



Middle East and East Asia energy relations: geopolitical implications of a strategic cooperation

Fabio Indeo

Central Asia Analyst, NATO Defense College Foundation

The achievement of an energy security condition – namely to preserve regular energy supplies without disruptions – is one of the main targets for both energy suppliers and energy consumers (importer countries) in the global scenario. Middle East and East Asian countries share a relevant interdependence in order to preserve their energy security condition. As a matter of fact, Middle East oil and gas suppliers (mainly Saudi Arabia, Iraq, United Arab Emirates and Qatar) are key partners and exporters in satisfying the growing energy demand of East Asian countries such as China, Japan and South Korea. Hence, the availability of a regular energy supply represents a strategic key point of their energy security policies.

Given the combination of current high energy consumption, the large share of oil and gas within the national energy mix and the insufficient (or non-existent) domestic production, China, Japan and South Korea are exposed to a rising dependence on energy imports, creating a dangerous condition of vulnerability that negatively affects their energy security condition. China currently is the largest global energy consumer and the world's second largest oil consumer behind the United States. According to the U.S. Energy Information Administration (EIA), Japan is the third largest oil consumer in the world, while South Korea is the eighth largest energy consumer in the world.¹

Maritime routes represent the main supply lines for these Asian countries due to their geographic location. Japan and South Korea have no overland oil and gas pipelines, so they must rely completely on maritime routes, while China benefits also from overland routes. Consequently, the security of the sea lines of communication (SLOC) is a very important strategic goal.² Saudi Arabia, Iraq, United Arab Emirates and Kuwait are among the top world's oil net producers and exporters, and East Asian economies represent the main markets for Middle East oil exports.

As a matter of fact, 76% of oil exports from Middle East are delivered to Asian markets, accounting for 44% of Chinese total imports (which means nearly 4,5 million barrel of oil per day), while the dependence of Japan on oil imports from Middle East is higher, accounting for nearly 82%. A different case is represented by South Korea, because its dependence on Middle East's oil imports

U.S. Energy Information Administration, *China*, 2020,

https://www.eia.gov/international/analysis/country/CHN; U.S. Energy Information Administration, *Japan*, 2020, https://www.eia.gov/international/analysis/country/JPN; U.S. Energy Information Administration, *South Korea*, 2020,

https://www.eia.gov/international/analysis/country/KOR

² Indeo 2016, 213–4.

accounts for 69%, down from more than 80% in 2018, thanks to a successful strategy of imports' diversification.3

Concerning LNG (Liquefied Natural Gas) from the Middle East, Asian dependence on imports appears better balanced, even if Qatar plays a leading role, as the third largest supplier for Japan (after Australia and Malaysia), the second largest LNG supplier for China (that can also import natural gas through overland pipelines, from Myanmar, Central Asian countries and Russia) after Australia, and the largest LNG supplier for South Korea.

As mentioned above, 76% of the Middle East crude oil was delivered to Asian markets but, taking into consideration individual countries, the relevance of the Asian market is further emphasized: 95% of EAU oil exports go to Asia, as well as 80% of Kuwait oil exports, 65% of Saudi Arabia oil exports and 54% of oil exports.4

These data clearly point out the existent energy interdependence, also highlighting a condition of mutual vulnerability, due also to the sensitive maritime chokepoints of Hormuz and Malacca, where colliding geopolitical interests and strategic issues could affect the global energy transit, posing serious geopolitical concerns for the energy security condition of Middle East and East Asian countries.

The Strait of Malacca (the main passage between the Indian Ocean and the Pacific Ocean) and the Strait of Hormuz (connecting the Persian Gulf with the Indian Ocean) are the world's most important strategic chokepoints by volume of oil transit. The Strait of Malacca is an energy gateway with a daily transit by 16 million barrels and by LNG tankers from Qatar and other Middle Eastern producers.⁵ The Strait of Hormuz is the world's most important chokepoint with an oil flow of 21 million barrels per day, that represents about 30% of all seaborne traded oil, while it is also crossed by 25% of the global liquefied natural gas trade.⁶

https://www.eia.gov/international/analysis/country/KOR

U.S. Energy Information Administration, South Korea, 2020,

US Energy Information Administration, United Arab Emirates, 2020, https://www.eia.gov/international/analysis/country/ARE; US Energy Information Administration, Kuwait, 2016,

https://www.eia.gov/international/analysis/country/KWT; US Energy Information Administration, Iraq, 2021, https://nnw.eia.gov/international/analysis/country/IRQ; US Energy Information Administration, Saudi Arabia, 2017, https://www.eia.gov/international/overview/country/SAU

U.S. Energy Information Administration, World Oil Transit Chokepoints, 2017, https://www.eia.gov/international/analysis/special-topics/World Oil Transit Chokepoints

U.S. Energy Information Administration, The Strait of Hormuz is the world's most important oil transit chokepoint 2019, https://www.eia.gov/todayinenergy/detail.php?id=39932

By definition, chokepoints lack completely alternative maritime routes or may offer less convenient ones for international trade, so that political instability, terrorism, or geopolitical escalation could provoke interruptions in the flows with potentially global effects on prices, supplies and economic losses.

For instance, following a blockage or a disruption of the energy transit through Malacca chokepoint, oil and LNG tankers could be rerouted around the Indonesian archipelago, with additional shipping costs and rising energy prices. China in particular fears that international terrorists or hostile powers could seize control of the straits and block nearly all of China's energy imports. However, the main concern for China is linked to the potential geopolitical competition and rivalry with the USA: their active presence in the Asian Pacific waters could also lead the USA to enhance their strategic influence on Malacca strait, allegedly allowing them to check and contain the rise of China and control the flow of energy.⁷

The potential closure of Hormuz strait is a scenario often envisaged, but never experienced, while since 1984 (First Gulf War or Iran-Iraq war) ships have been attacked or damaged during wars or serious crises in the area with immediate repercussions on markets and prices, but not substantially on supplies. This is of course a potential vulnerability that compounds specific infrastructural weak spots in some countries (e.g., the Abgaiq refinery attacked by drones).⁸

Only Saudi Arabia and United Arab Emirates have realized alternative corridors of export, bypassing Hormuz, while Kuwait, Iran and Qatar (for both oil and mainly LQNG exports) are totally dependent on the route crossing the Hormuz strait. The case of Iraq is different, because regional and domestic instability currently hamper the implementation of the existing northward territorial routes of oil exports.

The Petroline, also known as the East–West Pipeline, allows Saudi Arabia to deliver up to 50% of its total oil exports to the Red Sea, bypassing Hormuz. However, even if the total nominal capacity of this pipeline is 5 million b/d, in 2018 only 2.1 million b/d were shipped through this route. In

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S. Tata, "Deconstructing China's Energy Security Strategy", The Diplomat, January 14, 2017; F. Indeo, "The Vulnerability of Maritime Energy Routes and Chinese Energy Security: Hormuz and Malacca Chokepoints Dilemmas", in A. Beltran (Ed.), Oil Routes, Peter Lang Editions, Brussels, 2016, pp. 312-314

T.S. Warrick, What the Abqaiq attack should teach us about critical infrastructure, The Atlantic Council, September 18, 2019, https://www.atlanticcouncil.org/blogs/menasource/what-the-abqaiq-attack-should-teach-us-about-critical-infrastructure/.

U.S. Energy Information Administration, The Strait of Hormuz is the world's most important oil transit chokepoint 2019

addition to its limited capacity, Petroline was conceived to transport only Saudi Arabian oil: consequently, other Middle East suppliers like Kuwait (the second largest oil supplier for South Korea), Iraq, and Qatar will be not able to deliver their oil production to the markets in the case of a Hormuz blockage.

However, before reaching Asian markets these Saudi oil exports - delivered through an alternative route which avoid the transit through Hormuz - have to cross another vulnerable chokepoint, Bab el Mandeb (located between Yemen, Djibouti, and Eritrea), frequently affected by attacks of Somali piracy and at present severely threatened by the political instability in Yemen. The case of the hijacked Sirius Star oil tanker in 2008 shows concretely how dangerous this energy route can be. In 2018, after several attacks on oil facilities and tankers along the Red Sea, Saudi Aramco energy company decided to temporarily suspend its oil shipments through Bab el Mandeb.¹⁰

The Abu Dhabi Crude Oil Pipeline – which crosses EAU territory delivering oil to the Fujairah port in the Gulf of Oman – is the alternative energy route promoted by the UAE, with a nominal capacity of 1,5 million b/d, which represents more than half of UAE's total net oil exports. However, this pipeline currently delivers only 600.000 b/d, one third of its nominal capacity.¹¹

These two alternative export routes circumventing Hormuz will not be adequate in the case of blockage of the strait, due to the limited transport capacity of these routes which could nominally divert only one third of the total Middle East oil exports from the Hormuz transit. However, the situation is different in terms of real throughput, because only 2,7 million barrels of oil per day of 21 million b/d, means that only 13,5% of total oil exports from Middle East could be available, highlighting a dangerous geopolitical vulnerability for the energy market in the case of blockage of this strategic energy bottleneck.¹²

Nevertheless, it is necessary to highlight that Hormuz blockage represents a kind of case-study, because the transit through the strait has never been completely halted also during periods of open conflicts such as Iran-Iraq war or the Gulf War in the 1990's.

N. Ghoneim, "Saudi halts oil shipments through key strait after Houthi attacks." Al Jazeera. July 30, 2018, https://www.aljazeera.com/news/2018/07/saudi-suspends-oil-shipments-key-strait-houthi-attacks-180730141832127.html

U.S. Energy Information Administration, The Strait of Hormuz is the world's most important oil transit chokepoint 2019
Ibid.

Conclusion

Given the dangerous condition of vulnerability and the potential threats to their energy security condition, China, Japan and South Korea have wisely undertaken strategies of diversification aiming to diversify oil and gas suppliers, trying to address their unbalanced dependence on energy imports from the Middle East. The recent announcement of China, Japan and South Korea to shift their domestic energy system to achieve net-zero emissions appears an ambitious target, for the difficulty of replacing oil with renewable sources in their energy mix.

Consequently, Middle East countries will be able to preserve their strategic role as East Asia's main oil supplier also into the next decades. At the same time, Middle East countries need to reduce their dependence on oil exports, increasing the production of clean electricity to meet the growing domestic demand. In order to achieve the energy security's common goal, Middle East suppliers and East Asia countries have to work together to provide security along the sea lines of communication, weakening all the vulnerability factors. In recent years Japan has considered sending its navy assets to the Persian Gulf to increase stability and to protect its own energy interests, while in December 2019 China held joint naval drills with Iran and Russia with the intention of bolstering the security of international maritime trade.

Fabio Indeo

PhD holder in Geopolitics at the University of Trieste and non-resident fellow at the Centre for Energy Governance and Security (EGS South Korea).

