Securing America's Future Energy

November 2017

# Fact Sheet

Have low oil prices created a false sense of energy security? As the oil market remains in a low-price environment and a popular perception takes hold that the U.S. shale boom has resolved America's exposure to oil market uncertainty, many see the era of high and volatile oil prices as a thing of the past. However, a combination of factors including constrained supply, underinvestment risk, OPEC mismanagement, rising demand, and geopolitical instability may upend that notion.

## What is the "Decade of Disorder?"

### Supply Constraints

- Low oil prices over the past several years have lowered investment in upstream oil production, which is critical to ensuring long-term supply.
- OPEC has reduced output to increase prices, and the world oil markets have low spare production capacity with which to address supply disruptions.
- Supply constraints in unstable countries such as Nigeria, Libya, and Venezuela, as well as declines in U.S. shale from April 2015-September 2016, have contributed to tightening the global market.

### Rising Demand

- U.S. motorists are driving more than ever. In August, gasoline demand in the U.S. reached the highest monthly average ever at 9.77 mbd.
- Low gas prices encouraged U.S. consumers to shift back to less efficient trucks and SUVs, with record sales.
- As emerging markets develop, more vehicles will be on the road, which is expected underpin demand growth.
- More than 80 percent of the vehicles sold worldwide in 2040 will still use some form of petroleum-fueled combustion engine unless more dramatic policies are in place, according to IHS Markit.
- Demand for petroleum is expected to rise from 98 mbd today to 115 mbd in 2040, according to IHS Markit.

### Geopolitical Instability

- Oil market participants have largely overlooked geopolitical concerns over the past few years because of relatively low prices and high inventory overhang. But now that production is declining, instability in oil-producing countries is becoming relevant once again.
- Iraq, Venezuela, and Libya are key examples of major producers facing supply risks. Moreover, political instability in the Middle East continues to rise due to proxy wars between Saudi Arabia and Iran.

## Key Factors

### Deferred Investment

- In 2014, the price of oil reached $110, but fell to $26 by February 2016 as OPEC maintained high levels of production.
- Persistently low oil prices since mid-2014 have caused an unprecedented contraction in upstream oil investment, totaling $345 billion in 2015 and 2016, according to the International Energy Agency.
- North America saw the largest slump in upstream investment, with spending falling $180 billion over the two years.
- Wood Mackenzie estimated that the industry will have cut about $1 trillion in planned capex from 2015-2020.
- Oil and gas upstream expenditure in 2017 is expected to be around $440 billion, 20 percent under 2015 and nearly 45 percent lower than the historic high in 2014.

### OPEC Mismanagement

- OPEC drove down the price of oil in 2014 by maintaining high levels of production—a response to booming oil output in the U.S. shale patch.
- The sharp drop in oil prices caused more than 130 bankruptcies in the U.S. oil and gas sector.
- After driving down prices, OPEC has since sought to increase oil prices through production cuts and bullish rhetoric.
- Producers outside of OPEC—particularly Russia—have joined forces with Saudi Arabia and other cartel members to more decisively influence the global oil price. The countries in the supply agreement account for approximately 55 percent of daily oil supply.
- OPEC and its non-OPEC allies (The Vienna Group), starting at the beginning of 2017, have cut production by 1.8 mbd, or almost 2 percent of global supply.
- Global oil prices recently reached their highest level in more than two years as a result of the production cut, and an extension of the cut could lead to even higher prices and greater volatility.
- The Vienna Group is meeting this week and is likely to agree to extend the production cuts for an expected 6-9 months—without a clear exit strategy—which contributes to market uncertainty.
- Despite shale's massive growth this decade, the U.S. still imports approximately 3.3 mbd of crude from OPEC producers. That accounts for about 44 percent of the country's total crude imports.
- OPEC's market power is set to grow over time. More than 80 percent of the world's proven reserves are located in OPEC countries, with almost two-thirds in Middle East producers.

## Political Uncertainty in Major Oil-Producing Countries

- Saudi Arabian Crown Prince Mohammed bin Salman has embarked on unprecedented reforms in the Kingdom, with a controversial consolidation of power and an aggressive foreign policy. Although currently producing below annual capacity of 10 mbd, the Kingdom remains the global leader in crude oil production due to its extensive reserves and inexpensive production costs.
- Tensions between Saudi Arabia and Iran continue to rise as other flashpoints in the region—Yemen, Lebanon, Syria and Iraq—place the two countries in direct opposition to each other.
- Despite sitting on the world's largest oil reserves, Venezuela is sliding into chaos amid economic mismanagement and political upheaval. A key exporter to the U.S., Venezuela is struggling to repay debts to China and Russia. Just recently, President Nicolas Maduro appointed a military officer to run PDVSA and arrested six senior executives at Citgo, the U.S. refining subsidiary of PDVSA.
- Russia's participation in the OPEC production cut and its energy deals with Saudi Arabia and others have increased Moscow's influence in the global oil markets.

## Market Uncertainty and Consequences

- Conflicting signals in the markets reflect growing uncertainty in both the short run and the longer term, and risks point to the upside for prices. The International Energy Agency has warned of a price spike early next decade. **"More investment is needed in oil production capacity to avoid the risk of a sharp increase in oil prices," the IEA said. "The oil market today seems remarkably sanguine about this issue, but this feeling might not persist for too long before the realization dawns that unwelcome price pressures might lie ahead."**
- Because oil accounts for over 90 percent of U.S. transportation energy, with no alternatives readily available at scale, oil price spikes have severe negative impacts on the U.S. economy. Every recession since World War II has been preceded by or occurred concurrently with an oil price spike, while every one cent increase in gasoline prices reduces consumer spending by an estimated $1-2 billion.