

Singapore Marine Industry's Performance in 2010

OVERVIEW

Total Turnover

Year 2010 closed on a mixed but more optimistic note than the preceding year, amidst an uneven global economic recovery. For the Singapore marine and offshore industry, the year in review started in a cloud of uncertainty given the slow and weak global recovery, only to face further setback with the blowout of the Macondo well in the US Gulf of Mexico. The massive oil spill in the Gulf of Mexico impacted the offshore industry in 2010. The incident led to the subsequent ban on deepwater drilling in the Gulf of Mexico, bringing exploration and development work in one of the world's largest deepwater markets to a standstill.

However, the year ended with a strong rebound for the offshore industry with the early lifting of the moratorium in October 2010, resulting in a positive effect on utilisation and day rates for deepwater rigs. The stringent safety regulations imposed on offshore rigs led to a resurgence of interest in high-specification jack-up rigs which Singapore is well poised to provide given its track record in this area. The two deepwater semi-submersible rigs deployed in response to the Macondo well's blowout – *Development Driller II* and *Development Driller III* – were built in Singapore by Jurong Shipyard and Keppel FELS respectively.

The last quarter of 2010 saw several new rig orders clinched by local shipyards. The healthy performance of the local marine and offshore industry in 2010 was due largely to the successful completion and delivery of projects secured in previous years. Total revenue for the industry in 2010 saw a dip to S\$13.47 billion from the record high total turnover of S\$16.83 billion in 2009. The reduction of S\$3.36 billion represented a 19.96% decrease in total turnover.

The decline in total turnover is attributed to the lower volume of work in the industry in 2010 compared to the boom and post-crisis peak years of 2008 and part of 2009. Fewer projects were completed and delivered during the year. All three sectors – offshore, ship repair and conversion as well as shipbuilding – registered a decline in output in 2010 as compared to 2009.

In the last two years, the offshore sector has overtaken the ship repair sector to become the largest contributor to the industry's output. In 2010, the offshore sector continued its run as the industry's leading sector with its contribution of S\$8,082 million to the total industry's turnover. This represented 60% of the industry's total turnover.

The ship repair and conversion sector is supported by a strong and comprehensive ecosystem of shipyards, marine companies and contractors. The sector generated S\$4,849 million in revenue in 2010. It contributed 36% to the total industry's output. Shipbuilding is the smallest contributor in the industry. Its output of S\$539 million accounted for 4% of the total turnover.

With lower volume of work in 2010, fewer workers were employed as compared with 2009. Statistics from the Ministry of Manpower (MOM) and Workplace Safety and Health (WSH) Council showed a decline in the industry's total employment by 8.64% to 106,800 workers in 2010 compared to 2009. This was 10,100 workers fewer than the 116,900 workers employed in 2009 and a marked decline from the high of 141,000 workers employed in 2008.

Over the years, key industry players have made strong commitments and significant efforts to improve WSH in the industry. Shipyards and marine companies including contractors were encouraged since 2009 to go on board the national bizSAFE accreditation programme to accept safety as a core value and make WSH an integral part of businesses. The collective and concerted efforts of industry members through ASMI, coupled with collaborations with MOM and WSH Council on WSH programmes, have resulted in improvement over the past years.

In 2010, the industry made further improvement in its safety performance and continued the downward trend in the number of accidents recorded. A total of 395 accidents were recorded in the marine and offshore industry, 18.9% lower compared to the 487 accidents reported in 2009. There were six fatalities in the shipyards and anchorages during the year, a significant drop of 53.8% compared to the 13 fatalities reported in 2009. The industry's fatality rate also

declined from 11.1 per 100,000 persons employed in 2009 to 5.6 per 100,000 persons employed in 2010.

Statistics from the WSH Council showed the industry's Accident Frequency Rate (AFR) at 1.3 accidents per million man-hours worked in 2010. This is slightly lower than the AFR of 1.4 accidents per million man-hours worked reported in 2009. The Accident Severity Rate (ASR) for 2010 is also lower at 146 man-days lost per million man-hours worked. This is a decline of 46.7% from the ASR of 274 man-days lost per million man-hours worked recorded in 2009.

Sectoral Performances

Ship Repair & Conversion Sector

2010 was a challenging year for the ship repair and conversion sector. Although there were more ship calls in Singapore for repairs, the sector generated a lower turnover. The output of S\$4,849 million in 2010 was S\$1,884 million or 28% lower than the S\$6,733 million achieved in 2009. The sector's contribution of 36% to the industry's turnover represented a decline of 4% from the 40% share in 2009.

Port statistics from the Maritime and Port Authority of Singapore (MPA) showed an increase in the number of vessels calling in Singapore for ship repair. A total of 8,631 vessels called in Singapore for repair and maintenance during 2010. This was 1,431 more vessels compared to 7,200 in 2009, representing an increase of 19.9%.

Total gross tonnage of vessels called in Singapore for repairs in 2010 saw a decrease as compared to 2009. The total gross tonnage of 34.59 million grt in 2010 was 8.56% lower than the 37.83 million grt recorded in 2009.

The type of vessels that called in Singapore for repair, upgrading and maintenance included tankers, drillships, FPSOs, passenger ships, LNG and LPG gas carriers, containerships and bulk carriers. Seven FPSO (Floating Production, Storage and Offloading), FPDSO (Floating Production, Drilling, Storage and Offloading) and FSRU (Floating Storage and Regasification Unit) projects were carried out in 2010.

The major shipyards' strategy of establishing alliance partnerships with long term-customers through the signing of fleet agreements or evergreen or favoured customer contracts have helped to maintain a steady flow of ship repair work into Singapore.

Shipbuilding Sector

Shipbuilding is the smallest sector in the industry as Singapore remains a niche player in the global shipbuilding market. Its strength is in the production of customised and specialised vessels such as offshore support vessel and anchor handling and supply tugs.

In 2010, shipbuilding activities brought in a total turnover of S\$539 million. This was a decline of S\$303 million from the turnover of \$842 million earned in 2009. The sector accounted for 4% of the total turnover in 2010 as against its share of 5% in 2009.

A total of 78 vessels were launched in 2010. This was a significant drop of 38.6% or 49 vessels fewer than the 127 vessels launched in 2009. However, the combined gross tonnage of the vessels launched was higher. In 2010, the total gross tonnage of the vessels launched was 246,638 grt. This was 9.07% or 20,507 grt higher than the total gross tonnage of 226,131 grt for the vessels launched in 2009.

Most of the vessels launched in 2010 were barges, offshore supply and support vessels, workboats, and tugs. Other types of vessels launched included motor launches, yachts, oil tankers, dredgers and passenger ferry boats.

Offshore Sector

The offshore sector includes the repair, upgrade and construction of all types of drilling rigs and offshore platforms. This sector has been the largest contributor to the industry's turnover since 2008. The total turnover of S\$8,082 million in 2010 was S\$1,176 million or 12.7% lower than the turnover of S\$9,258 million in 2009. However, its share to total industry output increased from 55% to 60% in 2010.

As the world's leading builder of jack-up and semi-submersible rigs, Singapore delivered a total of 19 rigs in 2010. This included ten jack-up rigs, eight semi-submersible rigs and one offshore platform.

Industry Outlook

The global economy has recovered and improved steadily in the past year providing support for long-term energy demand. For the Singapore marine and offshore industry, the overall outlook is optimistic as the long-term fundamentals driving the industry, such as increased demand for oil, increased exploration and production spending budgets and firm oil prices; remain intact.

For the oil and gas industry, prospects are positive given the high levels of global oil demand and as oil companies reported their intention to increase their exploration and production budgets. According to the Barclays Capital Survey, global spending in exploration and production is expected to rise 11% in 2011, with oil prices expected to sustain above US\$80 per barrel.

The International Energy Agency anticipated growth in global energy demand to increase by 36% from 2008 to 2035, with oil as the leading fuel in the energy mix. Global demand for oil is estimated to rise by 89.9 million bpd in 2011 and to reach 99 million barrels per day by 2035, which is 15 million barrels per day more compared with 2009.

The jack-up rig market is experiencing a healthy recovery, particularly in the demand for high-end jack-ups. This segment is seeing the initial recovery stage of a rig-building cycle driven by replacement demand for existing jack-ups. The ageing jack-up rig fleet with an average age of more than 20 years coupled with the increased bifurcation in utilisation rates and day rates of older jack-ups and newer premium jack-ups, is expected to spur oil companies to demand for newer and more efficient higher-specification rigs. Most of the existing installed rigs and those built in the mid-80s to late-90s are low specification units.

Offshore deepwater prospects have also brightened with the lifting of the moratorium imposed in the Gulf of Mexico and the resumption in the issuing of deepwater drilling permits in the Gulf of Mexico. With greater clarity of the stricter regulations arising from the Macondo incident, the deepwater market is expected to see increasing demand for upgrades and replacements. The focus of oil companies will be on technically superior dynamically positioned deepwater rigs.

Deepwater drilling activities for the rest of the world are expected to increase, with strong growth in demand for development drilling in Brazil and West Africa, the main drivers in the market. Activity growth is also expected from countries such as East Africa, Southeast Asia, Greenland and Australia. Douglas-Westwood has forecasted a growth of 79% in deepwater sector's capital expenditure to US\$206 billion for the period 2011 to 2015, and with Africa and Latin American developments driving the forecast growth.

Pareto Securities forecasted the demand for Floating Production Systems (FPS) to accelerate over the next five years as exploration efforts move into deepwater fields. Douglas-Westwood predicted a surge in FPS installations, estimating that the world will need more than 100 FPS to be installed between 2010 and 2014. Hence, prospects in the FPSO market remains strong as exploration yields more deepwater fields and FPSOs continue to be the preferred solution for production in these fields.

The ship repair market is expected to improve with continued demand for bigger docks and a steady base-load from the shipyards' alliance partners and long-term and regular customers. In shipbuilding, strong oil prices and attractive charter rates are expected to drive new orders for more technically advanced offshore support vessels.

The returning market confidence in offshore has resulted in a robust rebound in new rig orders from the last quarter of 2010. The strong momentum has maintained into 2011 and Singapore is seeing a stream of new orders flowing into its shipyards. Singapore's ability to offer a full spectrum of product line and proprietary designs, from shallow-water to deep-water drilling rigs, shallow water production platforms to deep-water production units, puts her in good stead to ride the next offshore wave.

The industry's total net order book, not including ship repair contracts, has exceeded S\$12.7 billion, with projects' completion and deliveries stretching into 2014. Many of these orders are for new high specification jack-up rigs and FPSO projects