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From Escalation to Energy Shock: Repricing of Global Oil and Gas Risk

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1. From Escalation to Energy System Stress: The Immediate Market Signal

The latest escalation between the United States, Israel, and Iran has triggered a domino of geopolitical developments. Following Israeli strikes on Iranian-linked assets, subsequent U.S. military involvement, and retaliatory Iranian missile and drone activity near U.S. bases in the Gulf, the conflict has moved beyond rhetorical deterrence into operational risk territory. The significance of this transition is structural: markets are no longer pricing political signaling. They are pricing the probability that the Strait of Hormuz, one of the most critical transit corridors in the world, could become commercially uninsurable and mainly operationally unreliable.

Energy markets do not require confirmed destruction of export terminals to reprice risk. Shipping hesitation, war-risk insurance withdrawal, precautionary production halts, and naval escort constraints can generate a de facto supply disruption even in the absence of physical damage. During the first three days of March 2026, that shift became visible across crude benchmarks, European gas prices, freight rates, and volatility indicators. Yet while oil prices have responded, the deeper vulnerability exposed by this episode lies in natural gas.

To understand this asymmetry, we must first examine price behavior over time.

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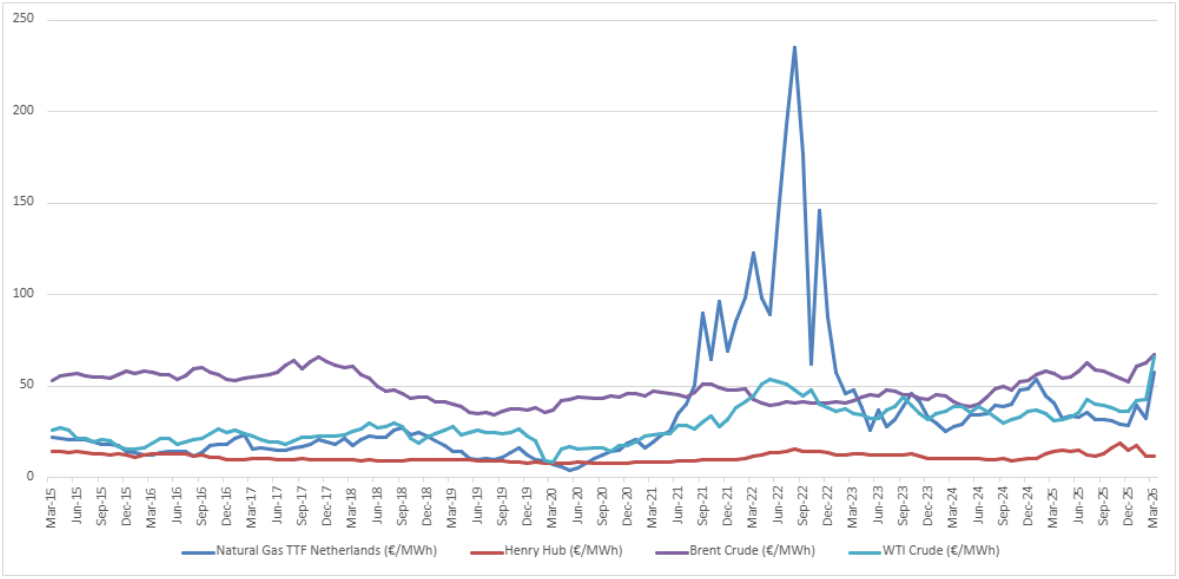

Figure 1 A decade of evolution in crude and natural gas prices, (2015 to 2026)
Brent and WTI are converted to energy-equivalent €/MWh for structural comparability with gas.

The ten-year price trajectory clarifies the structural asymmetry now emerging. Between 2015 and 2019, Brent traded largely within €34–66/MWh, while TTF fluctuated between €9–27/MWh. Even

during the 2020 pandemic collapse, Brent fell toward €35–45/MWh, while TTF briefly dropped to €3.8/MWh in May 2020, but both quickly normalized. Volatility was cyclical, not structural.

The rupture occurred in 2022. TTF surged from roughly €15-20/MWh in early 2021 to €235/MWh in August 2022 (+1,175%), while Brent remained within a much narrower band of roughly €39-51/MWh. Oil repriced moderately. Gas destabilized.

The current escalation (27 February – 9 March 2026) shows a similar divergence. Brent at €67/MWh (2 March 2026) remains within its historical volatility corridor, while TTF rose to €57.7/MWh before easing to €45.5/MWh on 9 March 2026. Although far below the 2022 extremes, these levels remain significantly above the 2025 average of roughly €31.7/MWh.

This contrast highlights a striking paradox in the current crisis. In theory, the shutdown of Qatari LNG exports and the disruption of shipping through the Strait of Hormuz should be generating the most severe gas supply shock the market has ever faced. Yet the price response remains relatively moderate compared with the Russian gas crisis.

Even after the recent surge, European gas prices remain dramatically below the 2022 peak of roughly €235/MWh. In fact, current TTF levels are broadly comparable to those observed in early September 2021, several months before the Russian invasion of Ukraine triggered the largest gas shock in modern European energy history.

This suggests that the market is currently pricing geopolitical risk rather than immediate physical scarcity.

One explanation is that traders expect the conflict to remain temporary or geographically contained. Under this scenario, LNG shipping disruptions would be short-lived and global supply chains would rapidly normalize.

Another explanation lies in the broader structure of the gas market itself. Unlike early 2022, when the market was already extremely tight due to strong post-COVID demand recovery and limited LNG supply growth, the current crisis is unfolding in a relatively soft market environment.

Just before the escalation began, the debate in the gas market was not about scarcity but about the scale of the upcoming LNG oversupply expected later in the decade.

In addition, global LNG supply flexibility has increased. U.S. LNG export volumes are now roughly 50% higher than four years ago, while Europe has significantly expanded regasification capacity and storage buffers following the 2022 crisis.

As a result, the system currently contains greater structural flexibility and more diversified supply options than it did at the onset of the Russian gas crisis.

The level is therefore manageable. Oil markets are pricing disruption probability. Gas markets are pricing transit fragility. That distinction reflects infrastructure realities: oil can be rerouted and buffered by spare capacity and strategic reserves; LNG flows through Hormuz have no overland bypass.

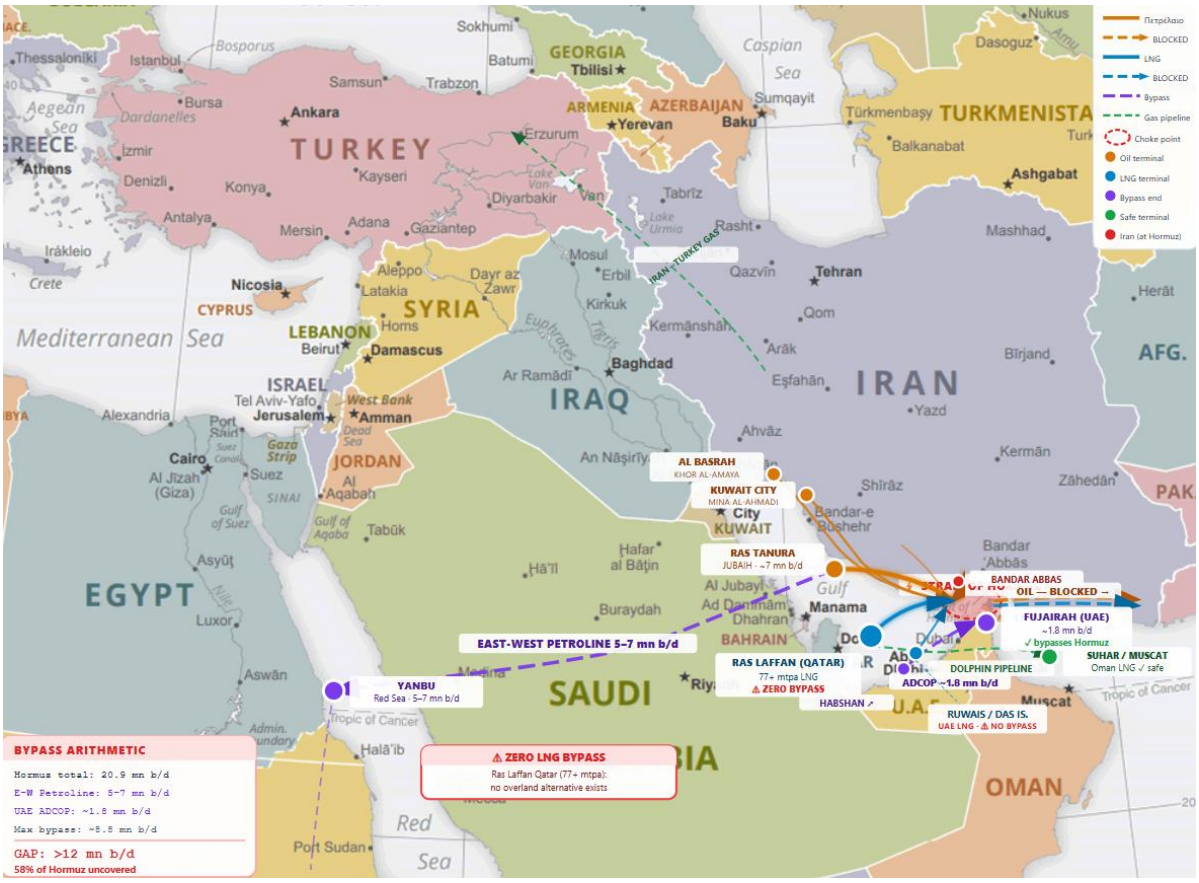

Figure 2 Gulf energy infrastructure and Hormuz Bypass routes (2025)

2. The Geography of Vulnerability

The structural explanation becomes clear when we examine the Gulf energy infrastructure. The Strait of Hormuz channels approximately 20–21 million barrels per day (mb/d) of crude oil and petroleum liquids, representing around one quarter of global seaborne oil trade.

Recent flow data illustrate the extreme concentration of these exports. In 2025, approximately 6.23 mb/d of crude exports originated from Saudi Arabia, followed by Iraq with 3.63 mb/d, the United Arab Emirates with 3.24 mb/d, Iran with 2.41 mb/d, Kuwait with 2.37 mb/d and Qatar with 1.43 mb/d, while smaller regional exporters contributed an additional 0.56 mb/d.

The concentration of export terminals along the Gulf coastline is remarkable: Saudi Arabia's Ras Tanura and Juaymah, Iraq's Basra terminals, Kuwait's Mina al-Ahmadi, UAE Gulf terminals, and Iran's own export facilities all sit inside a narrow transit corridor.

However, oil possesses partial redundancy. Saudi Arabia operates the East–West Petroline, which runs from the Eastern Province across the Arabian Peninsula to Yanbu on the Red Sea. Its nameplate capacity is 5

million barrels per day, temporarily expanded to 7 million barrels per day in 2019 by repurposing NGL lines. The UAE's Habshan–Fujairah pipeline (ADCOP) provides an additional 1.5–1.8 million barrels per day of capacity terminating on the Gulf of Oman, fully bypassing the Strait.

Even under full utilization, itself a demanding logistical assumption, combined bypass capacity reaches approximately 8.8 million barrels per day. Set against Hormuz's total transit flows of roughly 20 mb/d, the residual exposure exceeds 12 million barrels per day. The arithmetic is unambiguous: bypass infrastructure reduces the severity of a disruption shock, but it cannot neutralize it.

Nonetheless, this redundancy is economically meaningful. Oil benefits from floating storage, strategic petroleum reserves, flexible refining systems, and global trade integration. In a disruption scenario, prices spike and volatility rises, but the system retains rebalancing mechanisms.

The demand side of these flows is equally concentrated. Approximately 5.4 mb/d of Hormuz crude flows are absorbed by China alone, followed by India with around 2.8 mb/d. Other Asian economies collectively account for roughly 2.0 mb/d, while South Korea imports about 1.7 mb/d and Japan around 1.6 mb/d. Europe imports approximately 1.1 mb/d from Hormuz flows, while the United States absorbs only about 0.7 mb/d.

This distribution confirms that Asia is the primary exposure zone of any Hormuz disruption. China and India alone account for more than 8 mb/d of imports routed through the Strait, meaning that a closure scenario would disproportionately affect Asian industrial supply chains rather than Western energy security.

This geographical asymmetry helps explain why oil markets tend to react through price volatility rather than immediate physical scarcity in Western markets. While a disruption would be severe, its direct macroeconomic impact would be concentrated primarily in Asian import-dependent economies.

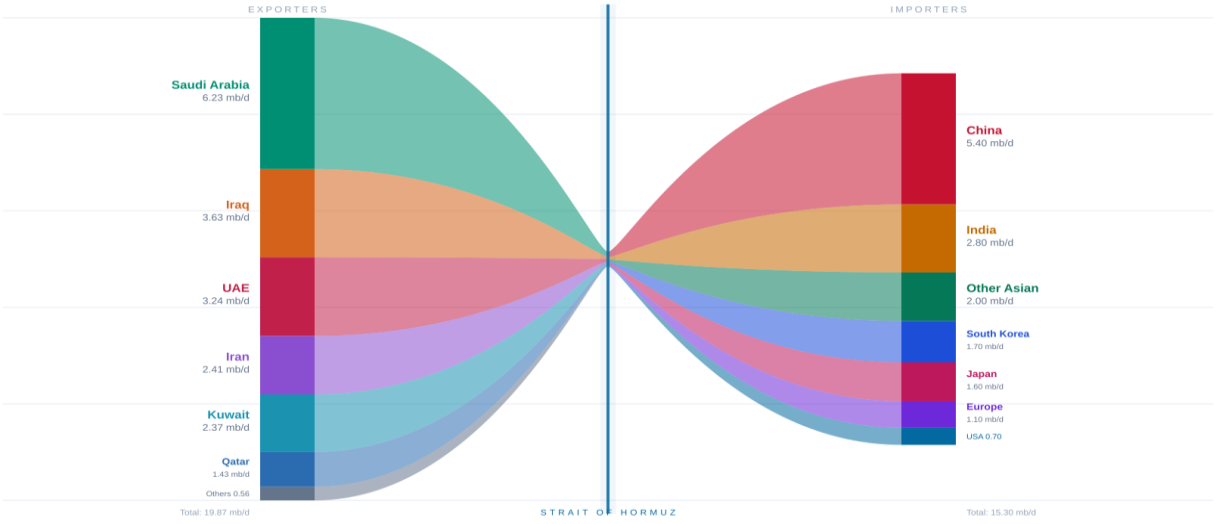

Figure 3 Flows of oil from the Strait of Hormuz (2025)

3. Oil First: Why the Strait of Hurmuz Is Not a Structural Oil Crisis

The Strait of Hormuz is structurally central to global oil flows, yet this centrality does not automatically imply systemic collapse in the event of disruption. Between 2020 and Q1 2025, crude and condensate flows through Hormuz ranged approximately 15 million barrels per day (mb/d), while petroleum products added another 5.4 mb/d. Total liquids transit therefore fluctuated around 20 mb/d. World oil demand reached an average of 103.84 mb/d in 2024. The magnitude is significant. However, systemic vulnerability depends not on gross transit exposure but on net irreplaceable supply.

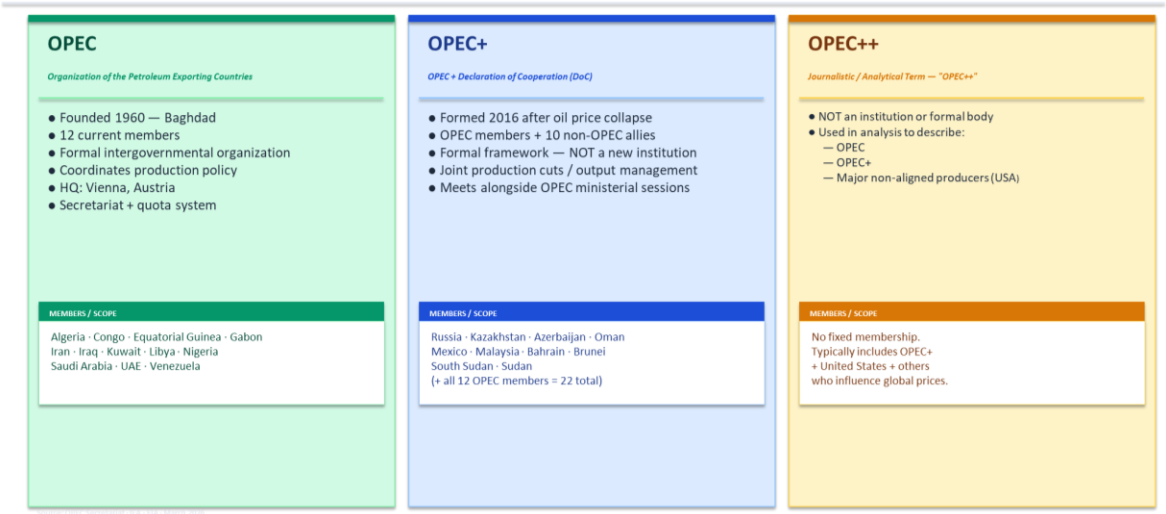

Figure 4 Membership, Structure, Institutional status, Key distinctions between OPEC, OPEC+, OPEC++

Global crude production averaged 72.58 mb/d in 2024, while total liquids production exceeded 100 mb/d when including NGLs and other liquids. OPEC crude production averaged 26.25 mb/d, with exports of 19.01 mb/d, 71.9% of which were directed toward Asia. This geographical concentration means that the primary exposure of a Hormuz disruption lies in Asian import dependence rather than in Western supply collapse. Europe's direct dependency on Gulf crude is materially lower than Asia's.

Recent bilateral trade data reinforce this asymmetry: China currently imports roughly 4.7 mb/d of crude from Gulf producers including Iran, compared with approximately 0.9 mb/d for the European Union and only about 0.47 mb/d for the United States. In other words, China alone absorbs more than four times the Gulf volumes of Europe and nearly ten times those of the U.S., making any Hormuz-related disruption disproportionately an Asian macroeconomic shock rather than a transatlantic supply crisis.

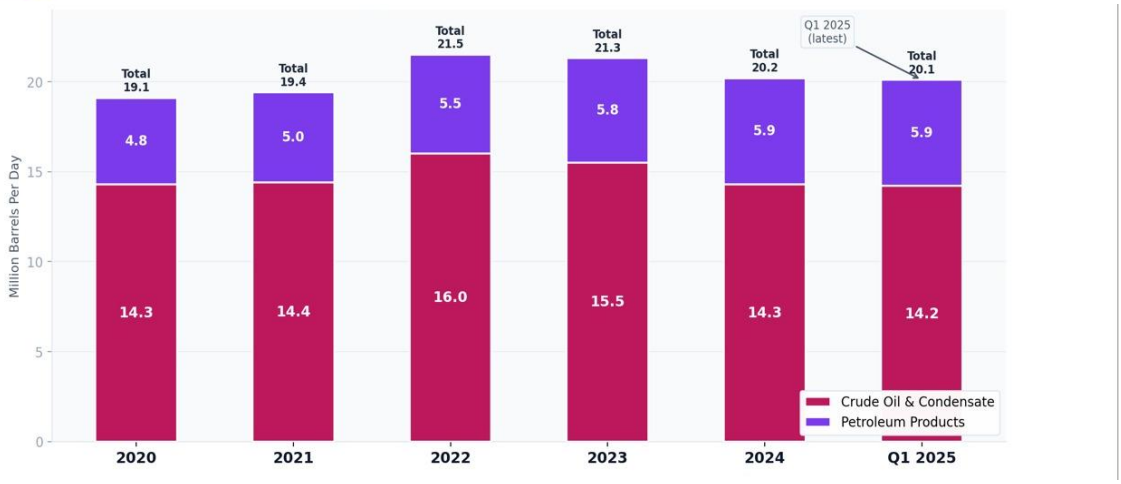

Figure 5 Oil Flows through the Strait of Hormuz, [million barrels per day], (2020 – Q1 2025)

Saudi Arabia, Iraq, Kuwait, the UAE and Iran collectively account for a large share of Hormuz-transiting volumes. Yet this does not imply full immobilization under stress. Saudi Arabia maintains the East–West Petroline with operational capacity between 5 and 7 mb/d. The UAE operates the Habshan–Fujairah pipeline with approximately 1.8 mb/d capacity, fully bypassing the Strait. Together, bypass capacity reaches close to 8 mb/d. If total Hormuz throughput is ~21 mb/d, the net immediate exposure after bypass utilization falls toward ~13 mb/d. That is a severe shock, but not an uncontrollable vacuum.

Saudi Arabia holds an estimated 2–2.5 mmbpd of immediately deployable spare capacity. In addition, Russia can potentially mobilize around 2 mmbpd under favorable conditions, while the United States could scale output by roughly another 2-3 mmbpd, primarily through shale responsiveness.
This effectively means that three major producing powers Saudi Arabia, Russia, and the United States, possess the ability to inject additional volumes into the market at a scale unmatched by the rest of the world combined.
Approximately 34 out of 78 mmbpd of globally traded crude supply originates from these three producers, underscoring the extreme concentration of flexible supply capacity within a very small group of countries.

The second stabilizing factor is spare and flexible production capacity. Saudi Arabia produces around 9–10 mb/d under current policy constraints, yet retains potential capacity near 12 mb/d, implying rapid upside of roughly 2–2.5 mb/d. The United States produces approximately 15 mb/d of crude and liquids, with shale responsiveness capable of adding 2–3 mb/d. Russia, despite sanctions, retains redirection capacity and possible incremental expansion of 2 mb/d toward Asian markets. Aggregated, these sources could mobilize between 6 and 7.5 mb/d over a medium-term horizon. While insufficient to fully offset a worst-case 12–13 mb/d disruption, such responsiveness materially compresses structural deficit risk.

Strategic petroleum reserves form the third stabilizing pillar. OECD commercial and strategic stocks exceed 4.5 billion barrels. The United States Strategic Petroleum Reserve alone holds roughly 350–

370 million barrels following post-2022 drawdowns. At global consumption near 104 mb/d, OECD inventories represent approximately 45–60 days of cover. Even in a scenario where 5–6 mb/d of supply is temporarily removed, coordinated stock releases could bridge the imbalance for months. This is the crucial distinction: price spikes are possible; physical shortages are not structurally inevitable.

Within Europe specifically, structural exposure is often overstated. Europe holds approximately 9.7 billion barrels of proven crude reserves, with 61.5% located in Norway and 21.7% in the United Kingdom. While European upstream production has declined structurally over the past decade, remaining recoverable reserves are concentrated in the North Sea and smaller Eastern European fields such as Romania. Europe is not a large growth producer, but it is not entirely reserve-empty either. More importantly, the European Union maintains strategic emergency oil stocks exceeding 100 million tonnes, designed to comply with International Energy Agency obligations for at least 90 days of net imports. These inventories function explicitly as a geopolitical shock absorber.

Greece represents a particularly illustrative micro-case. Greece maintains strategic petroleum stocks of 10 million barrels of proven oil reserves, covering approximately 90 days of net imports, effectively providing three months of domestic coverage even under a complete import interruption scenario. The presence of two major refining groups, HELLENiQ ENERGY and Motor Oil, enhances systemic resilience. These refineries not only satisfy domestic demand but also export refined products across the Mediterranean and Balkan regions, reinforcing regional supply flexibility.

4. The Gas Dimension: A Deeper, Less Visible Vulnerability

While crude oil disruption caused by the Middle East conflict dominates headlines, the more consequential market signal may be in natural gas, since liquefaction capacity is geographically concentrated, long-term contracts determine trade flows, abundant strategic reserves are missing and transport infrastructure constrains rapid reallocation. In the first three days of March 2026, European gas benchmarks surged by more than 44%, while Asian spot LNG prices jumped nearly 39% in direct response to the disruption in Gulf and particularly in the Strait of Hormuz. These are not proportionate to the scale of physical volumes lost in the immediate term; they are a forward-pricing of what sustained disruption would mean for a global gas market with limited spare capacity and finite storage buffers.

I. Middle East dominance in LNG Supply

But let's set up the scene first. Globally, LNG trade reached 411.2 million tonnes (MT) based on the GIIGNL Annual Report. The supply's geographic distribution remains highly concentrated. The United States remained the largest LNG exporter in 2024 with 88.4 MT, followed by Australia with 81.0 MT, and Qatar with approximately 78 MT, making it the third-largest LNG exporter globally. Russia followed with 33.5 MT.

To add on that, it is worth mentioning that approximately one-fifth of global LNG trade transits the Strait of Hormuz, linking the Gulf's liquefaction infrastructure with Asian demand centers. Unlike oil

pipelines that partially bypass the Strait, LNG exports from Qatar, Oman and the United Arab Emirates rely overwhelmingly on maritime transport through Hormuz.

In 2024, LNG exports from the Middle East reached approximately 96 MT, an amount that is increasing modestly by around 2 MT over the last 5years. The dominant share of this volume originates mainly from Qatar, which produces around 78 MT. The United Arab Emirates exported roughly 6 MT, representing a 19% increase year-on-year, while smaller but significant volumes of 77 MT came from Oman.

Within the global LNG system, Qatar occupies a uniquely strategic position. The country's LNG industry is built upon the North Dome gas field, the largest non-associated gas reservoir in the world. This field is geologically continuous with Iran's South Pars field, meaning that the two countries effectively exploit different sections of the same reservoir.

This shared structure introduces an additional layer of geopolitical complexity. On the Iranian side, several LNG export projects have historically been planned around the South Pars resource base, including Iran LNG (~10.8 MTPA), Pars LNG (~10 MTPA) and Persian LNG (~16.2 MTPA). Although these projects have faced repeated delays due to sanctions, technology restrictions and financing constraints, they illustrate the scale of gas resources concentrated within this transboundary basin.

Taken together, Qatar and the UAE exported roughly 84 MT of LNG in 2024, representing around 20% of global LNG supply. This concentration is amplified by infrastructure geography. Qatar alone, through its Ras Laffan production site, where all of the country's liquefaction facilities are concentrated, is the world's single largest LNG production site. Should Ras Laffan be struck, the global gas market would stand to lose an estimated 105 to 110 bcm of LNG export capacity. Roughly 80 percent of these combined volumes flow to Asian markets, primarily China, India, South Korea, Taiwan, and Pakistan, with the remainder directed predominantly to European buyers, including Italy, Belgium, Poland, and the United Kingdom.

II. Structural Dependence of the Asian Market

The vulnerability of LNG markets lies not only in supply concentration but also in demand geography. LNG trade is heavily Asia-centric. In 2024, Asia Pacific imported 165 MT of LNG, representing 40.1% of global LNG imports, while the broader Asian region imported an additional 118 MT, bringing the combined regional share to 68.8% of global LNG demand.

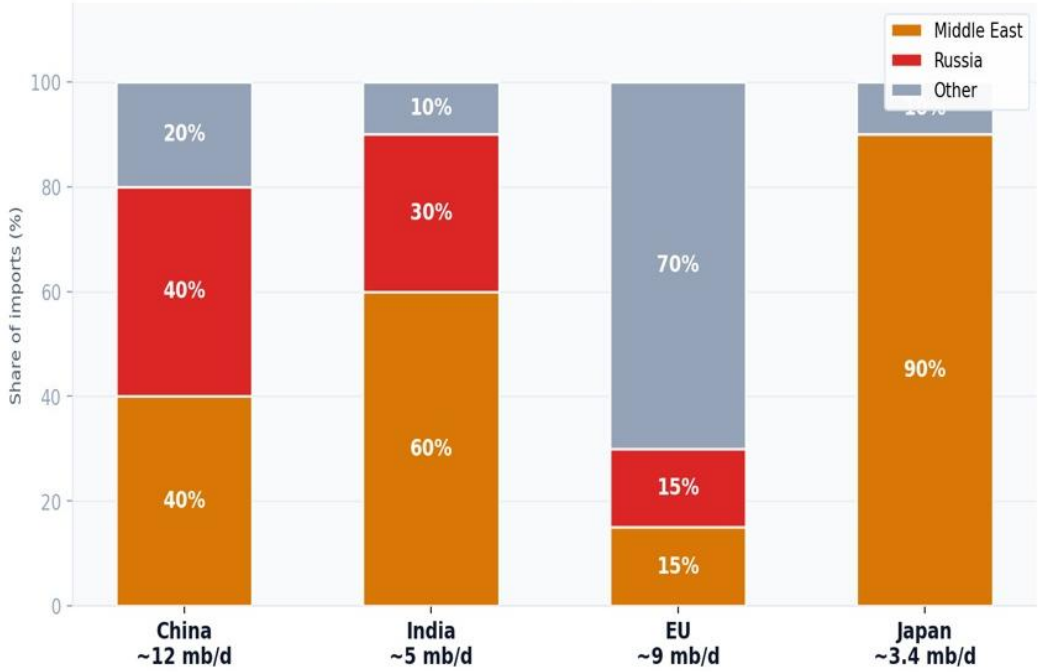

Figure 6 Oil Import Sources by Key Importing Country, [% share], (2024)

This demand concentration translates directly into exposure to Gulf supply. Of Qatar's 78 MT of exports, 63 MT—or 81%—were delivered to Asian markets in 2024, up from 59 MT in 2023. The three largest buyers were China (24%), India (15%), and South Korea (11%).

China alone imported 78.64 MT of LNG in 2024, reinforcing its position as the largest LNG importer globally. Japan followed with 67.72 MT, while South Korea imported 47.01 MT. Together, these three countries accounted for 47% of global LNG imports. India added another 26.15 MT, reflecting strong demand growth driven by extreme summer heat and gas-for-power consumption.

This demand structure means that any disruption in Gulf LNG flows would primarily impact Asian energy security.

III. Contract Structures and the U.S. LNG Model

Another structural feature of LNG markets lies in contract architecture. LNG projects are financed primarily through long-term offtake agreements rather than spot market exposure. Data from Cedigaz shows that a relatively small group of companies underwrites a large share of U.S. LNG export capacity.

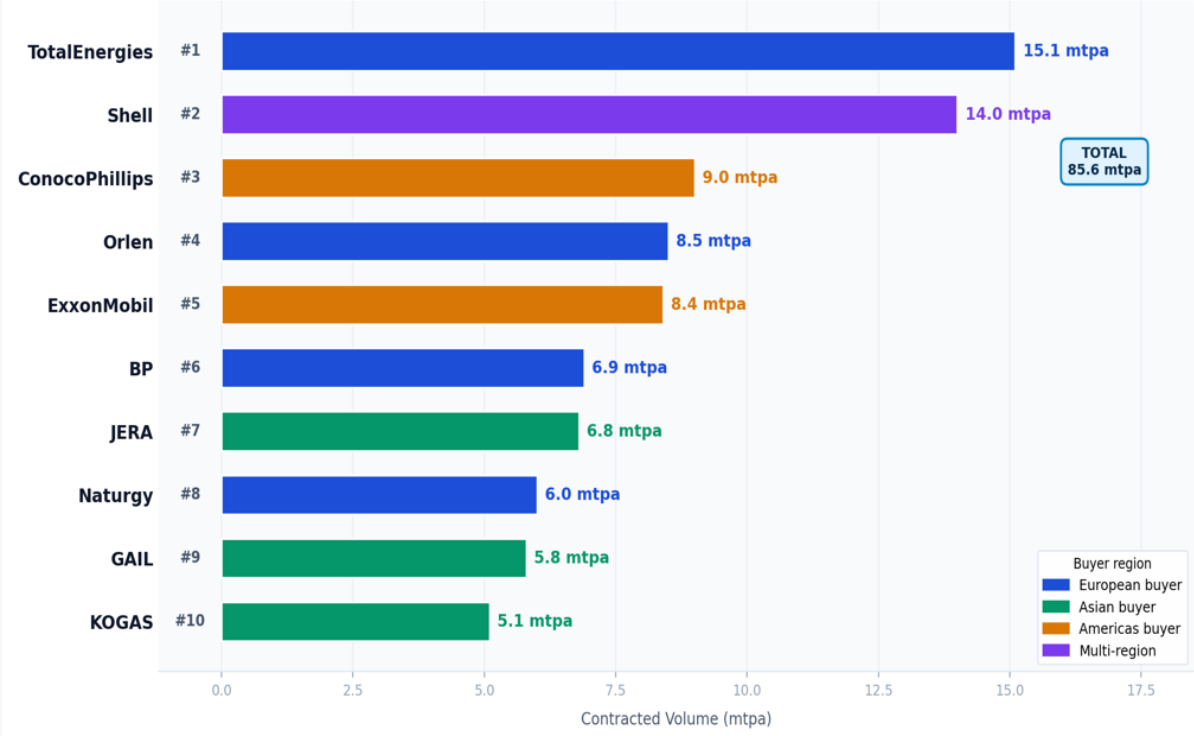

Figure 7 Largest Holders of contracted U.S. LNG export volumes, [mtpa], (2024)

Together these ten companies account for nearly half of all contracted U.S. LNG volumes.

10 Three structural characteristics emerge from this structure. First, the LNG market is increasingly dominated by portfolio players, large integrated energy companies managing global supply portfolios rather than single-destination buyers. Second, European utilities are deeply embedded in U.S. LNG contracting, confirming that Europe's post-2022 strategy has shifted from emergency procurement toward long-term supply security. Third, the industry is increasingly contracting with itself, with producers, traders, and developers holding overlapping positions across global LNG supply chains.

Recent developments have already demonstrated how quickly the system's resilience can erode when critical infrastructure becomes exposed to security risks. The escalation has affected several core nodes of the region's export architecture. Qatar temporarily halted LNG production following Iranian drone activity near its facilities, while Saudi Arabia suspended operations at its largest refinery in Ras Tanura after a drone strike. At the same time, Israel shut down its offshore gas fields as a precautionary measure, and oil and gas operations in Iraqi Kurdistan were suspended amid rising security concerns.

Individually, these incidents might be interpreted as temporary disruptions. Taken together, however, they represent a simultaneous compression of the system's operational flexibility at a moment when global markets require redundancy. When the constraint shifts from production availability to midstream security and export continuity, spare capacity offers limited relief. The central question

becomes not whether hydrocarbons exist underground, but whether they can safely reach global markets.

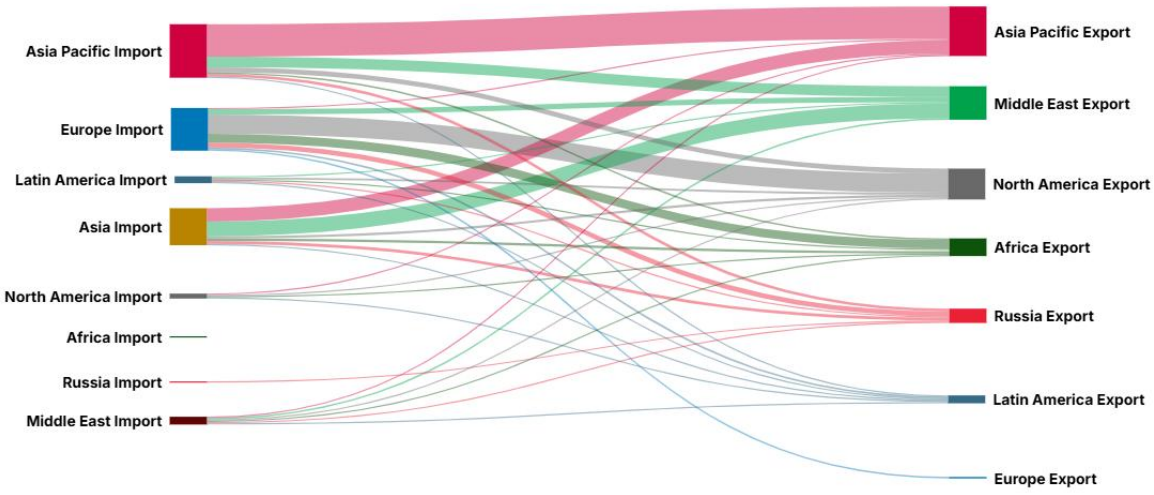

Figure 8 Global LNG trade, (2024)

In sum, the current escalation in the Gulf illustrates how geopolitical tensions can rapidly translate into systemic energy market stress, not necessarily through immediate physical supply losses but through the repricing of infrastructure and transit risk. Oil markets retain a degree of resilience due to diversified supply, strategic reserves, and partial pipeline bypass capacity around the Strait of Hormuz. By contrast, the global gas system remains structurally more fragile: LNG supply is geographically concentrated, transport routes are less flexible, and storage buffers are limited. As a result, even modest disruptions or perceived security risks can generate disproportionate price responses, as seen in the sharp rise of European gas benchmarks compared to the more moderate oil reaction. In a highly interconnected energy landscape, geopolitical shocks increasingly propagate through logistics, contracts, and transit corridors, making infrastructure resilience as central to energy security as production itself.

- ✓ Immediate market signal: European gas prices (TTF) jumped to €57.7/MWh in early March 2026, almost +163% above the 2025 average (€35.33/MWh). Brent oil rose more moderately to ~€67/MWh, slightly above historical volatility ranges.
- ✓ Hormuz exposure: roughly 20–21 mb/d of oil and ~20% of global LNG trade transit the Strait. However, oil flows have ~8.8 mb/d of pipeline bypass capacity, while LNG exports from Qatar and the UAE have no overland alternative.
- ✓ Supply concentration: Qatar (~78 MT) and the UAE (~6 MT) exported about 84 MT of LNG in 2024, representing ≈20% of global LNG trade (411 MT) and making the Gulf one of the most concentrated supply clusters in the gas market.

- ✓ Demand dependence: 81% of Qatari LNG exports (≈63 MT) go to Asia, mainly China (24%), India (15%), and South Korea (11%). These three economies alone account for 47% of global LNG imports, making Asia the primary exposure zone.

Sources

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