



More on the role of fuel in the Mining Industry and an eye on Russia

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Topic: [Demand/Consumption](#)

Tags: [coal](#), [lng](#), [mining](#), [natural gas](#), [oil](#), [russia](#), [shtokman](#) [[list all tags](#)]

In my last post I commented that, while the mining industry was rejoicing in the increase in demand for coal, the impact of the underlying cause (Peak Oil) was not fully appreciated. I had lunch yesterday with an engineer who has some responsibility in the [SME](#), as well as a corporate job. While I talked to him about the SME role in looking into ways of saving energy within the industry (where there are a number of processes that could be made more efficient) the answer was that the [Mining Industry of the Future](#) program at DoE had tried to do just that, and had just turned into toast. Thus it was not a really positive thing to push. So we talked some more, and after a while he switched to his company job role. And admitted that energy costs were the greatest current problem that he, his company, and the entire industry, are facing.

And yet he still, the Peabody speech notwithstanding, did not see this as a long-term continuing problem, but still as a short-term phase to get through. The point being that it is short-term it's not worth the effort and cost to find alternative less-energy-intensive processes, if it is long-term, then you have to look at entire processes and make the investment (which can be high), to find lower-energy-cost alternative solutions. (We had a variant of this discussion earlier in the year in regard to the poor and heating bills. If the crisis is short-term you pay their bills, if it is long-term you are better to pay to insulate their houses - as a very crude summary of that debate and as an illustration of the point).

The tipping point has to come when it is not only the size of the problem, but the inexorability of decline and its sustainable presence are realized and accepted. Right now, for those facing the consequence of tightening supply, most look on it as a problem that will go away, and thus the solutions that we talk about are still not easily marketable because the scale of the problem is not understood. This was the problem with the CNN "We Were Warned" program. It did not explore beyond the original impact and give people a sense of what the world would turn into. We had a precursor back when President Carter first came into office and the problems that he, and the nation faced. An impact now either forgotten, or since it was almost 30 years ago, not memorably experienced by the commentators since they were either too young or not yet born.

I see that the [Moscow Times](#) is reporting that there is not enough investment to sustain oil and gas exploration.

"[Companies] only find money to invest in production but not for the [long-term] prospect," said Viktor Orlov, the chairman of the Federation Council's committee for natural resources.

He said only 507 oil deposits with estimated reserves of 5 billion metric tons, out of 1,850 licensed deposits, were waiting to be developed.

Under Russia's energy strategy until 2020, about \$18-25 investment is to be contributed to the energy sector, Orlov said.

"According to our estimates, we are \$10 billion short of the target," he said.

Under the plan, oil production is to grow of 1.8-1.9% annually in the next few years and gas 1.2%. "The development is restrained not only by shortage in investment but also by the poor reproduction of the mineral base," Orlov said.

In the past 14 years, Russia's oil base shrank by 1.3% annually against 1.5% growth in the rest of the world.

"For 14 years, oil and gas production has exceeded reproduction, or, in other words, geological prospecting only replenished 60-65% of extracted reserves," he said.

. There have been posts on this and articles written in the past, but I note the new story for some of the data that it contains. In the same vein, and from the same Moscow Times summaries comes the note that Gazprom is planning an increased investment in LNG.

Gazprom plans to produce LNG for future deliveries to the North American market at the Kharasoveiskoye and Shtokman fields, while independent LNG producer Novatek is working on the Yamal Peninsula. Another liquefaction plant is slated to be built in Ust Luga in the Leningrad Region in cooperation with Petro-Canada. SG-Trans, Russia's biggest transporter of liquefied gas, plans to build a terminal for 0.6 million metric tons of LNG there.

The development plans of the Shtokman field provide for the delivery of gas to the LNG plant, which should turn out about 20 million metric tons annually. About 90% of it is to be sold in the U.S. and Canada and in northern Europe. The Shtokman deposit has enough gas for 50 years of deliveries to the United States.

Russia's LNG projects in the Far East are meant to provide fuel to the country's East Asian neighbors, namely Japan, South Korea and China. The pipeline delivery plans there are lagging behind LNG prospects, primarily the Sakhalin projects organized by transnational companies. Two LNG production lines with the annual capacity of 9.6 million metric tons each are being built under the Sakhalin II project.

However the article also notes that

It is apparent that Russia, despite its unique gas resources, will be unable to simultaneously cope with both tasks -- build gas pipelines in all directions and create major LNG production facilities. However, the production of LNG is a highly promising sphere of development in the Russian gas sector that deserves close attention.

It is also, one presumes, part of the Gazprom goal of increasing its share of the European gas market [from 25% to 30%](#).



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