

Fuel switching amid conflict: What it means for the clean energy transition

Summary

- The Middle East conflict has disrupted oil and gas markets and supply chains, complicating the outlook of the global clean energy transition which hinges on the duration of hostilities and degree of further energy market disruptions.
- If geopolitical tensions are prolonged alongside elevated oil and gas prices, countries will pivot to cost-competitive alternatives such as renewables and coal, or draw on existing stockpiles. The diversification of energy suppliers and sources remains critical to long-term energy security.

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Middle East conflict and rising oil and gas prices

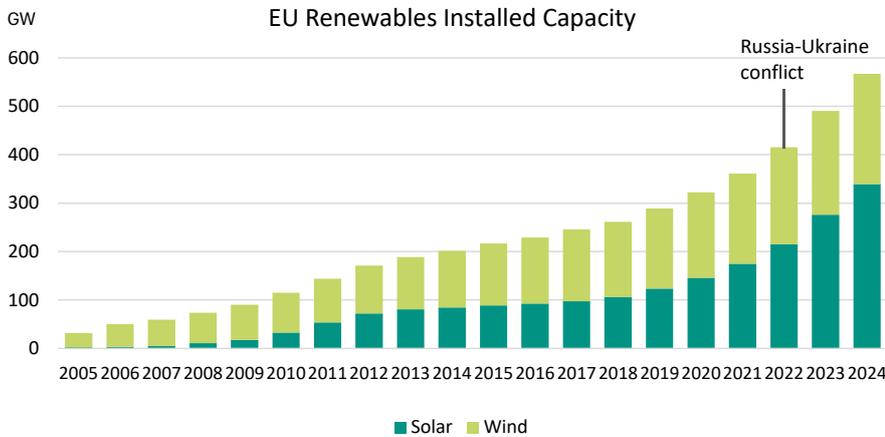
Escalating geopolitical tensions in the Middle East and the disruption to oil and gas markets are reshaping energy markets and disrupting supply chains, adding complexity to the clean energy transition. The Strait of Hormuz, which handles around a quarter of global seaborne oil trade and one fifth of LNG supply, has seen significant disruptions from the conflict as security risks escalate. The supply disruptions highlight risks to Asia, which are major consumers of oil imports from Middle Eastern producers. OCBC's report on *Impact of rising global oil prices: A look at Asia's economy and various asset classes* elaborates on the implications of oil price spikes on Asia's economy.

The impact of persistently higher oil and gas prices on the global clean energy transition is not straightforward, considering various factors in different markets including the price of alternative energy sources such as renewables or coal, availability of fuel subsidies, existing domestic oil stockpiles, inflationary pressures and commitment to climate goals.

Pivoting to more competitively priced energy sources including renewables

A sustained surge in global oil and gas prices would raise clear stagflation risks, although the presence of fuel subsidies in some countries can help buffer the impact e.g. Indonesia and Malaysia. Prolonged geopolitical tensions impacting oil and gas supply chains would pressure economies to seek alternative energy sources, if global oil and gas prices persist at elevated levels and the urgency of reducing reliance on fossil fuel imports increases.

In countries where clean energy sources are assessed to be more economically attractive in the current landscape, a pivot to clean energy based on a pragmatic response to volatile fossil fuel markets is possible. The EU, since the Russia-Ukraine conflict, has been increasingly reducing dependence on fossil fuel imports and increasing renewable energy deployment. The measures taken have reduced the volumes of imported Russian gas from 150 bcm in 2021 to 52 bcm in 2024, with the share of Russian gas imports falling from 45% to 19%. Many countries are also deploying clean energy solutions as these green alternatives become cheaper and more accessible. However, inflationary pressures could make it more expensive to deploy clean energy in an industry that requires large upfront investments and is sensitive to borrowing costs.



Source: BloombergNEF, OCBC Group Research

On the other hand, countries like China with large coal and crude reserves could fall back on these energy sources in the short term as a fast and cost-effective way to deal with oil and gas supply disruptions. Coal remains a crucial part of China’s energy landscape despite growing renewable energy capacity, with China’s coal output rising to a record 4.83 bn tons in 2025, up 1.2% from the previous year. In response to oil and gas supply challenges, Taiwan is considering raising production at coal-fired power plants and Italy could reactivate some coal-fired power plants. Reactivating coal-fired power plants to ensure energy security could represent a temporary setback in climate progress for some countries if an energy crisis ensues.

Urgency to diversify energy suppliers and sources to enhance energy security

Geopolitical conflicts and fossil fuel supply chain shocks reinforce the importance of increasing reliance on domestic energy sources, as well as diversifying energy suppliers and sources. This can reduce dependence on fossil fuel imports and mitigate energy disruption risks in the long term.

Countries like Indonesia plan to increase crude oil imports from the US to replace some supply from the Middle East, in efforts to diversify energy suppliers and mitigate geopolitical risks. Given the supply shocks and short lead time, the market may look to any supply response from the US shale industry. US shale oil production has been known for its flexibility in the past, with the ability to ramp up production more quickly than conventional sources. However, this will not be immediate, and incremental supply could require 6 to 12 months to bring additional supply onto the market.

The International Energy Agency (IEA) estimates that investing in renewable energy has allowed fossil fuel-importing nations to save an estimated US\$1.3 trn since 2010. Through increased renewable energy deployment, these countries avoided importing 700 mn tonnes of coal and 400 bcm of natural gas, which were particularly critical during the recent global energy crisis.

Singapore relies on imported natural gas for approximately 95% of its power generation needs, with limited domestic renewable energy sources as compared to other countries in the region. Of Singapore's natural gas imports, 57% is liquefied natural gas (LNG) from global exporters including the Middle East, while the remaining 43% is piped natural gas supplied by Malaysia and Indonesia. Electricity consumers in Singapore are cushioned from immediate price volatility due to the existing fixed-price retail contracts or regulated tariff set by SP group and retailers. Nonetheless, Singapore has the fiscal resources to mitigate the impact to consumers if the need arises. As a long-term measure to ensure a sustainable and secure energy future, Singapore has been advancing efforts to import low-carbon electricity from the region to diversify Singapore's energy mix and reduce reliance on imported natural gas. These efforts complement other initiatives to create more reliable supplies of secure and clean energy, such as advancing solar deployment, exploring deep geothermal energy potential and building capabilities for advanced nuclear energy technologies.

In addition to expanding strategic oil reserves, China plans to further accelerate efforts to meet incremental power demand with new clean energy sources while pushing for peak consumption of coal and oil, according to its latest five-year economic road map. Accelerating clean energy strategies not only hedges against fossil fuel volatility and mitigates future shocks, but also aligns with net-zero goals and accelerates the transition away from fossil fuels in the long term.

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