

US Exports to China of Natural Gas & Oil and Harmful Effects of US-China Trade Dispute

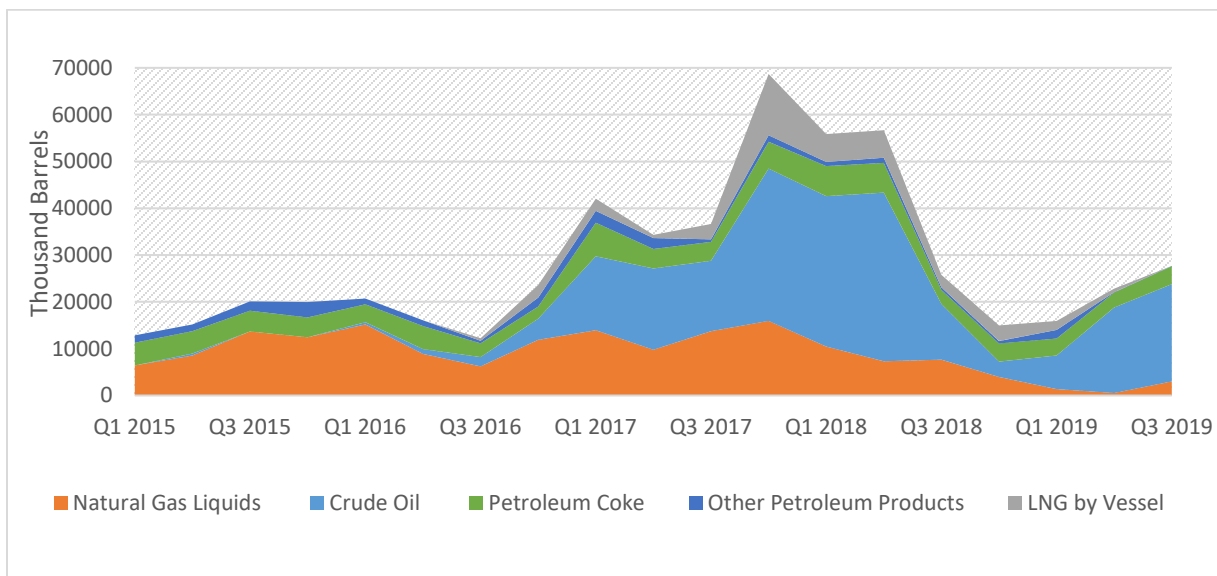
A Marketplace Match: US Natural Gas & Oil Supply meets China’s Demand

The flow of natural gas and oil from the US to China reflects US supply meeting China’s demand. The US is the world’s largest producer of oil and natural gas. China is the world’s second largest consumer of petroleum products and has the second largest refinery capacity (with the US as largest for both). Despite China being the fourth largest in production of crude oil (behind the US, Saudi Arabia, and Russia), since 1996 China has been a net crude oil importer. China is also the largest consumer globally of LNG.

US Natural Gas & Oil Exports to China were Increasing until mid-2018

US exports to China of crude oil, petroleum coke, natural gas liquids (propane and butane) and other petroleum products (gasoline, motor fuel blending stock, distillate fuel oil and kerosene type jet fuel) were increasing from January 2015 to June 2018¹, at which point they began to drop to near zero levels. US exports to China of liquefied natural gas (LNG) were increasing from June 2016 to early 2018, at which point they began to drop, eventually to zero by August 2018. Exports of LNG to China then slightly increased between Q4 2018 to Q1 2019 before dropping again to zero in May 2019. (See *Figures 1 and 2.*)

Figure 1. US Exports to China of Natural Gas & Oil, 2015-2019

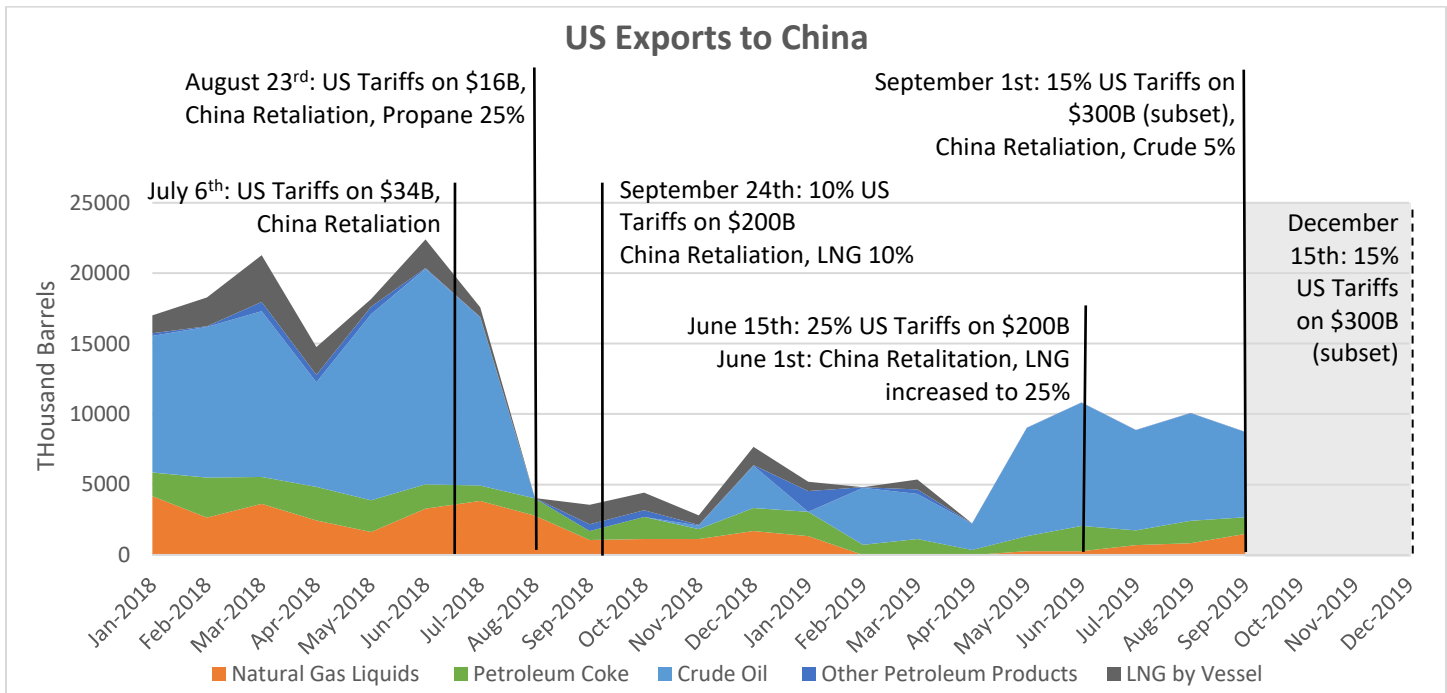


Source: US Energy Information Agency (EIA). [Petroleum & Other Liquids: Exports by Destination, US Natural Gas Exports and Re-Exports by Country.](#)

Regarding crude oil imports, China’s refineries are capable of refining a range of crude oil qualities from a wide range of foreign sources, including both heavy and light crude oil from the US. In 2015, China started importing heavy oil (under 25 degrees API) from the US, but quickly ramped up light imports (over 25 degrees API). In 2019, China has only imported US light crude oil.

¹ US exports to China were rising from 2015-2017 even in spite of China’s tariffs on these products: 9% for kerosene type jet fuel; 6% for distillate fuel oil; 5% for gasoline, motor fuel blending stock, propane, and butane; and 3% petroleum coke).

Figure 2. US Exports to China of Natural Gas & Oil, Jan 2018 – September 2019 (with data available as of December 2019)



Source: US Energy Information Agency (EIA). [Petroleum & Other Liquids: Exports by Destination](#), [US Natural Gas Exports and Re-Exports by Country](#).

Harm Caused by US-China Dispute: Reduced US Exports and Increased Costs of US Imports

The US-China trade dispute has harmed the US natural gas and oil industry on two fronts. First, US tariffs have increased the cost of many industrial components that are inputs to the supply chains of the US natural gas and oil industry, which are used to manufacture other products and/or are installed in US and global energy infrastructure. Second, China's retaliatory tariffs 10% on LNG and China's halt of all imports of US crude oil from August through November 2018 (an apparent retaliation by China that corresponds chronologically to US tariffs first imposed in July 2018) reduced US exports of natural gas and oil to China significantly. China's share of total US exports of crude oil dropped from over 20% in the first half of 2018 before the trade war to nearly 5% in the first half of 2019.

- China is able to rely on other suppliers for its crude oil import needs: in 2018 China imported crude oil from 45 different countries, but over half was supplied by Russia, Saudi Arabia, Angola, Iraq, and Oman. In 2018, China only received 3% of its crude oil imports and 4% of its liquefied natural gas imports from the US. In 2018 China received 11% of its liquefied propane imports (down from 26% in 2017) and 16% of its petroleum coke imports from the US.
- For the US, reduced natural gas and oil exports to China means that the US exports to other destinations but likely on less favorable terms. Reduced exports to China also have the potential to jeopardize investments for energy exports infrastructure in the US. For example, at least nine new LNG export terminals in the US have been proposed and are seeking to reach a final investment decision (FID) with eight others already under construction.² Retaliatory tariffs by China make it more difficult for these projects to agree to long term contracts with Chinese buyers, often a prerequisite for FID.

² Source: US FERC. [North American LNG Export Terminals; Approved, Not Yet Built](#), as of October 8, 2019.