Editor's note: Berman, an AAPG member, is with Labyrinth Consulting Services in Sugar Land, Texas.

COMMENTARY

Say It LOUD: A Few Words About Peak Oil

By ARTHUR BERMAN

A story in the January EXPLORER ("Surprise! North America Grabbed the Spotlight"), included the observation "The Peak Oil guys are pretty quiet now, thanks to the creativity and innovation of the industry," regarding the tight oil additions to oil production in the United States and Canada.

I am on the board of directors of the Association for the Study of Peak Oil (ASPO USA), and I can assure you that we are not quiet nor do these additions change our concern about the growing cost of oil and its effect on our economy.

In the past month alone, we held a major conference in Austin co-sponsored by the University of Texas, a great advocate for the oil and gas business (Texas leads the United States in both oil and gas production). Right after the conference in Austin, a group of our members presented a panel discussion at the fall American Geophysical Union meeting in San Francisco.

In the same month, we were invited to spend two hours with Adam Sieminski, the new administrator of the U.S. Energy Information Agency (EIA), and all of his top line staff. On the same day, we met with the new chairman of the Senate Natural Resources Committee and with a former senior senator who is now among the leading energy lobbyists in Washington.

Some people take us very seriously because they understand that "peak oil" does not mean we are running out of oil. It means that we have run out of the cheap oil on which the global economy is predicated. That is serious business.

We also applaud the creativity and innovation of the industry that has increased U.S. production over the past few years. It is, however, very expensive oil. Tight oil requires at least $80 per barrel for operators to break even because of the cost of horizontal drilling and hydraulic fracturing, not to mention the unprecedented leasing costs that the shale revolution has brought to our industry.

The high price of oil is among the key underlying reasons the United States and most of the developed world cannot get out of this recession. Gross domestic product (GDP) and oil consumption correlate because the economy runs on energy, and oil and its refined products are the largest component of primary energy consumption.

Because of the high price of oil, consumption in the United States has fallen 1.5 percent per year since 2005, and GDP has followed suit. Pre-2005 normal growth for the U.S. economy was 1.8 percent per year. With an annual 1.5 percent decline built in, it is not hard to see the problem with resuming growth.*

BERMAN

The IHS tight oil study the EXPLORER story quotes is confusing because it combines Canada and the United States. Canada has been energy self-sufficient for decades and is the leading oil exporter to the United States – any production additions from Canada are still imported oil for the United States.

The EIA estimates that U.S. crude oil production will increase to nearly eight million barrels per day by 2020 and then decline. Present consumption is almost 15.5 million barrels per day. If EIA is correct, the United States will still have to import about seven million barrels per day allowing for demand decline, and that does not look like energy independence to me.

Most of the exuberant reports about energy self-sufficiency from domestic production lump crude oil, natural gas liquids, refinery processing gain and biofuels as "liquids." That is fine, but we must bear in mind that what we import is crude oil and today, we cannot use other liquids for transport – the main use of crude oil – without massive equipment and infrastructure changes that will cost trillions of dollars and take decades.

These same optimistic reports almost never consider cost, price or profit margins.

The new production we are finding from tight oil is both important and exciting, and it will help make the United States less dependent on foreign crude oil. It will not, however, make us energy independent.

Peak Oil guys like me are hoping that at least people in the oil and gas business will realize that we have a problem that is not going away.

(*All data in this section from Douglas-Westwood.)

Continued from previous page

adapt to user behavior over time. You need technologies like fuzzy term matching, relevance scoring, part-of-speech analysis, content clustering. It's all basic graph theory and is well-understood by some web app developers.

▸ Allow people to add categories – or at least tags – of their own, so that your users can decide how they want to find things over time. You can weight them differently, but at least they are there. This has to be super-easy and fast.

Good luck with whatever you decide to do ...

Matt Hall
Mahone Bay, Canada