CIRUU ENERGY

Global Energy Security:
Energy Shocks, Strategic Reserves, and the Strait of Hormuz

Energy Market Bulletin

March 2026

Executive Summary

Global energy markets in 2026 are increasingly shaped by geopolitical risk, supply chain fragility, and structural shifts in demand. Global oil demand is projected to approach roughly 104–105 million barrels per day in 2026, while supply is forecast to reach around 108 million barrels per day under normal conditions. However, geopolitical disruptions particularly in the Middle East can quickly overturn supply balances and trigger global price volatility. The International Energy Agency (IEA) emphasises that oil security remains critical as hydrocarbons continue to dominate global energy consumption, especially in transport and petrochemical sectors.

Recent geopolitical tensions have underscored the vulnerability of global energy systems. Disruptions affecting the Strait of Hormuz through which about one-fifth of global oil supply moves represent the most significant immediate risk to global energy security. Simultaneously, the declaration of force majeure by QatarEnergy following attacks on Liquefied Natural Gas (LNG) infrastructure highlights the fragility of global gas supply chains. Qatar accounts for approximately 20% of global LNG exports and supplies primarily Asian markets, making disruptions highly consequential for energy-importing economies.

Strategic oil reserves and emerging gas security mechanisms remain the primary policy tools for mitigating supply shocks. However, the adequacy, accessibility, and deployment timing of these reserves will determine their effectiveness during prolonged disruptions.

Strategic oil reserves and emerging gas security mechanisms remain the primary policy tools for mitigating supply shocks. However, the adequacy, accessibility, and deployment timing of these reserves will determine their effectiveness during prolonged disruptions. Governments and corporations must increasingly adopt integrated risk management strategies combining stockpiles, diversified supply chains, infrastructure resilience, and energy transition policies.

Oil Demand Projections

104-105
Million Barrels

Oil Supply Projections

108
Million Barrels

1. Global Energy Market Dynamics

The global energy system is undergoing structural transformation, yet oil and gas remain the backbone of energy security. The IEA estimates that global oil demand will continue growing modestly through the mid-2020s, reaching approximately 104.9 million barrels per day in 2026. Demand growth is concentrated in emerging markets, particularly across Asia, where industrial expansion, petrochemical demand, and transportation growth continue to drive hydrocarbon consumption.

At the same time, global oil supply is expected to increase to roughly 108.6 million barrels per day, driven by production growth from non-OPEC producers such as the United States, Brazil, Canada, and Guyana. This diversification of supply sources has improved global resilience compared to earlier decades. However, supply concentration in politically sensitive regions remains significant. Middle Eastern producers including Saudi Arabia, Iraq, Kuwait, the UAE, and Qatar continue to dominate low-cost production and export capacity.

In parallel, LNG has emerged as the balancing fuel for global electricity systems. LNG trade volumes have expanded rapidly over the past decade, linking previously regional gas markets into an increasingly integrated global system. This integration enhances market flexibility but also amplifies contagion risks: disruptions in one exporting region quickly translate into price shocks across multiple continents.

2. Strategic Reserves and Emergency Systems

Strategic petroleum reserves (SPRs) represent one of the most critical policy tools available to governments for mitigating oil supply disruptions. Under the International Energy Programme, IEA member countries are required to hold oil stocks equivalent to at least 90 days of net imports. These stockpiles are intended to provide a buffer during severe supply disruptions and enable coordinated emergency responses.

Strategic reserves serve several functions. First, they stabilise markets by providing immediate supply during disruptions. Second, they reduce panic-driven price spikes by signalling government intervention capability. Third, they allow time for logistical adjustments, alternative sourcing, and diplomatic engagement.

However, the effectiveness of strategic reserves depends on several factors: storage volume, drawdown capacity, crude quality compatibility with domestic refining systems, and the duration of the supply disruption. Large reserves can mitigate short-term shocks but cannot fully offset sustained supply losses from major exporting regions. Furthermore, while oil stockpiling frameworks are well developed, equivalent mechanisms for natural gas remain underdeveloped. The rapid expansion of LNG markets has exposed the need for gas security frameworks similar to those governing oil reserves. Governments are increasingly exploring strategic gas storage, LNG inventory requirements, and coordinated market interventions.

> **Strategic oil reserves and emerging gas security mechanisms remain the primary policy tools for mitigating supply shocks. However, the adequacy, accessibility, and deployment timing of these reserves will determine their effectiveness during prolonged disruptions.**

3. The Strait of Hormuz as a Critical Energy Chokepoint

The Strait of Hormuz represents the single most important maritime chokepoint in global energy trade. Approximately 20% of globally traded oil and a substantial share of LNG exports transit this narrow waterway linking the Persian Gulf to international markets.

Disruption scenarios range from temporary shipping delays to partial restrictions or complete closure. Even limited disruptions can have outsized effects due to the scale of volumes involved and the limited availability of alternative export routes. Some Gulf producers possess pipeline infrastructure bypassing the Strait, but these systems cannot fully replace maritime export capacity. Recent geopolitical tensions have dramatically increased risk perceptions surrounding the Strait. Reports indicate that military activity and infrastructure attacks have already reduced vessel traffic and driven shipping insurance premiums sharply higher. Freight rates for LNG carriers

The closure or severe disruption of the Strait would create cascading effects across global energy markets. Oil prices could surge dramatically, LNG markets would tighten sharply, and strategic reserves would likely be deployed by multiple governments. The economic consequences would extend far beyond the energy sector, affecting inflation, industrial production, and global trade.

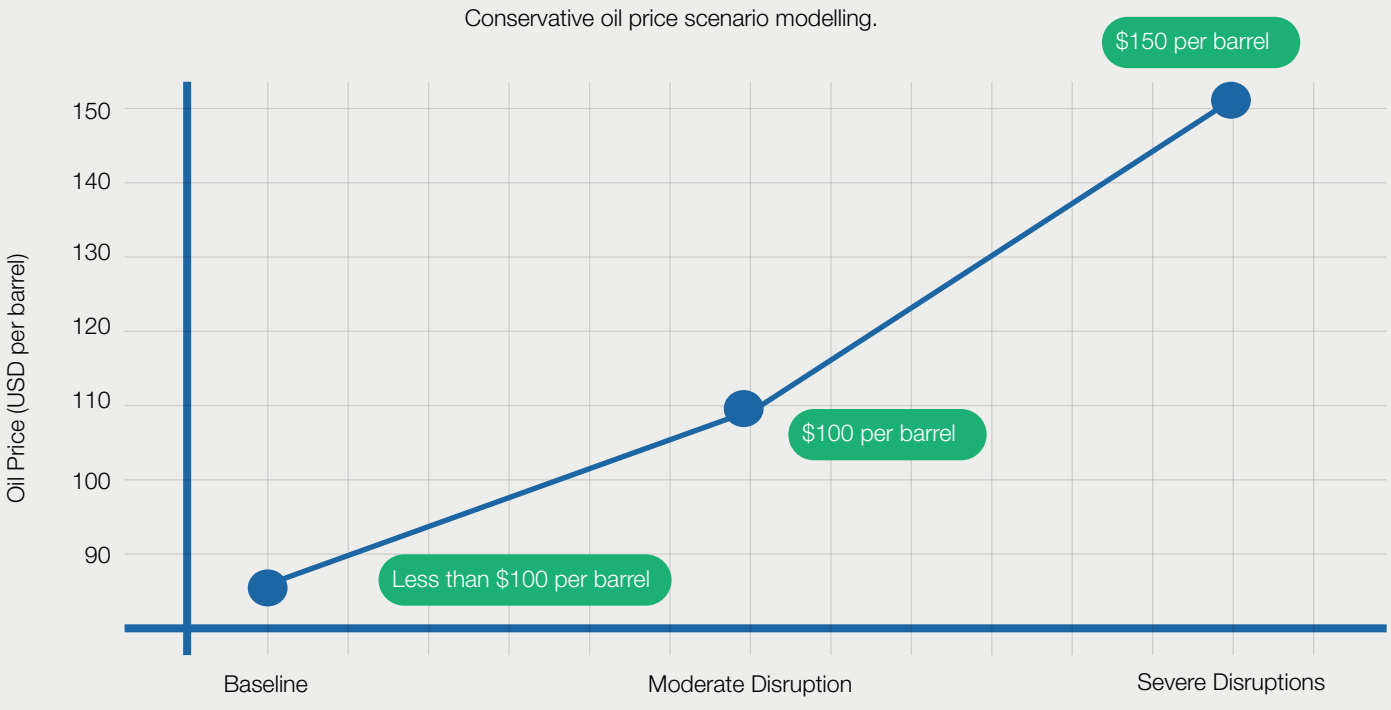
and crude tankers have surged to multi-year highs as shipping companies reassess operational risks. The closure or severe disruption of the Strait would create cascading effects across global energy markets. Oil prices could surge dramatically, LNG markets would tighten sharply, and strategic reserves would likely be deployed by multiple governments. The economic consequences would extend far beyond the energy sector, affecting inflation, industrial production, and global trade.

Energy market modelling suggests that disruptions to Gulf exports could trigger sharp oil price increases. Moderate disruptions could push prices above $100 per barrel, while severe disruptions involving prolonged shipping restrictions could push prices toward $150 per barrel. Brent already at $91.33 and WTI at $89.08 as of Friday the 6th of March 2026.

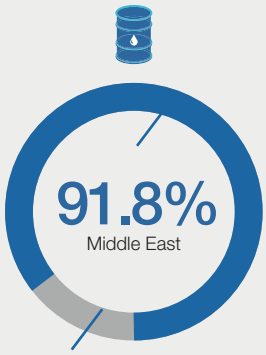
08 March 2026

Brent Oil $107.30

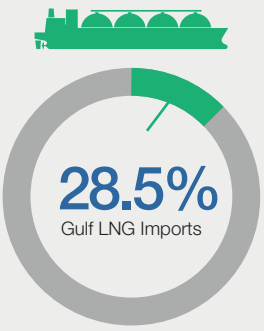
WTI $106.65



4. Regional Implications



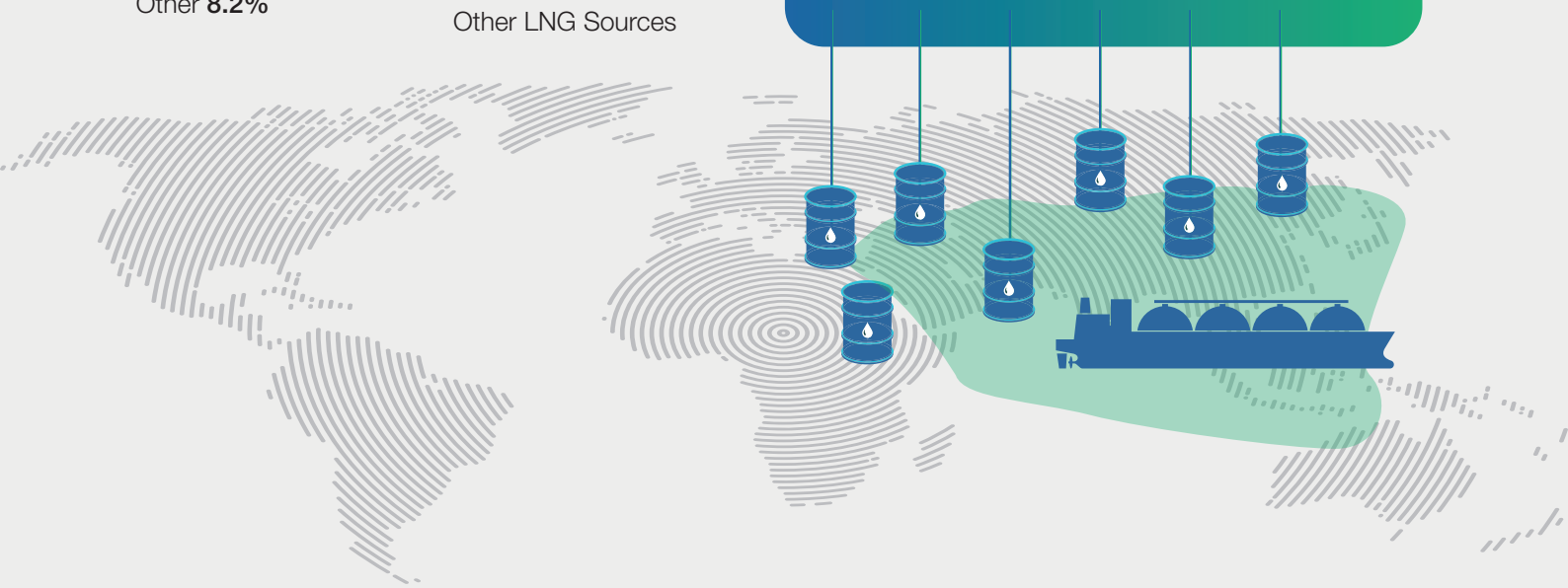
Other **8.2%**



71.5%
Other LNG Sources

90%

Dependent Rate of Countries such as Japan, South Korea, China, and India on their imported oil and LNG on the Middle East



Asia remains the most exposed region to Middle Eastern energy disruptions. Countries such as Japan, South Korea, China, and India depend heavily on imported oil and LNG from the Gulf. Japan in particular relies on the Middle East for more than 90% of its crude oil imports, making supply disruptions a critical national security concern.

Japan has historically addressed this vulnerability through extensive strategic stockpiling, supply diversification, and energy efficiency measures. Nevertheless, its heavy reliance on imported energy leaves it exposed to maritime disruptions. Strengthening LNG supply diversification, restarting nuclear generation where feasible, and expanding renewable energy capacity remain central to Japan's energy security strategy. In contrast, the United States has become significantly more resilient due to the shale revolution. The country has emerged as one of the world's largest oil and gas producers, dramatically reducing its dependence on Middle Eastern imports. Nonetheless, global price shocks still affect U.S. consumers and industries due to the integrated nature of global oil markets.

Middle Eastern producers themselves face complex risks. While they hold large reserves and production capacity, their export infrastructure is highly concentrated in coastal facilities vulnerable to military attacks or maritime disruptions. Export bottlenecks can force production shutdowns if storage capacity is exhausted.

5. LNG Market Disruptions and Force Majeure Impacts

The recent declaration of force majeure by QatarEnergy represents one of the most significant disruptions to the global LNG market in recent years. Qatar is responsible for roughly one-fifth of global LNG exports and supplies primarily Asian markets under long-term contracts. The shutdown of LNG production facilities following infrastructure attacks has forced the suspension of shipments and the issuance of force majeure notices to buyers. Restarting LNG facilities can take weeks or months due to the complex cryogenic processes involved and the need for gradual system restart procedures.

This disruption has triggered intense competition for alternative LNG supplies. European and Asian gas prices have surged, while shipping costs for LNG carriers have reached multi-year highs. Because most global LNG export facilities are already operating near capacity, replacement supply options are limited in the short term. The QatarEnergy disruption highlights the strategic importance of LNG supply diversification and flexible contracting structures. Countries relying heavily on a single supplier or region face elevated risks during geopolitical crises.

Qatar is responsible for roughly one-fifth of global LNG exports and supplies

the suspension of shipments and the issuance of force majeure notices to buyers. Restarting LNG facilities can take weeks or months due to the complex cryogenic processes involved and the need for gradual system restart procedures.

6. Risk Categories and Mitigation Strategies

Energy security risks can be categorised into geopolitical, infrastructure, market, and technological factors. Geopolitical conflicts affecting major exporting regions represent the most immediate threat to supply stability. Infrastructure vulnerabilities including pipelines, export terminals, and maritime routes also pose significant risks.

Market risks include price volatility, financial instability among energy companies, and supply-demand imbalances driven by economic cycles. Meanwhile, the global energy transition introduces additional uncertainty as investments shift between traditional hydrocarbons and emerging low-carbon technologies.

Mitigation strategies must therefore be multi-layered. Governments should strengthen strategic reserve frameworks, expand gas storage capacity, and improve emergency coordination mechanisms. Infrastructure resilience including diversified pipelines, LNG terminals, and shipping routes must also be prioritised.

Corporations should adopt advanced risk management strategies incorporating supply diversification, long-term contracting, and flexible logistics networks. Digital monitoring systems and predictive analytics can also improve resilience by identifying emerging disruptions early.

Finally, accelerating the energy transition remains one of the most effective long-term strategies for reducing vulnerability to fossil fuel supply shocks. Expanding renewable energy, electrification, and energy efficiency reduces dependence on imported hydrocarbons and enhances national energy independence.

Mitigation strategies must therefore be multi-layered. Governments should strengthen strategic reserve frameworks, expand gas storage capacity, and improve emergency coordination mechanisms. Infrastructure resilience including diversified pipelines, LNG terminals, and shipping routes must also be prioritised.

For Governments

Strengthen Strategic Reserves Framework

Increase oil and gas storage capacity

Adopt Advanced Risk Management

Diversify pipelines, LNG terminals and shipping routes

Improve Emergency Coordination

Enhance mechanisms for rapid crisis response

For Corporations

Adopt Advanced Risk Management

Focus on supply diversification and flexible contracts

Implement Digital Monitoring Systems

Use predictive analytics to detect emerging disruptions early

Conclusion

The global energy system remains deeply interconnected and vulnerable to geopolitical disruptions. The Strait of Hormuz continues to represent the most critical chokepoint in global energy trade, while disruptions to major suppliers such as Qatar can rapidly destabilise LNG markets. Strategic reserves remain essential tools for managing energy shocks, but they must be complemented by broader resilience strategies. Diversified supply chains, robust infrastructure, and coordinated international response mechanisms will be increasingly important in managing future disruptions.

Ultimately, the evolving energy transition will reshape global energy security dynamics. While hydrocarbons will remain vital in the near term, the expansion of renewable energy and electrification will gradually reduce exposure to geopolitical supply risks. Policymakers and industry leaders must therefore balance immediate security concerns with long-term structural transformation of the global energy system.

References

- Energy Insights, Energy security and strategic oil reserves: Lessons from the 1973 oil crisis.
- Energy Information Administration (EIA) (2026) International Energy Outlook.
- Energy Information Administration (EIA) (2026) World Oil Transit Chokepoints.
- Energy Information Administration (EIA) (2025) Short-Term Energy Outlook. U.S. Energy Information Administration. Available at: https://www.eia.gov/outlooks/steo/
- Energy Information Administration (EIA) (2026) Strategic Petroleum Reserve quick facts. U.S. Department of Energy. Available at: https://www.energy.gov/hgeo/opr/spr-quick-facts
- International Energy Forum (IEF) (2025) Comparative Analysis of Oil Market Reports.
- International Energy Agency (IEA) (2026) Gas Market Report Q1 2026.
- International Energy Agency (IEA) (2026) Oil Market Report: February 2026. Available at: https://www.iea.org/reports/oil-market-report-february-2026
- International Energy Agency (IEA) (2025) World Energy Outlook 2025.
- International Energy Agency (IEA) (2026) Energy Technology Perspectives 2026.
- International Energy Agency (IEA) (2026) Oil Market Report: February 2026. Available at: https://www.iea.org/reports/oil-market-report-february-2026
- Johnson, L. (2019) Technological advancements in energy production: A historical perspective. Energy Policy Review, 22(4), pp. 123-139.
- Ministry of Economy, Trade and Industry (METI) (2025) Japan's Strategic Energy Plan. Available at: https://www.meti.go.jp
- OPEC (2025) World Oil Outlook 2025.
- OPEC (2024) Annual Statistical Bulletin.
- Smith, J. (2020) The impact of the 1973 oil crisis on U.S. energy policy. Journal of Energy History, 15(2), pp. 45-67.
- Shell (2025) Shell LNG Outlook 2025.
- The Financial Times (2026) Shipping traffic collapses in the Strait of Hormuz amid regional conflict. Available at: https://www.ft.com

info@ciruuenergy.com
https://www.linkedin.com/company/ciruu-energy/
@CIRUUEnergy
www.ciruuenergy.com