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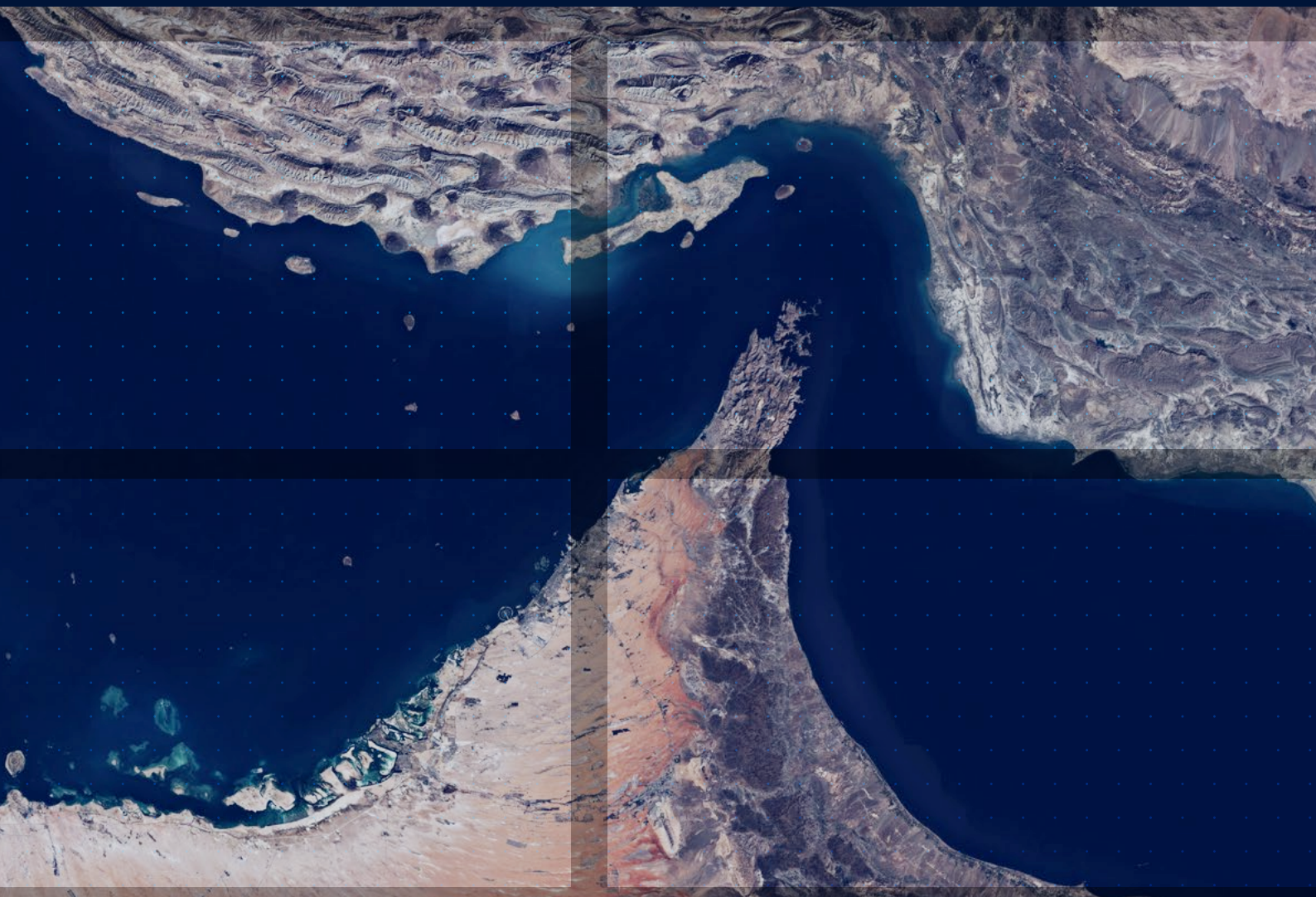
Energy markets and geopolitics

ENERGY SECURITY AND THE QUEST FOR NEW STRATEGIC ENERGY CORRIDORS



As global energy markets face increased geopolitical uncertainty and volatility, the need for a secure, stable and resilient energy future has never been more important. ADIPEC has launched this **Energy markets and geopolitics** series to provide market insights into the impact of the ongoing conflict on global energy markets and the way forward for the industry.

The series provides decision-makers with informed analysis, helping the industry navigate disruption, assess risk, and identify pathways to resilience in an increasingly complex energy landscape.

Thought leadership

Supply disruption, resilience, and the shift to energy diversification

By **Andrew Smart,** Senior Managing Director and EMEA Energy Lead at Accenture

The energy landscape has been fundamentally reshaped by recent supply disruptions, most notably the closure of the Strait of Hormuz. In this Q&A, Andrew Smart, Senior Managing Director and EMEA Energy Lead at Accenture, discusses how the industry is pivoting from production to diversified supply and portfolio management.

How is the industry navigating what is arguably the largest supply disruption in history?

In my 30-year career, this is the biggest shock I've lived through. It has strained the industry from end to end. While the energy sector is no stranger to challenges, this event has highlighted critical points of weakness — specifically the vulnerability of the Strait of Hormuz as a chokepoint.

However, it has also underscored an amazing resilience. Since oil hit US$147 in 2008, the industry has developed significant optionality and agility. We are seeing those years of long-term investment in both physical infrastructure and paper markets being tested to the absolute maximum.

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Andrew Smart
Senior Managing Director and EMEA Energy Lead at Accenture

Thought leadership

We have seen the UAE's Fujairah and Saudi Arabia's Yanbu pipelines play critical roles as alternative routes. How do you see the focus moving to building more physical infrastructure in the future to maintain global supplies?

These investments by Aramco and ADNOC are incredibly meaningful, but no system can have 100% redundancy. It's always a balance between risk and cost. Markets have started to price in the physical delivery risk, and we've seen agility in redirecting supplies and reconfiguring refining. However, I don't believe the full effect has filtered through the system yet, nor is the risk behind us. The industry remains on high alert, constantly testing its agility as the situation progresses.

Beyond pipelines, we have to look at how different nations have built resilience. China stands out here; since 2008, they've developed nearly 1.4 billion barrels of oil reserves — roughly 90 to 100 days of supply. Furthermore, international oil companies (IOCs) have shifted from being mere operators to portfolio managers, while national oil companies (NOCs) have moved beyond capacity-based views to a more system-oriented resilience.

Given the depleted state of some strategic reserves, are we moving toward a narrative of energy addition rather than just transition?

Strategic reserves provide breathing space, but they don't replace supply. The recent shock has exposed where those reserves weren't fully replenished. It has also highlighted that our gas systems are not as mature as oil; gas reserves are largely in commercial hands, which gives us pause for thought on how to develop resilience in that sector.

Ultimately, it is about diversification. While we see the electrification wave continuing, we will also see a need for ongoing capacity additions. Nothing fully insulates you from price impacts, but having more tools in the toolkit, including various energy sources and storage options, is now the focus of both long-term planning and operational discipline.

You mentioned "tools in the toolkit". How prominent is the role of AI and technology in managing these strategic strains?

I find this particularly fascinating. AI is coming into its own by enabling lightning-fast decision-making. The ability to analyse data and run complex scenarios in real-time is invaluable during a crisis.

Many organisations have had to rely on "gut feel" over the last few months. Going forward, the drive for AI will be reinforced because it allows companies to test-drive scenarios before they happen and make decisions with more precision when they do. The key, however, is having the governance and culture in place to actually act on that intelligence. ■

Energy security and the quest for new strategic energy corridors

Global energy systems remain heavily dependent on a small number of physical chokepoints, none more strategically consequential than the Strait of Hormuz. Roughly 20 million barrels per day (mbpd) of crude oil and petroleum products transit the corridor, accounting for close to 20% of global oil consumption and approximately one quarter of global seaborne oil trade. Over 80% of these shipments are directed to Asian markets. The Strait is even more critical for global gas markets. Around 93% of Qatar and around 96% of the United Arab Emirates' (UAE) LNG exports travel through the Strait. Recent disruption scenarios have reinforced a structural reality: concentrating global energy flows through one maritime chokepoint creates systemic vulnerability for both producers and consumers. While Gulf producers will remain central to global energy supply for decades, reliance on this corridor exposes both exporters and importers to significant geopolitical and operational risk.

As a result, energy strategy across the Gulf is shifting. The focus is moving beyond production capacity toward ensuring continuity of supply under disruption through route diversification, infrastructure redundancy, and the development of alternative export corridors. Recent investment decisions reflect this shift, including the UAE's plans to expand export capacity via Fujairah, strengthening its ability to bypass the Strait.

This evolving approach signals a broader transition in how energy security is defined. Control over resources alone is no longer sufficient; resilience increasingly depends on the ability to sustain multiple, flexible routes to market. In a more fragmented and volatile geopolitical environment, the robustness of energy corridors is becoming as critical as the resources they carry.

"Recent disruption scenarios have reinforced a structural reality: concentrating global energy flows through one maritime chokepoint creates systemic vulnerability for both producers and consumers."

The fiscal consequences of Hormuz disruption

Over 70 days of sustained escalation risk, disruption is already hitting global oil, gas, shipping and industrial markets. As the disruption continues, Brent crude is increasingly pushed into higher price bands, moving from a baseline of US$70–85 per barrel toward US$110–150 or higher depending on duration, spare capacity use, and coordinated strategic reserve releases.

The financial effects extend well beyond crude prices alone. Tanker insurance premiums in the Gulf have historically increased up to tenfold during periods of regional instability, while freight volatility, rerouting costs, and shipping delays have amplified uncertainty across global supply chains. Even partial rerouting around the Arabian Peninsula materially increases voyage time and operating costs for cargoes moving toward Europe and Asia.

LNG markets are highly exposed due to Qatar's concentration of exports through the Strait. With Qatar accounting for roughly 20% of global LNG trade, the disruption has tightened spot markets and intensified competition for cargoes from the US, Australia, and Africa.

The inflationary impact is already global, with higher transportation costs, input prices, and energy bills feeding into manufacturing, chemicals, aviation, and food supply chains. In this context, the cost of concentrated infrastructure exposure arguably increasingly exceeds the cost of building redundancy.

20 mbpd

Of crude oil and petroleum products transit the corridor

Uneven exposure across Gulf producers

Not all Gulf and Middle East producers face the same degree of vulnerability. While several states have invested heavily in bypass infrastructure over the past two decades, others remain structurally dependent on uninterrupted transit through the Strait of Hormuz.

Kuwait, Bahrain, and Qatar remain among the most exposed. Kuwait exports roughly 1.2 mbpd of crude oil, while Qatar exports about 77 million tonnes per annum (mtpa) of LNG, along with condensates and petroleum products. Bahrain's refining and export system is similarly reliant on Gulf shipping routes.

Unlike Saudi Arabia and the UAE, which have developed pipeline networks and export terminals that partially bypass the Strait, these states have limited redundancy, leaving them more exposed to geopolitical escalation, maritime incidents, or prolonged disruptions. This creates differentiated strategic incentives across the region: those with alternative corridors have greater flexibility during a crisis, while others face higher fiscal exposure and reduced export optionality.

Asia's strategic exposure and the search for alternatives

The strategic implications of the Strait's vulnerability are most acute in Asia, the primary destination for Gulf hydrocarbon exports. China, India, Japan, and South Korea together absorb the bulk of crude oil and LNG flows transiting the Strait, leaving Asian industrial economies disproportionately exposed to disruption. China imports approximately 11–12 mbpd of crude oil, with over 50% originating in the Middle East. India imports around 5 mbpd, of which over 60% comes from Gulf suppliers. Japan and South Korea are even more concentrated, with Gulf producers supplying around 90% and 70% of crude imports, respectively. While global markets can eventually rebalance through rerouted flows and higher prices, Asia remains structurally dependent on uninterrupted Gulf-to-Asia maritime transit for refining, power generation, and industrial stability.

This exposure is shaping long-term infrastructure and investment strategies across Eurasia. China's Belt and Road Initiative, with almost US$1.4 trillion in infrastructure commitments, alongside the US$62 billion China–Pakistan Economic Corridor (CPEC), reflects efforts to diversify logistics networks away from concentrated maritime routes.

Expanding existing bypass infrastructure as strategic insurance

The UAE has already demonstrated the value of route diversification through the Abu Dhabi Crude Oil Pipeline (ADCOP), a 360km link from Habshan to Fujairah on the Gulf of Oman that entirely bypasses the Strait of Hormuz. With a nameplate capacity of around 1.5 mbpd, reportedly pushed closer to 1.8 mbpd during periods of heightened regional risk, it provides critical export continuity during maritime instability. On 15 May, the UAE announced it would accelerate construction of a new oil pipeline that will double its export capacity through Fujairah by 2027, vastly expanding its ability to bypass the Strait of Hormuz.

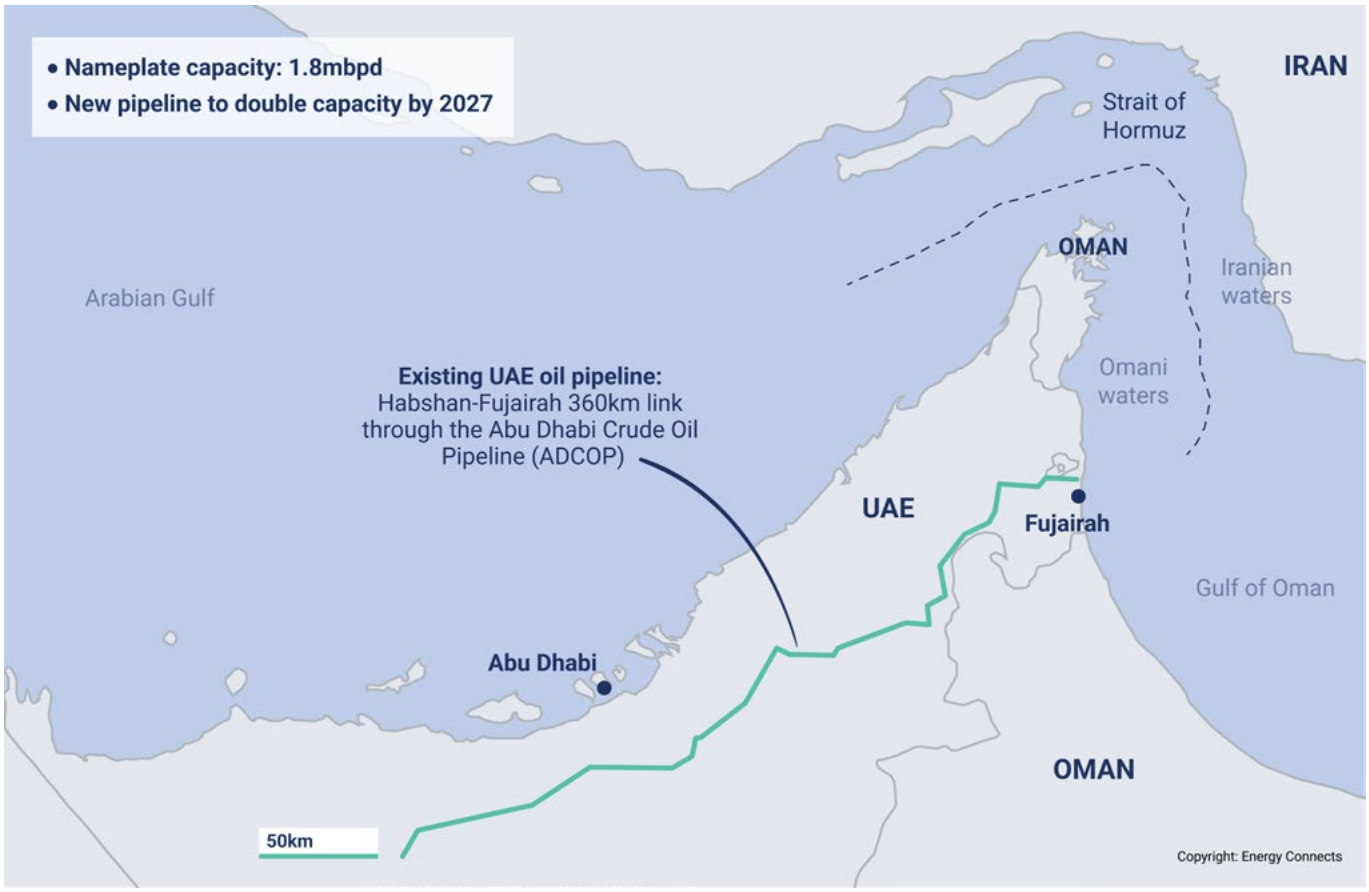
77 mtpa

The amount of crude oil Qatar exports

For ADNOC, the pipeline marks a major milestone in the company's long-term infrastructure expansion plans. By creating a direct export route to Fujairah, ADNOC has significantly reduced reliance on maritime transit through the strait. Fujairah has evolved into a major energy storage and export hub, handling about 1 mbpd of Murban crude exports in 2024 while also serving as a key bunkering and logistics centre connected to global shipping routes outside the Gulf chokepoint system.

Saudi Arabia has pursued a similar strategy through its East-West Petroline, connecting the Eastern Province to Yanbu on the Red Sea. It possesses an estimated capacity of

Market outlook



5–7 mbpd and enables large-scale export without reliance on Gulf maritime transit.

These projects reflect a broader shift in Gulf energy planning. Infrastructure redundancy is no longer viewed as an efficiency consideration but geopolitical insurance to secure export continuity under stress.

From isolated bypasses to integrated continental corridors

The next phase of resilience extends beyond standalone pipelines, with a growing focus on integrated continental networks combining pipeline, rail, and port to move hydrocarbons and strategic commodities more flexibly.

A key case is Iraq's export connectivity from Basra to Türkiye via

11-12 mbpd

China's crude imports, with over half from the Middle East

the Iraq–Türkiye Pipeline (ITP) at Ceyhan. Despite repeated outages and political disputes, its nominal capacity of around 1.6–1.7 mbpd makes it Iraq's main overland route to Mediterranean markets. While southern Basra terminals still handle most exports, northern flows via Ceyhan remain the only large-scale overland outlet toward Europe.

Dormant infrastructure is also being reassessed. The Iraqi Pipeline through Saudi Arabia (IPSA), once designed to transport crude westward, had a capacity of roughly 1.65 mbpd before being shut in the early 1990s. Trans-Arabian Pipeline (Tapline), linking Saudi Arabia's Eastern Province to the Lebanese port of Sidon, peaked at around 0.5 mbpd before closing in the 1980s.

Even Syria, despite political fragmentation, sanctions, and infrastructure damage, retains geographic relevance as a theoretical corridor, such as the Kirkuk-Baniyas oil pipeline between Iraq and the Mediterranean. While revival remains unlikely in the near term, it continues to feature in long-term discussions on energy security, redundancy, and alternative routes beyond chokepoint-dependent maritime routes.

US$5-20bn

The typical capital expenditure required by large-scale cross-border pipeline systems

Rail and multimodal logistics as resilience infrastructure

Energy corridor resilience is increasingly extending beyond pipelines alone, with rail emerging as a complementary mechanism for trade continuity, industrial integration and logistical flexibility across the Gulf and wider Middle East.

Projects such as the UAE–Jordan rail initiative reflect a broader movement toward multimodal corridors linking Gulf producers with Levantine and Southern European markets. While rail cannot replace pipeline-scale hydrocarbons, it strengthens resilience by diversifying inland logistics and improving inland-to-port connectivity for bulk commodities. The corridor is expected to handle around 16 mtpa of freight, primarily supporting Jordan's phosphate and potash exports via Aqaba, while potentially linking to wider Gulf–Levant–Mediterranean networks over time.

More broadly, GCC rail integration plans envision around 2,100 km of regional rail connectivity across Saudi Arabia, the UAE, Oman, Kuwait, Bahrain, and Qatar, with investment costs exceeding US$15 billion across multiple national segments.

The strategic objective is increasingly the development of overlapping transport systems — pipelines, rail, ports, storage hubs, and industrial corridors — to reduce exposure to disruption on any single route.

The economics of resilience

Large-scale cross-border pipeline systems typically require capital expenditure of US$5-20 billion, depending on terrain, route complexity, export capacity and security conditions. For comparison, the East African Crude Oil Pipeline (EACOP) is estimated at over US$5 billion, while major transcontinental gas projects such as the Trans Anatolian Natural Gas Pipeline Project cost between US$8-12 billion and the major Power of Siberia (part 1) project costs around US$55 billion.

Under stable market conditions, many redundancy projects have struggled to justify upfront costs given the efficiency and low operating expense of Gulf maritime transport. However, repeated disruption and sustained geopolitical fragmentation are already changing the economics. Under stress scenarios, higher oil prices, rerouting costs, insurance premiums, shipping delays, and broader supply-chain disruptions significantly increase the value of physical redundancy.

A price rise from US$75-130 per barrel across roughly 103 mbpd of global demand implies more than USD$2 trillion in annual energy cost shifts, while also significantly boosting revenues for exporting states. This increases the fiscal space available for Gulf producers to fund redundancy infrastructure, even if investment decisions remain driven primarily by long-term strategic and geopolitical factors.

US$2t+

Annual energy cost shift potential under major price disruption

The emerging blueprint for energy security

The central lesson of Strait of Hormuz's closure is not just the resilience of Gulf energy supplies and the planning that went into creating alternative bypasses and corridors, but also the need for strategic expansion of supply routes. Global energy trade is shifting from single mega-routes towards layered, overlapping corridors designed to preserve continuity under disruption, with the Gulf states at the heart of it. Pipelines, rail, ports, storage hubs, and multimodal networks are increasingly treated as a single resilience system rather than standalone assets.

Energy security is therefore moving beyond reserves and production volumes toward a wider concept of corridor survivability and logistical flexibility. In an era of geopolitical fragmentation and recurring instability, energy power lies not only in underground resources, but in the ability to sustain multiple routes to market simultaneously. ■

Sources and acknowledgments:

IEA; EIA; Kpler; ICIS; UAE Embassy; Tamimi; Eurasia Group; Reuters;

Wall Street Journal

* All data and information in this report is valid as of 15 May 2026.

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