



Attacks Against Saudi Oil Rattle Markets

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September 14, 2019, saw a successful attack against major oil infrastructure in [Saudi Arabia](#) (the largest oil exporter), which disrupted 5.7 million barrels of daily production (mb/d), about half of Saudi oil production and 5% of global supply. This is the largest single disruption to crude oil supplies in history, according to [Bloomberg](#), using International Energy Agency (IEA) data. For context, U.S. crude oil production is approximately 12 mb/d. Global oil markets have responded with an initial price increase. The magnitude and duration of the price rise will depend on many factors, such as repair time, additional supplies, the potential confirmation of the perpetrator, and any related security responses.

Implications for Saudi Arabia

The September 14, 2019, [attacks](#) on the Abqaiq processing facility and the Khurais oil field in eastern Saudi Arabia, claimed by Yemen's Houthi rebels, were the latest in a [series](#) of cross-border [attacks](#) on energy and transportation sites in the kingdom apparently linked to the ongoing war in Yemen and the Saudi-U.S. confrontation with Iran. The incidents have demonstrated the [vulnerability](#) of critical Saudi infrastructure to missile and drone attacks and raised complicated strategic questions for Saudi and U.S. policymakers concerning [attribution](#) and [potential responses](#). Iran's government [denies](#) U.S. [charges](#) of responsibility. Saudi Arabia's military operations in Yemen have created demands on its security and

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defense capabilities in addition to [fiscal pressures](#) that have been amplified by oil prices, which have remained below the kingdom's budget targets.

In response, Saudi leaders may delay a planned [initial public offering](#) of shares in their state-owned oil company, [Aramco](#), which operates facilities and infrastructure targeted in recent months. Aramco intends to use its [crude oil stockpiles](#) to compensate for reduced output and [expects](#) to restore production to pre-attack levels. However, [additional attacks](#), or delays in restoration efforts, could extend negative short-term effects and reduce investor confidence in the security of Aramco assets. Relative export volumes, prevailing market prices, and the extent of security and reconstruction costs will determine the attacks' fiscal effects on the kingdom, including in the event of any prolonged oil output disruptions.

The Abqaiq Oil Facility

The Abqaiq facility is the largest oil processing facility in the world, with a capacity of about 13 mb/d, but has been operating below its capacity. Abqaiq is a key processing facility for light and extra light Saudi oil that tend to be high in sulfur. To stabilize the crude, hydrogen sulfide and other contaminants need to be removed. An attempted terrorist attack on the facility in 2006 prompted joint Saudi-U.S. efforts to improve critical infrastructure security in the kingdom.

Global Responses

Crude oil markets have responded to the attacks. The price of the U.S. benchmark crude, West Texas Intermediate (WTI), on Friday before the attacks was \$54.85 per barrel, while the international benchmark, known as Brent, was \$60.22. At the market's close on September 16, WTI was priced at \$62.62 and Brent was \$68.75, a 14% increase for both.

Aramco is working to restore the disrupted supply, but full repairs could take [weeks or even months](#), according to industry experts familiar with the matter. The timeline for the return of the remaining amount had not been officially estimated as of September 16. Saudi officials have invited international observers to investigate the attack, and [state](#) that the kingdom "will take the appropriate measures based on the results of the investigation, to ensure its security and stability."

On September 15, [President Trump authorized the release of oil from the U.S. Strategic Petroleum Reserve \(SPR\)](#) in response to the attack against Saudi Arabia's oil production. The amount of the release has not been announced, but would be based on the necessary volumes to keep the market supplied and to mitigate the impact on oil prices. In the past, presidents have ordered a [release in response to severe interruptions](#) in coordination with other [IEA member countries](#). However, the SPR alone has the capacity to replace most of the Saudi barrels.

According to a [recent announcement](#), the IEA is monitoring the situation closely and is in close contact with Saudi officials. Commercial stocks are supplying the market, and the IEA has not called for a coordinated member country release.

The most recent coordinated release occurred in 2011, after political unrest in Libya led to a production capacity loss of 1.7 mb/d. Libya, at that time, was producing roughly [2% of global supply](#). On June 23, 2011, the IEA announced a coordinated release of 60 million barrels of crude oil and refined products into the global market. While the attack against Saudi Arabia has removed a larger volume of crude oil from the market, the context for the Libya response was much different. For example, crude oil prices were trading above \$100/barrel and the Fukushima disaster had recently occurred, increasing Japanese demand. Today, prices are stabilizing under \$70/bbl, and the United States is the top crude oil producer in the world.

Possible Additional Oil Market Consequences

As new information comes to light and questions are answered, there may be further ramifications for oil markets. For example, if Iran were determined to be the ultimate perpetrator of the attack, and if Saudi Arabia and/or the [United States were to attack Iran](#), risk premiums could rise. Additionally, a military response may raise the risk for oil and natural gas tankers that transit the [Strait of Hormuz](#). Depending on the response from the Organization of the Petroleum Exporting Countries (OPEC) members to any need to replace Saudi exports, it could renew congressional interest in the [NOPEC \(No Oil Producing and Exporting Cartels\) Act of 2019 \(H.R. 948 and S. 370\)](#). The attacks could also lead some in Congress to explore new means of improving critical infrastructure protection capabilities domestically and in partner countries.

China is the largest importer of Saudi crude oil, at 1.5 mb/d, followed by Japan at 1 mb/d. These countries may have incentive to purchase U.S. crude, especially U.S. shale supplies, which tend to be similar to Saudi crude that has been removed from the market.