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

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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.

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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.

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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.

