

## **Today in Energy**

IN-DEPTH ANALYSIS

February 1, 2024

## Red Sea attacks increase shipping times and freight rates

Selected commercial shipping routes, as of January 2024 Suez Cana Arabian Sea Rotterdam Bab el-Mandeb 19 days Chiba U.S. 44 days Arabian **Gulf Coast** Suez Canal Sea Panama Canal Bab el-Mandeb 27 days Cape of Good Hope

Data source: U.S. Energy Information Administration using calculations from Vortexa

Note: Voyage time is calculated for laden Suezmax tankers traveling at 14 knots without extended chokepoint delays.

After Yemen-based Houthi militia attacks on commercial ships transiting the Red Sea started in November 2023, some vessels began opting to avoid the Bab el-Mandeb chokepoint—a narrow strait that borders the Yemeni coast and is the southern entrance to the Red Sea. Instead, they're choosing to take longer, more costly routes around the tip of Africa.

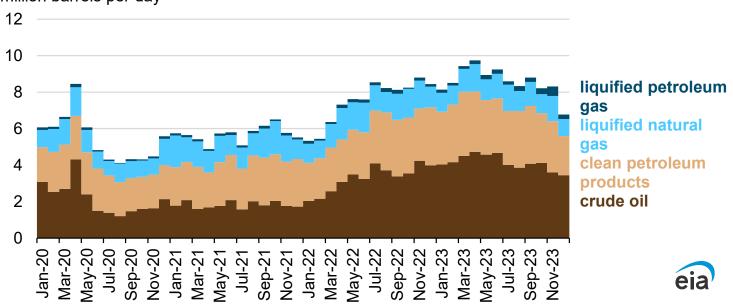
Ships transiting between Europe and Asia via the Suez Canal must pass through the Bab el-Mandeb Strait, which connects the Red Sea to the Gulf of Aden. The Bab el-Mandeb Strait is an important oil and natural gas chokepoint , accounting for 12% of seaborne oil trade and 8% of liquefied natural gas (LNG) trade in the first half of 2023. Major oil and natural gas companies that are avoiding the Red Sea include Equinor, which operates mostly natural gas carriers, and bp, which operates both oil and natural gas carriers. As of January 23, 2024, other major energy companies pausing Red Sea transits include Euronav , QatarEnergy , Torm, Shell, and Reliance .

Vessels that do not pass through the Suez Canal via the Bab el-Mandeb Strait and Red Sea can go around southern Africa via the Cape of Good Hope, but that route can add significant time to the voyage, depending on the ship's origin and its destination. A typical voyage from the Persian Gulf to the Amsterdam-Rotterdam-Antwerp petroleum trading hub (ARA) via the Suez Canal takes

19 days. If the ship takes the Cape of Good Hope route, it takes nearly 35 days to reach the ARA. For products leaving the U.S. Gulf Coast and heading toward Asia, vessels typically pass through the Panama Canal, which is nearly a month-long trip. Due to the ongoing drought and restrictions 2 at the Panama Canal, more Very Large Gas Carriers 2 (VLGCs), which primarily carry propane and butane, started going through the Suez Canal. Now some of these VLGCs are going around the Cape of Good Hope. A journey from the U.S. Gulf Coast to Chiba in Japan through the Suez Canal adds about 17 days and one through the Cape of Good Hope adds about 21 days, compared with going through the Panama Canal.

Longer routes put upward pressure on freight rates because of fuel costs and fewer available ships. A VLGC, for example, consumes about \$30,000 to \$35,000 worth of fuel per day if using high-sulfur bunker fuel at average 2023 prices. In addition to adding to fuel costs, a longer voyage requires more ships to maintain the same delivery schedule, and fewer available ships contribute to higher tanker rates and costs.

## Energy product flows through the Bab el-Mandeb Strait (2020–2023) million barrels per day

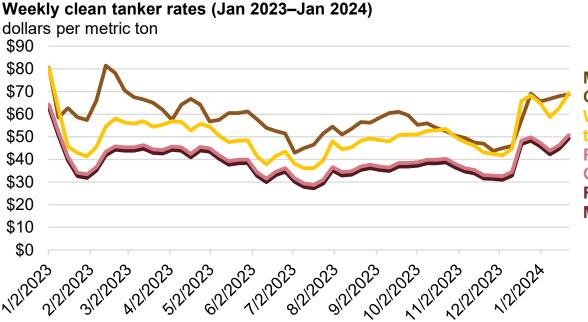


Data source: Vortexa

**Note:** Clean petroleum products include gasoline, distillate, diesel, jet fuel, naphtha, and biodiesel.

After the attacks began in November, flows of oil, refined products, and natural gas passing through the Bab el-Mandeb Strait slowed. About 18% less crude oil flowed through the Bab el-Mandeb in December than on average from January to November 2023. Most crude oil trade that goes through the Bab el-Mandeb Strait leaves Russia and Iraq en route to Asia and the Mediterranean, respectively. Clean petroleum product flows through the Bab el-Mandeb Strait were 30% lower in December than the rest of 2023. The majority of petroleum product trade leaves Saudi Arabia and India bound for Europe and leaves Russia bound for Asia.

In December, 24% less LNG and 1% more liquefied petroleum gas (LPG) were traded globally compared with the rest of 2023. Vessel restrictions at the Panama Canal due to a drought are causing more VLGCs leaving from the United States to head east toward either the Suez Canal or the Cape of Good Hope. LPG flows through the Bab el-Mandeb increased by 59% in 2023 compared with 2022 because water conservation efforts at the Panama Canal began in January 2023, causing delays and higher costs for VLGCs. The Combined Maritime Forces, a partnership of representing 39 nations, warned ships of to avoid the Bab el-Mandeb Strait on January 12, which will likely reduce passages through January 2024.





Mideast Gulf to UK
Continent
West Coast India
to UK Continent
Red Sea to UK
Continent
Red Sea to
Mediterranean

Data source: Argus Freight

**Note:** Rates are for long-range 1 tankers, except the Mideast Gulf to UK Continent rates, which are for medium-range tankers.

Clean petroleum product tanker rates for routes that cross the Bab el-Mandeb Strait and Suez Canal increased in December 2023 because of the ongoing conflict in the Red Sea. Because routes going through the Red Sea have elevated risk insurance premiums \$\mathbb{C}\$, these costs are passed on to tanker rates. For the four tanker rates that pass through the Red Sea, the average increase was 20% in December compared with November, according to Argus Freight. Long-range 1 \$\mathbb{C}\$ tankers traveling from the western coast of India to the UK Continent increased the most (23%), and tankers traveling from the Mideast Gulf to the UK Continent increased the least (16%). Rates for dirty tankers, which mostly transport crude oil, have been relatively unchanged from the elevated prices in November. Brent crude oil spot prices \$\mathbb{C}\$ for the week ending November 17, 2023, the week before attacks on ships in the Red Sea began, were \$82 per barrel (b). Since then, prices have traded in range, and they closed at \$79/b as of January 18, 2024.

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