because of the way you frac the wells. By the end of the first year you're down 70%.

Question: *So you think that the shale gas story is the most hyped story...*

Simmons: It's the most hyped play since Kashagan, which was later derisively called "Cash is gone."