CRS INSIGHT

U.S. Crude Oil Exports to International Destinations

April 6, 2016 (IN104	472)			
_				_
Related Author				
Phillip Brown				
_				

Phillip Brown, Specialist in Energy Policy (pbrown@crs.loc.gov, 7-7386)

On December 18, 2015, Congress passed H.R. 2029—the Consolidated Appropriations Act, 2016—which was enacted and became P.L. 114-113. A provision contained in P.L. 114-113 repealed a 40-year prohibition on the export of crude oil produced in the United States. (See CRS Report R44403, Crude Oil Exports and Related Provisions in P.L. 114-113: In Brief.) Removing this prohibition and its associated restrictions provides producers, shippers, and traders with more options to market and sell crude oil to international markets when market conditions support such transactions. Prior to removing export restrictions, exemptions resulted in approximately 500,000 barrels per day of crude oil exported—nearly all to Canada—during 2015. Since the export prohibition was repealed, Energy Information Administration (EIA) data indicate that U.S. crude oil export volumes declined, although industry trade data indicate that crude oil has been exported to destinations that were previously not allowed and monthly export volumes to these international markets have increased steadily since the restrictions were removed. (See CRS Report R43442, U.S. Crude Oil Export Policy: Background and Considerations.)

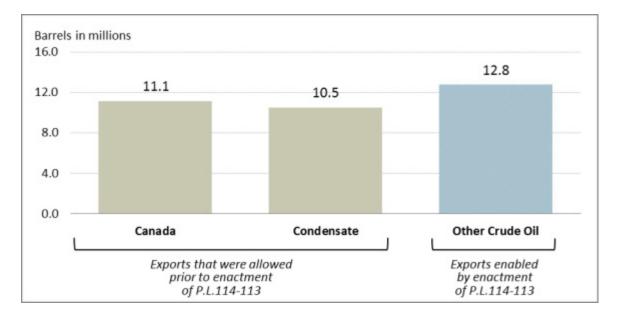
U.S. Crude Oil Export Volumes

EIA weekly data report that for the week ended December 18, 2015, 500,000 barrels per day (bpd) of crude oil was exported from the United States. For the week that ended on March 25, 2016, crude oil export volumes were estimated at 387,000 bpd. One possible reason for this export volume decline is the narrowing price differential between domestic and international crude oils that has reduced the financial attractiveness of exporting U.S. crude. (See R44403.)

According to industry data consultancy <u>ClipperData</u>, waterborne exports—not including modes such as pipeline, rail, or truck—of U.S. crude oil from December 19, 2015, through March 31, 2016, totaled approximately 34.4 million barrels, approximately 334,000 bpd. Most (approximately two-thirds) of those barrels were eligible for export prior to enactment of <u>P.L. 114-113</u> and would likely have been exported had the restrictions remained in effect. For example, exports to Canada and exports of processed condensate were allowed within the previous crude oil export regulatory framework. Other crude oil exports outside of these categories represent non-condensate crude oil exports that have been enabled by the prohibition repeal. See <u>Figure 1</u>.

Figure 1. U.S. Waterborne Crude Oil Exports

December 19, 2015-March 31, 2016

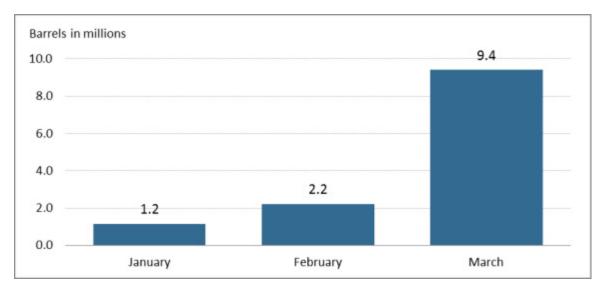


Source: CRS, with data from ClipperData.

According to ClipperData approximately 12.8 million barrels of non-condensate crude oil, approximately 124,000 bpd, have been exported to destinations that were prohibited prior to enactment of P.L. 114-113. This export volume is within the 0 to 2 million bpd range estimated by EIA in a September 2015 study that analyzed the effects of removing export restrictions. Export volumes to date have been on the lower end of the range and this can generally be explained by two factors. First, the financial attractiveness of exporting U.S. crude oil has been limited by the relatively narrow price differential among domestic and international benchmark prices. However, benchmark price differentials are not the only condition that might motivate exports. Regional price dynamics and low-cost shipping opportunities could result in conditions that support crude oil exports. Second, global refiners may still be getting comfortable with acquiring and processing U.S. crude oil and it may take some time for global refiners to integrate U.S. crude oil into their feedstock mix. Monthly export data appears to support this conclusion: monthly non-condensate, non-Canada crude oil export volumes have increased from 1.2 million barrels in January to 9.4 million barrels in March. See Figure 2.

Figure 2. Non-Condensate U.S. Crude Oil Exports (Excluding Canada)





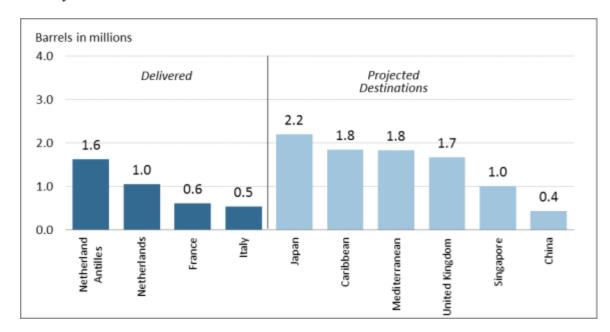
Source: CRS with data from ClipperData.

Export Destinations

Through March 31, 2016, approximately 12.8 million barrels of non-condensate crude oil—including crude oil grades such as Eagle Ford, West Texas Intermediate, and Gulf Coast sour blend—has been exported and either has been delivered or is in transit to 10 destinations that were previously prohibited. Regional destinations for U.S. crude oil include Europe, Asia, the Mediterranean, and the Caribbean. Approximately 30% of these exports have been delivered and 70% was in transit. Figure 3 indicates export volumes to each destination.

Figure 3. Non-Condensate U.S. Crude Oil Destinations (Excluding Canada)

January-March 2016



Source: CRS with data from ClipperData.

Notes: Projected destinations are subject to change due to transactions that can occur during transit.

Policy Considerations

During the congressional debate about removing crude oil export restrictions, several policy issues were considered, such as price impacts and production volumes. Regarding price impacts, there was concern that gasoline prices for consumers could potentially rise if crude oil exports were allowed. However, price information to date does not suggest such a relationship between gasoline prices and crude oil exports. EIA price statistics indicate that during the week prior to enactment of P.L. 114-113, retail gasoline was priced at \$2.14 per gallon. Prices declined to \$1.83 per gallon in mid-February, and have since risen to \$2.17 per gallon for the week ending March 28, 2016. Additionally, there was concern expressed about increasing production volumes with the potential for associated environmental impacts that might result from allowing crude oil exports. Data available to date do not support such a concern and EIA data indicate that U.S. crude oil production has declined since December 2015. This dynamic could potentially change in the future should crude oil prices and production profitability increase, production levels rise, or regional oversupply of certain crude oil types start to occur. Oversupply conditions generally result in price differentials, which could create economic incentives to export and thus motivate additional production activity.

<u>P.L. 114-113</u> includes a provision that allows the President to impose restrictions should it be determined that crude exports result in domestic oil prices above global prices and adverse employment effects. (See <u>R44403</u>.) While the current data do not suggest any negative economic, gasoline price, or employment effects resulting from the export prohibition repeal, unrestricted U.S. crude oil exports have only been allowed for a short period and it may take some time for such relationships, if any, to be evident.