



TANKERS

STRAIT OF MALACCA

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A key agreement was signed last week between Malaysian, Indonesian and Saudi Arabian firms to build a pipeline that will by-pass the Strait of Malacca. The pipeline is intended to divert 20% of oil through Malaysia's northern states of Kedah, Perak and Kelantan, across Malaysian mainland. The estimated cost of the project is US \$ 7 billion and completion is expected in 2014. The 2 mbpd pipeline will have a 60 million barrel storage capacity and is planned to be partially operational by 2011 and upgraded after four or five years to 6 mbpd of throughput and 180 million barrels of storage capacity.

From an economic and strategic perspective the Strait of Malacca is one of the most important shipping lanes in the world, an equivalent of the Suez Canal, or the Panama Canal. The strait forms the main ship passageway between the Indian Ocean and the Pacific Ocean; it stretches 500 miles (800 kilometers) in length and is 1.5 (2.4 kilometers) wide at its narrowest point, creating a substantial traffic bottleneck.

Over 50% of the oil exported from the Arabian Gulf, the world's largest export region, transits the strait. Approximately 62% of this oil is transported on VLCCs and 70% of them are destined for China, Japan, or South Korea. Presently 80% of Chinese oil goes through the strait. As Chinese oil consumption increases (expected 28% increase by 2011) the demand for more VLCCs from the AG will increase, thereby increasing traffic density in the strait.



With increasing volumes of tanker traffic and other vessels with valuable and explosive cargoes, the security of the strait is an increasing concern. The Strait of Malacca is known for piracy attacks. In 2004 it accounted for 40% of attacks reported worldwide. Since then the number is on a downslide with 79 reported attacks in 2005 and 50 in 2006. This is mostly due to increased police patrols and joint regional governmental efforts to protect this vital passage to world trade.

Increasing concern is also shifting from piracy to terrorists. The narrowest point of the Strait of Malacca is the Phillips Channel, near Singapore, where the strait shrinks to 1.5 nautical miles. The channel is 25 meters deep at that point and sinking of a large tanker at this critical spot would certainly close the passageway for some time. In that case, what would happen to AG/East oil supply?

Vessels would likely be diverted through the Bali Sea resulting in an approximately 1,000 nautical mile longer leg in one direction on the AG/Japan VLCC route, adding approximately 5 days to the voyage on a round trip basis. Any short term disruption would likely have a positive effect on freight rates. A closure of the strait would also affect demand; AG/East one way demand for VLCCs increases by 10 vessels due to the longer haul.

Looking forward, will the building of a 2 million barrel a day pipeline to by-pass the Malacca Straits make a significant difference to bottlenecks especially taking into consideration rising oil demand in the East?

We calculate that taking out 2 million barrels a day on the AG / East route equates to 40 VLCCs on a round trip basis. Projecting annual VLCC demand out to 2011 using crude oil demand estimates from the US EIA long term forecast and assuming that the VLCC share of seaborne transport demand continues to increase at the expense of the other tanker sectors* indicates that two way VLCC demand on the AG / East route will be in the region of 178 vessels by this time. Forty vessels is a significant portion of this but is unlikely to dramatically reduce congestion in the region.

* We have observed this trend historically