



---

## **Global Oil Markets: An Overview**

*WTI, Brent, and the Forces That Move Crude Prices*

March 9, 2026

## Current Market Prices and the Iran Crisis

Few events demonstrate the raw power of geopolitics over oil markets as vividly as what has unfolded since the United States and Israel struck Iran. Investors, traders, analysts, and consumers worldwide have had their eyes locked on two numbers above all others: the price of West Texas Intermediate crude and the price of Brent — the twin benchmarks that serve as the global shorthand for the cost of energy. Those numbers have swung so dramatically in recent days that they have commanded front-page attention far beyond the financial press.

WTI began the year below \$60 a barrel. As of Monday, March 9, 2026, the picture is almost unrecognizable. WTI broke above \$100 per barrel in overnight trading, surging to more than \$119 — its first time above that threshold since 2022, when investors were reacting to the aftermath of Russia's invasion of Ukraine. The intraday volatility has been staggering: WTI touched \$119.48 overnight before pulling back sharply to approximately \$96 to \$100 during Monday's session, a range of more than \$23 within a single trading day. Brent followed a similarly violent trajectory, pulling back to nearly \$84 a barrel at its lowest for the day after having traded above \$114 just days prior, with the most recent futures settlement near \$90. WTI's 30-day trading range has spanned from a low of \$61.87 to a high of \$119.43 — a spread of nearly \$58 per barrel in a single month, a degree of price instability that traders with decades of experience describe as extraordinary. Crude oil trading has been some of the most active in over 25 years, according to OPIS chief oil analyst Denton Cinquegrana.

The catalyst is the escalating conflict involving the United States, Israel, and Iran. Following joint airstrikes on Iranian territory, Iran launched a massive retaliatory campaign and moved to effectively close the Strait of Hormuz — the narrow waterway through which approximately 20% of global petroleum liquids pass daily. Iraq has shut down roughly 1.5 million barrels per day of production, and Kuwait has begun precautionary output cuts. The disruption has rippled immediately into gasoline prices at the pump: the national average for regular gasoline reached approximately \$3.48 per gallon on Monday, with analysts projecting it could hit \$4 per gallon by the end of the week. G7 finance ministers are now discussing the possible release of strategic petroleum reserves in a coordinated response to the price surge.

Oil prices slipped from a seven-month high as the war premium showed early signs of fading, reflecting how sensitive both benchmarks are to every development — a diplomatic signal, a tanker report, a presidential post — that might alter the calculus around Iranian supply. That sensitivity is precisely what makes this moment a compelling entry point for a broader examination of how oil markets work, who sets prices, and what forces drive them.

The sections that follow provide the context needed to interpret what is happening today and what may come next. We begin with the two benchmarks themselves — what WTI and Brent are, how they differ, and why non-U.S. and non-North Sea crudes are nonetheless priced relative to them. Understanding the benchmarks is the foundation for everything else. We then examine the financialization of oil markets, which explains why prices can move \$23 in a single session even when no barrel of physical crude has actually changed hands. From there we turn to the geopolitical risk premium — the structural reason the Strait of Hormuz's closure reverberates so immediately into every gas station in America. With that framework in place, we examine the broader market structure: who the key producers, companies, and institutions are that determine global supply. We

then cover the primary price drivers — from OPEC decisions and inventory data to the U.S. dollar — before turning to the shale revolution, which transformed the United States from a price-taker into a price-influencer and changed OPEC's strategic calculus permanently. Finally, we examine refining and the crack spread, which connects crude oil prices to the refined products — gasoline, diesel, jet fuel — that households and businesses actually consume.

## Understanding the Two Benchmarks: WTI and Brent

### Origins and Physical Characteristics

West Texas Intermediate and Brent crude are the two most widely referenced oil price benchmarks in the world, yet they are distinct products with different physical characteristics, geographic origins, and market roles. Understanding both is essential to any serious analysis of global oil markets.

WTI is a grade of light, sweet crude oil extracted from oil fields across Texas, Oklahoma, and the broader U.S. midcontinent. Its pricing hub is Cushing, Oklahoma, a landlocked pipeline and storage nexus that sits at the heart of the U.S. domestic oil distribution network. WTI futures trade on the New York Mercantile Exchange (NYMEX) and serve as the primary benchmark for North American crude pricing. Its relatively low density and exceptionally low sulfur content make it slightly superior to Brent in terms of refining yield, particularly for gasoline production.

Brent, by contrast, originated as a specific blend of crude from multiple oil fields in the North Sea, off the coasts of the United Kingdom and Norway. Because it is produced offshore, Brent can be loaded directly onto tankers at the point of extraction, giving it a natural logistical advantage for global trade. Brent futures trade on the Intercontinental Exchange (ICE) in London. Over time, Brent has grown into the world's dominant pricing reference, with an estimated 60–70% of internationally traded crude priced relative to it. It is the benchmark of choice for oil flowing out of Europe, Africa, and the Middle East.

### The WTI–Brent Spread

For most of their shared history, WTI traded at a modest premium to Brent, reflecting its slightly superior refining characteristics. That relationship inverted dramatically around 2011, when the U.S. shale revolution flooded the domestic market with crude that pipeline infrastructure could not quickly move to export terminals. Supply backed up at Cushing, and WTI fell to a discount of \$10–15 per barrel relative to Brent at the peak of the divergence in 2012–2013. The spread compressed after the U.S. lifted its decades-old ban on crude oil exports in late 2015, enabling American producers to access global markets more freely. Today the two benchmarks trade much more closely, with Brent typically holding a modest premium of \$2–4 per barrel over WTI under normal market conditions.

### Brent as a Marker Crude — Not a Volume Benchmark

A common misconception is that Brent's role as a global benchmark means that oil produced in the Middle East, West Africa, or elsewhere physically flows through the North Sea pricing system. It does not. Brent is a marker crude: Saudi, Iraqi, Nigerian, and Angolan barrels are sold under contracts written as “Brent plus or minus a differential,” reflecting each crude's quality and transportation cost relative to the benchmark. The price of Brent thus functions as a global clearing price signal rather than a description of where the oil came from.

This also means that events affecting supply in the Middle East, Russia, or Venezuela do not physically alter Brent crude itself, but they move Brent prices through their impact on global supply and demand. When OPEC cuts production, Brent rises. When Venezuelan output collapses under

sanctions, that tightness is reflected in the Brent price. The causality flows both ways: Brent prices govern how non-North Sea crudes are valued, while those crudes' production levels determine what Brent is worth.

There is also a structural challenge unique to Brent: North Sea production has been in long-term decline as its mature fields deplete. To maintain a sufficiently large physical base — and thus prevent the benchmark from being susceptible to manipulation — the benchmark has been progressively expanded. It now encompasses crude from five North Sea fields under the umbrella designation BFOET: Brent, Forties, Oseberg, Ekofisk, and Troll.

### **North Dakota and the WTI Parallel**

The same logic applies to WTI. Crude produced in North Dakota's Bakken shale formation, or in Wyoming, Colorado, and Kansas, is not technically "West Texas Intermediate" — it is a different crude that trades at a differential to the WTI price based on its own quality characteristics and the cost of transporting it to Cushing. Bakken crude is extremely light — sometimes too light for refineries optimized to process heavier grades — and historically required expensive rail transport before pipelines expanded. The completion of the Dakota Access Pipeline in 2017 significantly improved Bakken crude's access to the Cushing hub and Gulf Coast refineries.

Like Brent, the WTI benchmark has evolved well beyond its geographic origins. The "West Texas" name reflects where the benchmark was born, not a precise description of the crude it prices today. WTI now functions as an aggregated pricing signal for a wide swath of North American production, with the Cushing hub serving as the physical delivery and price discovery point for the continent.

## **The Financialization of Oil Markets**

Oil is no longer simply a physical commodity bought and sold between producers and refiners. Over the past four decades, it has become one of the most actively traded financial assets in the world, with consequences for price behavior, volatility, and the relationship between market prices and underlying physical fundamentals.

### **Futures Markets and Price Discovery**

The modern oil pricing system is built on futures contracts — standardized agreements to buy or sell a specified quantity of crude at a predetermined price on a future delivery date. WTI futures on NYMEX and Brent futures on ICE are each among the most liquid commodity contracts in the world, with daily trading volumes that dwarf the actual physical oil that changes hands. A single WTI futures contract represents 1,000 barrels of oil, but the vast majority of contracts are closed out before delivery: traders are speculating on price movements, not taking physical possession of crude.

This futures market serves several legitimate economic functions. It allows producers to lock in prices months or years in advance, providing revenue certainty that enables capital investment decisions. Airlines, utilities, and industrial consumers use futures to hedge against price spikes. Refiners use the market to manage their exposure to the spread between crude input costs and refined product prices. In this sense, futures markets improve the efficiency of physical oil markets by enabling risk transfer between parties with different exposures.

### **Speculative Participation and Volatility**

Beginning in the early 2000s, oil futures markets attracted a massive influx of purely financial participants: hedge funds, commodity trading advisors, index funds, and pension funds seeking diversification or commodity exposure. This trend — often described as the "financialization of

commodities” — fundamentally changed the composition of market participants. At times, financial traders have held positions representing many times the volume of physical oil in storage.

The implications for volatility are debated among economists, but several effects are well-documented. Financial participants respond to macroeconomic signals — interest rates, the U.S. dollar, equity market sentiment — that have little direct bearing on physical oil supply and demand. As a result, oil prices sometimes move in response to forces entirely exogenous to the physical market. The sharp dollar strengthening in 2014–15 contributed to the oil price collapse of that period, as dollar-priced commodities became more expensive for buyers using other currencies, suppressing demand.

### **Oil as an Asset Class**

The inclusion of oil in commodity indices — most notably the S&P GSCI and Bloomberg Commodity Index — brought institutional capital into the market at a scale that had not previously existed. Pension funds and sovereign wealth funds allocating a percentage of their portfolios to “commodities” were effectively buying oil futures en masse, regardless of the underlying supply–demand picture. Critics argue this contributed to the dramatic 2007–2008 price spike that took WTI from roughly \$70 to \$147 per barrel in less than 18 months.

More recently, the growth of algorithmic and high-frequency trading in oil futures has added another dimension. Algorithms that react to momentum, options market signals, or technical price levels can amplify short-term moves, as was dramatically illustrated on April 20, 2020, when WTI front-month futures briefly fell to negative \$37.63 per barrel. The episode was driven by the mechanics of futures contract expiration and storage constraints rather than any rational assessment of oil’s worth, but it could only have occurred in a market shaped by its financial architecture.

### **Geopolitical Risk and the Oil Price Premium**

At any given moment, the price of crude oil includes not only a reflection of current supply and demand but also a “risk premium” — a forward-looking adjustment for the possibility that future supply could be disrupted by conflict, political instability, or infrastructure failure. This premium is often invisible when geopolitical conditions are calm, but it can constitute a significant portion of the prevailing price during periods of tension.

### **The Strait of Hormuz and Critical Chokepoints**

The Strait of Hormuz is the single most consequential geographic chokepoint in global energy markets. Approximately 20–21 million barrels of oil pass through the Strait daily, representing roughly 20% of global petroleum liquids consumption. The narrow waterway between Iran and the Oman peninsula connects the Persian Gulf — home to the bulk of Saudi, Iraqi, Kuwaiti, UAE, and Qatari oil export infrastructure — to the broader Indian Ocean and global shipping lanes. There is no practical alternative route for most of this volume: pipelines running overland through Saudi Arabia and the UAE provide only partial bypass capacity.

The ongoing conflict between the United States and Iran has made this risk devastatingly concrete. Iran’s ability to threaten — and now effectively close — the Strait of Hormuz is the primary reason oil prices have surged so dramatically in the past week. For decades, the Strait’s vulnerability was a theoretical consideration priced into oil markets as a modest background premium. The current crisis has transformed it into an immediate supply disruption, driving prices to levels that reflect genuine uncertainty about when and whether normal flows can resume.

Other critical chokepoints include the Suez Canal, through which approximately 10% of globally traded oil passes, connecting the Red Sea to the Mediterranean. The Turkish Straits (Bosphorus and

Dardanelles) are vital for Russian Black Sea crude exports to European markets. The Strait of Malacca, between Malaysia and Indonesia, handles the bulk of oil moving from the Middle East to China, Japan, and South Korea — the three largest oil-importing nations in Asia. Each of these chokepoints represents a potential flashpoint whose closure would immediately transmit into oil prices.

## **OPEC, Sanctions, and Political Disruption**

Beyond geographic chokepoints, oil markets are acutely sensitive to the political decisions of major producing nations and the sanctions regimes imposed by Western governments. OPEC and its expanded grouping OPEC+ — which includes Russia, Kazakhstan, and other non-member producers — have demonstrated a consistent willingness to use production restraint as a price-support tool. Their collective decisions on output quotas are among the most market-moving events in the oil calendar.

U.S. and European sanctions have periodically removed significant volumes of crude from global markets. Sanctions on Iran affect a producer capable of exporting upward of 2–3 million barrels per day at full capacity. Sanctions on Venezuela, combined with decades of mismanagement of the state oil company PDVSA, have reduced that country's output from over 3 million barrels per day in the late 1990s to a fraction of that figure. The sanctions regime imposed on Russia following its 2022 invasion of Ukraine reshaped global crude trade flows, pushing Russian barrels toward India and China while tightening supply to Europe.

Internal political instability in producing nations also carries persistent price implications. Libya's civil conflict has caused its output to swing by more than a million barrels per day depending on which factions control key oil infrastructure. Nigerian production has been chronically affected by pipeline sabotage. Iraq, despite holding some of the world's largest proven reserves, has faced decades of conflict, sectarian tension, and governance challenges that have constrained its production potential.

## **Market Structure and Key Participants**

The global oil market involves a complex ecosystem of producers, traders, refiners, and consumers, operating across both physical and financial markets. Understanding the key institutional actors is essential to interpreting how supply decisions and geopolitical developments translate into the prices consumers and businesses ultimately face.

### **OPEC and OPEC+**

The Organization of the Petroleum Exporting Countries (OPEC), founded in 1960, currently comprises 12 member nations, with Saudi Arabia as its de facto leader and largest producer. The organization's original purpose — to coordinate production policy among major exporters and maintain price stability — remains its core function today. In 2016, OPEC formed an alliance with 10 additional non-member producers, most notably Russia, to create the OPEC+ grouping. This expanded coalition now controls approximately 40% of global oil production and holds the largest share of the world's spare production capacity.

OPEC's power is not unlimited. Its ability to manage prices depends on the compliance of member nations with agreed quotas, the behavior of non-OPEC producers, and the responsiveness of demand to price changes. The rise of U.S. shale production has significantly complicated OPEC's task: shale wells can be brought online and shut in relatively quickly, meaning that high oil prices rapidly attract new U.S. supply, while low prices curtail it. This dynamic has forced OPEC+ into a more reactive posture than it held during the era of conventional-production dominance.

## National Oil Companies and International Majors

The world's largest oil companies by reserves and production are not ExxonMobil or Shell but state-owned national oil companies (NOCs). Saudi Aramco controls the world's largest proven reserves and is the single largest oil producer globally. The Abu Dhabi National Oil Company (ADNOC), Kuwait Petroleum Corporation, Iraq's SOMO, and Venezuela's PDVSA collectively manage vast resource endowments on behalf of their governments, for which oil revenues represent the primary source of fiscal income.

The international oil majors — ExxonMobil, Chevron, Shell, BP, TotalEnergies, and Equinor — operate across the full value chain of exploration, production, refining, and marketing on a global basis. While their combined production represents a smaller share of global output than it did in the 1970s, they remain enormously influential through their technology leadership, capital allocation decisions, and dominant role in downstream refining and retail.

## The Rise of the United States as a Dominant Producer

Perhaps the most consequential structural shift in global oil markets over the past two decades has been the emergence of the United States as the world's largest oil producer, a position it reclaimed around 2018 after decades as a declining conventional producer. This transformation was driven almost entirely by the shale revolution — the application of hydraulic fracturing and horizontal drilling to unlock oil and gas trapped in shale formations, primarily in the Permian Basin of West Texas and New Mexico, the Bakken formation in North Dakota, and the Eagle Ford in South Texas.

U.S. production growth has fundamentally altered the geopolitics of oil. American energy independence — once a political aspiration, now largely a reality — has reduced the strategic vulnerability of the U.S. economy to oil price shocks and shifted leverage dynamics in relationships with both OPEC producers and adversary nations that depend on oil revenues.

## Price Drivers

Oil prices are determined by the intersection of a large number of supply-side and demand-side forces, operating simultaneously across different time horizons. Separating these drivers analytically is useful for understanding price movements, even though in practice they interact in complex and sometimes mutually reinforcing ways.

### Supply-Side Factors

On the supply side, OPEC+ production decisions are the single most consistently watched variable. The cartel's monthly and quarterly meetings, and the compliance of member nations with agreed quotas, are closely tracked by market participants. Beyond OPEC+, unplanned supply disruptions from geopolitical conflict, natural disasters, or infrastructure failure can move prices sharply. The EIA's weekly U.S. crude inventory report, released every Wednesday at 10:30 a.m. Eastern time, is among the most market-moving regular data releases in commodity markets: a larger-than-expected build in inventories signals supply surplus and typically pressures prices lower, while a surprise drawdown signals tighter conditions and supports prices.

### Demand-Side Factors

Demand for oil is closely tied to global economic growth, particularly in the largest consuming nations. The United States, China, India, Japan, and South Korea collectively account for a majority of global oil consumption. China's economic trajectory has been the most powerful demand variable in oil markets since the early 2000s: its industrialization and urbanization drove much of the 2003–2008 price surge, and any slowdown in Chinese growth registers almost immediately in oil demand

forecasts and prices. India has become increasingly important as a swing demand factor as its economy expands and its middle class grows.

Seasonal demand patterns also matter. Gasoline consumption peaks in the Northern Hemisphere summer driving season, typically lifting WTI prices in spring. The relationship between crude prices and refined product demand is captured in the “crack spread” — the difference between the price of crude and the prices of the refined products it yields. A wide crack spread signals strong refinery profitability and often encourages higher crude throughput, supporting crude prices.

### **The U.S. Dollar Relationship**

Because oil is priced globally in U.S. dollars, the value of the dollar exerts a significant and well-documented influence on crude prices. When the dollar strengthens against other major currencies, oil becomes more expensive for buyers using euros, yen, rupees, and yuan, which tends to suppress demand and weigh on prices. When the dollar weakens, oil becomes cheaper in non-dollar terms, stimulating demand and supporting prices. This relationship creates a built-in feedback mechanism: oil price shocks that drive inflation and prompt Federal Reserve tightening tend to strengthen the dollar, which in turn moderates subsequent oil price increases.

### **The Shale Revolution**

No development has done more to reshape global oil markets in the past two decades than the U.S. shale revolution. The combination of horizontal drilling technology with multi-stage hydraulic fracturing — largely pioneered by companies like Mitchell Energy and later scaled by EOG Resources, Pioneer Natural Resources, and others — made it economically viable to extract oil and gas from tight rock formations previously considered unproductive. U.S. crude production more than doubled between 2008 and 2020, from roughly 5 million barrels per day to over 13 million, reshaping global supply balances in ways that OPEC had not anticipated and found difficult to counter.

### **Shale as the New Swing Producer**

Historically, Saudi Arabia played the role of the global “swing producer” — the supplier willing to adjust output up or down to balance the market, using its low-cost production and vast spare capacity as a buffer against price extremes. Shale has complicated this role significantly. Unlike conventional oil projects, which require years of development and cannot be quickly curtailed without permanent reservoir damage, shale wells have relatively short production cycles and lower sunk costs. A shale operator facing \$50 oil can shut in a well and restart it when prices recover, a flexibility that conventional producers lack.

This has created a de facto price ceiling in oil markets: when prices rise above shale’s breakeven cost (which has generally ranged from \$40 to \$65 per barrel depending on basin and vintage), U.S. rig counts rise, production grows, and the incremental supply constrains further price appreciation. OPEC tested this dynamic directly in 2014, when Saudi Arabia chose to maintain production in the face of the shale surge rather than cut output to defend prices. Brent fell from over \$100 per barrel in mid-2014 to below \$30 in early 2016, before OPEC ultimately reversed course.

### **Geopolitical Implications**

The geopolitical consequences of U.S. energy abundance have been profound. American foreign policy in the Middle East, once heavily conditioned by energy dependency, now operates with considerably greater latitude. The U.S. can absorb oil price spikes that would have been politically devastating in the 1970s or 1990s, and it has leverage as a potential supplier to allies seeking alternatives to Russian or Middle Eastern crude. At the same time, major oil exporters — including

Russia and several OPEC nations — face greater fiscal pressure, as the price level needed to balance their government budgets has often exceeded what shale-constrained markets will sustain.

## Refining and the Crack Spread

Crude oil in its raw form has no direct use to consumers. It must be processed in a refinery — through distillation, cracking, hydrotreating, and other chemical processes — to yield the transportation fuels, heating oil, petrochemical feedstocks, lubricants, and other products that the global economy actually consumes. The refining sector thus sits between crude producers and end consumers, and the economics of refining play an important role in determining both the demand for crude and the prices consumers pay at the pump.

### Understanding the Crack Spread

The crack spread is the margin a refiner earns by processing crude oil into refined products. In its simplest form, it is calculated as the difference between the market price of refined products (weighted by the refinery's yield of gasoline, diesel, and other outputs) and the cost of the crude input. A wide crack spread indicates strong demand for refined products relative to crude supply — a profitable environment for refiners. A narrow crack spread indicates the opposite: either refined product markets are oversupplied, demand is weak, or crude prices have risen faster than product prices.

The most commonly quoted crack spread is the “3-2-1” spread, which models a simplified refinery that processes three barrels of crude into two barrels of gasoline and one barrel of distillate (diesel or heating oil). This metric is widely used by market participants as a proxy for refinery profitability and as a leading indicator of crude demand. When crack spreads widen — as they did dramatically in 2022 following the Russian invasion of Ukraine, which severely tightened diesel supply in Europe — refiners have an incentive to maximize throughput, pulling more crude into the system and supporting crude prices.

### Crude Quality and Refinery Configuration

Not all crude oil is interchangeable. Refineries are built and configured to process specific types of crude, defined primarily by their density (API gravity) and sulfur content. A “complex” refinery equipped with coking or hydrocracking units can handle heavy, sour crude — which typically trades at a discount to light, sweet benchmarks — and convert it into high-value products efficiently. A simpler “topping” refinery is limited to lighter, sweeter feedstocks. This means that shifts in the crude slate available in a given market — such as the surge in ultra-light shale oil in the United States, or the loss of medium-sour Iranian crude due to sanctions — can create significant dislocations between crude grades, with some commanding premiums while others trade at discounts, independently of the headline WTI or Brent price.

## Sources

1. CNBC, "Oil surges 35% this week for biggest gain in futures trading history dating back to 1983," March 6, 2026. <https://www.cnbc.com/2026/03/06/iran-us-war-oil-prices-brent-wti-barrel-futures.html>
2. CNBC, "Stock market news for March 9, 2026" (WTI hits \$119.48 intraday, national gasoline average), March 9, 2026. <https://www.cnbc.com/2026/03/08/stock-market-today-live-updates.html>
3. Investing.com, WTI Crude Oil Futures Historical Data (30-day range \$61.87–\$119.43), March 9, 2026. <https://www.investing.com/commodities/crude-oil-historical-data>
4. OilPrice.com, "Oil Prices Slip From Seven-Month High as War Premium Fades," March 9, 2026. <https://oilprice.com/>
5. CNBC, "Oil surges above \$110 a barrel; Trump says 'small price to pay' for defeating Iran," March 8, 2026. <https://www.cnbc.com/2026/03/08/crude-oil-prices-today-iran-war.html>
6. Axios, "Oil tops \$100 a barrel as Iran war escalates," March 8, 2026. <https://www.axios.com/2026/03/08/iran-war-oil-market-barrel-cost>
7. Investing.com, Brent Crude Oil Futures Price Today (intraday data, March 6–9, 2026). <https://www.investing.com/commodities/brent-oil>
8. U.S. Energy Information Administration, "World Oil Transit Chokepoints," 2023. [https://www.eia.gov/international/analysis/special-topics/World\\_Oil\\_Transit\\_Chokepoints](https://www.eia.gov/international/analysis/special-topics/World_Oil_Transit_Chokepoints)
9. Securities Industry and Financial Markets Association (SIFMA), Capital Markets Factbook, 2024. <https://www.sifma.org/wp-content/uploads/2023/07/2024-SIFMA-Capital-Markets-Factbook.pdf>