



Summary of the Crude Export Roundtable

February 25, 2014

On February 25, 2014, Columbia University's Center on Global Energy Policy (CGEP) and the Baker Institute's Center for Energy Studies hosted a roundtable on the implications of the U.S. crude oil export ban and the prospects for reform. The roundtable is part of a CGEP study on U.S. oil export policy, a collaboration with Trevor Houser of the Rhodium Group and Ken Medlock of the Baker Institute, which will be a comprehensive analysis of the economic and geopolitical implications of a shift in policy relative to the status quo. Energy leaders from government, industry, banking, and academia participated in a discussion of light tight oil production, refining economics, regulations, U.S. and international oil markets, and major avenues for industry and policymakers to respond to increasing domestic supply.

The following are among the key points made by participants in the roundtable (without attribution to any specific participant in accordance with the roundtable's ground rules):

The United States is in the midst of an unprecedented surge in domestic crude supply thanks to light tight oil production from areas like the Bakken and Eagle Ford shale formations. The impact has been sweeping. This spike in crude oil supply, coupled with stagnant-to-declining domestic demand growth, has led to a 50 percent decline in the U.S. petroleum trade balance over the past seven years. A massive overhaul of the nation's crude oil transportation system is under way to move oil from new production areas to refining centers in the Gulf Coast, East Coast, and increasingly the West Coast, with crude-by-rail becoming an increasingly important mode of transport.

Concerns are growing about the ability of the U.S. refining system to process all the anticipated light sweet crude production growth. Some analysts estimate that U.S. crude could become stranded (unable to find a refining outlet as laws currently stand) sometime between 2016 and 2018, thus causing a drop in domestic prices that could dampen upstream investment. The industry saw a large disconnect between domestic Gulf Coast and global crude prices in late 2013, which some participants attributed, in part, to the export restriction. Opening up foreign markets to U.S. crude, they argue, would raise domestic oil prices to levels that would allow for continued investment and at the same time drive down fuel costs across the globe – including in the United States. Other analysts countered that a combination of higher refinery utilization, investments to alter refinery configurations, and increased exports to Canada (currently permitted by U.S. export laws) will be sufficient to absorb rising domestic production.





As the debate grows, some oil companies, policymakers and analysts are calling for an easing of the ban on crude exports in order to create new outlets for U.S. production to ensure domestic production growth continues. Countering those arguments are worries that such a move would run counter to broad US energy security and economic policy goals by driving up fuel costs for consumers.

The debate has divided even the U.S. oil industry. Many U.S. refiners, which have benefitted from the low cost domestic crude supplies and the ability to sell their fuel abroad, have objected to a lifting of the crude oil export ban on the grounds it would reduce their advantage in a highly competitive global business where profit margins are already generally low.

The roundtable honed in on the flexibility of the U.S. refining network to adapt to the new supplies. Once all current light sweet imports are displaced, the industry is expected to begin blending domestic light sweet to create medium blends, curtailing the need for imports of similar quality oil. This would leave a level of "structural" imports: supplies of foreign heavy, sour crude needed for complex Gulf Coast refineries that could not be replaced with the new U.S. production without idling relatively expensive refinery equipment. Participants also discussed the prospect of new refinery investment that would increase domestic capacity to process light sweet crude.

The potential to export U.S. crude to foreign markets under conditions allowed by the law was also reviewed, as well as the potential for changes to current limits through presidential findings. Past presidential findings have allowed limited exports of heavy crude from California, exports of Alaska North Slope crude and exports to Canada. Exports to Canada have been increasing to supply plants on the East Coast, and there is potential to more than double those volumes.

Participants also discussed the possibility of doing a crude swap, another type of export allowed under current law, with countries including Mexico. Such a deal would bring in additional volumes of heavy sour crude to complex refineries in the United States, giving less complex Mexican plants more light sweet crude. However, the window to do such a transaction could be limited to five years, as investment is made to upgrade refining capacity there, and overall the volumes would not be large. In addition, it was pointed out that the law makes such transactions cumbersome.

The potential for a decision by the Department of Commerce's Bureau of Industry and Security on the export of condensate was also discussed. Currently, certain types of condensate – those extracted at the wellhead – are banned from sales abroad while those produced at refineries are allowed. As condensate output grows, there are calls for a different interpretation of what constitutes an exportable condensate.





The president can also use a presidential finding under certain conditions to modify the current export ban. Such action has been taken in the past to allow exports of Alaskan North Slope crude, limited exports from California, and the previously mentioned shipments of domestic crude oil production to Canada.

The national security, geopolitical and international trade implications of relaxing crude exports restrictions was also discussed. Some argued that the turnaround in U.S. crude oil production has to a certain extent strengthened U.S. energy security by increasing access to cheap energy. Others, however, question whether lifting the export ban would in fact threaten U.S. energy security. If the U.S. were to minimize net oil imports through exporting its production at the same as it continues to import large volumes, for example, would the U.S. be equally or less energy secure as if exports were banned and the U.S. imported less crude?

Removing such limits could potentially put consumers at greater risk to oil shocks from geopolitical events. However, participants noted that as U.S. refined products are allowed to be exported, and such sales have been surging, the price of U.S. fuel is already tied to international markets, implying there would be no guaranteed price buffer from a continued ban on crude oil exports for domestic consumers.

Overall, participants held an engaging discussion over many critical issues, which the Center on Global Energy Policy and Baker Institute will continue to explore in the months to come. Specifically, the study will:

- 1. **Market Overview:** Provide an overview of the changing U.S. oil market and how shifting patterns of production, demand, infrastructure, and flows are creating transport bottlenecks and challenges for refineries built for a different crude slate.
- 2. **Policy Overview:** Describe the history and rationale of the current crude export restriction, and what legislative and Administration options exist to change the restriction. Options such as approving swap transactions or changing crude definitions will be analyzed, including quantification of how much pressure on the system such Administrative changes would relieve.
- 3. **Economic Impacts:** Assess how much light tight oil U.S. refineries can accommodate; what the costs associated with the necessary investments might be; what potential U.S. crude discounts may emerge as a result; what the impact may be on U.S. production levels; and what the impact may be on U.S. consumers.
- 4. **Geopolitical Impacts:** Discuss whether and how U.S. energy security is affected by relaxing the crude export restrictions, considering the relative importance of total imports vs. net imports for example, and how restricting U.S. crude exports may affect U.S. trade negotiations, foreign policy, and WTO compliance.