



ANNUAL REPORT

ENERGY MARKETS OUTLOOK

Port of Fujairah



Port of Fujairah
United Arab Emirates



**Energy Markets Sail into 2026
in Search of Arbitrage Amidst the Fog
of Collapsing Global Rules-Based System**



Delivering the
world's energy needs
today and tomorrow



Publication Supported By



GI ANNUAL REPORT ENERGY MARKETS OUTLOOK CONTENTS

07 FOREWORD

- AI is Redefining the Flows That Power the World
- Dyala Sabbagh, Partner & Editor-in-Chief, Gulf Intelligence

CHAPTER 1 ENERGY MARKETS OUTLOOK

12 Brent Crude oil Anchored in the \$60s in 2026 – Outlook?

- Sara Akbar, Chairperson & CEO, OilSERV Kuwait
- Jarand Rystad, Founder & CEO, Rystad Energy

17 The Pragmatic Pact — What Will Hold OPEC+ Together in a Winner-Takes-All Era?

- Ali Al Riyami, Consultant & Former Director General of Marketing, Ministry of Energy & Minerals, Oman
- Vandana Hari, Founder & CEO, Vanda Insights
- Marc Ostwald, Chief Economist & Global Strategist, ADM Investor Services International
- Manus Cranny, Geo Economics Editor, The National

24 The Gulf's Shift Beyond Oil Price is Rewriting OPEC+ Strategy

- Edward Bell, Acting Chief Economist & Head of Research, Emirates NBD

26 With oil prices hovering near \$65 and fiscal pressures mounting, Saudi Arabia faces its most critical test yet

- Toby Iles, Chief Economist, Jadwa Investment

CHAPTER 2 TRADING IN A LAWLESS WORLD

31 The New Order of Disorder: Inside the Fragmented World of Global Commodity Trading

- Sh. Khaled Ahmad M. Al-Sabah, Managing Director - International Marketing – Kuwait Petroleum Corporation (KPC)
- Dave Ernsberger, Co-President, S&P Global Commodity Insights
- Tom Baker, Managing Director & Head of Middle East & Africa, Vitol

36 Top 20 Insights How Commodity Traders Can Navigate a Fragmented World Where Global Rules Are Breaking Down?

39 Peak Shale – Why America's Oil Miracle Has Hit a Wall

- Brian Pieri, Founder & CEO, Energy Rogue

40 How is AI Impacting Physical Energy Trading – Winning & Losing Strategies?

- Richard Frey, CEO, INAIT

43 Gulf's Rise as Global Commodity Trading Hub Attracts Talent

- Zoe Upson, Director, FACT - Freight and Commodity Talent, & Founder, Women Together
- Victoria Todd, Regional Director & Head MENA, HC Group
- Dyala Sabbagh, Co-Founder & Editor in Chief, Gulf Intelligence

47 TOP 6 INSIGHTS on What Hiring Trends Tell Us About How the Gulf States Are Shaping the Region's Rise as a Global Hub for Trading & Shipping?

49 How can Fujairah Become One of the World's Top Three Global Energy Hubs

- Iman Nasser, Managing Director - Middle East, FGE NexantECA
- Narendra Taneja, Chairman, Independent Energy Policy Institute, India
- Arne Lohmann Rasmussen, Chief Analyst and Head of Research, Global Risk Management
- Osama Rizvi, Energy & Economic Analyst, Primary Vision
- Nikhil Deshpande, Head of Middle East Growth for Oil & Gas, Tata Consultancy Services

CHAPTER 3 ASIA WITH US OR AGAINST US

56 “You Are Either With Us or Against Us” – How can South Asia Navigate Divided World?

- Mehmet Ögütçü, Group CEO, Global Resources Partnership & Chairman, London Energy Club
- Osama Rizvi, Energy & Economic Analyst - Primary Vision
- Ram Narayanan, Senior Energy & Commodities Executive, India
- Rachel Ziemba, Adjunct Fellow, Center for a New American Security & Senior Advisor, Horizon Engage

60 India Refutes Us Charge of Funding Russia’s War On Ukraine

- Narendra Taneja, Chairman, Independent Energy Policy Institute, India & Distinguished Research Fellow, Oxford Institute for Energy Studies

62 How is China Shaping the World Amid U.S. Containment & Global Crises?

- Victor Gao, Chairman, China Energy Security Institute & VP, Center for China & Globalization

65 How Should the Middle East Oil Industry Prepare for Peak China Oil Demand?

- Ali Al Riyami, Consultant & Former Director General of Marketing, Ministry of Energy and Minerals, Oman
- Rachel Ziemba, Adjunct Fellow, Center for a New American Security, Senior Advisor, Horizon Engage
- Ahmed Mehdi, Managing Director, Renaissance Energy Advisors & Senior Fellow, OIES
- Ram Narayanan, Senior Energy & Commodities Executive, India
- Toby Iles, Chief Economist, Jadwa Investment
- Vandana Hari, Founder & CEO, Vanda Insights

70 PLATTS Redefines The East-Of-Suez Oil Benchmark

- Daniel Colover, Head of Global Engagement & Intelligence for Oil and LNG, SPGCI
- Wesley Monteiro, Middle East Lead, Strategic Engagement & Intelligence Group, SPGCI

CHAPTER 4 GLOBAL SHIPPING SAILING IN THE DARK

75 How to Tackle the Dark Fleet & Secure the Critical Arteries of Global Trade?

- H.E Dr. Shaikh Abdulla bin Ahmed Al Khalifa, Minister of Transportation & Telecommunications, Bahrain

77 How Can the World Stop Shadow Fleet Rewriting the Rules of Global Shipping & Trade?

- Caroline Yang, CEO, Hong Lam Marine, and Former President of the Singapore Shipping Association
- Shrikant Madhav Vaidya, Former Chairman, IndianOil Corporation
- Capt. Rishi Nyati, CEO, Emarat Maritime

84 From Dark Waters to Daylight: How Global Shipping Can Turn Scrutiny into Strength?

- Dhruv Kapur, Head of Shipping, Mena Terminals
- Capt. Rishi Nyati, CEO, Emarat Maritime
- Mary Melton, Senior Tanker Analyst, Braemar
- Arthur Richier, Head of Strategic Partnerships, Vortexa
- Dr. Binay Singh, President, Federation of Global Maritime Community
- André Bledjian, Director, Oil Trading & Shipping, Moeve
- Zoe Upson, Director, FACT - Freight and Commodity Talent and Founder, Women Together

89 How can Port Operators & Terminals Future-Proof their Assets by Becoming Hubs for Carbon Capture, Storage & Utilization (CCUS)?

- H.E. Khamis Al Mazrouei, CEO, SNOC
- Captain Mohamed Al Yahyaie, CEO - Fujairah Terminals, AD Ports Group
- Ravi Bhatiani, Executive Director, The Federation of European Tank Storage Associations
- Dr. Steven Griffiths, Professor & Vice Chancellor for Research, American University of Sharjah
- Capt. Ali Al Abdouli, Director, Fujairah Oil Tanker Terminals (FOTT), Port of Fujairah
- Robert Perkins, Global Managing Editor - Oil, Shipping & Chemicals News, S&P Global Commodity Insights

94 EU Must Replace Energy Idealism with Industrial Realism

- Ravi Bhatiani, Executive Director, Federation of European Tank Storage Associations

S&P Global
Commodity Insights

Crude and Refined Solutions

Oil intelligence – from split-second moves to decade-long trends.

Sharpen your edge in the dynamic oil market with extensive historical data, real-time daily reporting, and detailed short- and long-term outlooks.



Publishing
Intelligence
Consultancy

***All the content included in this report was harvested from brainstorming sessions held over two days with 300 East-of-Suez energy markets stakeholders on Oct. 1st & 2nd, 2025.*



FOREWORD

AI is Redefining the Flows That Power the World



By Dyala Sabbagh, Partner & Editor-in-Chief, Gulf Intelligence

Artificial intelligence is moving rapidly from pilot projects to core infrastructure in the energy industry, with the most immediate impact being felt in midstream logistics and downstream refining. These parts of the value chain, traditionally reliant on human intuition and legacy systems, are being reshaped by AI's ability to process complexity at scale, reduce emissions, and deliver new levels of efficiency.

In the midstream sector, the movement of hydrocarbons through global supply chains has always been a delicate balancing act. Tanker scheduling across multiple ports, routing around weather disruptions, and adjusting to shifting patterns of demand all involve an overwhelming number of variables. AI excels at precisely this kind of problem, bringing real-time optimization that lowers shipping costs, cuts emissions, and builds resilience into global energy flows. Predictive maintenance is another breakthrough application. Pipelines, compressors, and storage facilities are under constant stress, and unplanned failures can be both financially devastating and environmentally damaging. AI-driven models now predict equipment failures with remarkable accuracy, extending asset lifespans and reducing downtime. Over the next five years, such predictive systems will move from optional enhancements to an industry standard, underpinning midstream competitiveness. As digitalization expands, data security also becomes critical. AI-enabled monitoring tools are beginning to provide operators with the means to protect sensitive operational data from leaks or misuse, ensuring that efficiency gains are matched with resilience against cyber risks.

Downstream, the adoption of digital twins is beginning to transform the way refineries are run. These virtual models replicate entire facilities, allowing operators to test variables, optimize production, and stress-test safety protocols without interrupting live operations. The results are already striking: efficiency gains of 15-20% and measurable improvements in energy use and carbon intensity. Anomaly detection is another area where AI is proving invaluable. By identifying inconsistencies across sensor data, weather inputs, and pricing feeds, AI is helping refiners and traders avoid costly errors that have historically led to major disruptions. In trading, AI-driven analytics are compressing multi-day processes into real-time assessments, enabling faster, more confident decisions in volatile markets. This speed advantage, even at the cost of marginal precision, is becoming a decisive factor for downstream competitiveness.

Perhaps most significantly, AI is becoming a lever for decarbonization. By optimizing yields, reducing waste, and enhancing efficiency, it directly lowers emissions and helps firms meet increasingly stringent regulatory and societal expectations. Over the coming decade, midstream and downstream operators that embrace AI will not just run leaner operations; they will redefine the standards of efficiency, security, and sustainability. Those that delay will risk being left behind in an industry where AI is quickly becoming the new baseline.

CHAPTER 1

Energy Markets Outlook

***What will be the Price of Brent
Crude Oil on New Year's Eve?***



**Transparency.
Price discovery.
Innovation.**

Markets and data happen here.

ice.com



BRENT ANCHORED IN THE \$60s

- Caution, Not Complacency, Defines the 2026 Outlook

CONTRIBUTORS

- SARA AKBAR, CHAIRPERSON & CEO, OILSERV, KUWAIT
- JARAND RYSTAD, FOUNDER & CEO, RYSTAD ENERGY

The pulse of the 300 Energy Markets Survey participants revealed a measured, almost pragmatic mood among participants. While geopolitical risks persist and demand forecasts diverge, most analysts now accept that the oil market has entered a new phase — one defined less by crisis management and more by quiet recalibration. The survey findings point to cautious stability ahead, with Brent anchored in a narrow range through 2025 and 2026, and OPEC+ transitioning away from its COVID-era interventions toward a more flexible, market-responsive strategy.

1. What Will Brent Crude Oil Price Be on December 31, 2025?

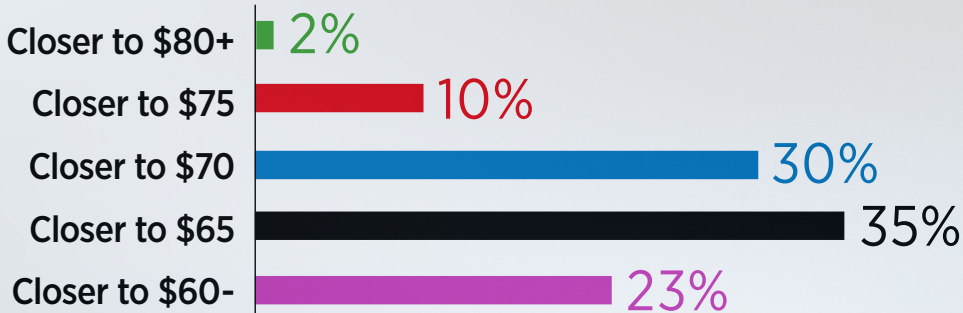
The consensus among market participants places Brent crude ending 2025 somewhere in the \$65–\$70 per barrel range. The mood was neither euphoric nor pessimistic — instead, reflective of a market treading the middle ground. Despite structural uncertainties in the global economy, few foresee a sharp rally or collapse. The sentiment underscores a belief that the era of wild price swings has largely passed, replaced by cautious equilibrium sustained by supply discipline and muted demand.

Analysts emphasized that unless OPEC+ introduces new voluntary

cuts or an unforeseen supply shock occurs, prices are unlikely to move dramatically by year-end. Macroeconomic headwinds — notably slower global industrial growth and trade fragmentation — are restraining upside momentum. The prevailing expectation is for a “steady-state” finish to 2025, mirroring current levels rather than retracing to the volatile extremes of 2020–2022.

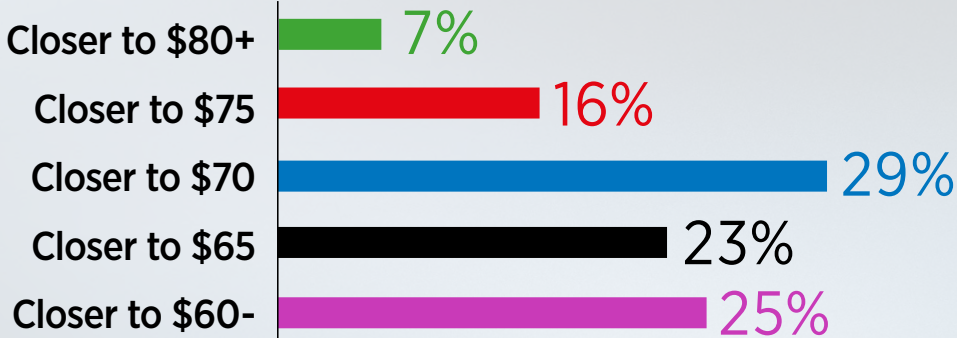
The geopolitical risk premium, once a dominant market mover, has diminished to a few dollars per barrel at most. Traders are becoming desensitized to geopolitical tension unless it directly affects supply corridors or critical maritime choke points. This normalization reflects a broader recalibration: oil markets are

What will Brent Crude Oil Price be on the last trading day of 2025 – December 31st?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

What will Brent Crude Oil Price average in 2026?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

adapting to live with instability as a permanent condition, not a temporary shock.

Perhaps most striking is the shifting influence of China, which for two decades served as the marginal driver of global oil demand. With refinery runs and import growth plateauing, Beijing no longer provides the same incremental pull. This leaves OPEC+’s production discipline — not Asian consumption — as the decisive variable in determining end-2025 prices.

2. What Will Brent Crude Oil Price Average be in 2026?

Looking ahead, the forum’s respondents expect Brent crude to average between \$65 and \$70 per barrel in 2026 — a continuation of 2025’s range-bound dynamics. This consensus points to an energy market in transition, consolidating after several years of volatility. Price stability is seen as both a symptom of demand stagnation and a testament to OPEC+’s ability to calibrate output with restraint.

A mild market surplus is forecast for 2026, keeping prices from breaking higher. The absence of major disruptions or runaway consumption means producers will likely trade price for market share in a balanced way. The comfort zone around the mid-\$60s reflects a “Goldilocks” outcome — not too low to endanger producers’ fiscal budgets, but not high enough to trigger inflationary backlash in consuming nations.

Longer-term dynamics could shift thereafter. By 2027–2028, underinvestment in upstream projects, especially outside the Middle East, may tighten balances again. Yet 2026 itself looks like a plateau year, when inventories remain comfortable, spare capacity abundant, and investment sentiment cautious.

Participants also agreed that political shocks will have shorter-lived effects on prices. While war, sanctions, or maritime tension may generate \$5 swings, such volatility rarely endures without fundamental dislocations in physical supply. The market’s resilience to crises — from Ukraine to the Red Sea — has redefined its risk tolerance. In 2026, fundamentals rather than fear will anchor pricing trends.

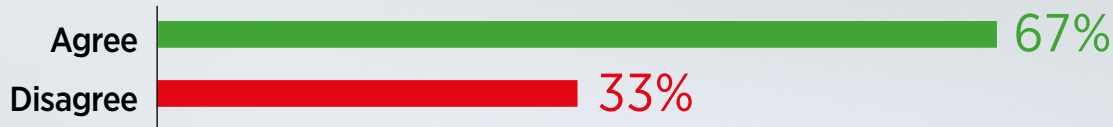
3. Does OPEC+ Raising Supply Mark the End of the COVID “Emergency Management” Era?

Two-thirds of respondents agreed that OPEC+’s decision to raise supply quotas this year effectively marks the end of the five-year COVID-era emergency management of oil markets. The group, once laser-focused on crisis stabilization, is now reasserting a longer-term strategy grounded in flexibility, coordination, and revenue optimization rather than emergency restraint.

This marks a structural transition in OPEC+ governance. The alliance has evolved from a defensive posture — cutting output to rescue prices during global lockdowns — to a proactive, adaptive stance. Today’s OPEC+ sees its role as maintaining equilibrium, not enforcing scarcity. The new goal is to keep markets within a comfortable band rather than defending a rigid price floor.

This flexibility reflects confidence. Spare capacity can now be deployed dynamically, particularly by leading Gulf producers. Instead of keeping millions of barrels offline indefinitely, members are learning to manage output like a “swing orchestra” — playing louder or softer as needed. The strategy strengthens OPEC+’s credibility as a market stabilizer rather than a monopolist.

The OPEC+ decision to raise oil supply quotas this year in the face of uncertain demand outlook signals the end of the 5-year COVID emergency oil market management Era?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

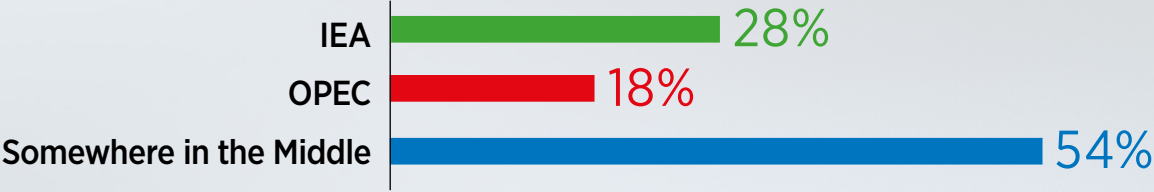
Moreover, the landscape outside the cartel supports this normalization. U.S. shale growth has flattened, with marginal cost pressures rising. New production from Guyana and West Africa, while notable, is insufficient to unseat OPEC+ as the pivotal supplier. With global energy demand maturing and prices hovering near fiscal comfort zones, the group can gradually exit its emergency posture without surrendering market influence.

In essence, the pandemic’s oil market management era is over — replaced by a subtler balancing act between national fiscal needs, energy transition pressures, and evolving trade flows.

4. Whose Demand Forecast for 2026 Is Closer — IEA or OPEC?

The divide between the IEA’s 700 kb/d demand growth forecast and OPEC’s 1.4 mb/d projection for 2026 produced one of the forum’s most cautious results: a majority, 54%, opted for “somewhere in the middle.” This response reveals a pragmatic realism — recognizing the world’s ongoing energy needs but doubting an imminent return to pre-COVID consumption trajectories.

The IEA has forecast global oil demand growth in 2026 as same as this year at 700 kb/d, while OPEC expects double that amount next year: which is closer to likely outcome?



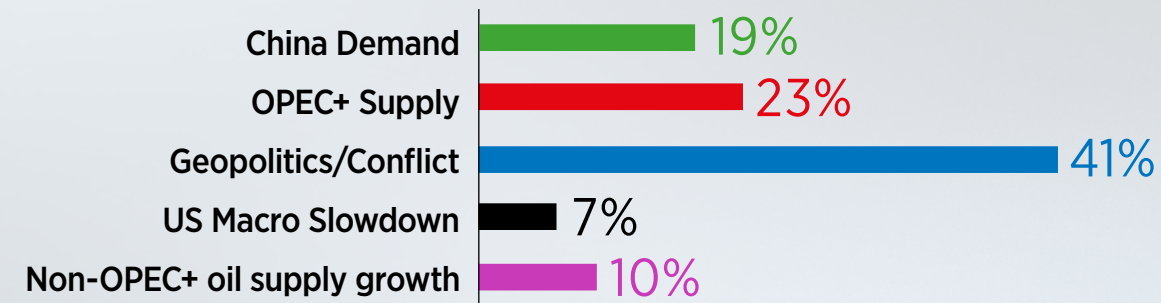
NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

Several factors underpin this middle-ground consensus. The slowdown in global trade — amplified by rising protectionism and tariff barriers — constrains freight and industrial fuel demand. Similarly, the electrification of transport, while gradual, is beginning to erode incremental oil growth in key sectors. The mood suggests that demand growth will persist, but at a decelerating pace.

China’s role remains pivotal but tempered. The country’s shift from heavy industry toward technology and services marks a structural transition that limits crude intake growth. Meanwhile, India, Southeast Asia, and parts of Africa are emerging as incremental demand drivers, though their growth is not yet large enough to fully offset China’s slowdown.

Another moderating factor is inventory behavior. Many nations rebuilt strategic reserves post-pandemic, leaving less room for further stockpiling unless prices fall meaningfully. This dampens any upside surprise in 2026 consumption figures. The reality, therefore, will likely land between the IEA

What will have the Biggest impact on direction of oil prices in 2026?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

and OPEC numbers — modest, steady, and far from explosive.

The forum takeaway was clear: demand growth in 2026 will be real but restrained, shaped by regional divergences and a more mature global oil system adjusting to the pace of energy transition.

5. What Will Have the Biggest Impact on the Direction of Oil Prices in 2026?

When participants were asked to identify the single biggest factor shaping oil prices in 2026, OPEC+ supply policy emerged as the overwhelming choice. The alliance’s production decisions have effectively replaced geopolitics as the market’s most reliable barometer. The capacity to synchronize output across 20+ producers gives OPEC+ unparalleled influence in steering sentiment and price direction.

While geopolitics remains a wildcard, its impact has been blunted. Conflicts or sanctions that don’t directly remove barrels from the market now trigger smaller, shorter-lived price responses. Traders have recalibrated their models to differentiate between headline risk and physical risk, rewarding fundamentals over speculation. The “geopolitical fear premium” that once added \$10-\$15 to Brent now hovers closer to \$5 at best.

Non-OPEC supply will continue to shape the margins. Growth from Guyana, Brazil, and West Africa introduces incremental barrels, but not enough to redefine global balance. These flows serve as stabilizers — cushioning mild deficits but never overwhelming OPEC+’s capacity to steer the market. The U.S. shale engine, once the main disruptor, appears to have reached a plateau due to capital discipline and declining well productivity.



Perhaps the most underestimated driver lies outside the oil sector itself: the global macroeconomic environment. Escalating trade frictions, regional bloc politics, and slower globalization threaten to suppress product demand even when supply remains tight. This “soft ceiling” effect could prevent Brent from sustaining levels above \$75, even under bullish supply conditions. The 2026 oil market, therefore, will be as much a story of geopolitics and trade as of geology and production.

Conclusion: From Emergency to Equilibrium

The ENERGY MARKETS FORUM findings suggest that the oil market has matured into a post-emergency phase — defined not by panic or scarcity, but by managed balance. OPEC+ has reclaimed its role as a flexible stabilizer rather than a crisis firefighter. Demand growth continues, albeit slower and more regionally fragmented. And prices hover in a comfort zone that sustains producers without stifling consumers.

If 2020–2024 were the years of crisis response, 2025–2026 mark the return to managed normalcy. The industry’s focus now turns to long-term adaptation — aligning investment, climate commitments, and trade resilience for a slower, more stable era of energy transformation. The volatility of the past half-decade may finally be giving way to an equilibrium that, while less dramatic, is far more sustainable. ■



MENA TERMINALS FUJAIRAH FZC



MTF Storage Terminal

Profile

MENA Terminals Fujairah is an independently owned and operated storage terminal located within the Fujairah Oil Industry Zone at the Port of Fujairah. Established in 2012, the terminal has been effectively catering to the storage requirements of major trading houses, multinational corporations, and medium-sized traders.

The terminal comprised of 14 tanks with a total capacity of 352,000 cbm, is capable of handling Class I, Class II, and Class III products ranging from light distillates like gasoline all the way up to middle and heavy distillates like gas and fuel oils, respectively. Equipped with state-of-the-art technologies, the terminal can accomplish operations such as vessel and bunker barge loading and discharge, pipeline transfers with other terminals, inter-tank transfers, additive blending, cargo heating, circulation, and truck loading services.

MENA Terminals Fujairah plans to construct a sustainable aviation fuel plant on its site in Fujairah. Once operational, it will produce up to 150 million liters of SAF annually. This marks a significant milestone for sustainable energy in the Middle East and aligns with the UAE's goals of reducing carbon emissions and its ambition to become a global hub for low-carbon aviation fuel.

MENA Terminals Fujairah is part of the Mercantile & Maritime Group, which specializes in oil and gas marketing & trading, shipping, logistics and consultancy services. The group offers a comprehensive range of services across the oil and gas value chain.

Operational Excellence

- Multipurpose Class-I switchable tanks with Internal Floating Roofs
- State-of-the-Art Terminal Automation System
- Best in class pumping capacity amongst FOIZ terminals with 4,500 and 3,000 m³/hr flowrates for black and clean products, respectively.
- Two jetty lines (30" each) for black products capable of 4,500 m³/hr flowrates per line
- Four jetty lines (24" each) for clean products capable of 3,000 m³/hr flowrates per line
- End-to-end piggable pipeline between the Port Jetties and the terminal
- Cone-bottom and fully strippable product tanks
- Efficient product blending and heating capability
- Dedicated matrix manifold for positive segregation of black and clean products
- All pumps equipped with Variable Frequency Drives for optimized flow rates.
- Redundant critical utilities & equipment in place to ensure business continuity.

Terminal Highlights

- State-of-the-Art engineered Class-I Oil Storage Terminal.
- Strategically located at Port of Fujairah (PoF) - One of the largest bunkering ports in the world.
- Current operational capacity of 352,200 m³ with 14 tanks (Phase 1 & 2) with truck loading facility.
 - 230,246 m³ – Black Products (6 tanks).
 - 121,954 m³ – Clean Products (8 tanks).
- Connectivity with all berths of Port facilitating Vessel operations and Inter-terminal trade.
- Consistently best performing terminal in shipping operations against Port KPIs.
- Zero claim on contamination, product loss or vessel delays
- Zero Operational downtime given to effective Preventive maintenance.
- Efficient control on product loss.
- Pre-qualified by Oil Majors for storage.
- Dedicated team of well experienced and qualified oil industry professionals.



THE PRAGMATIC PACT — What Will Hold OPEC+ Together in a Winner-Takes-All Era?

THE PRAGMATIC PACT — What Will Hold OPEC+ Together in a Winner-Takes-All Era?

CONTRIBUTORS:

- ALI AL RIYAMI, CONSULTANT & FORMER DIRECTOR GENERAL OF MARKETING, MINISTRY OF ENERGY & MINERALS, OMAN
- VANDANA HARI, FOUNDER & CEO, VANDA INSIGHTS
- MARC OSTWALD, CHIEF ECONOMIST & GLOBAL STRATEGIST, ADM INVESTOR SERVICES INTERNATIONAL
- MANUS CRANNY, GEO ECONOMICS EDITOR, THE NATIONAL

As global oil demand slows and the “last barrel” race begins, OPEC+ faces its toughest cohesion test since the 2016 Vienna Pact. The alliance that weathered pandemics, price collapses, and wars must now navigate an era of structural oversupply, accelerating energy transition, and diverging national ambitions. What will hold it together is not ideology, but mutual vulnerability and hard-nosed pragmatism. From Crisis Managers to Long-Game Strategists

The secret to OPEC+ survival lies in its pre-emptive diplomacy. Far from the spectacle of Vienna press conferences, the real decisions are made in WhatsApp groups among the core “G8” countries. By the time ministers convene, the outcome is already settled — consensus forged in private ensures unity in public. This silent choreography gives OPEC+ the appearance of efficiency and solidarity, even as internal debates rage behind the scenes.

The group’s greatest stress test came with the asymmetrical cuts of 2023–24, when only eight members bore the burden of deeper voluntary reductions. While frustration simmered among smaller producers, restraint prevailed. The message was clear: cohesion matters more than short-term market share. In a world of flattening demand, collective endurance is the new currency of power.

That shift marks the dawn of a “long-game” mindset. OPEC+ is no longer chasing daily price movements or quarterly balances. It is building mechanisms for the post-2030 landscape — an era when global consumption may plateau, but political and fiscal dependencies on oil remain. The alliance’s survival strategy is measured not in barrels but in decades.

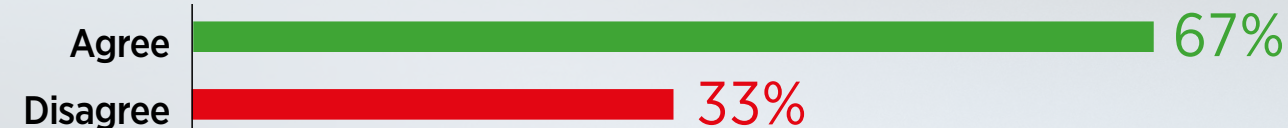
A critical psychological victory has been the fading of the U.S. shale threat. Once the bogeyman of OPEC meetings, American producers are now bound by investor discipline and capital constraints. With shale growth throttled, OPEC+ no longer fears being blindsided by an unregulated rival, restoring its confidence to manage supply deliberately rather than defensively.

At the heart of this new pragmatism is Saudi Arabia. Riyadh anchors cohesion through fiscal realism, targeting a “comfort corridor” around \$70–75 a barrel — sufficient to fund Vision 2030 without crushing demand. This disciplined moderation earns trust across the alliance and projects the image of a steady hand steering an otherwise fractious coalition.

The Glue of Vulnerability and Shared Interests

Ironically, one of OPEC+’s greatest sources of unity is physical constraint. Most members are already producing near capacity, leaving little room for

The OPEC+ decision to raise oil supply quotas this year in the face of uncertain demand outlook signals the end of the 5-year COVID emergency oil market management Era?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

opportunistic cheating. Scarcity of spare capacity — once a weakness — has become a stabilizing force. It reduces temptation to defect, transforming production limitations into collective discipline.

Equally important is credibility. OPEC+ has learned that perception shapes reality. Allowing prices to spiral downward would erode faith in its leadership. Thus, even small, well-timed gestures — like the controlled return of 137,000 barrels per day — serve to project authority. Optics matter: predictability is a form of power.

A further stabilizer comes from China. Beijing’s

ongoing stockpiling of crude, at times exceeding one million barrels per day, acts as a de facto price floor. Its strategic buying cushions market imbalances, giving producers confidence that an external buffer exists to absorb their output. For OPEC+, China’s behavior is the unspoken safety net that underpins market equilibrium.

Underlying all this is a shared fear of oversupply. The painful memory of 2020 — when uncoordinated pumping crashed prices below zero — still haunts producers. No member wants to repeat that chaos. This collective trauma reinforces restraint, reminding all that unilateralism equals self-harm. The realization that “cooperation is cheaper than collapse” remains the alliance’s strongest invisible bond.

At the geopolitical level, Saudi Arabia and Russia form the indispensable twin pillars. Riyadh brings market legitimacy; Moscow contributes scale and strategic depth. Despite divergent fiscal goals — one seeking stability, the other liquidity — both need each other to keep Western producers at bay. For all its tensions, their marriage of necessity is the bedrock of OPEC+ endurance.

Indeed, Russia’s inclusion is non-negotiable. Without it, the group would revert to a diminished



OPEC+ began as a marriage of convenience; it has matured into a pact of mutual survival.

OPEC with limited leverage. The alliance’s global relevance depends on Moscow’s participation, even under sanctions. That partnership is pragmatic, not ideological — a recognition that the market responds to supply, not politics.

In this sense, OPEC+ operates as a technocratic coalition, not a geopolitical club. Decisions are guided by spreadsheets, not slogans. Members may differ politically, but all converge on a single truth: fiscal stability and price predictability are existential. The market, not ideology, is the language that binds them.

Adaptation, Ambiguity, and the Last-Barrel Reality

The modern OPEC+ has mastered the art of ambiguity. By keeping the market guessing — declining to pre-announce production plans or

timelines — it frustrates speculators and protects its internal flexibility. Controlled opacity buys ministers time to negotiate consensus privately without being boxed in by public expectations.

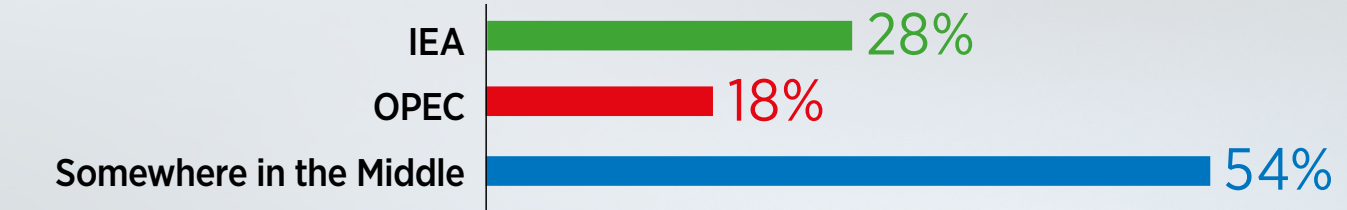
This communications strategy complements a new pricing philosophy. Gone are fixed targets; in their place, the “comfort corridor” — a flexible range roughly between \$60 and \$80. The aim is to balance fiscal health with demand elasticity, adjusting output gradually to avoid sudden shocks. This corridor approach sustains unity by accommodating the diverse economics of producers from Riyadh to Lagos.

Behind the strategy lies a deeper truth: every OPEC+ member shares the same vulnerability. No country, however powerful, can stabilize prices alone. That interdependence — born of necessity — is the

Top 5 Recommendations for Holding OPEC+ Together in 2026

1. MAINTAIN PRE-MEETING DIPLOMACY — Keep consensus-building via informal G8 coordination to avoid public fractures.
2. ADOPT A FLEXIBLE “COMFORT CORRIDOR” — Manage prices within a \$60–80 range to balance fiscal stability and demand.
3. PRESERVE SAUDI-RUSSIA PARTNERSHIP — Anchor cohesion through pragmatic cooperation between Riyadh’s fiscal needs and Moscow’s export ambitions.
4. COORDINATE GRADUAL SUPPLY ADJUSTMENTS — Use controlled, predictable production changes to sustain market confidence and internal unity.
5. REINFORCE SHARED VULNERABILITY NARRATIVE — Remind members that only collective restraint can prevent another destructive price collapse.

The IEA has forecast global oil demand growth in 2026 as same as this year at 700 kb/d, while OPEC expects double that amount next year: which is closer to likely outcome?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

psychological glue of the alliance. Each member’s fiscal survival depends on collective discipline; defection endangers all.

History reinforces this bond. OPEC has survived wars, sanctions, and revolutions. During the 1980s tanker war, Iran and Iraq still attended meetings while fighting each other. That institutional memory sustains confidence that, despite today’s rivalries, cooperation remains possible. The lesson of history is clear: OPEC breaks records, not apart.

Yet the energy transition introduces a new paradox. As global demand approaches its peak, producers are racing to monetize reserves before decline. This “last-barrel” urgency could easily fragment the alliance — but it also motivates continued coordination. Only through managed extraction can members maximize revenue without collapsing prices. Survival in the sunset phase requires discipline, not defection.

Geopolitical turmoil further hardens cooperation. The overlapping crises — Russia-Ukraine, Israel-Iran, Gaza — create volatility that only coordinated producers can weather. In a multipolar world, OPEC+ unity doubles as insurance against external shocks, allowing members to navigate a chaotic geopolitical

landscape while projecting stability to the market.

Ultimately, OPEC+ endures not by choice but by necessity. Shared fiscal dependence, limited capacity, and existential uncertainty make collaboration unavoidable. The alliance may bicker and evolve, but its foundation remains unshakable: cooperation is still better than chaos. In a winner-takes-all era, survival itself becomes the ultimate act of unity.

Conclusion — The Endurance of Pragmatism

As the global energy order fragments, OPEC+ persists as a rare constant. Its members understand that they are bound less by friendship than by fear — fear of volatility, of fiscal collapse, of irrelevance. The recognition that no single nation can manage the market alone is the quiet covenant holding them together.

OPEC+ began as a marriage of convenience; it has matured into a pact of mutual survival. In a world of shrinking margins and rising competition, that realism — not rhetoric — will define its strength. The era of “winner takes all” may have begun, but OPEC+ intends to ensure that everyone survives long enough to win something. ■

Supporting the future of energy



Vopak Horizon Fujairah Ltd.
Phone: +971 9 228 1800
P.O.Box 1769, Fujairah, United Arab Emirates
www.vopakhorizonfujairah.com



END OF OIL PRICE TARGET ERA
The Gulf's Shift Beyond Oil Price
is Rewriting OPEC+ Strategy



The Gulf's Shift Beyond Oil Price is Rewriting OPEC+ Strategy



EDWARD BELL,
ACTING CHIEF ECONOMIST & HEAD OF RESEARCH, EMIRATES NBD

The Gulf Cooperation Council has entered a new era of fiscal sovereignty where national budgets are no longer tied to a single oil price target. The introduction of taxation, the rise of sovereign borrowing, and the success of economic diversification have made it possible for governments to manage their finances without defending a fixed price floor. The Gulf states have built new pillars of resilience that give them flexibility to tolerate volatility and pursue longer term strategic goals rather than short term price management.

This transformation has also redefined oil production policy. The GCC producers are now prioritizing market share over price defense. Restricting output to sustain eighty or ninety dollar oil proved ineffective and counterproductive. By producing at scale and leveraging their low cost base, Gulf producers are positioning themselves as reliable suppliers for a changing energy world. The strategy secures global market relevance even as the energy transition accelerates.

Diversification has made this possible. In the United Arab Emirates, more than seventy five percent of the economy is now non oil, while Saudi Arabia continues to record almost five percent growth in its non oil sectors. The fiscal foundation of the region has been broadened through taxes, state owned enterprise profits, and international borrowing. The result is a more balanced economic structure where oil is important but not dominant.

Saudi Arabia's planned deficits of two to five percent of GDP represent a conscious strategy to sustain investment, not a sign of weakness. Vision 2030 projects

worth nearly one point seven trillion dollars are driving employment, housing, and infrastructure development. Rather than pursuing a spending binge, the government is extending timelines to maintain steady growth beyond 2030. The United Arab Emirates leads in fiscal maturity through diversified state revenues and self sustaining enterprises that buffer against energy market swings.

The GCC's ability to tap bond markets has replaced oil as a primary fiscal shock absorber. With low debt levels and strong sovereign assets, countries such as Saudi Arabia can continue large scale investment programs without risking financial instability.

These developments are also reshaping OPEC Plus. Wealthier Gulf members can afford to expand production while others remain constrained by fiscal dependence on oil revenues. This shift reduces the group's cohesion but enhances the Gulf's strategic autonomy.

By tolerating lower prices, the Gulf producers are reinforcing their position as the world's base load suppliers and weakening higher cost competitors such as shale and oil sands. Lower prices also support local consumers and businesses, since fuel costs are now market based. As production rises, deeper partnerships with India, China, and Southeast Asia will anchor the Gulf's future growth.

The end of the oil price target era marks a decisive transition from fiscal dependency to strategic confidence. The Gulf states are no longer price takers in global energy but architects of a new economic order built on diversification, flexibility, and long term vision. ■

Top 10 Insights

1. Gulf Fiscal Sovereignty Ends the Oil Price Target Era

The GCC has decoupled budgets from oil prices. With economic diversification, taxes, and borrowing now stabilizing public finances, Gulf governments no longer defend a single "breakeven" oil price. This fiscal sovereignty grants flexibility to tolerate volatility, manage reserves strategically, and focus on long-term goals rather than short-term market shocks.

2. Market Share Over Price: A New Production Doctrine

The Gulf states are prioritizing maintaining market share over propping up prices. Restricting supply to defend \$80-\$90 oil proved ineffective. Producing more at low cost ensures sustained global relevance and shields economies from demand erosion as the world transitions toward cleaner energy and alternative technologies.

3. Diversification Strengthens Economic Resilience

Non-oil sectors now account for over 75% of the UAE economy and dominate Saudi Arabia's non-oil growth at nearly 5%. The GCC's diversification into finance, logistics, manufacturing, and tourism has weakened oil's macroeconomic grip, enabling governments to pursue structural growth strategies even amid fluctuating oil prices.

4. Strategic Fiscal Deficits Sustain Development Momentum

Saudi Arabia's fiscal deficits of 2-5% of GDP are strategic, not symptomatic of weakness. Vision 2030 projects—worth about \$1.7 trillion—are driving employment, housing, and infrastructure expansion. Rather than austerity, the focus is on phasing projects over longer timelines to sustain steady economic growth beyond 2030.

5. The UAE's Self-Sustaining Fiscal Model Leads the Region

The UAE's government-owned enterprises—from Emirates Airline to Emirates NBD—generate strong, recurring revenues that insulate national budgets from oil volatility. The country's mature fiscal model, paired with VAT and corporate taxes, underpins a sustainable foundation for growth independent of hydrocarbon cycles, setting a model for regional fiscal resilience.

6. Bond Markets Replace Oil as Fiscal Shock Absorbers

GCC nations, particularly Saudi Arabia, are financing development through bond markets rather than oil windfalls. Strong investor demand, low public debt ratios, and vast sovereign assets provide confidence and liquidity. This borrowing capacity allows sustained investment in infrastructure without destabilizing domestic credit markets or inflation.

7. OPEC+ Enters a New Era of Uneven Flexibility

The Gulf's fiscal independence reshapes OPEC+. Wealthier members like Saudi Arabia and the UAE can increase production without fiscal strain, while others remain revenue-dependent. This asymmetry risks weakening cohesion but gives Gulf producers freedom to prioritize strategic influence, market stability, and long-term energy transition planning.

8. Lower Prices to Cement Long-Term Market Dominance

By tolerating lower prices, Gulf producers undermine high-cost rivals such as U.S. shale and Canadian oil sands. This "base-load supplier" strategy mirrors metals markets, positioning the GCC as the world's anchor of stable supply. Short-term price declines consolidate long-term dominance over the global energy value chain.

9. Lower Oil Prices Benefit GCC Consumers and Businesses

Since fuel prices are now liberalized, lower oil prices reduce costs for households and businesses rather than cutting government revenues. The GCC's policy maturity allows growth and investment to continue even in low-price phases, supporting consumer spending and strengthening competitiveness in non-oil industries.

10. Asia Becomes the Strategic Growth Partner

As the Gulf redefines its production strategy, deepening trade and investment ties with India, China, and Southeast Asia becomes essential. These regions guarantee long-term demand, while Gulf investment capital reinforces supply security. This two-way partnership anchors the GCC's economic future beyond oil dependence and Western market cycles. ■

With oil prices hovering near \$65 and fiscal pressures mounting, Saudi Arabia faces its most critical test yet: can Vision 2030 stay on track when the cash cushion that once powered transformation begins to thin?



TOBY ILES, CHIEF ECONOMIST, JADWA INVESTMENT

Saudi Arabia's bold Vision 2030 blueprint was never meant to be easy. But as oil revenues soften and fiscal space narrows, the Kingdom's challenge is shifting from vision to execution. What stands out in 2026 is not retreat but recalibration—a measured attempt to sustain diversification and modernization without losing macroeconomic discipline.

The non-oil economy remains resilient, expanding by around 4.5 percent annually even as hydrocarbons weaken. Growth stems from tourism, logistics, and infrastructure—proof that structural reform is bearing fruit. Yet hydrocarbons still underpin half the budget, and non-oil exports, though rising from 15 to 25 percent of GDP, remain below the 2030 target of 50 percent.

The government's \$1.3 trillion spending plan signals both caution and commitment. It aims to stabilize deficits around 5 percent of GDP while preserving essential investment. This counter-cyclical posture—continuing to build while oil prices dip—marks a cultural shift from the boom-bust fiscal cycles of past decades. But if Brent sinks below \$55, cuts will be inevitable.

At the center of Saudi Arabia's diversification engine stands the Public Investment Fund, now managing over 200 companies. Initially conceived as a catalyst, the

PIF risks overextension as it evolves into operator and financier. The next phase will require asset recycling, deeper private co-investment, and new capital market instruments to sustain growth without over-reliance on oil-linked dividends.

Yet Vision 2030's true success will hinge less on megaprojects and more on mindsets. Transforming education, cultivating innovation, and incentivizing risk-taking are now the Kingdom's greatest frontiers. The private sector must evolve from dependency on state contracts toward self-sustaining entrepreneurship and globally competitive productivity.

Meanwhile, foreign direct investment is gaining traction in power, tourism, and non-oil manufacturing, reflecting growing investor confidence. Project cost inflation has eased as timelines recalibrate, and Saudi Arabia's debt-to-GDP ratio—barely 30 percent—offers a valuable cushion.

In a lower-oil world, Riyadh's playbook is becoming more sophisticated: spend wisely, borrow prudently, reform relentlessly. Vision 2030's trajectory will ultimately depend less on the price of oil and more on the price of complacency. The transformation has begun—its endurance will be measured in the Kingdom's ability to innovate its way beyond oil. ■

Top 10 Insights

1. Sustained Non-Oil Growth Remains the Engine of Diversification

Saudi Arabia's non-oil economy continues expanding at roughly 4–4.5 percent annually, despite fiscal tightening and lower oil income. Growth stems from reforms, infrastructure investment, and the rapid build-out of tourism, transport, and logistics. This steady performance demonstrates the emerging strength of non-oil sectors that are essential to Vision 2030's structural transformation goals.

2. Fiscal Discipline Is Tightening as Oil Averages \$65 per Barrel

The 2026 budget assumes around \$65 Brent, implying only modest spending reductions but maintaining historically high expenditure levels of roughly SAR 1.3 trillion. Riyadh's approach balances consolidation with continuity—accepting small deficits near 5 percent of GDP to preserve Vision 2030 momentum while signaling prudence to investors and credit-rating agencies.

3. Counter-Cyclical Spending Replaces Boom-Bust Cycles

Rather than cutting expenditure whenever oil prices fall, the kingdom now aims for counter-cyclical budgeting—maintaining infrastructure and social-development investment to smooth economic volatility. Yet, should prices sink below \$55 Brent, policymakers will likely trim spending to safeguard fiscal credibility, foreign-reserve stability, and the riyal's longstanding currency peg.

4. Vision 2030 Metrics Show Progress but Ongoing Oil Dependence

Non-oil exports have risen from about 15 percent to 25 percent of GDP, and non-oil revenues now account for nearly 40 percent of budget receipts. However, hydrocarbons still finance over half of public spending. Diversification is advancing but remains incomplete, highlighting the need for continued reform to meet Vision 2030's ambitious targets.

5. The Public Investment Fund Is a Catalyst—but Needs Refinancing

The PIF's 200 plus portfolio companies span giga-projects, utilities, and industrial services, making it a linchpin of the non-oil economy. Yet its dual role as investor and operator creates funding strain. Sustained progress requires recycling mature assets, encouraging private co-investment, and expanding new financing sources beyond Aramco dividends to maintain growth under lower oil revenues.

6. Private-Sector Transformation and Education Reform Are Crucial

The next phase of Vision 2030 depends less on government spending and more on human capital and innovation. Saudi firms must evolve from risk-averse family conglomerates into dynamic, investment-driven enterprises. Improving education quality, technical training, and entrepreneurial mindsets will be central to achieving long-term competitiveness and reducing dependence on state-led economic activity.

7. Credit Growth and Banking Liquidity Are Near Their Limits

Local banks have expanded lending faster than deposit growth, stretching liquidity and relying increasingly on foreign funding. To sustain private-sector finance without overheating the system, Saudi Arabia must broaden capital markets through securitization, foreign listings, and bond issuance. Financial-sector innovation is essential to fuel Vision 2030 projects amid a tighter banking environment.

8. Foreign Direct Investment Broadens Beyond Oil and Real Estate

Riyadh's FDI strategy is shifting toward construction, power, logistics, tourism, and non-oil manufacturing—especially renewable energy. Revised data show inflows approaching 2.5–3 percent of GDP, though still short of Vision 2030 targets. Sustaining progress requires regulatory clarity, investor confidence, and continued privatization of state services to anchor long-term foreign capital commitments.

9. Inflation Pressures Are Easing as Projects Re-Calibrate

After a period of sharp construction-cost inflation, the government's decision to re-sequence some mega-projects and source materials from deflationary Chinese suppliers has eased pressure on prices. This rebalancing will allow Saudi Arabia to stretch capital budgets further and protect investment continuity despite reduced oil-based revenues in the medium term.

10. Long-Term Fiscal Space and Low Debt Provide a Cushion

Public debt stands near 30 percent of GDP—low by global standards—and the economy remains asset-rich and lightly leveraged. This affords ample room to borrow for strategic projects without threatening the currency peg or ratings. Maintaining transparency and policy credibility will ensure this fiscal space continues supporting Vision 2030's transformation agenda. ■

CHAPTER 2

Trading in A Lawless World

HARNESS OUR EXPERTISE TO NAVIGATE TOWARDS SUCCESS.

At NBF, we bring decades of expertise in supporting the oil & gas, and marine sectors with a comprehensive suite of products and services. Addressing the specialised requirements of the offshore sector, terminal operators and oil traders, defines our expertise in business banking.

As you navigate to new frontiers, we support you with tailored financial solutions and steadily sail towards a sustainable future.

OUR SERVICES



Trade finance for oil, petroleum, and energy commodities



Structured commodity finance



Asset and equipment finance



Capex and working capital finance



Marine financing, and more.

ENERGY AND MARINE

WHOLESALE BANKING – NATIONAL BANK OF FUJAIRAH



Call 600565551
to start our partnership
nbf.ae



ANNUAL REPORT ENERGY MARKETS OUTLOOK

***THE NEW ORDER OF DISORDER:
Inside the Fragmented World of
Global Commodity Trading***

Trading Without Rules: How Commodity Markets are Adapting to a Fractured Global Order

As the international rules-based order disintegrates, commodity trading is being reshaped by sanctions, tariffs, and the rise of state-backed NOC trading firms. In this fractured landscape, adaptability, digital intelligence, and strategic cooperation, not multilateral law, now define success. Traders who combine agility with trusted partnerships will thrive amid perpetual volatility.

CONTRIBUTORS

- SH. KHALED AHMAD M. AL-SABAH, MANAGING DIRECTOR - INTERNATIONAL MARKETING –KUWAIT PETROLEUM CORPORATION (KPC)
- DAVE ERNSBERGER, CO-PRESIDENT, S&P GLOBAL COMMODITY INSIGHTS
- TOM BAKER, MANAGING DIRECTOR & HEAD OF MIDDLE EAST & AFRICA, VITOL

The End of Rules, the Rise of Agility

The international trading system built around the World Trade Organization and multilateral law is eroding before our eyes. Once the guarantor of predictable market behavior, the rules-based order has been replaced by a patchwork of unilateral sanctions, tariffs, and opaque compliance regimes that shift overnight. For commodity traders, this environment presents both dangers and arbitrage opportunities.

Adaptability has become the new anchor of success. The traders best equipped to survive are those who combine agility with deep situational awareness, rapidly recalibrating routes, hedging exposures, and rewriting risk models in real time. Compliance, once a box-ticking exercise, has evolved into a frontline discipline. Firms are now embedding legal analysts beside traders to anticipate regulatory turns before they hit the market. Defensive positioning, holding optionality across freight, storage, and grade, is replacing long-term predictability. In a world of binary policy shifts, flexibility equals survival.

At the heart of this transformation lies a simple truth: the market now rewards speed over scale. Those who can see disruption before it's official, whether through data analytics, political risk mapping, or AI-driven intelligence, will capture the arbitrage margins that once belonged to incumbents. The new frontier of trading is not defined by geography, but by reaction time.

Trading in the Shadows: Fragmented Flows and the Rise of Parallel Markets

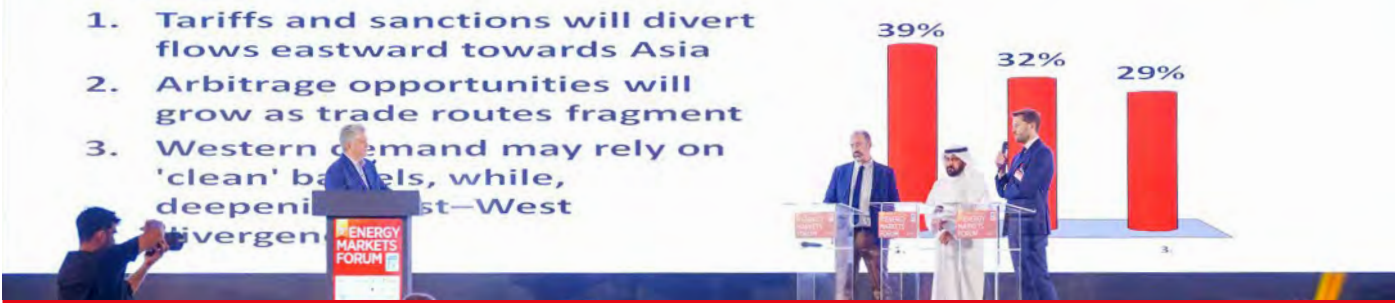
Geopolitical confrontation has fragmented energy markets into multiple tiers. Sanctions on Russian oil, price caps, and export bans have spawned a “clean” and “dark” economy of trade, one governed by transparency and regulation, and another by necessity and risk. The so-called shadow fleet, operating outside traditional insurance and legal frameworks, has become a crucial link in this parallel system. These vessels, often untraceable and underinsured, now carry millions of barrels daily, a hidden network born from policy contradictions.

While critics decry the dangers, environmental, safety, and ethical, others see inevitability. When legitimate logistics are blocked, markets improvise. The growth of these gray and black channels shows that commodity trade, like water, finds its level. Yet this improvisation comes with long-term systemic risks. Unregulated shipping creates “moving bombs” at sea, eroding trust in maritime safety and complicating insurance, financing, and carbon accountability.

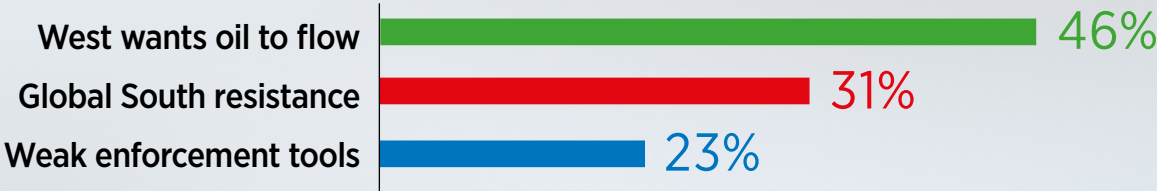
Sanctions have also redrawn global flows. Oil and LNG are increasingly pulled eastward, toward Asia's vast demand hubs in India and China. Western economies now prize transparency and “clean barrels,” while the East captures discounted supply. This bifurcation has birthed a two-speed market, one driven by moral licensing, the other by economic realism.

Q2. How will escalating tariffs & sanctions reshape global oil and LNG trade flows the most in 2026?

1. Tariffs and sanctions will divert flows eastward towards Asia
2. Arbitrage opportunities will grow as trade routes fragment
3. Western demand may rely on 'clean' barrels, while, deepening East-West divergence



Why has Sanctions enforcement failed?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

In this environment, volatility is no longer episodic; it is structural. Each new sanction, tariff, or political rupture triggers a new chain of price distortions. But traders are adapting. Benchmarks such as Brent, WTI, and Dubai remain robust reference points, continuously evolving to reflect the new geometry of trade. Arbitrage has become both a discipline and an art form, identifying value in fragmentation, not uniformity.

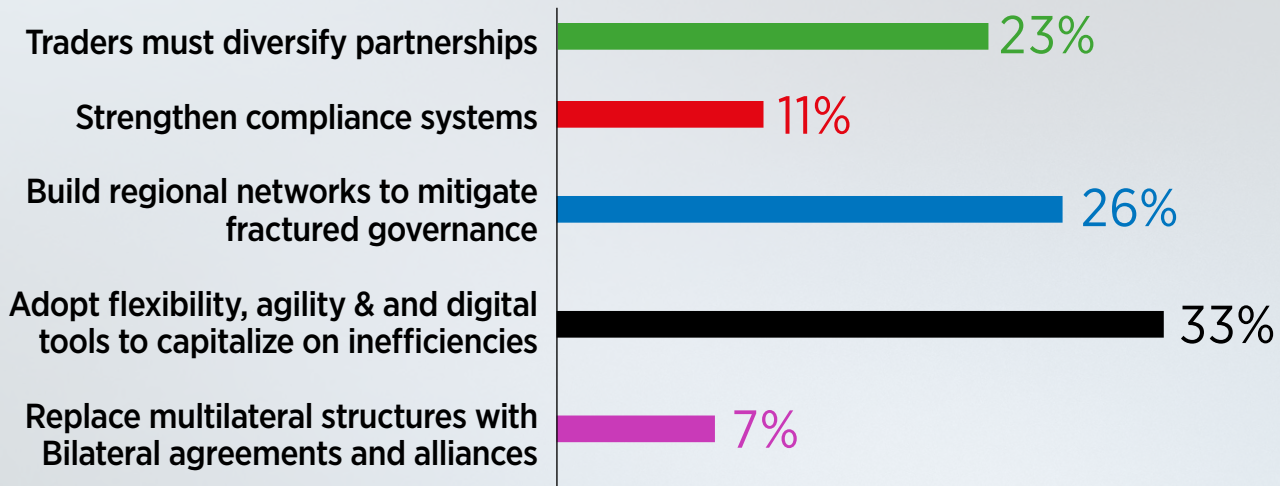
State Traders Ascendant: How NOCs Are Rewriting the Rules of Competition

One of the most profound shifts in today's commodity landscape is the emergence of National Oil Company (NOC) trading firms as global competitors. Over the past decade, state-backed entities such as Aramco Trading, ADNOC Trading, and KPC Trading have transitioned from marketing extensions of their upstream operations into fully fledged commercial trading houses.

Armed with sovereign balance sheets, access to state production, and government-to-government leverage, these new entrants operate in a different strategic dimension than private traders. While traditional independents like Vitol, Trafigura, and Glencore rely on risk capital and agility, NOCs can pair commercial flexibility with diplomatic muscle, an advantage in navigating sanctions, securing market access, and forging bilateral deals that independents cannot replicate.

This realignment is redefining the structure of the global market. NOCs are no longer content to sell crude at the wellhead; they are building integrated portfolios spanning refining, petrochemicals, shipping, and retail. Kuwait Petroleum Corporation's new trading arm mirrors earlier moves by Aramco and ADNOC, leveraging refining expansion to control more of the value chain. By embedding refining and downstream assets abroad, particularly in Asia, these state traders ensure secure outlets for their barrels and hedge against future demand decline.

What is the most important strategy for traders to adopt to thrive in a fragmented world without a functioning WTO framework?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

Yet this rise also challenges the independents who once dominated global flows. The commercial space is narrowing as NOCs internalize activities that used to be outsourced. Independents must now specialize, focusing on agility, niche markets, and sophisticated risk-taking where bureaucratic players cannot move fast. At the same time, a cooperative dimension is emerging: NOCs increasingly partner with independents for swaps, logistics, and expertise in risk management. The future may thus belong not to rivalry but to hybrid collaboration between state-backed stability and private innovation.

Cooperation, Technology, and the New Foundations of Market Resilience

If the past decade was about scale, the next will be about connectivity. In a world fragmented by politics but united by data, traders who build networks, both digital and human, will lead. Strategic alliances, storage sharing, and flexible joint ventures are becoming the new architecture of resilience.

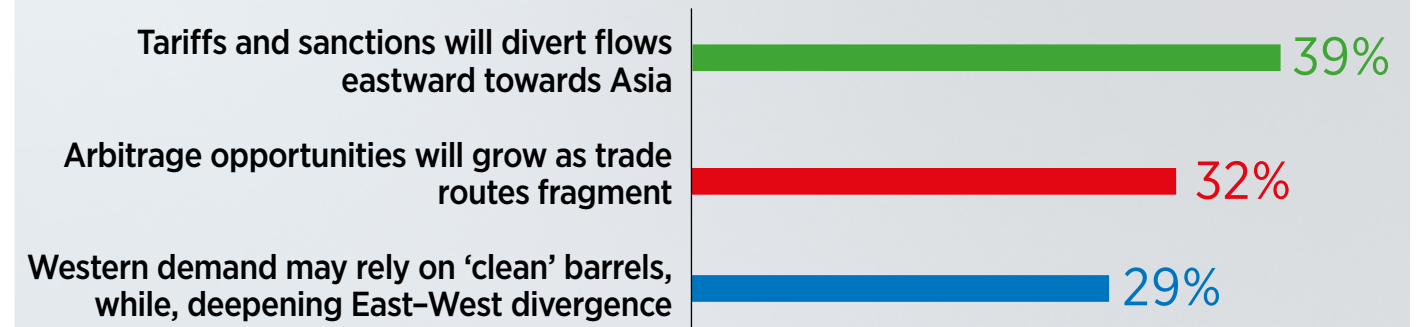
Artificial intelligence is the most transformative tool in

this landscape. Early adopters have already integrated AI to track vessel movements, model sanction impacts, and forecast arbitrage spreads before they become visible. For trading houses, especially NOCs catching up to the digital revolution, AI is no longer optional. Those who fail to embed machine learning into trading and compliance processes risk falling permanently behind.

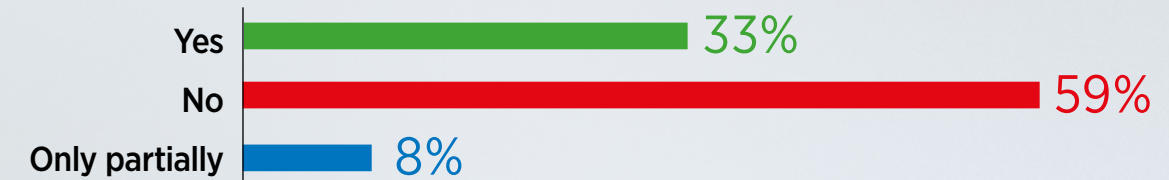
Ultimately, the global commodity system is proving astonishingly resilient. Despite broken treaties, embargoes, and tariffs, 100 million barrels of oil still move every day. Trade adapts, reconfigures, and reinvents itself faster than politics can constrain it. Yet the cost of resilience is complexity. The invisible web of bilateral trust, digital analytics, and ad hoc partnerships now holds together what institutions no longer can.

The challenge for traders, state-owned or independent, is to balance ethics with pragmatism, sovereignty with interdependence, and speed with discipline. In a fractured world, the market's new order is not dictated by law but by behavior. The rulebook has been rewritten, but the game goes on. ■

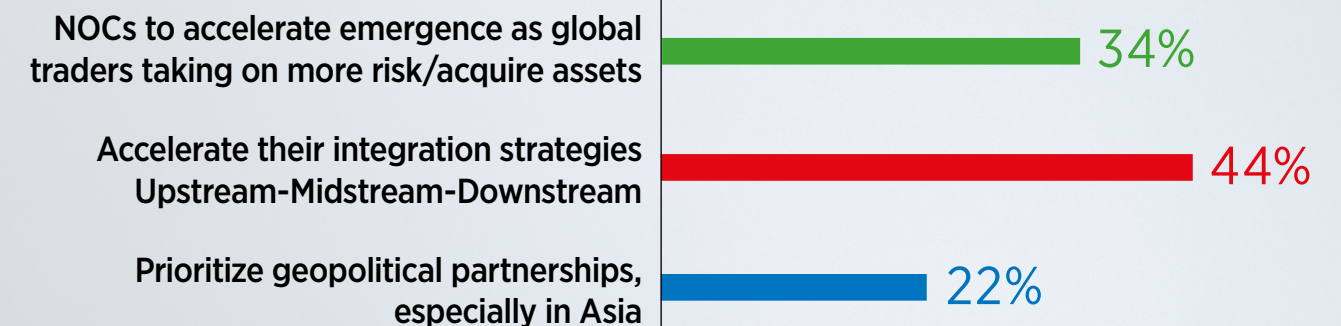
How will escalating tariffs & sanctions reshape global oil and LNG trade flows the most in 2026?



Can bilateral and regional trade agreements replace multilateral governance for energy markets?



How will Middle East NOC Trading firms adapt global expansion plans in a world of shifting rules and alliances?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

TOP 20 INSIGHTS

How Commodity Traders Can Navigate a Fragmented World Where Global Rules Are Breaking Down

1. Adaptability Over Orthodoxy

The breakdown of the rules-based order has made adaptability the new cornerstone of trading. Success now hinges on flexibility, agility, and an openness to recalibrate commercial models. Traders who anticipate shocks and respond to new regulatory realities faster than their peers will capture opportunity where rigid systems falter.

2. Compliance Becomes a Core Competitive Edge

With sanctions and tariffs emerging overnight, compliance is no longer administrative — it's strategic. Leading firms are embedding regulatory forecasting into trading desks and building direct channels with governments to pre-empt policy shifts. Those who can interpret legal gray zones swiftly will protect margins and preserve credibility.

3. Defensive Postures Mitigate Binary Risks

Markets now swing on binary political outcomes, whether an EU sanction is adopted or a tariff withdrawn. Traders have learned to operate defensively, holding flexible positions, diversifying exposures, and retaining optionality across routes and grades. Risk resilience today depends on positioning for volatility rather than predicting stability.

4. Relationships Replace Institutions

In the absence of a functioning WTO, the foundation of trade is now bilateral trust. Dispute resolution increasingly occurs through relationship capital, not international arbitration. Traders who invest in reputational strength and counterpart reliability are better equipped to operate where contracts and legal institutions can no longer be relied upon.

5. Arbitrage Thrives in Fragmented Markets

Disruption is the fuel of arbitrage. As trade routes fracture and pricing benchmarks diverge, arbitrageurs can extract exceptional margins by bridging dislocated markets. Identifying

inefficiencies caused by sanctions, freight mismatches, or pricing asymmetries is becoming the principal driver of profitability in an otherwise uncertain trading landscape.

6. Sanctions Create Parallel Market Systems

The rise of “clean,” “gray,” and “dark” barrels has permanently split the energy trading ecosystem. The so-called dark fleet, born from sanctions, has become an unregulated alternative logistics network. Its persistence highlights how political interference has hardwired a dual global market with different pricing, insurance, and compliance realities.

7. Shadow Fleets Pose Systemic Risk

The unregulated growth of shadow fleets presents grave safety and environmental risks. Their opaque ownership, poor maintenance, and limited oversight make them “moving bombs.” Left unchecked, they threaten not only maritime security but also insurance and financing frameworks essential for legitimate global energy trade. Regulation must eventually catch up.

8. Eastward Diversion of Energy Flows

Sanctions are accelerating an eastward reorientation of global oil and LNG flows. India and China have emerged as major beneficiaries of discounted Russian barrels, deepening an Asia-centric trading network. Western buyers increasingly seek traceable “clean” cargoes, reinforcing a bifurcated market shaped by geopolitics rather than economics.

9. Volatility Is the New Normal

Commodity markets have transitioned from cyclical volatility to structural turbulence. The constant interplay of sanctions, tariffs, and supply rerouting creates a market environment where uncertainty is permanent. Successful traders now prioritize scenario modeling, data analytics, and speed of execution over long-term predictability.

10. Multilateralism Still Matters for Efficiency

While bilateral deals offer tactical advantages, only multilateral frameworks ensure liquidity and transparent pricing. A global market based solely on bilateral ties risks inefficiency, reduced competition, and diminished market depth. Restoring cooperative governance remains vital for sustaining a level playing field in commodity trade.

11. NOCs Are the New Power Brokers

National Oil Companies are emerging as influential trading houses, combining state-backed access to resources with commercial agility. Entities like Aramco Trading, ADNOC Trading, and KPC Trading bring government-to-government leverage that independents cannot match, allowing them to navigate sanctions and market disruptions with unique diplomatic and logistical advantages.

12. NOC Expansion Redefines Market Competition

The rise of NOC trading arms has redrawn the competitive map. Backed by national reserves and geopolitical relationships, these players are accelerating into global markets, integrating refining, storage, and shipping to capture full value chains. Their growth challenges independents to innovate, specialize, or partner to maintain relevance.

13. NOCs and Independents Can Coexist Symbiotically

Rather than displacing independent traders, NOCs often collaborate with them through swaps, joint ventures, and logistics partnerships. These hybrid models enhance efficiency, spread risk, and deepen market connectivity, illustrating how cooperation across public and private domains can stabilize trade amid global uncertainty.

14. Trust-Based Norms Anchor Fragmented Markets

In a fractured trading ecosystem, informal norms and mutual trust serve as the invisible framework of commerce. Reliability, reputation, and continuity of delivery now matter more than adherence to any formal global code. Traders with strong counterparty relationships become the de facto enforcers of stability and order.

15. Benchmarks Remain the Market's Compass

Even amid distortion, global pricing benchmarks such as Brent, WTI, and Dubai continue to provide essential

signals for risk management. Their resilience under stress proves that market-based systems, not political decrees, still determine value. Traders rely on them as the ultimate anchor of price discovery.

16. Arbitrage and Benchmarks Evolve Together

As regional fragmentation widens spreads, benchmarks are adapting dynamically, reflecting changing trade routes and localized liquidity pools. Traders who align strategies with emerging markers can identify new arbitrage windows faster, securing profits where legacy benchmarks lag behind geopolitical reality.

17. Integration Across the Value Chain Builds Resilience

Vertical integration across upstream, midstream, and downstream shields traders from supply shocks and price swings. NOCs are increasingly embedding petrochemical and refining capacity within their global footprint, reducing exposure to external disruptions while deepening control over value creation. Integration equals insulation in volatile times.

18. Partnerships Secure Access and Optionality

Strategic alliances and joint ventures, particularly in Asia and Africa, are becoming the backbone of risk-managed expansion. Whether through shared storage, financing, or marketing, partnerships ensure market access and create optionality in an environment where political barriers can change overnight.

19. AI Is Becoming the Trader's Edge

Artificial intelligence is now the most transformative force in trading. From predictive modeling to compliance automation and freight optimization, AI enables faster, smarter decisions. Traders and NOCs adopting AI early can locate “alpha” in real-time, identifying hidden risks, optimizing arbitrage, and anticipating market sentiment ahead of competitors.

20. Cooperation Is the Ultimate Resilience Strategy

In a multipolar trading order, collaboration trumps isolation. Swaps, shared logistics, and cross-border alliances reduce risk exposure and ensure continuity of supply. Traders that prioritize cooperation, not confrontation, will be best placed to navigate an era defined by disruption, fragmentation, and political unpredictability. ■



snoc.ae

Fueling Sharjah's Growth. Shaping Tomorrow's Energy.

Sharjah National Oil Corporation (SNOC) is government-owned and the oil and gas industry executive arm of the Emirate under the auspices of the Petroleum Department. Established in 2010, SNOC owns and manages Sharjah onshore oil and gas assets and is the main supplier of gas in Sharjah.

UPSTREAM



MIDSTREAM



TRADING



ENERGY TRANSITION



ANNUAL REPORT ENERGY MARKETS OUTLOOK

PEAK SHALE – *Why America's Oil Miracle Has Hit a Wall*



BRIAN PIERI, FOUNDER & CEO, ENERGY ROGUE

After more than a decade of driving global oil supply growth, U.S. shale has quietly reached its natural limit. The once-explosive surge that transformed America from importer to exporter has plateaued at around 13.5 million barrels a day — a ceiling shaped not by politics, but by physics and economics.

Despite Donald Trump's renewed rallying cry to "Drill Baby Drill," the reality is that no policy lever can overcome shale's geological decline. Each month, the U.S. loses roughly 650,000 barrels per day of output as wells deplete rapidly. To stay flat, operators must replace that decline with new drilling at extraordinary cost. It now takes about 700,000 barrels per day of new output merely to net 50,000 barrels of actual growth — a treadmill that demands ever-higher capital efficiency in an environment of rising costs and falling margins.

The Permian Basin, which accounts for 93% of U.S. output gains since 2020, is the last major engine still running. But it too is losing steam. The best "Tier 1" acreage has been drilled, leaving "Tier 2" zones with lower oil content and weaker economics. The cost of new wells has climbed 50% since 2016, while inflation, tariffs, and capital discipline among the supermajors have throttled

the frenzied drilling pace that once defined the shale boom.

Technology — the true driver of America's oil renaissance — is also approaching diminishing returns. The productivity leaps that once delivered 30–40% annual efficiency gains have slowed to about 7%. Artificial intelligence and quantum computing may one day unlock new subsurface insights, but today they offer marginal improvement, not a revolution.

Meanwhile, OPEC+ has learned to play its cards shrewdly. By strategically adding barrels when U.S. breakevens hover around \$55 a barrel, it can undercut American shale and reclaim the market power it ceded a decade ago. Trump's promise of an energy-dominant America is colliding with a geological truth: the shale industry has matured into a high-cost, low-growth business.

The American oil miracle was real — and transformational. But the era of relentless shale expansion is over. What comes next will be defined not by how much the U.S. drills, but by how smartly it innovates. The age of easy shale oil is behind us; the age of efficient, technology-driven survival has begun. ■

How is AI Impacting Physical Energy Trading – Winning & Losing Strategies?



RICHARD FREY, CEO, INAIT

Artificial Intelligence is rapidly redefining physical energy trading by giving traders unprecedented forecasting power while forcing them to rethink how they integrate human judgment with machine precision. The winners in this new era won't be those who surrender to automation—but those who build systems where AI enhances, rather than replaces, the human trader.

With partnerships like inait and Microsoft and embedding inait's advanced neural forecasting platform FutureComplete directly into cloud ecosystems, traders can now access predictive models that quantify uncertainty in real time, eliminating the traditional lag between signal and decision. The "confidence interval" becomes the trader's new compass—showing not just what's likely, but how much to trust it.

Yet the competitive edge lies in the data. Those who combine proprietary shipping, logistics, and refinery information with global market feeds will generate forecasts no one else can

replicate. However, this raises critical questions about trust and data sovereignty. Many energy firms remain reluctant to share sensitive data, fearing loss of control. The path forward lies in sovereign cloud solutions that keep data local and secure while enabling AI to operate seamlessly within existing infrastructures.

AI's success will depend on explainability and transparency. Traders must be able to interrogate predictions, challenge assumptions, and inject human context into machine-driven outputs. Systems that act as "colleagues" rather than black boxes will inspire the trust necessary for real-world adoption.

In the end, the greatest risk is inaction. As financial traders and hedge funds already exploit AI's speed and adaptability, physical players risk losing their edge if they wait too long. The winning strategy is to start small, test fast, and scale what works—because in a market where milliseconds matter, the future of trading belongs to those who learn faster. ■

Top 10 Insights

1. AI as a Human-Enhancement Tool, not a Replacement

AI is not replacing traders but amplifying them. The winning model combines machine precision with human judgment, enabling traders to interpret forecasts, test scenarios, and make confident calls. This human-in-the-loop approach ensures accountability; safeguards oversight and builds trust by turning AI into a decision-enhancement engine rather than an autonomous replacement system.

2. Forecasting Accuracy Becomes the New Competitive Edge

The core advantage of AI lies in precision forecasting. Advanced neural networks now deliver real-time volatility and spread projections with measurable "confidence intervals" that quantify uncertainty. This transparency allows traders to act decisively, calibrate risk exposure, and defend positions. The new benchmark of trading excellence is predictive accuracy underpinned by explainable AI.

3. Integration Through Cloud Ecosystems Reduces Barriers

AI adoption no longer requires costly digital overhauls. Through partnerships such as inait – Microsoft Azure, AI forecasting tools are embedded directly into existing enterprise systems and data warehouses. Traders can test models on small, low-risk cases within existing workflows—eliminating consulting overheads and enabling rapid, scalable experimentation with minimal structural disruption or IT investment.

4. Proprietary Data Is the Ultimate Weapon

In the AI trading era, private data determines competitive advantage. Firms combining their proprietary datasets—cargo schedules, refinery outages, vessel movements—with public market data will generate superior predictions. Those who depend solely on open or subscription feeds like Refinitiv or Bloomberg risk commoditization. AI's edge depends on feeding it what others cannot access.

5. Physical Traders Face a Data-Trust Dilemma

Many energy companies hesitate to share operational data due to security, compliance, and confidentiality concerns. The winning strategy is localized AI deployment via sovereign cloud solutions that guarantee privacy. By keeping sensitive data within secure Azure or Fabric environments, traders gain AI intelligence without compromising data sovereignty—a prerequisite for widespread industry adoption.

6. The Real Advantage Lies in Scenario-Based Forecasting

AI's new power lies in dynamic "what-if" modelling. Traders can test custom hypotheses—like an unannounced refinery outage or policy shift—and instantly simulate price impacts. Combining private insights with algorithmic forecasts transforms strategy from reactive to anticipatory. Scenario-driven trading becomes the key differentiator between mere automation and intelligent decision-making.

7. Trust and Transparency Will Define Adoption Pace

Explainability is critical for trader confidence. Winning AI systems show the reasoning behind each forecast, highlighting drivers, data sources, and uncertainty bands. This transparency enables human scrutiny and reduces reliance on "black box" outputs. In a regulated market, tools that reveal logic rather than conceal it will see faster, deeper adoption.

8. Speed and Real-Time Learning Replace Historical Back-Testing

Next-generation biologically inspired neural networks learn continuously in real time, adapting instantly to new information. Unlike traditional models reliant on years of historical back-testing, these networks process live data streams, identifying volatility shifts and price anomalies instantly. This agility gives traders real-time market foresight—a decisive edge in fast-moving physical markets.

9. Testing and Failing Fast Is the Winning Mindset

Successful firms will adopt a "fail-fast" culture—experimenting with AI on targeted use cases like short-term arbitrage or storage optimization. Small-scale pilots minimize cost and risk while building internal know-how. Firms that test early and iterate rapidly will capture learning curves faster than those paralyzed by large-scale digital transformation inertia.

10. Waiting on the Sidelines Is the Biggest Risk

While concerns over data bias, model manipulation, and control persist, the cost of inaction is greater. Financial institutions and hedge funds are already leveraging AI to forecast flows, price risk, and capture spreads faster. Physical traders who delay adoption risk losing visibility, margins, and market relevance in the AI-driven trading era. ■

مجموعة واحدة
فرص لا محدودة.

One Group.
Endless Possibilities.



Gulf's Rise as Global Commodity Trading Hub Attracts Talent





Gulf Cities Power a New Era of Global Commodity Trading — People, Policy, and Ports Redefine the Energy Hub of the Future

CONTRIBUTORS

- ZOE UPSON, DIRECTOR, FACT - FREIGHT AND COMMODITY TALENT, & FOUNDER, WOMEN TOGETHER
- VICTORIA TODD, REGIONAL DIRECTOR & HEAD MENA, HC GROUP
- DYALA SABBAGH, CO-FOUNDER & EDITOR IN CHIEF, GULF INTELLIGENCE

The Gulf is no longer just the world's fueling station — it is fast becoming the beating heart of global commodity trading. Hiring patterns across Dubai, Abu Dhabi, and Fujairah reveal a structural shift from infrastructure-led development to people-driven competitiveness. The region is cultivating a world-class talent base spanning energy trading, risk analytics, shipping logistics, and digital pricing intelligence — turning the UAE into a bridge between East-of-Suez flows and global markets. Strategic workforce investments, inclusive hiring, and the rise of Fujairah as a critical storage and pricing hub all signal a deeper transformation: the Gulf's evolution from moving barrels to managing benchmarks, from exporting oil to exporting intelligence.

From Infrastructure to Intelligence: The Gulf's Talent-Driven Growth

A decade ago, the Gulf's rise as an energy and logistics powerhouse was defined by infrastructure — ports, pipelines, refineries, and storage. Today, it is defined by people. The new measure of progress is how effectively regional economies attract, retain, and empower world-class talent across the trading and shipping value chain.

The UAE's trading and shipping sectors are expanding at unprecedented speed, drawing in both multinationals and entrepreneurs. Dubai's population, forecast to reach five million by the end of the decade, symbolizes a broader demographic and professional shift. Thousands of specialists in commodities, risk, analytics, and shipping are relocating from Europe and Asia to the Gulf, responding to the region's promise of stability, opportunity, and openness.

The talent flow also signals a rebalancing of global centers of gravity. Once peripheral to Geneva, London, and Singapore, Gulf cities now compete head-to-head in areas such as energy trading, marine logistics, and commodity finance. Competitive tax frameworks, reliable governance, and advanced infrastructure have made the Gulf not just an operational base but a lifestyle destination for professionals seeking long-term careers.

Fujairah, in particular, has emerged as a strategic node in this new order. Its world-class port and storage complex, positioned safely outside the Strait of Hormuz, anchors the UAE's east-of-Suez export strategy. Recent mega-projects such as the Mandous underground storage facility demonstrate both the scale of ambition and the sophistication of manpower management that now define the Gulf's industrial expansion.

The Human Factor: Building Sustainable, Inclusive Workforces

As trading and shipping activities deepen, the employment landscape is evolving from front-office dominance to balanced ecosystems. The earlier rush for traders and brokers is giving way to a more nuanced wave of hiring that values back-office stability — operations, compliance, analytics, risk management, and legal support. This diversification ensures institutional maturity and mirrors the governance standards of global hubs.

However, growth brings new challenges. Dubai's rapid ascent up global cost-of-living indices has introduced financial pressures for both employers and employees. Companies are adjusting compensation models to preserve competitiveness while protecting fiscal discipline. The Gulf's advantage remains

its quality-of-life dividend: safety, world-class education, and cosmopolitan culture continue to outweigh higher costs.

At the same time, corporate tax reform — once viewed as a potential deterrent — has instead become a signal of modernization. The UAE's 9 percent corporate tax, with exemptions for qualifying free-zone and commodity-trading entities, reassures investors that the business environment is adapting to global norms without losing its competitive edge.

allel shift is taking place in the cultural fabric of the workplace. Diversity and inclusion are now central to recruitment strategies across the Gulf. Firms are aligning their human-capital policies with international ESG benchmarks, emphasizing gender balance, multicultural teams, and equitable advancement. Saudi Arabia, Qatar, and the UAE are all embedding inclusion within their broader national visions, recognizing that innovation thrives on diversity of perspective.

The normalization of global trading conditions after years of volatility has also reshaped labor dynamics. Markets that were once candidate-driven have stabilized, restoring bargaining power to employers. Hiring decisions are increasingly guided by strategic fit rather than pay escalation. Firms are adopting disciplined salary frameworks that encourage retention and reward long-term performance instead of short-term mobility.

Perhaps the most encouraging development is the maturing of the regional talent pool itself. The Gulf's internal labor mobility has surged, with professionals moving between Dubai, Abu Dhabi, and Fujairah rather than from overseas markets. This intra-regional flow reflects the emergence of homegrown expertise capable of sustaining world-class operations — a defining hallmark of any global hub.

National Vision Meets Global Workforce: Investing in the Future

Human-capital development now stands at the center of national industrial strategies across the GCC. Localization programs such as Emiratization, Saudization, and Omanization are reshaping recruitment philosophies. Companies are expected not only to meet national hiring targets but to invest meaningfully in training, mentorship, and career development for citizens. This fusion of global expertise and local empowerment ensures continuity, resilience, and a genuine transfer of knowledge.

Governments are also investing heavily in education and specialized training. Qatar, Saudi Arabia, and the UAE have launched dedicated academies focused on commodities trading, maritime operations, and logistics management. These initiatives

At its core, the Gulf’s success story is no longer just about energy flows but knowledge flows — the migration of ideas, expertise, and ambition.

are producing a new generation of skilled nationals prepared to manage complex energy and shipping ecosystems with global competence.

For Saudi Arabia, inclusion and diversity have become key priorities within its transformation agenda. The Kingdom’s new labor frameworks encourage gender diversity and international engagement, enhancing its attractiveness as an emerging trading destination. This social modernization complements its economic reforms, projecting a confident image to global investors and professionals alike.

In Fujairah, strategic workforce planning is translating national ambition into operational excellence. The completion of the Mandous underground oil-storage project — involving more than 7,000 workers and 64 million man-hours — highlights the UAE’s capacity to manage vast industrial endeavors with precision and safety. Such achievements reinforce the perception of the Gulf as a region where world-class execution is standard practice.

Beyond individual projects, a cultural shift is underway: human-capital transformation is now viewed as inseparable from digitalization and decarbonization. Energy and shipping companies are embedding people strategies into their innovation roadmaps, recognizing that technology adoption and sustainability goals cannot succeed without skilled, motivated, and adaptable teams.

Volatility, once seen as a risk, has become a catalyst for creativity. In trading environments where price swings generate opportunity, Gulf-based professionals are learning to thrive under uncertainty. This adaptability — the ability to translate market turbulence into performance — is perhaps the most valuable currency in the modern energy economy.



Conclusion: People as the New Infrastructure

The Gulf’s transformation from an infrastructure powerhouse to a talent hub represents a decisive shift in its economic narrative. The foundations of this new era are not pipelines, refineries, or port expansions — though those remain vital — but the people who design, operate, and sustain them.

Dubai’s international magnetism, Abu Dhabi’s strategic integration of trading and finance, and Fujairah’s operational excellence together form a triangle of human and industrial capacity that anchors the region’s role in global trade. Saudi Arabia and Oman’s parallel advances ensure that the momentum is regional, not local.

At its core, the Gulf’s success story is no longer just about energy flows but knowledge flows — the migration of ideas, expertise, and ambition. Hiring trends reveal an ecosystem that is deepening, diversifying, and professionalizing. The message is clear: the Gulf’s future competitiveness will depend less on barrels and tonnage, and more on brains and talent.

The rise of the Gulf as a global hub for trading and shipping is, ultimately, a human achievement — built by the engineers, analysts, brokers, and leaders who see opportunities in transformation. The region’s next chapter will be written not only in infrastructure and investment, but in the language of human capital — the most renewable resource of all. ■

TOP 6 INSIGHTS on What Hiring Trends Tell Us About How the Gulf States Are Shaping the Region’s Rise as a Global Hub for Trading & Shipping?

1. The GCC’s Trading and Shipping Sectors Are Entering a Talent-Driven Growth Phase

The Gulf’s trading and shipping industries are expanding rapidly, supported by record levels of new entity registrations and relocations. Hiring patterns indicate a transition from infrastructure-led to talent-driven growth, positioning Dubai, Abu Dhabi, and Fujairah as integral parts of the global commodities, shipping, and energy-trading ecosystem.

2. Dubai’s Population Growth Mirrors Its Expansion as a Trading Capital

Dubai’s population is projected to rise from 3.6 to nearly 5 million within five years, reflecting sustained inward migration of professionals and entrepreneurs. This demographic growth parallels the city’s ambition to rival Geneva, London, and Singapore as a top-tier global trading and maritime center.

3. Gulf Cities Are Overtaking Traditional Hubs in Attractiveness

The Gulf’s appeal is now surpassing that of older financial centers. Professionals from London, Singapore, and Europe are increasingly relocating to Dubai and Abu Dhabi due to dynamic growth, political stability, and global connectivity. This movement highlights a broader realignment of human capital toward the region’s expanding energy and trade corridors.

4. Fujairah Is Emerging as the New Strategic Node

Fujairah’s evolution into a major global energy and shipping hub is underpinned by world-class infrastructure and strategic location outside the Strait of Hormuz. Large-scale projects such as underground oil storage and port expansions reinforce its role as a secure outlet for the UAE’s growing east-of-Suez trading capacity.

5. Balanced Ecosystems Are Replacing Front-Office Dominance

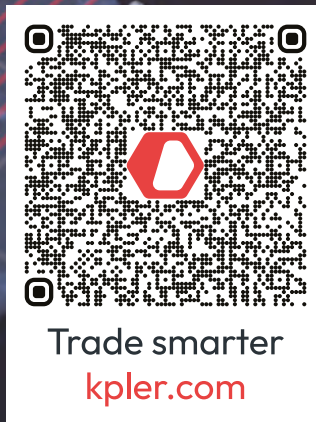
The region’s earlier focus on front-office trading roles is giving way to a more balanced employment ecosystem. Hiring is increasingly concentrated in operations, risk, compliance, analytics, and legal functions, reflecting a deliberate effort to build institutional depth and global-standard back-office infrastructure in Gulf-based trading firms.

6. Cost of Living Is a New Strategic Variable

Rapid increases in Dubai’s cost of living have created new challenges for workforce planning. While the city’s quality of life remains a magnet for professionals, rising housing and service costs are compelling employers to reassess compensation structures and long-term retention strategies to sustain their competitive edge.

Intelligence tools for trade

kpler

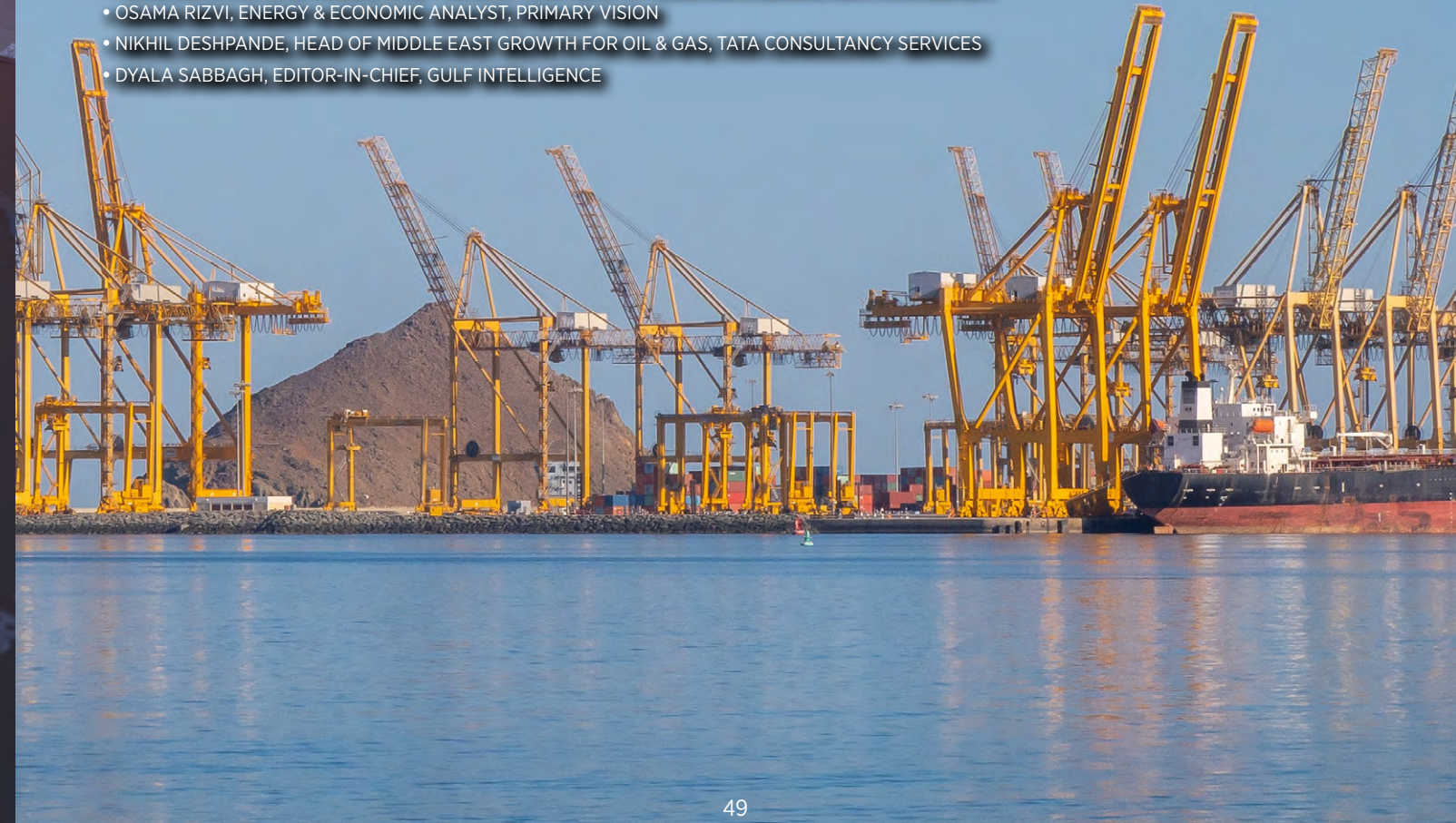


ANNUAL REPORT ENERGY MARKETS OUTLOOK

CHARTING THE COURSE ***How Fujairah Can Become One of the*** ***World's Top Three Global Energy Hubs***

CONTRIBUTORS:

- MARTIJN HEIJBOER, SENIOR MANAGER-BUSINESS DEVELOPMENT STRATEGY TRANSFORMATION & BUSINESS DEVELOPMENT, PORT OF FUJAIRAH
- IMAN NASSERI, MANAGING DIRECTOR - MIDDLE EAST, FGE NEXANTECA
- NARENDRA TANEJA, CHAIRMAN, INDEPENDENT ENERGY POLICY INSTITUTE, INDIA
- ARNE LOHMANN RASMUSSEN, CHIEF ANALYST AND HEAD OF RESEARCH, GLOBAL RISK MANAGEMENT
- OSAMA RIZVI, ENERGY & ECONOMIC ANALYST, PRIMARY VISION
- NIKHIL DESHPANDE, HEAD OF MIDDLE EAST GROWTH FOR OIL & GAS, TATA CONSULTANCY SERVICES
- DYALA SABBAGH, EDITOR-IN-CHIEF, GULF INTELLIGENCE



FROM PORT TO PLATFORM

Fujairah's destiny will not be defined by storage volumes or jetty counts alone but by its ability to evolve from a port into a platform—an integrated ecosystem where logistics, digitalization, energy transformation, and sustainability converge. The emirate's neutrality, geography, and institutional strength already provide a rare foundation. By executing these 20 priorities in concert—expanding capacity, deepening partnerships, embracing digitalization, and leading responsibly on climate—Fujairah can claim its rightful place among the world's top three global energy hubs.

Energy Transition to Energy Transformation: Fujairah's Roadmap to Become a Top-Three Global Energy Hub

Few ports in the world have rewritten their destiny as decisively as Fujairah. From a modest refueling stop on the Gulf of Oman to one of the world's leading oil-storage and bunkering hubs, Fujairah's rise has been nothing short of extraordinary. Yet the next decade will demand something far more ambitious than operational excellence. To reach the goal of becoming one of the world's top three global energy hubs, Fujairah must transition from being a port to becoming a platform—a fully integrated ecosystem that connects trade, industry, and technology across continents.

The foundation is solid. Through geopolitical shocks and shifting trade flows, Fujairah has proven its resilience. Its neutrality, strategic location, and reliable governance have safeguarded energy flows when others faltered. But resilience alone will not secure leadership. The next chapter requires transformation, anchored in infrastructure, innovation, and international collaboration.

Infrastructure Expansion and Industrial Evolution

Fujairah's immediate task is to expand its backbone. The planned completion of Jetty 10 and 11 by 2027, coupled with a 50 percent increase in commercial storage capacity, will ensure the port can handle rising throughput with minimal congestion. Faster turnaround, greater flexibility, and redundancy in capacity will protect Fujairah's reputation as the Gulf's most efficient liquids hub even in times of geopolitical stress.

Yet storage alone is no longer the defining measure of success. The next evolution must move up the value chain. By attracting refining, petrochemical, and topping-unit investors into the Fujairah Oil Industry Zone, the emirate can transform itself from a trans-shipment point into a regional energy-industrial complex. Such clusters would generate multiplier effects across trade, employment, and technology, embedding Fujairah deeper into the regional energy value chain.

This physical expansion must be guided by selectivity. Land in Fujairah is finite and precious. Every new project must

be evaluated not just by short-term commercial returns but by its ability to enhance the hub's strategic relevance. High-yield, synergistic projects—hydrogen terminals, carbon-capture clusters, or hybrid data-energy facilities—should take precedence over fragmented industrial sprawl. Smart allocation will determine whether Fujairah remains efficient or becomes congested.

To sustain momentum, partnerships will be critical. The port's collaboration with the Fujairah Oil Industry Zone and private terminal operators must evolve into a formalized governance model with shared digital systems, unified investment planning, and synchronized marketing strategies. Public-private integration will deliver the agility global investors now expect from world-class energy hubs.

Digital, Green, and Global Integration

No port can claim global status without mastering the digital and decarbonized age. Fujairah has already taken decisive steps by developing a Port Community System that connects customs, terminals, and agents through one digital interface. This initiative must be scaled into a full ecosystem—integrating real-time data, AI-driven scheduling, and predictive maintenance. The result: shorter waiting times, lower emissions, and higher profitability.

Digitalization also unlocks something more powerful—trust. Transparent, data-driven reporting of vessel movements, emissions, and turnaround times will elevate Fujairah's reputation for transparency. At a time when regulators and financiers demand accountability, this visibility will attract the world's leading energy and logistics firms seeking a compliant and efficient operating environment.

Balancing green ambition with commercial realism will be another defining test. The race toward new fuels—biofuel, ammonia, methanol, hydrogen—cannot be won by enthusiasm alone. Fujairah must sequence its entry carefully: scale up proven biofuel blending and LNG optimization first, monitor technology readiness, and only then commit capital to untested alternatives. Strategic timing will protect the hub from stranded assets while ensuring readiness for future markets.

Compliance and safety excellence will remain Fujairah's license to operate. The port must continue to lead on IMO standards, ESG reporting, and anti-shadow-fleet enforcement. As regulators tighten scrutiny of maritime practices, ports with clean reputations will become the preferred gateways for responsible global trade. Fujairah's record of neutrality and safety already distinguishes it; maintaining that integrity is non-negotiable.

At the global level, integration with the India–Middle East–Europe Economic Corridor (IMEC) offers Fujairah an unparalleled growth lever. As the corridor's natural maritime node, Fujairah can connect Asia's demand centers with Europe's industrial markets through seamless trade and energy flows. Aligning infrastructure planning with IMEC's logistics, digital, and energy corridors will position Fujairah as the East-of-Suez anchor of the new global supply chain.

This connectivity must extend southward too. Africa's two-billion-strong consumer base is the next great frontier. Fujairah's location gives it an unmatched opportunity to serve as the logistics bridge between Gulf producers and African importers. Developing feeder routes, bonded storage, and financing mechanisms for African trade will secure a powerful new demand base and cement Fujairah's role as the region's gateway to the continent.

Innovation, Human Capital, and Long-Term Resilience

If infrastructure is the skeleton and digitalization the nervous system, then innovation is Fujairah's lifeblood. The port should position itself as a testbed for emerging technologies—hosting pilot projects in digital bunkering, waste-to-energy, solar-powered industrial zones, and green-fuel blending. Each successful demonstration strengthens investor confidence and reinforces Fujairah's global image as a forward-looking innovation hub.

Future-proofing infrastructure is equally essential. All new pipelines, tanks, and jetties should be designed for modular conversion to handle ammonia, methanol, and hydrogen derivatives. Building flexibility into physical assets today will save billions in retrofits tomorrow. The cost of foresight is always lower than the cost of correction.

At the same time, the emirate should not limit its view of “energy” to hydrocarbons. With some of the world's highest solar irradiance, Fujairah is ideally placed to power its operations with renewable energy and even export surplus

electricity or battery-stored power to regional markets like India and Pakistan. Investing in solar industrial parks would signal that Fujairah's future lies not only in storing energy but also in generating it sustainably.

Partnerships remain the currency of global leadership. Joint ventures with European, Indian, and Japanese investors can bring technology transfer, capital, and risk-sharing to mega-projects in refining, petrochemicals, and low-carbon logistics. Such alliances will globalize Fujairah's brand and integrate it into the world's most sophisticated energy networks.

No transformation, however, can succeed without people. The creation of a Fujairah Energy Academy would train a new generation of professionals in AI, automation, maritime safety, and sustainable operations. Developing local human capital ensures that the digital and green transformation is not imported but homegrown rooted in Emirati expertise and regional pride.

Finally, resilience must remain Fujairah's defining trait. Energy markets are cyclical, and the hub's financial and operational strategy must be counter-cyclical—investing during downturns, diversifying revenue streams, and maintaining flexibility to pivot between fuels and partners. Stability through volatility is what will differentiate Fujairah from competitors that rise and fall with market tides.

Conclusion: From Port to Platform

Fujairah stands at a remarkable crossroads. Its past has been shaped by geography; its future will be defined by strategy. The emirate already commands the fundamentals—deep-water access, political stability, robust infrastructure—but its long-term success will depend on how effectively it weaves these strengths into a unified vision of transformation.

To join Singapore and Rotterdam in the top tier of global energy hubs, Fujairah must think beyond tonnage and tankage. It must become a living ecosystem—digitally integrated, industrially diversified, and globally connected. A place where molecules meet electrons, where trade meets technology, and where sustainability meets scale.

The path is clear: expand capacity, integrate corridors, digitize operations, diversify industry, attract global partners, and empower local talent. If these priorities are executed with the same pragmatism and foresight that built Fujairah's foundation, the emirate will not just participate in the next chapter of global energy—it will help write it. ■

TOP 20 RECOMMENDATIONS

From Resilient Port to Global Powerhouse

Over the past decade, the Port of Fujairah has evolved from a regional bunkering hub into one of the world’s most strategic midstream energy gateways. Its resilience—proven through geopolitical turbulence, sanctions realignments, and global supply disruptions—demonstrates both the strength of its infrastructure and the agility of its ecosystem. Yet the next decade presents a far greater challenge: how to translate resilience into global leadership. To become one of the world’s top three energy hubs, Fujairah must now execute a bold, integrated strategy that aligns infrastructure expansion, industrial diversification, digital transformation, and sustainability into a single forward-looking vision.

1. Expand Core Capacity to Enable Growth

Fujairah’s near-term priority is completing Jetty 10 and 11 by 2027, ensuring minimal vessel congestion and faster turnaround. Coupled with a planned 50 percent increase in commercial storage capacity, this expansion will underpin throughput growth and preserve operational reliability. Investing in scalable jetty and tankage infrastructure will strengthen the port’s reputation as the Gulf’s most efficient liquids terminal.

2. Move Up the Value Chain with Industrial Clusters

Becoming a true global energy hub requires more than handling cargo—it requires creating value. Fujairah’s next evolution lies in attracting processing, petrochemical, and topping-unit facilities within the Fujairah Oil Industry Zone (FOIZ). Co-located industrial clusters will generate employment, stimulate exports, and turn Fujairah into a dynamic manufacturing and logistics ecosystem rather than a simple trans-shipment point.

3. Anchor Fujairah in the India–Middle East–Europe Corridor

The advent of the India–Middle East–Europe Economic Corridor (IMEC) marks a turning point. Fujairah must position itself as the maritime heart of this new trade route, linking Asia’s demand engines with Europe’s industrial markets. By aligning port expansion with IMEC’s logistics, digital, and energy infrastructure, Fujairah can secure a long-term role as the East-of-Suez gateway for both molecules and electrons.

4. Forge Deep Commercial Ties with India and Africa

India’s economic rise and Africa’s demographic surge will shape global demand for decades. Fujairah can anchor its long-term growth by developing bilateral frameworks for joint storage, refining, and shipping investments. Serving these markets with reliability and transparency will ensure that energy and goods continue to flow through Fujairah’s jetties long after current trade routes evolve.

5. Preserve Political and Commercial Neutrality

Neutrality is Fujairah’s strongest brand asset. As global energy markets fracture under geopolitical strain, the port’s reputation for impartiality must remain absolute. Transparent governance, consistent regulations, and non-aligned trade policies will continue to attract international investors seeking a secure and sanction-resilient base for global operations.

6. Accelerate Digital Transformation

To compete with Singapore and Rotterdam, Fujairah must lead on digital efficiency. The rollout of a Port Community System linking terminals, customs, immigration, and agents is a critical step. Applying artificial intelligence to scheduling, berthing, and maintenance will reduce waiting times, cut emissions, and enhance profitability through smarter asset utilization.

7. Champion Transparency and Data Integration

Digitalization also enables trust. By providing real-time visibility into cargo movements, port performance, and environmental metrics, Fujairah can build unparalleled data transparency. Public dashboards and automated compliance reporting will reassure traders, regulators, and financiers, making the port a global benchmark for accountability.

8. Balance Green Ambition with Commercial Realism

The energy transition must be pragmatic. Fujairah should prioritize commercially viable decarbonization—biofuel blending and LNG efficiency—while closely tracking the maturity of ammonia, methanol, and hydrogen supply chains. Entering too early risks stranded assets; entering too late risks lost relevance. Timing, not ideology, will define success.

9. Lead on Safety, Compliance, and ESG Standards

Regulatory excellence will be non-negotiable. Strict enforcement of IMO rules, ESG reporting, and anti-shadow-fleet measures will reinforce Fujairah’s legitimacy as a transparent, rules-based hub. In an era where safety and compliance define credibility, Fujairah’s zero-tolerance approach must remain its license to operate.

10. Build a Fully Integrated Logistics Ecosystem

Beyond the port gates lies the opportunity to integrate shipping, storage, and inland transport through digital twins and smart-tracking systems. Predictive logistics platforms can synchronize vessel arrivals with jetty availability, optimizing bunker allocation and inventory turnover. Fujairah’s transformation into an intelligent logistics ecosystem would redefine efficiency across the Gulf.

11. Maximize Limited Land Through Strategic Allocation

Land is finite, but vision is not. With most available plots already earmarked, future development must prioritize high-yield, synergistic projects such as hydrogen hubs, carbon-capture clusters, or hybrid data-energy centers. Strategic land governance will prevent fragmentation and channel resources into sectors that deliver long-term economic and environmental returns.

12. Attract Low-Carbon Industrial Anchors

Diversification is the antidote to volatility. By attracting LNG liquefaction, hydrogen processing, and carbon-neutral manufacturing facilities, Fujairah can future-proof its energy portfolio. These investments will position the emirate as both a conventional energy powerhouse and a pioneer in the low-carbon economy.

13. Institutionalize Public-Private Collaboration

Fujairah’s rise has been a collective achievement between the Port Authority, FOIZ, and private terminals. To accelerate future growth, this collaboration must become institutionalized through unified investment planning, shared digital systems, and joint marketing strategies. Cohesive governance will deliver the agility global investors expect.

14. Position Fujairah as Africa’s Energy Gateway

Africa’s emerging economies represent the next frontier for energy and commodity flows. Fujairah can serve as the logistics bridge between Gulf suppliers and African demand centers. Establishing feeder routes, financing mechanisms, and bonded storage for African trade would give Fujairah first-mover advantage in a continent of two billion future consumers.

15. Launch Pilot Innovation Projects

Innovation attracts investment. Pilot projects in digital bunkering, waste-to-energy, and green-fuel blending will demonstrate technological readiness and inspire confidence among global partners. Each successful trial will reinforce Fujairah’s brand as a laboratory for future energy solutions.

16. Future-Proof Infrastructure for New Energy Carriers

All new jetties, pipelines, and tanks should be built with modular designs to accommodate ammonia, methanol, and hydrogen derivatives. This foresight will save billions on retrofits and ensure Fujairah remains compliant with evolving maritime fuel standards over the next three decades.

17. Develop Solar-Powered Industrial Parks

Harnessing the emirate’s exceptional solar potential can transform Fujairah into a renewable-powered hub. Dedicated solar parks supplying clean electricity to port operations—and potentially exporting battery-stored energy to India or Africa—would showcase Fujairah’s commitment to decarbonized industrialization.

18. Establish Strategic Energy Partnerships

Global collaboration is key to technological and financial resilience. Partnerships with European, Indian, and Japanese investors can accelerate development in refining, petrochemicals, and logistics. Shared capital and know-how will distribute risk while embedding Fujairah in the global network of trusted energy suppliers.

19. Upskill the Workforce for the Digital and Green Era

Infrastructure alone cannot lead transformation—people must. Establishing a Fujairah Energy Academy to train young professionals in AI, automation, maritime safety, and sustainability will cultivate a skilled workforce capable of managing next-generation infrastructure and reinforcing the emirate’s human capital base.

20. Build Financial and Operational Resilience

The global energy market is cyclical. Fujairah must adopt counter-cyclical planning, investing through downturns, diversifying revenue streams, and maintaining financial buffers. Resilience will depend on flexibility: the ability to pivot between products, partners, and technologies without losing momentum. ■

CHAPTER 3

Asia With us or Against us

“You Are Either With Us or Against Us”
– How South Asia Can Navigate a Divided World

- CONTRIBUTORS:
- MEHMET ÖĞÜTÇÜ, GROUP CEO, GLOBAL RESOURCES PARTNERSHIP & CHAIRMAN, LONDON ENERGY CLUB
 - OSAMA RIZVI, ENERGY & ECONOMIC ANALYST - PRIMARY VISION
 - RAM NARAYANAN, SENIOR ENERGY & COMMODITIES EXECUTIVE, INDIA
 - RACHEL ZIEMBA, ADJUNCT FELLOW, CENTER FOR A NEW AMERICAN SECURITY & SENIOR ADVISOR, HORIZON ENGAGE

The world is not what it used to be. During the 20th-century Cold War, geopolitics was a relatively predictable chessboard: two superpowers — the United States and the Soviet Union — locked in ideological rivalry, drawing the rest of the world into camps of allies, satellites, or non-aligned observers. It was rigid and often tense, but also stable.

Today, that simplicity is gone. The emerging order is multipolar, fragmented, and volatile. Power is dispersed across multiple centres. Alliances shift with circumstances. Even UN Security Council decisions, once the gold standard of legitimacy, are often ignored. Instead of ideology, competition now revolves around technology, trade routes, supply chains, rare earths, data flows, and energy corridors.

Nowhere is this new complexity more evident — or more consequential — than in South Asia, home to nearly two billion people, some of the world’s fastest-growing economies, and critical geopolitical chokepoints.

The Return of a Dangerous Binary

The rhetoric of division is back. “You are either with us or against us” — George W. Bush’s post-9/11 mantra — has returned as a foreign-policy organising principle, revived by Donald Trump

and echoed across Washington. But this time, the battleground is not ideology but power — and the stakes are global dominance over the commanding heights of the 21st century.

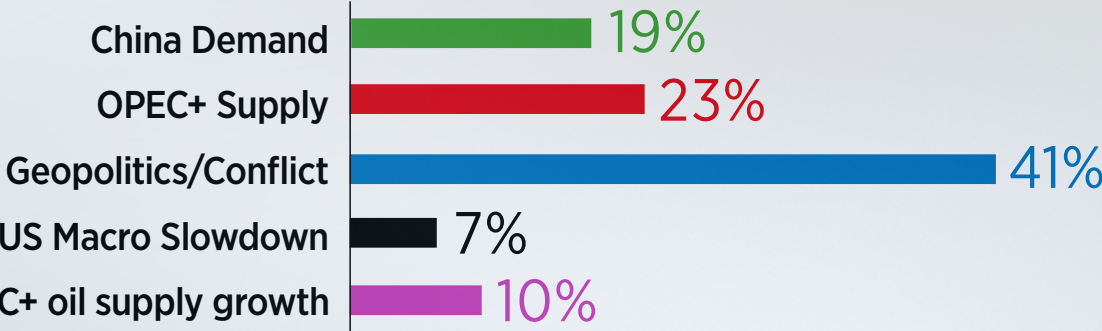
The United States and China remain deeply intertwined — trading over \$600 billion in goods last year — yet their rivalry intensifies. Washington, running a trade deficit of nearly \$300 billion with Beijing, is leveraging its dominance in global finance, maritime chokepoints, technology transfer, and data infrastructure to slow China’s rise, while holding the “Damocles sword” of Taiwan over Beijing’s head.

China, meanwhile, is building alternative power centres through BRICS, the Belt and Road Initiative, and the Shanghai Cooperation Organization, eroding U.S. primacy and offering countries a new geopolitical grammar.

Caught in this struggle, nations are pressured to “choose.” Sanctions, export controls, punitive tariffs, and restrictions on technology transfer are now routine. On 6 September, Trump lamented, “It seems we have lost India and Russia to the deepest and darkest China” — revealing Washington’s increasingly binary worldview.

Yet South Asia refuses to fit neatly into this zero-sum frame.

What will have the Biggest impact on direction of oil prices in 2026?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

India: Too Big to Push, Too Strategic to Ignore

India cannot be coerced into anyone’s camp. With a population of 1.4 billion, a dynamic democracy, and the potential to become the world’s third-largest economy, New Delhi has the leverage and ambition to pursue strategic autonomy.



It partners with the United States in the Indo-Pacific, even as it sits with China and Russia in BRICS and the SCO. It buys discounted oil from Russia while deepening defence ties with Washington. It clashes with China along the Himalayan border but maintains robust bilateral trade. It courts Gulf sovereign wealth and European tech giants without surrendering sovereignty.

This is not indecision; it is design. Prime Minister Narendra Modi’s government seeks to maximise manoeuvring space. Its refusal to halt Russian crude imports despite Western sanctions — while simultaneously strengthening the Quad alliance — reflects a simple principle: India’s foreign policy is not anti-American; it is pro-Indian.

Beyond balancing, India is expanding its reach — pursuing Central Asian energy and minerals via Afghanistan and forging ties with African partners like Ghana. “India First,” like “America First,” is not a slogan but a strategic reality Washington must accept.

Pakistan: Walking the Tightrope

Pakistan faces a more delicate balancing act. Economic fragility, security imperatives, and dependence on foreign aid constrain its choices. Yet Islamabad cannot afford to become a pawn in someone else's rivalry.

China is Pakistan's largest investor and a strategic partner through the China-Pakistan Economic Corridor (CPEC), the flagship of BRI. At the same time, Pakistan relies on Western financial institutions, trade access, and security cooperation with Washington. Its geography — at the crossroads of South Asia, Central Asia, and the Middle East — is both opportunity and pressure.

Pakistan's best path is to become a bridge, not a battlefield — deepening regional connectivity, diversifying partnerships to include the Gulf and Central Asia, and strengthening domestic resilience. By turning geography from vulnerability into leverage, Islamabad can preserve autonomy in an era of great-power rivalry.

Beyond Binary Choices

Most nations across the Global South reject simplistic binaries of democracy vs. autocracy. They see overlapping interests that demand nuance and hedging. They are unwilling to sacrifice autonomy for someone else's grand strategy.

The combined trade among India, China, Russia, and Pakistan — about \$400 billion — is dwarfed by U.S.-China trade. Yet beneath those numbers lie deeper shifts: non-dollar payment systems, energy deals in local currencies, new transport corridors, and tech partnerships designed to bypass Western choke points. These are not tactical moves but long-term bets on a multipolar future.

If Washington doubles down on coercion — weaponising tariffs, blacklisting firms, sanctioning governments — it risks alienating not only rivals but also allies. Short-term compliance could turn into long-term isolation.

Policy Takeaways: Navigating a Divided World

For South Asia to thrive amid great-power rivalry, it must pursue a proactive and strategic course:

1. Preserve strategic autonomy: Reject binary choices and prioritise national interests.
2. Invest in regional connectivity: Transform geography into economic and political leverage.
3. Build alternative platforms: Expand payment systems, supply chains, and alliances beyond Western frameworks.
4. Balance power with principle: Engage with all major powers while safeguarding sovereignty.
5. Champion multipolarity: Advocate for an order based on negotiated interdependence, not imposed allegiance.

If the US & China increasingly operate outside the global rules-based system, other countries will follow and do the same, leading to rising uncertainty, drags on productivity and lower overall economic growth?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

The United States must recognise that just as it asserts “America First,” others will do the same: “India First,” “Pakistan First,” “China First,” “Turkey First.”

Conclusion: Neither — and Yet Both

South Asia's choices will shape the 21st-century order. India's rise, Pakistan's geography, and the region's demographic weight mean neither Washington nor Beijing can dictate terms. The task for both is to offer partnerships that respect agency rather than demand allegiance.

The United States must recognise that just as it asserts “America First,” others will do the same: “India First,” “Pakistan First,” “China First,” “Turkey First.” The era of uncontested dominance is over. The era of negotiated interdependence has begun.

In a world fractured by great-power competition, South Asia's greatest strength may be the ability to say, “neither — and yet both.” ■





**INDIA REFUTES US CHARGE OF
FUNDING RUSSIA’S WAR ON UKRAINE**

India Buys Oil, Not Wars: Why Energy Pragmatism Isn’t Funding Moscow’s Guns



NARENDRA TANEJA, CHAIRMAN, INDEPENDENT ENERGY POLICY INSTITUTE, INDIA & DISTINGUISHED RESEARCH FELLOW, OXFORD INSTITUTE FOR ENERGY STUDIES

India’s oil trade with Russia has been misrepresented as complicity in the Ukraine conflict, but the reality is one of economics, sovereignty, and global imbalance. The accusation that India is “funding Russia’s war” ignores legality, history, and the moral contradictions of those making the charge.

Russian crude is not sanctioned by the United Nations, OECD, or any global body — only by Western powers. Indian refiners, both public and private, purchase it within international law. These decisions are commercial, not political; refiners seek affordable, reliable supplies in a volatile market. When Russia offered discounted barrels, India responded pragmatically — protecting its 1.4 billion citizens from inflation, not propping up Moscow’s arsenal.

The West’s moral outrage is selective. Europe still buys Russian gas indirectly and imports fertilizers, uranium, and commodities linked to Russia. Meanwhile, India exports diesel to Ukraine — often refined from Russian oil — exposing the absurdity of claims that it is financing Moscow’s war effort. This is not ideology; it is market mechanics.

India’s relationship with Russia is rooted in decades of mutual trust. From 1971, when Moscow shielded India during war, to today’s defense cooperation and technology sharing, the partnership has been

consistent. Yet New Delhi remains firmly multi-aligned — strengthening the Quad with the United States, Japan, and Australia, while maintaining deep trade with over 40 oil suppliers and exporting refined products to 100 nations.

At home, cheap Russian crude has helped India maintain welfare programs feeding 800 million people. Energy security for the world’s most populous democracy is not a luxury; it is a moral obligation. To deny India affordable energy on Western moral grounds would impose hunger and instability on millions.

India’s stance reflects civilizational self-confidence. A 7,000-year-old culture that endured colonization will not bow to external pressure. “We will starve, but we will not surrender,” Taneja declared — a reminder that sovereignty cannot be traded for Western approval.

The world is witnessing a transition from unipolar dominance to multipolar balance. India’s energy pragmatism is not defiance but foresight — a sign that nations of the Global South will no longer be shamed for prioritizing survival over symbolism. India buys oil, not wars — and in doing so, asserts its rightful place as a mature, sovereign power in a changing world. ■



How is China Shaping the World Amid U.S. Containment & Global Crises?

China’s Pragmatic Rise in a Fragmented World



VICTOR GAO, CHAIRMAN, CHINA ENERGY SECURITY INSTITUTE
& VP, CENTER FOR CHINA & GLOBALIZATION

Amid escalating U.S. tariffs, renewed great-power rivalry, and global crises from Gaza to Ukraine, China is shaping the world not by confrontation, but by repositioning itself as the steady hand of multipolarity. Beijing’s message is clear: it does not seek to upend the global order -- it seeks to restore the one it helped build in 1945. By invoking its wartime sacrifices and its role as a founding member of the United Nations, China frames its global ambition as a defense of the international system against unilateral dominance.

At the heart of China’s strategy lies continuity -- stability at home, peace abroad and relentless development. The country’s leadership believes that economic growth is the truest form of legitimacy, both internally and internationally. Rather than exporting ideology, Beijing exports infrastructure, investment, and technology. The Belt and Road Initiative, often portrayed as debt diplomacy, is recast by China as an effort to close the “connectivity gap” that stifles development across the Global South. Its call for cooperation is rooted in practicality: nations should not be forced to choose between Washington and Beijing but rather align with policies that deliver tangible benefits.

China’s worldview rejects the binary logic of the Cold War. In its narrative, the aberration is

not multipolarity, but the decades of unipolar dominance that followed the Soviet collapse. The rise of populist nationalism in the United States -- exemplified by Trump’s “America First” politics -- is seen as a symptom of a deeper structural shift toward protectionism and retreat. Beijing’s counteroffensive is one of openness: open trade, open technology, and open-source artificial intelligence, which it claims will prevent an “AI divide” from mirroring the inequalities of globalization.

Yet China’s assertive confidence is tempered with awareness of risk. Its unity and discipline -- its greatest strengths -- can amplify the consequences of wrong decisions. To offset that, Beijing emphasizes learning, adaptation, and engagement with other models of success, from Singapore’s governance to U.S. innovation. Even its expanding military capability is framed not as aggression, but as deterrence in a world where peace requires strength.

In a fractured international landscape, China is positioning itself as the pragmatic power—seeking to lead through stability rather than shock, cooperation rather than coercion. Whether the world accepts that vision may determine not only China’s future, but the nature of global order in the post-American century. ■

YOUR ENERGY GATEWAY TO THE WORLD

#1 ENERGY HUB

In MENA & top 3 worldwide

14 MILLION M²

Total land area

17 TERMINALS

With direct access to
deep-water berths via
Port of Fujairah

120 MILLION BBL

Combined storage capacity
for light, middle & heavy
products

ANNUAL REPORT ENERGY MARKETS OUTLOOK

How Should the Middle East Oil Industry Prepare for Peak China Oil Demand?

CONTRIBUTORS:

- ALI AL RIYAMI, CONSULTANT & FORMER DIRECTOR GENERAL OF MARKETING, MINISTRY OF ENERGY AND MINERALS, OMAN
- RACHEL ZIEMBA, ADJUNCT FELLOW, CENTER FOR A NEW AMERICAN SECURITY, SENIOR ADVISOR, HORIZON ENGAGE
- AHMED MEHDI, MANAGING DIRECTOR, RENAISSANCE ENERGY ADVISORS & SENIOR FELLOW, OIES
- RAM NARAYANAN, SENIOR ENERGY & COMMODITIES EXECUTIVE, INDIA
- TOBY ILES, CHIEF ECONOMIST, JADWA INVESTMENT
- VANDANA HARI, FOUNDER & CEO, VANDA INSIGHTS



PREPARING FOR PEAK CHINA OIL DEMAND

Strategic Imperatives for the Middle East Energy Industry

From Dependence to Diversification: The Next Chapter of Gulf-Asia Energy Relations

The Middle East oil industry faces a structural turning point as China — long the world's engine of crude demand — approaches an inflection point in consumption. Analysts now broadly agree that Chinese oil demand will likely peak around 2025, driven by rapid electrification, the exponential growth of electric vehicles, and a national commitment to double electricity generation capacity to power the coming AI revolution. This transformation does not signal the end of oil's relevance but rather the beginning of a new competitive era in which market access, integration, and adaptability will determine who thrives.

For Gulf producers, the first imperative is to secure long-term supply contracts with Chinese refiners while demand remains robust. Locking in multi-decade crude supply agreements provides a stable export base as Beijing shifts from transportation fuels to electricity and petrochemicals. Closely linked to this is the opportunity to invest directly in oil storage infrastructure inside China, positioning Gulf crude closer to refining and petrochemical demand centers. Forward-based inventories enhance both commercial agility and energy-security cooperation — a vital hedge against any disruption to maritime flows through the Strait of Hormuz.

However, the era of relying almost exclusively on Chinese demand is over. The next strategic horizon lies in diversifying market exposure beyond China. Emerging Asian economies such as India, Pakistan, the Philippines, and parts of Southeast Asia still have expanding transport-fuel demand and less developed EV infrastructure. Gulf national oil companies (NOCs) should strengthen footholds in these markets through retail ventures, supply agreements, and downstream partnerships that replicate the success of their Chinese ventures while capturing new growth frontiers.

Downstream Integration, Technology Adaptation, and the Gas Pivot

As refined-product demand in China plateaus, the most competitive Middle Eastern producers will be those who move deeper downstream. Companies such as Aramco and ADNOC have already demonstrated the value of integrated refining-petrochemical complexes that transform crude directly into high-value chemicals. This “liquids-to-chemicals” model protects revenue streams in a world where fuel consumption stagnates but demand for plastics, industrial materials, and chemical feedstocks continues to rise.

At the same time, Gulf producers must balance refining and chemical investments. China's own overcapacity has depressed petrochemical margins, highlighting the need for selective, regionally optimized projects rather than blanket expansion. Strategic integration — refining, storage, and chemical conversion aligned with specific demand hubs — will produce superior returns and flexibility.

Another essential shift is the gas and LNG pivot. As China substitutes oil with natural gas for power generation and industrial use, the Middle East should leverage its competitive LNG cost base to build long-term supply contracts. Qatar's expansion and ADNOC's growing LNG portfolio position the region to remain central to Asia's cleaner-energy mix. Aligning with China's decarbonization path requires Gulf producers to integrate gas, hydrogen, and renewable exports into their strategic portfolios, ensuring continuity of relevance through the transition.

“Strategic integration — refining, storage, and chemical conversion aligned with specific demand hubs — will produce superior returns and flexibility.”

Technological preparedness is equally vital. The accelerating diffusion of AI, robotics, and automation across industry will reshape both demand and cost structures. The Gulf must embed artificial intelligence into upstream operations to enhance productivity, optimize reservoir management, and cut extraction costs. Digital transformation will not only preserve competitiveness but also attract international capital seeking low-carbon, high-efficiency production profiles.

The next growth frontier also lies in battery and energy-storage ventures. Collaborating with Chinese manufacturers and innovators can secure Gulf participation in the electrification value chain — from grid-scale storage to EV components — diversifying revenue while strengthening bilateral industrial partnerships. As Saudi Arabia and the UAE push renewable generation capacity, coupling this with energy-storage manufacturing would extend the region's strategic leverage well beyond hydrocarbons.

Securing Energy Flows and Strategic Influence in a Post-Peak World

Preparing for peak China oil demand is not solely a commercial question — it is a geopolitical and structural one. The Middle East must strengthen its energy diplomacy with both Beijing and emerging Asian partners. Coordinated policies on storage, reserves, and technology exchange can deepen interdependence beyond simple buyer-seller relations. This includes exploring currency flexibility through limited yuan-denominated transactions or currency-swap frameworks, which could insulate bilateral trade from dollar volatility or sanctions risk, while preserving monetary stability in dollar-linked economies.

Energy security, however, begins at home. Regional producers should accelerate infrastructure diversification, expanding pipelines across Saudi Arabia and Oman to reduce reliance on the Strait of Hormuz. Alternate export corridors and regional storage hubs enhance resilience against geopolitical shocks. The Gulf's growing network of east-west pipelines, combined with shared storage and refining investments, will anchor a more secure and flexible supply chain to Asia.

Internally, producers must build data-driven market-intelligence capabilities that capture non-traditional indicators — such as EV adoption rates, battery costs, and AI-related power demand. Accurate forecasting will be decisive as traditional demand models lose predictive value in the face of technological disruption. Middle Eastern energy policy units and trading arms should invest in these analytics to anticipate shifts in consumption patterns across sectors.

Finally, Gulf governments and companies should continue advocating for pragmatic energy narratives. Despite the rhetoric of “peak demand,” oil will remain an indispensable part of the global mix for decades. The priority is not to resist change but to shape it — through diversification, innovation, and disciplined capital allocation. By reinforcing confidence among investors and partners in the region's capacity to adapt, Middle Eastern producers can maintain leadership in a transformed energy ecosystem.

Conclusion: From Market Dependence to Strategic Resilience

The prospect of China's oil demand peaking marks a pivotal moment for the Gulf energy industry. The transition underway is less about decline and more about redistribution of opportunity — from fuels to chemicals, from oil to gas, and from China to the broader Global South. The winners will be those who anticipate structural change and convert it into strategic advantage.

The Middle East's response must therefore be multifaceted: secure long-term contracts now; deepen integration in Asia's refining and petrochemical sectors; expand LNG and new-energy exports; digitalize upstream operations; and fortify supply-chain resilience through diversified routes and strategic storage. At the same time, Gulf producers must remain proactive in energy diplomacy, innovation partnerships, and market intelligence, ensuring that the region evolves from a price-taker to a technology-enabled energy-system architect.

In this post-peak landscape, success will depend on vision and velocity. The Gulf's historic role as the world's oil heartland can evolve into that of a global energy-solutions hub — one that supplies not just molecules, but stability, technology, and foresight to the markets of tomorrow. ■



TOP 20 RECOMMENDATIONS

How Should the Middle East Oil Industry Prepare for Peak China Oil Demand?

1. Secure Long-Term Supply Contracts with China

Middle East producers should lock in long-term crude export agreements with Chinese refiners while demand remains robust. As China approaches peak oil demand around 2025, these contracts will safeguard export volumes and stabilize revenue before China's shift to electric vehicles and AI-driven electrification reduces crude import requirements.

2. Invest in Chinese Storage Infrastructure

Producers like Saudi Arabia and the UAE should invest in forward-positioned oil storage inside China. This enhances energy security, ensures market access during supply disruptions, and keeps Gulf crude close to key refining and petrochemical hubs amid potential Strait of Hormuz chokepoints.

3. Deepen Downstream Integration in Asia

NOCs should continue expanding stakes in Chinese and Asian refining and petrochemical complexes. This vertical integration—exemplified by Aramco's partnerships with Rongsheng and Hengli Petrochemical Co. Ltd. — secures crude offtake, captures higher downstream margins, and embeds Gulf producers into end-user markets beyond China's borders.

4. Diversify Market Exposure Beyond China

With Chinese demand plateauing, Gulf exporters must expand presence in South and Southeast Asia—particularly India, Pakistan, and the Philippines—where population growth, industrialization, and slower EV adoption promise stronger medium-term oil demand growth.

5. Prioritize Liquids-to-Chemicals Expansion

Middle East refineries should prioritize converting more crude into petrochemicals rather than fuels. As global transport fuel demand peaks, petrochemical feedstock will remain the main growth outlet for oil. Aramco's liquids-to-chemicals strategy provides a sustainable path to value creation.

6. Balance Refining and Chemical Investments

Avoid over-concentration in chemicals alone. Optimize between refining, storage, and petrochemicals, as China's overcapacity and margin compression have made chemicals markets cyclical. Middle East producers should pursue flexible, regionally adaptive refining-chemical integration.

7. Strengthen Strategic Energy Partnerships

Expand state-to-state cooperation with China, India, and ASEAN economies on energy security, hydrogen, and renewables. Strategic joint ventures can ensure Gulf oil remains embedded in evolving Asian energy systems as demand growth diversifies geographically.

8. Hedge Against Technological Disruption

Prepare for demand erosion from China's electric vehicle revolution and AI-powered electrification. Rebalance portfolios toward gas, hydrogen, and critical minerals for energy technologies, positioning the Middle East as a supplier for the AI and EV age.

9. Invest in Gas and LNG Export Infrastructure

As China replaces oil with natural gas for power and industry, Gulf producers should expand LNG capacity and secure long-term gas supply contracts. Natural gas will underpin the region's export resilience through the next energy transition phase.

10. Encourage Currency Flexibility and RMB Trade Readiness

While full de-dollarization remains unlikely, Gulf producers should build readiness for partial yuan-denominated trade with China. Currency swap arrangements could deepen bilateral ties and hedge against U.S. sanctions or dollar volatility.

11. Develop Energy Storage and Battery Ventures

Engage with Chinese firms in the battery and storage value chain to capture growth in electrification. Saudi and UAE investments in grid-scale batteries and EV components can complement declining oil revenues while securing footholds in new energy supply chains.

12. Expand Renewable and Hybrid Energy Exports

Support China's decarbonization drive by exporting solar, hydrogen, and clean fuels. Gulf nations should leverage their solar and hydrogen potential to remain central to Asia's decarbonized energy mix.

13. Build Regional Resilience Through Alternate Export Routes

Reduce vulnerability to Strait of Hormuz disruptions by expanding pipeline routes across Saudi Arabia and Oman.

Securing alternate export corridors ensures uninterrupted flow to Asia, especially during geopolitical crises.

14. Leverage AI and Automation in Upstream Efficiency

Adopt AI and robotics to reduce operational costs and boost extraction efficiency. As oil demand plateaus, digitalization will distinguish the most competitive producers and preserve margins against lower demand growth.

15. Engage in Energy Diplomacy and Policy Alignment

Middle East governments should coordinate closely with Beijing on strategic reserves, supply diversification, and technology exchange. Long-term stability in energy relations will outlast short-term demand cycles.

16. Reassess Storage vs. Downstream Investment

For Gulf NOCs, refining and downstream investments may yield better returns than large-scale foreign storage. Strategically placed storage has merit, but downstream equity in markets like China provides more consistent commercial gains.

17. Strengthen Regional Energy Cooperation

Collaborate with regional allies (e.g., Saudi Arabia-UAE-Pakistan) to enhance shared security, infrastructure, and energy transport resilience, creating a unified Gulf-Asian energy corridor to counter global market volatility.

18. Prepare for Supply Security Scenarios

Develop contingency plans for global disruptions, including geopolitical shocks or major wars, by diversifying export markets and maintaining flexible storage, shipping, and pipeline infrastructure.

19. Invest in Data and Market Intelligence

Incorporate new data sets—such as EV uptake, battery costs, and AI electricity demand—into oil demand modeling. Understanding these technological disruptors will improve forecasting accuracy and strategic agility.

20. Continue Advocacy for Market Stability

Champion pragmatic narratives that frame oil as a necessary part of the global energy mix for decades ahead. Avoid premature “peak demand” fatalism and reinforce confidence among investors and partners in the Middle East's long-term role. ■

PLATTS REDEFINES THE EAST-OF-SUEZ OIL BENCHMARK Murban to be Assessed Freely in Dubai Basket from 2026

CONTRIBUTORS:

DANIEL COLOVER, HEAD OF GLOBAL ENGAGEMENT & INTELLIGENCE FOR OIL AND LNG, SPGCI

WESLEY MONTEIRO, MIDDLE EAST LEAD, STRATEGIC ENGAGEMENT & INTELLIGENCE GROUP, SPGCI

For more than four decades, the Platts Dubai benchmark has stood as the cornerstone of Middle East crude pricing — the anchor against which official selling prices (OSPs) are set and Asian refiners hedge their exposure. Now, in one of the most significant methodological changes since Murban and Al Shaheen were added to the basket in 2016, S&P Global Commodity Insights, plans to give Murban the freedom to be assessed without a floor to Dubai from January 2026.

The Dubai benchmark has continually evolved to mirror the realities of the market it serves. What began as a single-grade assessment has expanded into a five-grade basket encompassing Dubai, Oman, Upper Zakum, Al Shaheen, and Murban. Each cargo traded under the “partials” system — 20 lots of 25,000 barrels each — delivers unparalleled price granularity and transparency. When 20 partials converge between the same buyer and seller, a full half-million-barrel cargo is declared, giving the process a uniquely physical backbone rarely seen in global oil pricing.

Until now, all five deliverable grades were prevented from pricing below Dubai. That will change come January 2026. Platts’ forthcoming adjustment will allow Murban to be assessed either at a premium, parity or a discount to Dubai, depending on market dynamics. The methodology change reflects important shifts in sweet and sour crude dynamics over the past two years. The combination of OPEC+ production cuts, booming US shale exports, and some key refinery upgrades in the Middle East and beyond have at times inverted the traditional relationship between sweet and sour crudes.

The 2026 methodology change marks the most significant evolution of the Platts Dubai/Oman benchmark in a decade—integrating Murban more dynamically to mirror shifting market economics.

An update to the quality adjustment mechanism will accompany this shift. If Murban assessments averaged below Platts Oman over the five days prior, Platts will publish a quality adjustment for Murban based on 100% of the net price difference between the two grades over the five prior days. There will be no threshold for this quality adjustment when Murban is below Oman. If a quality adjustment with a negative number was assessed for a given day, the seller will pay the buyer the published quality adjustment upon the declaration of Murban into a convergence on that day. If Platts Murban assessments averaged above Platts Oman over the five days, Platts will publish a daily Murban quality adjustment at 50% of the net price difference between Platts Murban and Platts Oman assessments. The threshold for the quality adjustment will remain at 50 cents/b when Murban is assessed above Oman. If a positive quality adjustment above 50 cents/b was assessed for a given day, the buyer will pay the seller the published quality adjustment upon the declaration of Murban into a convergence on that day.

Crucially, sellers retain the flexibility to deliver any of the five grades in the basket. This methodology change to Platts Dubai with the addition of a Murban quality adjustment will allow the value of the Dubai benchmark to more dynamically react to sweet/sour shifts -- therefore allowing the benchmark’s methodology to robustly reflect the value of medium sour crude in all market conditions. ■

TOP 10 TAKEAWAYS

The 2026 methodology change will mark the most significant evolution of the Platts Dubai/Oman benchmark methodology in a decade.

1. Historic Role and Evolution of the Dubai Benchmark

The Platts Dubai benchmark has been the foundation of Middle East crude pricing for over 40 years, first assessed in 1984 in New York and later relocated to Singapore. Over time, Platts has progressively expanded the basket of deliverable grades to ensure liquidity and representativeness, starting with Dubai and Oman and adding Upper Zakum, Al Shaheen, and Murban.

2. The Partial Cargo Mechanism Underpins Market Transparency

Introduced in 2004, the “partials” system allows cargoes to be divided into 20 tradable lots of 25,000 barrels each, giving traders granular price points. Once 20 partials between the same buyer and seller are matched, a full 500,000-barrel cargo is declared. This ensures daily liquidity and transparent price discovery for the benchmark.

3. Seller’s Option Creates Flexibility in Deliverable Grades

Sellers can nominate any of the five grades—Dubai, Oman, Upper Zakum, Al Shaheen, or Murban—upon cargo convergence. This “seller’s option” ensures a sufficient pool of physically deliverable crude (over 3.5 million b/d), enhancing the robustness of the benchmark.

4. Murban’s Rising Role in the Basket

Historically, Upper Zakum was the most delivered crude upon convergence in the benchmark. In recent years, Murban has seen an increase in being declared, reflecting its increased competitiveness relative to medium-sour grades. Changing market dynamics and the influx of WTI Midland into Asia have at times narrowed Murban’s premium, prompting a rethink of how it’s treated in Platts Dubai.

5. The 2026 Change: Removing Murban’s Price Floor

Starting from January 2026, Platts will remove the pricing floor that previously prevented Murban from being assessed below Dubai. This means Murban will now be assessed either at a premium, parity or a discount to Platts Dubai.

6. New Quality Adjustment Mechanism

A revised quality adjustment formula will apply:

- When Murban is net assessed above Oman over the five prior days, a 50% quality adjustment (with a \$0.50/b threshold) is paid from buyer to seller.
- When Murban is net assessed below Oman over the five prior days, a 100% quality adjustment applies, with the seller paying the buyer fully for the differential.

7. Seller Optionality Remains Central

Sellers continue to retain full flexibility to declare Dubai, Oman, Al Shaheen, Upper Zakum, or Murban with the quality adjustment upon convergence of 20 partials.

8. Strengthened Linkage to Derivatives Ecosystem

Platts Dubai related derivatives instruments – including ICE Dubai represent billions of barrels traded monthly — settle against Platts Dubai’s calendar-month average, allowing participants to manage their exposure to the benchmark efficiently.

9. Market On Close activity sees increase in Asian Participants

Since Western banks largely exited the physical markets post-2008, participation has also seen an increase in activity by Asian refiners, oil majors and trading houses, with activity seeing participation from a broad cross-section of the market.

10. Purpose of the methodology change:

The upcoming changes to Murban and Murban quality adjustment methodology will allow the value of the Dubai benchmark to more dynamically react to sweet/sour shifts -- therefore allowing the benchmark’s methodology to robustly reflect the value of medium sour crude in all market conditions. ■

NB. The Top 10 Takeaways were harvested from a Seminar Presentation at the Fujairah Energy Markets Forum on Oct. 2nd, 2025

CHAPTER 4

Global Shipping

Sailing in the Dark



VTTI Fujairah - Energy to Move Tomorrow

VTTI Fujairah, the regional terminal company with a wide range of energy storage solutions and services, plays a significant role in supplying domestic and international markets. With the ability to handle vessels of all sizes and a wide range of products, VTTI is a trusted partner to our customers in energy logistics and storage.

Scan the QR code to learn more:



“How to Tackle the Dark Fleet & Secure the Critical Arteries of Global Trade?”



“The Dark Fleet is a Growing Menace!”



BY H.E DR. SHAIKH ABDULLA BIN AHMED AL KHALIFA
MINISTER OF TRANSPORTATION & TELECOMMUNICATIONS, BAHRAIN

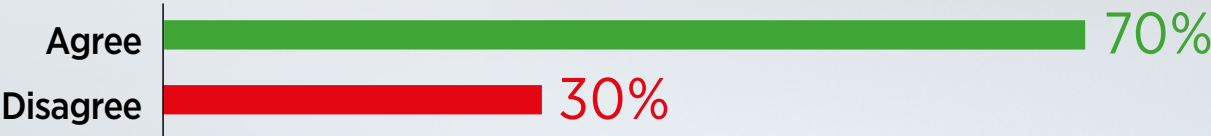
We are at a critical juncture for our industry, facing challenges that threaten not only our supply chains but the foundational principles of international commerce. We must see how we can work together to secure the critical arteries of global trade. For years, the maritime world has been grappling with substandard shipping, but the recent proliferation of the dark fleet is in a new and more dangerous phase. These vessels, that operate outside the bounds of international law, often using deceptive practices - like forging documents, disabling AIS transponders, and conducting illicit ship to ship transfers in open water - to evade sanctions and scrutiny. These ships pose a severe threat to maritime safety, environmental protection and the integrity of our financial systems. Many are aging, poorly maintained and uninsured - making them a ticking bomb for potential oil spills and maritime accidents. The dark fleet undermines the global regulatory framework that we have all worked so hard to build, creating an uneven playing field that penalizes legitimate, compliant operators.

Critical Chokepoints: The threat of the dark fleet is magnified by its focus on the world’s most vital maritime choke points, such as the Strait of Hormuz, Bab al-Mandeb and the Suez Canal - which incorporate 80% of global trade by volume. The Strait of Hormuz is the only sea passage from the Arabian Gulf, and the gateway for a significant share of the world’s oil and natural gas exports. Any disruption here has a ripple effect across the global

economy - affecting prices, supply and security. Protecting these chokepoints is not just a regional responsibility; it is a global imperative.

Solution Lies in Three-fold Approach: International cooperation, technological innovation and robust enforcement can help us tackle these challenges. Collaboration includes sharing intelligence and coordinating with global bodies like the International Maritime Organization. We need a unified front to close the legal loopholes that the dark fleet exploits, including those related to flag registries and insurance. Secondly, we must leverage technology. We’ve seen significant advancement in satellite imagery, AI-driven tracking and data analytics, that can help us identify and monitor suspicious vessel behavior, even when AIS is turned off. Fujairah, as a leading global bunkering and trading hub, can be a leader in adopting and promoting these technologies. Thirdly, we need stronger enforcement. This requires port states to conduct more rigorous inspections and to hold non-compliant vessels accountable. We must work to impose severe penalties on vessels, owners and operators who engage in illicit activities, making it economically unviable to be part of the dark fleet. The challenge is complex but our commitment to a secure, stable and sustainable energy market must be unwavering. By tracking the dark fleet and safeguarding our critical maritime arteries, we will not only protect our economies, but also the safety of our seas and the well-being of future generations. ■

If the US & China increasingly operate outside the global rules-based system, other countries will follow and do the same, leading to rising uncertainty, drags on productivity and lower overall economic growth?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

“How Can the World Stop the Shadow Fleet Rewriting the Rules of Global Shipping and Trade?”

CONTRIBUTORS:

- CAROLINE YANG, CEO, HONG LAM MARINE, AND FORMER PRESIDENT OF THE SINGAPORE SHIPPING ASSOCIATION
- SHRIKANT MADHAV VAIDYA, FORMER CHAIRMAN, INDIANOIL CORPORATION
- CAPT. RISHI NYATI, CEO, EMARAT MARITIME

A Parallel Maritime World Emerging Beyond the Rules-Based Order

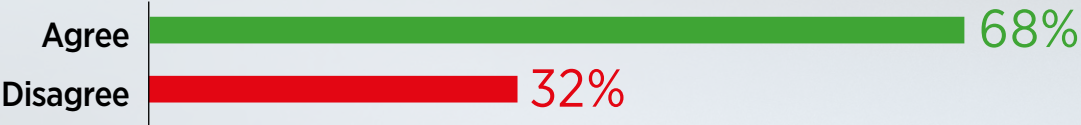
A silent revolution is taking place at sea. Out of sight of regulators, insurers, and mainstream traders, a “dark fleet” of aging oil tankers has emerged as the backbone of global sanctions evasion — a parallel maritime ecosystem that now handles almost one-fifth of the world’s seaborne crude trade.

These vessels operate in the shadows: ownership concealed behind shell companies, flags of convenience, and false registries; transponders switched off to avoid satellite tracking; cargo transfers executed in international waters with no record of destination or origin. The result is the steady erosion of the rules-based maritime system that has underpinned 90 percent of global trade for decades.

For much of the post-war era, international shipping has functioned as the connective tissue of globalization — governed by the International Maritime Organization, insured through London and European syndicates, and disciplined by the shared assumption that transparency, safety, and accountability were in everyone’s interest. The dark fleet upends that consensus. It represents not only a regulatory failure but also a geopolitical rebalancing — a manifestation of the shift from a Western-centric trade order to a fragmented, multipolar reality.

The consequences are already visible. Maritime safety is deteriorating as uninspected and poorly maintained tankers ply congested waters with their AIS tracking systems switched off. Recent collisions in Asian waters, including off the Straits of Malacca, have exposed how blind these “ghost ships” render local authorities. The environmental stakes are enormous: an uninsured spill

The explosive growth of the “Dark” / “Shadow” Fleet—now estimated to represent close to 20% of the world’s oil tankers—poses one of the most urgent challenges to global shipping and trade?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

For countries like India and China, the calculus is purely commercial. Before 2022, Russian oil accounted for less than 1 percent of India’s imports. After the Ukraine invasion and subsequent sanctions, it rose to more than a third.

in a chokepoint such as the Gulf of Oman or the South China Sea could paralyze regional trade and devastate ecosystems for decades.

The world’s most sophisticated ports — from Singapore to Fujairah — now face the unenviable challenge of policing a trade they cannot fully see. Ship profiling, insurance verification, and enhanced inspections have become routine, but these measures remain reactive, not preventive. In the absence of a unified global enforcement mechanism, the dark fleet continues to grow — a shadow network hiding in plain sight.

When Sanctions Backfire: The Economics of Evasion

Every sanction regime produces its own black market. The modern dark fleet is the direct offspring of the West’s attempt to weaponize energy flows. By restricting Russian and Iranian oil through G7-led price caps and service bans, policymakers hoped to constrain revenue without destabilizing supply. Instead, they created a lucrative arbitrage opportunity: a global gray zone where

oil flows outside official systems, traded at discounts but beyond the reach of Western enforcement.

Old tankers — many deregistered or approaching the end of their service lives — were purchased en masse by intermediaries in the Middle East and Asia. Reflagged under obscure registries, they became the logistical arm of the new shadow economy. Their purpose is straightforward: carry sanctioned crude to willing buyers who can pay in currencies and through channels immune to Western scrutiny.

For countries like India and China, the calculus is purely commercial. Before 2022, Russian oil accounted for less than 1 percent of India’s imports. After the Ukraine invasion and subsequent sanctions, it rose to more than a third. The rationale was not ideological defiance but pragmatic economics: discounted Russian barrels offered energy security at a time of global volatility. From the perspective of the Global South, Western sanctions are a self-inflicted problem — political instruments of the G7, not universal law.

This divergence underscores the widening fracture between the developed world’s moral framing of sanctions and the developing world’s material needs. The G7 envisions compliance as a moral duty; the Global South sees affordable energy as an existential necessity. The result is a geopolitical stalemate that plays directly into the hands of the dark fleet’s operators.

Even within the West, there is ambivalence. Policymakers are reluctant to enforce sanctions too aggressively for fear of triggering a price shock. The much-touted “price cap” on Russian oil is designed not to halt exports but to maintain flow under managed conditions — a paradox that reveals the limits of sanctions as a policy tool. Enforcement agencies can blacklist a few ships or insurers, but as long as demand persists, replacements will emerge overnight.



This ambiguity has turned the dark fleet from a temporary workaround into a permanent feature of global trade. The more policymakers hesitate, the more institutionalized the shadow economy becomes. In effect, sanctions have not curtailed the trade they targeted — they have re-channelled it into murkier waters where accountability is optional.

The Costs of Looking Away — Safety, Sovereignty, and What Must Come Next

The normalization of the dark fleet carries profound consequences — legal, environmental, and moral. For legitimate ports and traders, the risk of accidental entanglement is rising sharply. One interaction with a misdeclared vessel can trigger secondary sanctions or loss of insurance coverage. More than 60 percent of maritime operators now cite legal exposure as their top concern, eclipsing even fuel costs and freight rates.

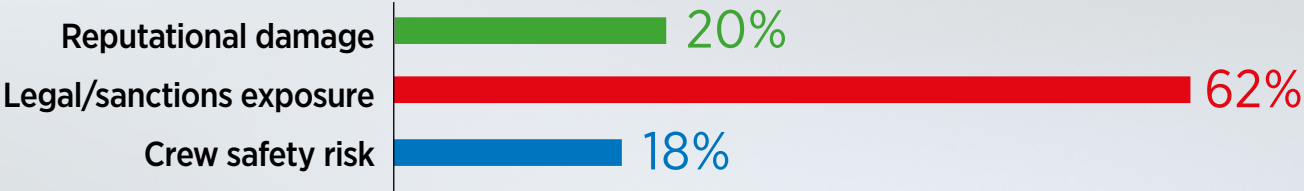
Reputational damage is equally severe. Maritime hubs like Singapore and Fujairah, built on trust and compliance, cannot afford to be perceived as conduits for opaque trade. The cost of compliance has soared as ports invest in advanced inspection technologies and AI-based vessel tracking systems to detect identity fraud and falsified insurance documents. Yet these tools remain piecemeal without a shared global database of verified vessels and beneficial ownership records.

What’s at stake if Dark Fleet continues unchecked?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

Why should legitimate ports & shippers care?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

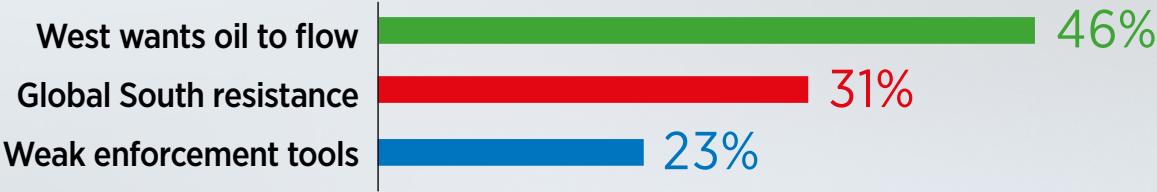
Beyond the boardrooms and policy debates lies a human dimension often overlooked. Thousands of seafarers aboard dark fleet tankers operate without valid insurance, legal protection, or even clear employment contracts. When accidents occur — as they inevitably do — crews are abandoned, injured, or stranded without recourse. The absence of liability chains means victims of spills or collisions have no path to compensation. The dark fleet is not only a regulatory blind spot; it is a humanitarian void. The environmental toll could be catastrophic. A single spill from an uninsured vessel could cripple fisheries and

coastal livelihoods across Asia, Africa, or the Middle East. Cleanup would fall to local governments ill-equipped to manage the fallout. The dark fleet thus represents not just a breach of law but a breach of global stewardship — a quiet unraveling of the collective safeguards that have kept maritime trade sustainable for half a century. The path forward requires what has so far been missing: a unified, depoliticized coalition. Sanctions can only succeed if they are global, swift, and continuous. Fragmented enforcement by Western agencies will never match the agility of private traders operating across

Top 5 Recommended Critical Policy Actions to tackle the Dark Fleet

- 1. Mandate Global Vessel Transparency – Establish a unified IMO-led database of verified ship ownership, insurance, and AIS tracking compliance.
- 2. Harmonize Sanctions Enforcement – Create a UN-backed coalition to align G7 and Global South maritime sanctions and inspection standards.
- 3. Enforce Port Entry Controls – Deny access to vessels without verifiable P&I insurance, transponder activity, and transparent ownership history.
- 4. Expand Real-Time Maritime Surveillance – Deploy AI-driven satellite monitoring to detect transponder blackouts, illegal transfers, and flag-hopping activity.
- 5. Criminalize Shadow Trade Financing – Impose financial penalties and asset freezes on banks, brokers, and insurers facilitating dark fleet operations.

Why has Sanctions enforcement failed?



NB. Survey was conducted with 300 global energy market stakeholders on Oct. 2nd, 2025

The ships sail because nations need the oil, and enforcement stops where affordability begins.

multiple jurisdictions. A meaningful solution must extend beyond the G7 to include major maritime states of the Global South.

This means harmonizing vessel tracking data, mandating transparency in ownership registries, and linking port-entry permissions to verified insurance and compliance records accessible through a shared digital platform. The International Maritime Organization, working with insurers and classification societies, could play a convening role in building this architecture. Without such cooperation, enforcement will remain symbolic — blacklisting a few ships while hundreds more quietly replace them.

At its core, the dark fleet is a symptom of the world's shifting balance of power. The global economy is fragmenting into parallel systems of finance, logistics, and law. In this new order, the dark fleet has become both a cause and a consequence of declining multilateralism — a maritime mirror reflecting the erosion of trust between the West and the rest.

The question now is not whether the dark fleet can be eliminated — it cannot — but whether it can be contained

within a framework that prevents its worst outcomes. The alternative is a future where energy trade operates entirely in the shadows, maritime safety becomes optional, and the next major oil spill is not an accident but an inevitability.

Conclusion: The High Price of Tolerating the Shadows

The world's dependence on cheap energy has blinded it to the cost of complicity. Every barrel moved by the dark fleet represents a quiet concession — an acknowledgment that political will is no match for market logic. The ships sail because nations need the oil, and enforcement stops where affordability begins.

Unless policymakers confront this contradiction, the shadow fleet will become the default model for a new era of trade — one defined not by transparency and cooperation, but by opacity and opportunism. The danger is not merely economic; it is existential. If the guardians of maritime order continue to look away, the next crisis at sea will not be a surprise. It will be the bill for years of deliberate neglect — and it will be paid for in oil, in ecosystems, and in human lives. ■

A Global Energy Trader

BB Energy is among the world's leading independent energy trading companies. With over six decades of experience in energy markets around the world, we responsibly connect energy producers and suppliers with the people, communities and businesses that need it most.

Our unique entrepreneurial culture, backed by our global reach, allows us to meet our clients' needs by providing safe, efficient and reliable access to energy.

#energisinggrowth



BB Energy

bbenergy.com

ANNUAL REPORT ENERGY MARKETS OUTLOOK

***Global Shipping has
Unintentionally Sailed
into Primetime and the
Bright Lights of
International Scrutiny***

From Dark Waters to Daylight: How Global Shipping Can Turn Scrutiny into Strength?

CONTRIBUTORS:

- DHRUV KAPUR, HEAD OF SHIPPING, MENA TERMINALS
- CAPT. RISHI NYATI, CEO, EMARAT MARITIME
- MARY MELTON, SENIOR TANKER ANALYST, BRAEMAR
- ARTHUR RICHIER, HEAD OF STRATEGIC PARTNERSHIPS, VORTEXA
- DR. BINAY SINGH, PRESIDENT, FEDERATION OF GLOBAL MARITIME COMMUNITY
- ANDRÉ BLEDJIAN, DIRECTOR, OIL TRADING & SHIPPING, MOEVE
- ZOE UPSON, DIRECTOR, FACT - FREIGHT AND COMMODITY TALENT AND FOUNDER, WOMEN TOGETHER

From Dependence to Diversification: The Next Chapter of Gulf-Asia Energy Relations

For decades, the global shipping industry has quietly powered 90 percent of world trade from the shadows — efficient, indispensable, and largely unseen. But in recent years, a cascade of crises has pushed maritime logistics into primetime: the Suez Canal blockage, the “dark fleet” sanctions evasion, piracy incidents, and geopolitical flashpoints from the Red Sea to the Baltic.

This sudden glare of public scrutiny presents both a threat and an opportunity. The threat lies in being defined by scandal, secrecy, and sanctions; the opportunity lies in redefining shipping as a pillar of transparency, safety, and sustainability. To seize this moment, the industry must move beyond damage control and embrace transformation as a strategy for long-term resilience.

Transparency must become a competitive asset, not a compliance burden. Companies that deploy satellite analytics, blockchain cargo registries, and emissions dashboards can transform visibility into value — proving that global shipping is ready to lead in integrity. By sharing verified real-time data between ports, traders, and insurers, the sector can strengthen trust with regulators and financiers while demonstrating that oversight and innovation can coexist.

At the same time, the world must confront the uncomfortable truth that one-fifth of crude oil now moves through what used to be called the “shadow fleet.” Denying its existence only perpetuates the problem. A coordinated international effort should establish pathways for legitimization — safety audits, insurance validation, and structured phase-outs — turning today’s opaque underworld into a monitored parallel fleet that can eventually be reintegrated under global regulation.

The same spirit of modernization must extend to customs. Outdated, paper-based systems that take 30 to 90 days to process bills of lading are relics of another century. Full digitalization through electronic manifests and shared customs APIs would give real-time cargo visibility, accelerate trade, and close the information gap that often fuels suspicion.

Building Credibility Through Collaboration, Technology, and Human Values

Collaboration across the maritime ecosystem is now essential. Flags, class societies, and port authorities must harmonize their standards and share compliance data to eliminate the re-flagging loopholes that allow non-compliant ships to hide. A shared database of vessel identity, insurance, and class status would create a single source of truth in an industry long fractured by fragmented governance.

Meanwhile, global attention offers the perfect stage to reposition compliance as brand equity. Public perception now drives market access and capital flows. Companies that publish ESG data, safety metrics, and crew-welfare reports can attract partners who value responsible logistics. In this new era, transparency is not a weakness — it’s a marketing strength.

That human dimension, too often overlooked, must move to the center of the shipping narrative. Crew training, mental-health support, and welfare programs should be publicly championed as non-negotiable investments. The image of a fatigued or abandoned seafarer cannot define a trillion-dollar industry. By valuing the people behind the ports and vessels, the sector restores its moral legitimacy and public empathy.

Port-state controls remain the most visible expression of governance. Fujairah has already set a global benchmark by refusing entry to any vessel lacking valid class or insurance. Replicating this “clean port” model across regions would establish a culture of shared responsibility and reward compliant operators with faster, safer, and more profitable trade.

Equally important is aligning traders and shipowners under common ethical and operational risk codes. Too often, traders claim ignorance of a vessel’s compliance history while owners claim ignorance of cargo origin. A unified “Maritime Integrity Code” can bridge this divide, ensuring that risk awareness and accountability flow across every link of the value chain.

Technology must serve as the connective tissue binding all these reforms. Artificial intelligence can map sanctions-risk networks, detect false vessel identities, and analyze satellite imagery faster than any human compliance team. Real-time maritime data coalitions — where analytics firms, insurers, and ports share encrypted intelligence — could become early-warning systems for environmental, financial, and security breaches.

This same digital infrastructure should extend to ports. Smart terminals equipped with automated screening, cross-manifold connectivity, and AI scheduling systems can drastically cut turnaround times and emissions. Ports that combine safety with traceability will not only meet regulatory demand but attract premium customers seeking reliability.

Reaction to Reinvention — Leading the Next Chapter of Global Shipping

If transparency and technology are the twin pillars of reform, global cooperation must be its foundation. The industry should advocate for international frameworks that protect seafarers from sanctions-related reprisals — recognizing crews as neutral humanitarian actors. In parallel, regulators, insurers, and recycling yards should work together to institutionalize safe scrapping frameworks, offering green-recycling credits that reward responsible disposal and reduce the dangerous build-up of obsolete vessels.

Environmental leadership presents another defining opportunity. Shipping must use its visibility to shape, not resist, the global carbon conversation. By aligning vessel order books, fuel-mix strategies, and charter contracts with credible decarbonization trajectories, the sector can signal it is serious about its net-zero obligations. Collaborating with the IMO and EU to design a fair, uniform carbon-pricing system would further prove that the maritime community is willing to pay its share for a cleaner world.

A “Maritime Transparency Pact,” modelled after the Extractive

“In a geopolitically divided world, shipping can also serve as a stabilizing force.”

Industries Transparency Initiative, could unify industry leaders around shared disclosure standards — publishing emissions, ownership, and compliance data verified by independent auditors. Such self-regulation would pre-empt heavier government mandates and prove that reform from within is possible.

The industry must also communicate differently. ESG reporting should evolve from static data tables into storytelling — documentaries, digital campaigns, and educational outreach showing the human and technological transformation underway. Shipping can replace images of “dark fleets” with stories of cleaner fuels, safer crews, and smarter ports.

Crisis response, too, must become more coordinated. Multi-stakeholder task forces linking IMO bodies, insurers, and analytics firms should be prepared to act instantly after accidents or cyber incidents. Unified communication and rapid containment not only limit environmental and financial damage but signal to the public that shipping has matured into a responsible global citizen.

In a geopolitically divided world, shipping can also serve as a stabilizing force. Whether delivering grain through conflict zones or maintaining energy corridors under sanctions pressure, the maritime community embodies cooperation across borders. By positioning itself as a guarantor of trade continuity and humanitarian supply, the sector can transform scrutiny into respect and fleeting headlines into lasting influence.

Conclusion: Navigating from Obscurity to Leadership

The shipping industry’s “15 minutes of fame” need not fade into infamy. It can mark the dawn of a new era where transparency, technology, and human values define global logistics. The industry’s challenge is not to avoid the spotlight but to own it — to turn every inquiry, every regulation, and every satellite image into proof of progress.

By embracing digitalization, safe scrapping, unified governance, crew welfare, and decarbonization, the maritime community can reposition itself as a modern steward of world trade. The oceans have long carried the world’s commerce unseen; now, under the bright lights, shipping has the chance to carry its conscience too. ■

TOP 20 RECOMMENDATIONS

What can the Shipping & Logistics Industry do to Adapt Quickly and Take Advantage of its 15 Minutes of Fame?

1. Embrace Transparency as Competitive Advantage

Global attention is an opportunity to lead, not hide. Shipping companies should adopt satellite analytics, blockchain cargo registries, and public emissions dashboards to make transparency a market differentiator. Real-time disclosure of vessel movements, ownership, and carbon intensity will attract compliant partners, investors, and regulators, transforming scrutiny into strategic advantage.

2. Institutionalize Safe Scrapping Frameworks

The dark-fleet problem begins and ends with aging tonnage. Regulators, insurers, and shipowners must jointly establish certified “green recycling corridors” that offer financial incentives for proper dismantling. A transparent scrapping registry and recycling credit system could prevent illegal beaching, reduce environmental damage, and remove obsolete tankers that endanger lives and seas.

3. Collaborate Across Flags and Class Societies

Fragmented enforcement enables abuse. Harmonizing standards across flag states, insurers, and classification societies is essential. A coordinated compliance database—linking vessel flag, age, insurance, and maintenance—would prevent serial re-flagging and fake certifications. Shared oversight can restore integrity to global registries and stop substandard ships from slipping through regulatory cracks.

4. Legitimize the Parallel Fleet

Roughly one-fifth of world crude now moves through the so-called “shadow fleet.” Denial serves no purpose. The industry should create transitional frameworks that bring these vessels into regulated channels through amnesty programs, safety audits, and insurance verification—transforming today’s opaque underworld into tomorrow’s monitored, revenue-generating secondary fleet.

5. Digitalize Customs and Port Documentation

Paper-based customs systems delay transparency by months. Mandatory e-manifests and shared customs APIs could allow real-

time cargo validation worldwide. Governments must accelerate digitization, connecting port authorities, banks, and traders. The result would be faster clearance, better traceability, and a global trade environment that matches the speed of modern logistics.

6. Build Real-Time Maritime Data Coalitions

Create an alliance of analytics firms, ports, and insurers to aggregate and share verified vessel data. Real-time satellite feeds, AIS cross-checks, and environmental metrics can be compiled into a global “maritime ledger.” Collective intelligence will enable early-warning systems for illegal activities, protecting the industry before media or regulators intervene.

7. Reframe Compliance as Brand Equity

Public perception matters more than ever. Shipping companies can turn ESG compliance into a brand story that attracts cargo owners, financiers, and recruits. Transparent reporting on emissions, safety, and labor standards position shipping as a responsible cornerstone of global trade, elevating its image from invisible industry to ethical powerhouse.

8. Prioritize Crew Welfare and Training

No regulation can replace human vigilance. Crew members must receive continuous safety and security training, especially for piracy-prone zones like the Red Sea. Shipping firms should fund mental-health support, clear grievance systems, and welfare audits. Valuing seafarers publicly reinforces trust and reminds the world that shipping’s strength is human.

9. Reinforce Port-State Controls as First Line of Defense

Ports like Fujairah demonstrate best practice by screening every vessel for class, insurance, and safety compliance before entry. This model should be globalized. Strong port-state inspections—combined with shared blacklists—can keep rogue ships out of legitimate trade routes and reassure both consumers and policymakers that shipping polices itself.

10. Align Traders and Shippers under Common Risk Codes

Trading desks and vessel owners operate under different compliance cultures. A joint “Maritime Integrity Code” should align both sides on sanctions, financing, and environmental risk standards. Shared accountability frameworks would prevent blame-shifting after incidents, strengthen due-diligence practices, and prove that the sector can self-govern complex global supply chains.

11. Treat Sanctions as Design Problems, Not Barriers

Sanctions will not vanish—but they can be redesigned. Shipping companies should proactively engage with regulators to develop dynamic licensing systems and humanitarian exemptions that prevent bottlenecks and oil-price volatility. Industry consultation ensures sanctions remain effective yet flexible, balancing ethics, security, and the uninterrupted flow of global energy.

12. Institutionalize Cross-Industry Decarbonization Plans

The next decade demands measurable decarbonization. Shipping should align its order books, fuel-mix strategies, and charter contracts with credible emission-reduction trajectories. Transparency about dual-fuel adoption, carbon pricing, and lifecycle intensity will position shipping as a climate solution industry rather than a reluctant emitter hiding behind complexity.

13. Create a “Maritime Transparency Pact”

A voluntary pact modeled on the Extractive Industries Transparency Initiative could unite companies around shared disclosure standards. Participants would publish vessel ownership, emissions, and compliance records verified by independent auditors. Self-imposed transparency pre-empts heavier regulation and shows governments that the industry is serious about reform and accountability.

14. Promote Crew Nationality Protection under Sanctions

Thousands of seafarers are trapped in geopolitical crossfire. The industry should champion new international rules that shield crew from penalization linked to sanctioned cargoes. Recognizing seafarers as neutral humanitarian actors restores dignity, improves recruitment, and positions shipping as a defender of human rights, not merely corporate profit.

15. Invest in Port-Based Digital Infrastructure

Terminals must evolve into smart logistics ecosystems. Upgrading to cross-manifold connections, automated screening, and AI-enabled berth scheduling reduces downtime and emissions.

Ports with transparent cargo histories and integrated digital platforms will be preferred by charterers seeking reliability and compliance, turning infrastructure modernization into competitive differentiation.

16. Foster Multi-Stakeholder Crisis Response Units

Public scrutiny is harshest after disasters. Establish rapid-response coordination units linking IMO offices, insurers, analytics providers, and port authorities. Pre-agreed protocols for spills, accidents, or cyber incidents allow swift, unified communication that minimizes damage and demonstrates governance maturity under the global spotlight.

17. Turn ESG Reporting into Storytelling

Data alone doesn’t inspire. Shipping must narrate its transformation—through documentaries, media partnerships, and educational campaigns showing its role in powering global supply chains. Transparent storytelling humanizes the sector, counters misinformation, and shifts headlines from “shadow fleets” to “shared responsibility,” converting fleeting fame into lasting public respect.

18. Leverage AI for Sanctions-Risk Mapping

Artificial intelligence can process satellite imagery, cargo registries, and financial data to map risk networks faster than human compliance teams. Deploying such systems industry-wide could detect suspicious routes or duplicate vessel identities before violations occur, making technology a trusted ally in proactive governance and transparency.

19. Advance Uniform Global Carbon Pricing Mechanisms

Rather than resist taxation, the industry should co-design fair carbon-pricing models through the IMO that align with EU ETS rules. A unified framework avoids market fragmentation, enables offset markets for greener fleets, and proves that shipping is willing to pay its share for decarbonizing global trade.

20. Recast Shipping as a Pillar of Global Security

Shipping underpins 90 percent of world commerce and energy transport. Industry leaders should reframe the narrative from pollution and sanctions to stability and humanitarian supply. By engaging media, governments, and youth audiences, shipping can cement its role as an indispensable force for peace, prosperity, and energy resilience. ■



Moving Energy Forward

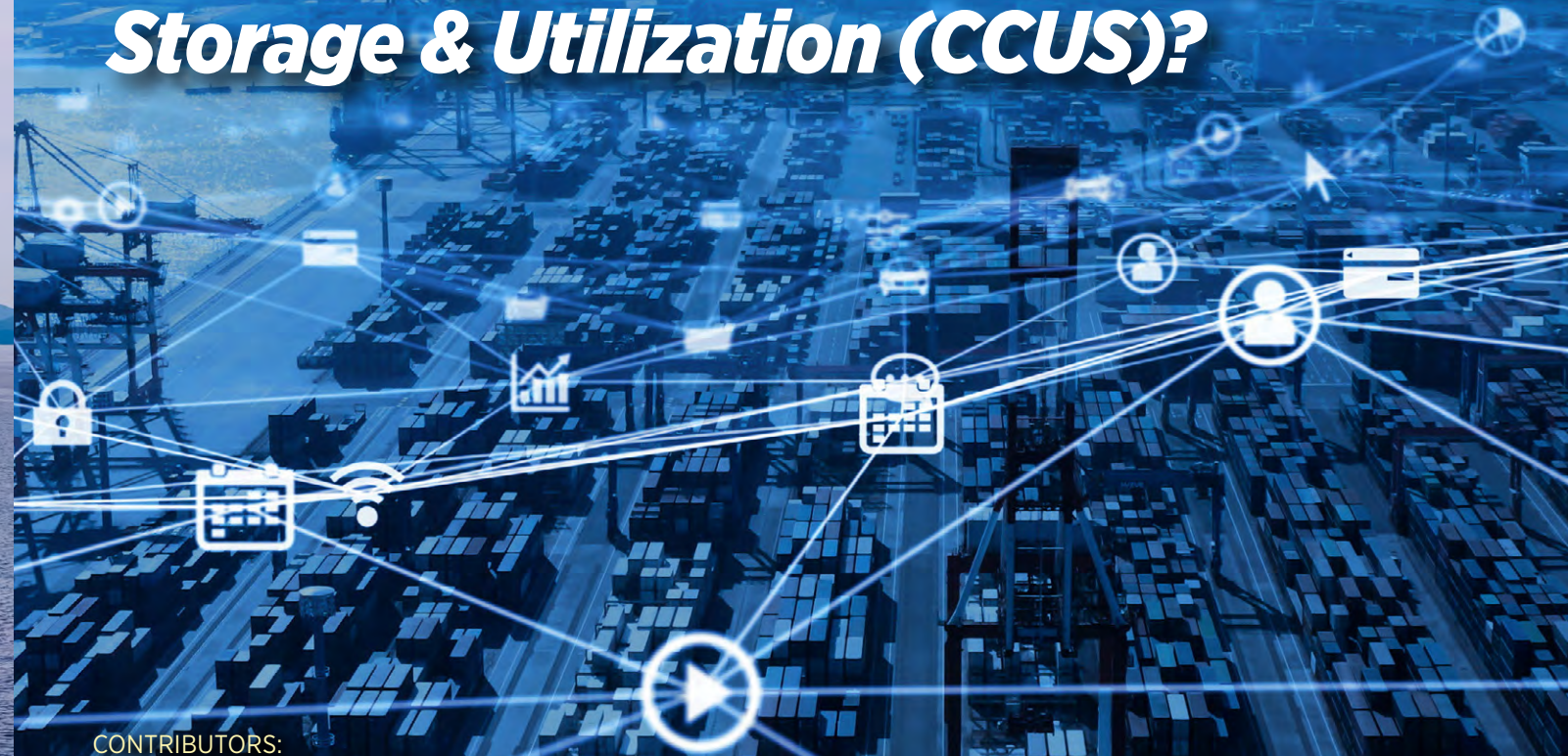
Gunvor Group is one of the world's largest independent commodities trading houses by turnover, creating logistics solutions that safely and efficiently move physical energy, metals and bulk materials from where they are sourced and stored to where they are demanded most. Gunvor has strategic investments in industrial infrastructure—refineries, pipelines, storage, terminals, and upstream—that complement core trading activities and generate sustainable value across the global supply chain for customers.



Dubai | Geneva | Houston | London | Shanghai | Singapore

The Celsius Copenhagen, pictured, is one of the most efficient LNG carriers in the world, minimizing CO2 emissions and methane slip from operations.

How can Port Operators & Terminals Future-Proof their Assets by Becoming Hubs for Carbon Capture, Storage & Utilization (CCUS)?



CONTRIBUTORS:

- H.E. KHAMIS AL MAZROUEI, CEO, SNOC
- CAPTAIN MOHAMED AL YAHYAEI, CEO - FUJAIRAH TERMINALS, AD PORTS GROUP
- RAVI BHATIANI, EXECUTIVE DIRECTOR, THE FEDERATION OF EUROPEAN TANK STORAGE ASSOCIATIONS
- DR. STEVEN GRIFFITHS, PROFESSOR & VICE CHANCELLOR FOR RESEARCH, AMERICAN UNIVERSITY OF SHARJAH
- CAPT. ALI AL ABDOULI, DIRECTOR, FUJAIRAH OIL TANKER TERMINALS (FOTT), PORT OF FUJAIRAH
- ROBERT PERKINS, GLOBAL MANAGING EDITOR - OIL, SHIPPING & CHEMICALS NEWS, S&P GLOBAL COMMODITY INSIGHTS

Future-Proofing the Ports: Turning Carbon Capture into the Next Great Maritime Industry

Ports have always mirrored global trade trends — from crude oil to containers, and soon, carbon. The next frontier is clear: ports and terminals must evolve into CCUS hubs where captured CO₂ can be aggregated, processed, shipped, and stored permanently. This shift transforms ports into climate infrastructure — the connective tissue of a decarbonized global economy.

The transition starts with pilot projects, not mega schemes. Port authorities and operators should launch small-scale, low-risk CCUS pilots that test capture technologies, simulate transport routes, and build data familiarity. Early proof-of-concepts, even at 1% of potential scale, attract private capital and generate policy confidence that unlocks larger investment phases.

Yet ambition without regulation remains a gamble. Governments must create clear legal frameworks defining carbon ownership, storage liability, transport standards, and tariff structures. Without this, investors face uncertainty that delays or kills projects before they start. Just as IMO 2020 brought clarity to low-sulfur fuels, a regional carbon-governance framework can trigger similar acceleration.

To maximize efficiency, disaggregate the CCUS value chain. Capture, transport, and storage should each be managed by specialized entities — ports can excel in aggregation, shipping, and storage, while technology firms handle capture at industrial sites. This “modular chain” approach minimizes risk and attracts niche expertise rather than demanding a single vertically integrated player.

Ports are uniquely positioned to offer “storage as a service.” Acting as aggregators, they can collect CO₂ from nearby emitters, compress it on site, and channel it via pipeline or tanker to geological storage. By bundling this service, ports create a new recurring revenue stream while helping industries comply with tightening emissions frameworks.

Many coastal regions sit atop depleted oil and gas fields, ideal for long-term CO₂ storage. These dormant reservoirs can be repurposed as secure carbon sinks — converting

legacy hydrocarbon infrastructure into low-carbon assets. It’s a symbolic and practical bridge between yesterday’s energy economy and tomorrow’s climate economy.

Building the Business Case for Carbon Infrastructure

The economics of carbon storage hinge on pricing. Without a defined carbon price or incentive, investment will stagnate. Policymakers must introduce carbon-credit systems or border-adjustment mechanisms (like the EU’s CBAM) to make domestic capture and storage competitive. This clarity attracts investors and rewards early movers who invest before mandates arrive.

Digitalization and data monitoring systems (MUV) will be central to future port competitiveness. Reliable data on captured, transported, and stored CO₂ ensures compliance, transparency, and credibility. Ports should embed digital twin technology to measure emissions in real time, providing verifiable proof of carbon reduction for certification and financing purposes.

Future-ready ports won’t operate in isolation — they will partner with academia and industry. Universities provide R&D depth, ports bring logistical know-how, and private firms supply capital. Together, these partnerships reduce capture costs, enhance storage safety, and expand regional capacity. The result: an innovation corridor that anchors the port’s position in the green economy.

Before large-scale carbon capture matures, ports must decarbonize their own operations through electrified cranes, cold-ironing for vessels, and renewable-powered facilities. These incremental improvements both cut emissions and demonstrate leadership, signaling that ports are serious about sustainability and willing to apply to themselves the same standards expected of others.

To connect emitters and reservoirs efficiently, multimodal CO₂ transport networks are essential. These include short-distance pipelines linking industrial clusters to port terminals, and specialized tankers that can move compressed CO₂

between regions. As these networks mature, ports will become the crossroads of the global carbon-trade system.

Safety and reliability demand that CO₂ transport and storage follow international quality standards. Uniform thresholds for purity, pressure, and corrosion prevention will create interoperability between ports and storage facilities. Standardization is also key to unlocking cross-border trade of captured CO₂, ensuring safe handling and reducing insurance costs.

Ports should be designed for dual-use functionality — handling both inbound CO₂ for storage and outbound low-carbon products like methanol, hydrogen, and sustainable aviation fuel (SAF). This dual design future-proofs infrastructure and enables ports to profit from both the “carbon inflow” and “green fuel outflow” sides of the new energy trade.

Given the scale of capital and time required, public-private partnerships (PPPs) are critical. Governments can take post-closure liability for stored carbon after 20 years, reducing investor risk. Private firms, in turn, build and operate the infrastructure. This model mirrors the success of early LNG terminals that matured under similar risk-sharing arrangements.

Governance, Risk, and the Global Race for Scale

To thrive, CCUS must be embedded in broader energy-transition strategies. Rather than treating carbon storage as an isolated task, ports should integrate it with hydrogen, ammonia, and SAF corridors, ensuring synergy between fuel supply chains and storage capacity. This cross-sector alignment magnifies returns and prevents stranded assets.

Data transparency will be the competitive differentiator. Openly publishing verified CO₂ data attracts financiers, builds public trust, and enables informed policymaking. Data is the new currency of climate credibility — the faster ports make theirs public, the sooner they’ll be recognized as credible green hubs.

Because carbon flows don’t respect borders, regional collaboration across the Gulf is vital. A harmonized Gulf CCUS framework — covering liability, certification, tariffs, and safety — would position the region as a single carbon-storage network. This collective effort would mirror Europe’s hydrogen corridors but with far greater geological potential.

“By combining regulatory clarity, public-private investment, and technological innovation, Gulf ports like Fujairah, Khalifa, and Hamriyah could become the “Carbon Harbors” of the 21st century.”

Establishing research and innovation clusters within port zones is key. Collaboration between ports, universities, and technology startups can advance membrane separation, mineralization, and direct-air capture methods. Such clusters turn ports into living laboratories — places where maritime engineering meets climate innovation.

A critical concern for investors is long-term storage liability. Governments must guarantee monitoring, verification, and remediation after site closure. No private operator can assume 100-year liability. Regulatory certainty here will decide whether major energy players commit or hesitate.

Finally, ports can accelerate momentum by anchoring CCUS growth to existing methanol and hydrogen projects. These industries already depend on CO₂ capture for product qualification under international standards. By co-locating such projects, ports secure baseline demand for storage services, ensuring steady cash flows and market validation.

Conclusion: The Race to Build the Carbon Harbors of the Future

CCUS isn’t just an environmental necessity — it’s an industrial revolution waiting to be claimed. The world’s most successful ports in 2050 will be those that act now to blend climate responsibility with commercial foresight.

The UAE, with its unique geological reservoirs, global trade connectivity, and policy ambition, is ideally placed to lead this transformation. By combining regulatory clarity, public-private investment, and technological innovation, Gulf ports like Fujairah, Khalifa, and Hamriyah could become the “Carbon Harbors” of the 21st century — gateways not only for global trade, but for the planet’s decarbonized future. ■

TOP 20 RECOMMENDATIONS

1. Develop Ports as Integrated CCS Hubs

Ports must evolve from traditional trade nodes into integrated CCUS ecosystems connecting emitters, shipping, and depleted reservoirs. Acting as logistical, storage, and processing gateways for captured carbon positions ports at the center of the decarbonization value chain, enabling them to monetize CO₂ flows, attract investors, and drive long-term sustainability transformation.

2. Begin with Small-Scale, Commercially Viable Pilot Projects

Early adoption requires small, focused pilot projects that demonstrate capture, transport, and storage feasibility. These pilots prove technical reliability, attract partners, and create early datasets critical for scale-up. Gradual expansion reduces financial risk, builds local technical capability, and allows regulations and business models to mature organically around real-world performance results.

3. Create a Regional Legal & Regulatory Framework

Without clear carbon regulations, investment will stagnate. Governments must establish legal frameworks defining CO₂ ownership, liability, storage duration, transport protocols, and tariffs. Unified regional standards across Gulf ports would reduce uncertainty, enable cross-border cooperation, and ensure carbon captured, stored, or traded meets internationally recognized verification and reporting criteria.

4. Separate the CCS Value Chain for Efficiency

Breaking up the CCUS value chain into specialized functions — capture, transport, and storage — maximizes efficiency. Ports should focus on aggregation, logistics, and injection readiness, while industrial clusters or technology providers specialize in capture. This modular approach lowers barriers to entry, increases competition, and speeds up infrastructure deployment at scale.

5. Offer “Storage as a Service” to Emitters

Ports can act as aggregators of carbon by collecting CO₂ from nearby industrial emitters, compressing it, and transporting it to secure geological storage. By commercializing storage as a subscription-style service, ports generate new revenue streams, create investor confidence, and offer industries a one-stop decarbonization solution aligned with net-zero strategies.

6. Leverage Depleted Gas Fields as Permanent Storage Sites

Many ports sit near depleted oil and gas reservoirs — assets that can be repurposed for permanent carbon storage. Converting these fields creates low-cost, high-integrity CO₂ sinks that extend the life and value of legacy infrastructure, providing ports with a scalable, long-term competitive advantage in the carbon-management industry.

7. Introduce Carbon Pricing and Incentives

To make CCUS commercially viable, policymakers must create carbon pricing mechanisms, tax credits, or tradeable certificates that reward emissions reduction. A predictable carbon price encourages early movers to invest in capture and storage infrastructure, providing the economic certainty necessary for long-term capital deployment and sustainable industrial transformation.

8. Use Data Monitoring and Verification Systems (MVV)

Ports should deploy advanced data platforms for real-time monitoring of CO₂ capture, transfer, and storage. Verified datasets build investor and regulator confidence, enable carbon-credit certification, and ensure compliance with emerging border-adjustment measures. Accurate MVV systems transform ports into transparent, data-driven environmental custodians with measurable climate-impact credibility.

9. Prioritize Partnerships Between Ports and Industry

Effective CCUS development depends on strong collaboration among ports, industrial emitters, academia, and technology providers. Joint ventures allow shared investment, knowledge transfer, and risk distribution. Such partnerships accelerate innovation, integrate infrastructure planning, and align sustainability commitments — turning ports into engines of collective industrial decarbonization rather than isolated operators.

10. Invest in Cold-Ironing and Electrification

While large-scale CCS matures, ports can immediately decarbonize by electrifying cranes, introducing cold-ironing (ship-to-shore power), and transitioning vehicles to electric or hybrid models. These steps reduce baseline emissions, strengthen ESG credentials, and demonstrate proactive

environmental leadership, positioning ports as credible climate partners in future carbon-management ecosystems.

11. Encourage Multimodal CO₂ Transport Networks

Ports should develop multimodal CO₂ transport systems combining pipelines, road networks, and specialized tankers. These interconnected routes enable efficient movement of captured carbon from industrial clusters to storage hubs. Integrated logistics design enhances flexibility, builds redundancy, and allows ports to serve both regional emitters and international CO₂ trading corridors.

12. Adopt International Standards for CO₂ Quality and Safety

To ensure safe and efficient CO₂ handling, ports must comply with globally recognized standards for purity, pressure, and corrosion control. Standardization fosters interoperability between ports, pipelines, and storage operators, enabling international carbon-shipping trade and reducing technical risks associated with cross-border carbon transportation and offshore injection operations.

13. Design Port Infrastructure for Dual Use (Import/Export)

Future-proofed ports should be engineered to handle both inbound CO₂ for storage and outbound low-carbon products such as methanol, hydrogen, or sustainable aviation fuel. This dual functionality ensures ports capture value from both the inflow and outflow of carbon-based commodities, maximizing revenue diversification and strategic resilience.

14. Build Long-Term Public-Private Partnerships (PPPs)

Governments must collaborate with private operators through long-term PPP frameworks that balance investment risk. Public entities should assume long-term storage liability beyond 20 years, while private firms build and manage operations. This structure de-risks projects, encourages early participation, and ensures continuity in national decarbonization infrastructure development.

15. Integrate CCUS into Broader Energy Transition Strategies

CCUS should not operate in isolation. Ports must embed it within broader clean-energy strategies covering hydrogen, ammonia, LNG decarbonization, and renewable integration. This systems-based approach allows shared infrastructure, streamlined permitting, and coordinated investment, making ports the convergence point for multiple low-carbon technologies and circular-economy initiatives.

16. Promote Data Transparency and Open Reporting

Ports can differentiate themselves by publishing transparent, verifiable CO₂ data. Open access builds public trust, attracts green-finance institutions, and facilitates collaboration across sectors. As data integrity becomes a global competitive advantage, transparent ports will be first to secure recognition as credible, science-based decarbonization hubs in global shipping.

17. Develop Regional Collaboration Across the Gulf

CCUS requires scale, and scale requires cooperation. Gulf nations should harmonize policies on liability, tariff structures, certification, and safety to form a regional carbon-storage network. Coordinated action will reduce duplication, share infrastructure costs, and position the Gulf as a unified carbon-management powerhouse serving global emitters.

18. Create Port-Based Research and Innovation Clusters

Establishing innovation zones within ports brings together scientists, engineers, and entrepreneurs to test new capture materials, pipeline sensors, and digital-twin solutions. R&D collaboration accelerates cost reductions and safety advances, transforming ports into living laboratories for climate technology and ensuring continual modernization of the carbon-storage value chain.

19. Address Long-Term Storage Liability and Risk Management

Long-term CO₂ containment poses legal and financial challenges. Governments must take ultimate responsibility for post-closure monitoring and liability. Clear rules on ownership transfer, insurance, and remediation are essential to attract institutional investment and ensure environmental integrity for centuries beyond a project’s operational lifetime.

20. Use Methanol and Hydrogen Projects as Anchors for CCS Growth

Ports can anchor early CCS investment by co-locating methanol, hydrogen, and e-fuel projects that require captured CO₂ as feedstock. These industrial anchors create guaranteed offtake demand for storage services, proving commercial viability and turning carbon capture from a compliance obligation into a profitable circular-economy business model. ■

EU Must Replace Energy Idealism with Industrial Realism



RAVI BHATIANI, EXECUTIVE DIRECTOR,
FEDERATION OF EUROPEAN TANK STORAGE ASSOCIATIONS



ETSA's roadmap urges Europe to pivot from symbolism to pragmatism—adopting flexible climate targets, welcoming foreign capital, investing in stockpiles, and embracing all viable technologies. By focusing on affordability, partnership, and implementation, the EU can reverse deindustrialization, secure energy supplies, and rebuild the foundations of European industrial competitiveness.

Europe's industrial competitiveness is being quietly dismantled by well-intentioned but self-defeating energy and climate policies. The European Commission's Clean Industrial Deal and Affordable Energy Package promise transformation, yet deliver symbolism. If Europe wishes to preserve its industrial base, it must abandon ideological rigidity and embrace pragmatic reform.

At the heart of the problem lies a disconnect between climate ambition and economic reality. Europe's decarbonization targets were designed for boom times, not an era of weak growth and fiscal strain. Linking emissions goals dynamically to GDP would allow industry breathing space during downturns and ensure environmental progress doesn't come at the cost of mass deindustrialization.

Equally damaging is the EU's growing hostility toward foreign investment. The bloc's foreign subsidy regulations have created barriers for trusted partners such as the UAE, whose capital could modernize Europe's aging infrastructure. Rather than punishing investors under the guise of "strategic autonomy," Brussels should welcome responsible capital to revive terminals, pipelines, and

energy logistics networks essential for competitiveness. A pragmatic European energy strategy must start with the basics: energy security and affordability. Expanding national and regional stockpiles for fuels and feedstocks is one of the most tangible steps toward resilience. These storage investments, coupled with dual-use logistics and modernized pipelines, offer both commercial opportunity and geopolitical insurance.

Policy must also become technology-neutral. Europe's refusal to embrace nuclear power, carbon capture, and blue hydrogen has delayed progress and raised costs. Every credible pathway to net zero must include all technologies that cut emissions affordably and reliably. Sanctions and tariffs, meanwhile, should not be imposed without industrial affordability tests. Europe cannot afford policies that punish its own manufacturers more than geopolitical adversaries. A balance must be struck between moral leadership and material self-preservation.

Above all, the energy transition must be built with industry, not against it. Redirecting subsidies toward energy-intensive users, enhancing cross-border corporate cooperation, and improving labour productivity through targeted immigration and upskilling can all help re-anchor Europe's competitiveness. The European project has always thrived when driven by realism, not rhetoric. Its next chapter must return to that tradition—one of pragmatic leadership, open investment, and shared prosperity. Europe's energy future depends on whether it can bridge the gap between its ideals and its industries. ■

Top 10 Recommendations for fixing the EU's failing energy strategy and restoring industrial competitiveness

1. Realign Climate Targets with Economic Reality

Europe's climate ambitions must adapt to economic conditions rather than remain rigid. Linking emissions targets dynamically to GDP growth ensures that when economies can afford deeper decarbonization, they proceed—but during slowdowns, they prioritize jobs and competitiveness. This flexibility would prevent further deindustrialization and restore credibility to EU energy policy.

2. Reform Foreign Subsidy & Investment Screening Rules

The EU's aggressive enforcement of foreign subsidy regulations discourages much-needed investment from trusted partners like the UAE. Brussels should separate legitimate national security screening from protectionist barriers, encouraging strategic FDI into energy storage, terminals, and infrastructure. Revitalizing foreign capital inflows is essential to reindustrializing Europe's struggling energy base.

3. Establish Strategic Energy & Feedstock Stockpiles

Europe urgently needs to expand national and regional stockpiles of both fossil and low-carbon fuels. Building strategic reserves of crude, refined products, and biofuel feedstocks will enhance resilience, stabilize supply, and attract terminal investment. Stockpiles are tangible assets that strengthen energy security and reduce vulnerability to global disruptions or sanctions.

4. Adopt Technological Neutrality Across Energy Transition

Europe's fixation on renewables alone undermines practical decarbonization. A technology-neutral approach—embracing nuclear, carbon capture, e-fuels, and hydrogen—would unleash investment diversity and cost efficiency. Recognizing carbon capture and nuclear as solutions rather than threats can balance emissions goals with industrial competitiveness and ensure a realistic, affordable transition pathway.

5. Conduct Affordability & Impact Tests Before Sanctions

The EU should perform formal "Industrial Affordability Tests" before imposing sanctions or trade restrictions that impact energy flows. Current policies disproportionately hurt European industries and consumers. Testing the economic cost and competitiveness impact of sanctions ensures that geopolitical posturing does not translate into higher energy bills and job losses.

6. Strengthen Energy Partnerships with the UK & Turkey

Reinforcing energy and trade cooperation with immediate neighbours—particularly the UK and Turkey—would deliver faster results than negotiating distant alliances. Shared infrastructure, cross-border logistics, and pipeline connectivity can lower costs and secure supply chains. Pragmatic regional diplomacy must replace fortress-style protectionism to rebuild Europe's industrial energy competitiveness.

7. Redirect Subsidy Frameworks Toward Industrial Users

Energy subsidies should prioritize industrial users—the economic backbone of Europe—rather than primarily consumers. Redirecting funds to energy-intensive sectors like steel, refining, and chemicals would sustain jobs and competitiveness while still advancing low-carbon innovation. Support must balance environmental ambition with economic survival, ensuring industries remain globally viable.

8. Enhance Public-Private Cooperation Across Borders

Europe's fragmented corporate landscape weakens its policy influence. Governments and industry federations should foster stronger cross-border alliances among logistics, energy, and manufacturing players. A unified private-sector voice could counter bureaucratic inertia in Brussels, streamline permitting for major infrastructure, and champion pragmatic, industry-led solutions to energy and competitiveness challenges.

9. Improve Labour Productivity and Skilled Immigration

Europe's labour productivity crisis and restrictive migration policies are eroding competitiveness. Adopting targeted immigration reforms, vocational training, and upskilling programs—modeled on Spain's pragmatic approach—can revitalize its industrial workforce. A larger, more skilled labour base will attract investment, support industrial renewal, and offset demographic decline across EU economies.

10. Replace Symbolic Legislation with Deliverable Projects

Europe's "Clean Industrial Deal" and "Affordable Energy Package" are symbolic gestures lacking real impact. The EU must focus on deliverable projects—grid modernization, carbon-capture hubs, low-carbon fuel infrastructure—financed through blended public-private investment. Tangible results, not slogans, will rebuild trust in EU policymaking and demonstrate that Europe can still compete globally. ■

