

Refining, Supply & Aviation Restructuring of the Refining, Supply and Trading Group

In February 2008, SPC restructured the Refining, Supply & Trading Group into the Refining, Supply & Aviation (RSA) Group and Crude & Products Trading (CPT) Group. RSA comprises Refining and Supply Operations, Aviation Sales, and Pulau Sebarok Terminal Operations. The restructuring provided focus for distinct business operations that require specific competencies and skill sets.

As competition in the refining sector intensified during the year, SPC established a dedicated RSA team to address the challenges.

Market Environment

Crudes and products prices experienced severe volatility in 2008. Oil prices increased sharply during the first half-year and the price of the West Texas Intermediate (WTI) crude reached an unprecedented high of US\$147.27 per barrel in July. Oil prices, however, retreated rapidly with the WTI falling to US\$44.60 per barrel by year end as the global financial crisis impacted consumer demand and GDP growth worldwide.

Oil demand for the first half of 2008 proved to be relatively price inelastic, mainly supported by subsidies in countries such as China, India and Indonesia. Demand from these countries accounted significantly for the global oil demand growth for the first half-year. The relative oil price inelasticity coupled with the depreciation of the US dollar, resulted in a rapid vertical climb in prices for the first six months. However, the fast deteriorating global economy exacerbated the fall in prices in the second half-year. Oil prices fell by an average of 68% in the second half of 2008.

2008 global oil demand was 85.8 million barrels per day (bpd), a 0.2 million bpd decrease from 2007. The Asia-Pacific region accounted for about 30% of the total global demand, with an incremental growth of 0.2 million bpd over 2007. Demand growth in the first half-year was driven mainly by China's preparation for the Beijing Olympics and India's growing appetite for energy. Consumption of energy in the Middle East also grew as high oil prices sparked a construction boom across the region.



In line with its commitment towards a clean and green environment, SRC is upgrading its ultra-low sulphur diesel production capability and volume.

Operations Review Downstream

Refining margins were relatively strong in the first half of the year with the Group achieving an average refining margin of about US\$10.00 per barrel. This was due to higher product demand and tight refining capacities in the region. Refining margins were supported by middle distillate demand from China as a result of the Sichuan earthquake relief efforts and the preparation for the Beijing Olympics.

In the second half of 2008, refined product prices plunged on the back of the global financial crisis. Demand for distillate products in China eased after the Beijing Olympics. The shutdown of many Chinese manufacturing plants due to low consumer demand from the US led to further decline. Weak demand from the rest of the region led to poorer refining margins in the second half-year. As a result, the Group achieved an average refining margin of about US\$5.50 per barrel for the year.

Refining and Supply Operations The Singapore Refining Company (SRC)

is capable of processing a wide variety of crudes from light sweet to heavy sour. SPC's share of the crude throughput totalled 49.7 million barrels (bbls) in 2008, consisting predominantly of heavy and sour crudes. The refinery uses rigorous planning tools for crude selection. The planning focuses on optimising utilisation and maximising profit by considering the inherent operating constraints while ensuring a safe operating environment. In 2008, the refinery improved its processing capability by adding facilities to handle difficult crudes to reduce its overall feedstock cost.

During the year, the refinery achieved maximum utilisation of its crude distillation and upgrading units, and operated safely and reliably throughout the year. SRC achieved an average utilisation rate of about 95% for 2008. The refinery achieved 8 million man-hours without any loss time injury, the highest achievement to date. It also pursues excellence in safety performance by fully adopting an Injury and Incident Free culture.

The refinery's upgrading units such as the hydrocracker, catalytic reformer, visbreaker, vacuum distillation as well as other supporting auxiliary units were shut down for a scheduled maintenance programme in April and May 2008. Nearly 1,350 contract workers were engaged for the programme, which was completed safely and without any incident.

Increasing environmental concerns and the stricter specifications for transportation fuels require regional refiners to address the challenge to supply cleaner fuels. SPC responded quickly to this by initiating adequate measures and adopting market specifications to supply cleaner products.

In May 2007, SPC and its SRC partner announced an ultra-low sulphur diesel (ULSD) production project ahead of the regional cleaner fuel implementation timelines. Scheduled for completion by the end of the second quarter of 2009, this project will enhance SRC's existing ULSD production capability and volume.



SPC has built a solid reputation as a reliable and quality supplier with more than 30 years of aviation fuel sales experience.

This project is progressing on schedule, with detailed engineering and procurement work almost completed. Construction activity is progressing well with the new reactor installed in December 2008 and major equipment already on site.

In line with its commitment towards a clean and green environment, SPC will continue to evaluate projects to augment its product quality in tandem with market requirements. Many of these projects will be aimed at reducing emissions and energy consumption. At the same time, such projects should also enhance the overall reliability, integrity and safety of the refinery.

Aviation Sales

SPC markets and supplies aviation fuel to airlines at five international airports, namely Singapore, Hong Kong, Bangkok, Taiwan Taoyuan and Taiwan Kaohsiung. The Group has built a solid reputation as a reliable and quality supplier with more than 30 years of aviation fuel sales experience.

Jet fuel sales in Singapore accounted for the largest segment of the Group's aviation volume. The Singapore Changi Airport handled close to 40 million passengers and nearly 2 million airfreight movements in 2008. With the inauguration of Terminal 3 in January 2008, the airport now serves more than 80 international airlines flying to 180 cities worldwide. Growing in tandem with the Singapore Changi Airport as a key Asian aviation hub, SPC is well-placed to meet Singapore's aviation needs.

With the global economic slowdown, demand for air travel weakened in the second half of 2008. While airlines may scale back operations and review expansion plans, the aviation industry as a whole, is expected to retain its medium to long-term viability.

Pulau Sebarok Terminal Operations

The Company's storage terminal for petroleum products at Pulau Sebarok supports its marine bunker operations, distribution and trading business.

The 220,000 cubic metre terminal consists of 13 storage tanks and is equipped with a deepwater jetty for tankers up to 160,000 tonnes displacement. A smaller jetty for barges up to 10,000 tonnes displacement is also available for smaller cargo sizes. The terminal has a comprehensive laboratory, which has the SINGLAS (Singapore Laboratory Accreditation Scheme) accreditation, and a highly advanced automated Distributed Control System to provide quick turnaround for tanker and barge operations. In 2008, the terminal handled a product throughput of 2.2 million tonnes (2.3 million cubic metres).



SPC's offshore storage facility at Pulau Sebarok is capable of performing assurance tests round-the-clock.