Caspian Oil: How Vital Is It to U.S. Energy Security?

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The issue of Caspian Sea oil is often entangled with many political considerations. In determining the actual importance of Caspian Sea oil, however, one needs to determine how much oil there is, how to extract the oil, and finally, how to get it to market. The answers to these question provide real insight into the actual value of the Caspian as an oil-producing region and how it compares to a true oil exporting region like the Persian Gulf.

Amount of Oil in the Caspian Sea Region

Saudi Arabia has 259 billion barrels of oil under the ground in proven reserves. One knows where the oil is, and it can be readily extracted from the ground. On the other hand, the U.S. State Department's report that the Caspian basin is home to 200 billion barrels of oil refers only to probable resources. After twenty years of exploration, one may or may not find 200 billion barrels. Thus, these two figures are not comparable.

A better comparison would be Saudi Arabia's proven reserves of 259 billion barrels and Kazakhstan's proven reserves of an estimated 10 billion to 22 billion barrels (Kazakhstan has 80 percent of the probable reserves in the Caspian basin region). According to the Baker Institute's figures, the Caspian has only 3 percent of the world proven reserves -- a paltry figure compared to 50 percent to 60 percent that sits in the Persian Gulf. By these standards the Caspian basin is obviously no Persian Gulf.

Oil executives themselves do not estimate 200 billion barrels in probable reserves. Rather, they estimate probable reserves of less than 100 billion barrels.

Feasibility of Extracting Caspian Oil

Most of the oil in the Caspian region is offshore under the Caspian Sea. Drilling for offshore oil requires the use of semi-submersible rigs. Such rigs are enormous. They are usually built by large, modern shipyards and towed by sea to the oilfields. That is not possible in the Caspian. The Caspian region is landlocked; rigs can not be towed there from oilfields or shipyards outside the Caspian. In the Caspian region there is only one shipbuilding yard, and it is substandard. When British Petroleum decided to import a rig into the Caspian, the rig had to be cut into small segments and brought by barge down the Volga River, to be reassembled in the Caspian; twelve months later, the rig is still not ready.

In the North Sea, eighty-nine rigs operate in a region with 173 billion barrels of proven reserves. In contrast, the Caspian (with perhaps similar reserves) is served by one rig. Even if the Caspian oil is there, extraction will be very slow.

Getting Caspian Oil to the World Market

By 2010, the Caspian region will be exporting only 2 million to 2.5 million barrels of oil a day. Even by conservative estimates, the countries of the Black Sea region, Romania, and Ukraine, could probably absorb 1 million to 1.5 million barrels a day themselves, leaving very little oil for the market outside the Black Sea.

The challenge for marketing Caspian oil will be that the oil may not be very profitable in a world where oil is sold for $12 to $18 per barrel. Caspian oil must travel by pipeline through a number of countries before it can be placed on tanker ships. Oil production costs in the region are thus much higher after paying transit fees, pipeline upkeep, and tariffs. Moreover, Kazak oil is very high in sulfur and needs expensive treatments to make it marketable. Oil producers might spend $10 to $11 per barrel before the oil can even be put on ships. Thus, Caspian oil production is far less profitable and far less money is left over for the producing countries and the oil companies.

By 2010, the Caspian will likely constitute only 3 percent of a probably oversupplied oil market. Three percent is an insignificant amount of total production; removing it from the market would change the oil market negligibly. Therefore, there is little reason to emphasize the Caspian as an element in energy security, especially when the Persian Gulf will remain of vital importance for many years. To be sure, there may be reasons other than energy security to focus so much diplomatic effort on the region.

Although the U.S. government favors multiple pipelines, one large pipeline is more cost-effective than two smaller ones. In a region like the Caspian, where oil production costs are so high, it makes sense to favor a pipeline route that involves the fewest number of transit countries and tariffs.
The U.S. government has devoted much attention to the Caspian. That may be appropriate for many reasons, but energy security is not one of them. There is a much more urgent energy security issue brewing, and that is the reorientation of the Persian Gulf oil from West to East.

> The United States currently obtains from the Middle East only 5 percent to 6 percent of the total energy it consumes. By 2010, that percentage could be close to zero. The United States obtains most of its oil imports from the Atlantic Basin -- that is, the North Sea, North Africa, Mexico, and Latin America. To be sure, the oil market is global; a disruption in one part of the world affects prices everywhere in the world. But it is not clear how much U.S. political support there will be for protecting the Persian Gulf when so little of its oil goes to the United States.

At the same time that the United States is buying less and less Persian Gulf oil, East Asia is consuming more and more. In particular, China is the world's second largest oil consumer. Since 1993, China has been a net oil importer, most of its oil coming from the Persian Gulf. By 2015, China could be importing 2 million to 4 million barrels of oil a day.

> A Confucian/Islamic alliance could be formed (as Samuel Huntington argues) between China and Iran or Iraq. This, however, seems unlikely. For instance, China is beginning to rethink its policy on arms sales to Iran because it now realizes that the missiles it provides to Iran are going to target China's oil sources. It is more likely that China will aim for a greater stake in the world oil industry. The Chinese have recently stunned many observers with their enormous oil deals. The Chinese oil companies made a $4.5 billion agreement with Kazakhstan to build a pipeline from there into China, a $1.2 billion deal to develop the Adab oilfield in Iraq, and an investment in the Iranian oil company; it also outbid two Western firms for the rights to develop two oilfields in Venezuela. On the positive side, these developments could lead to China's increased integration into the international system; on the negative side, this will give China a greater desire in playing a security role in the Gulf.

This Special Policy Forum Report was prepared by Harlan Cohen