



Ministry of Transportation
and Telecommunications



وزارة المواصلات والاتصالات

Bahrain Ports Performance Report

2016

This annual performance report evaluates the operational performance of the Ports and Maritime Affairs of Bahrain, supported by graphs analysis. This report illustrates the annual results of 2016 in comparison to the years 2015.



1Khalifa Bin Salman Port (KBSP) Performance Commercial Figures:

1.1 Vessel Movement (Total Arrivals):

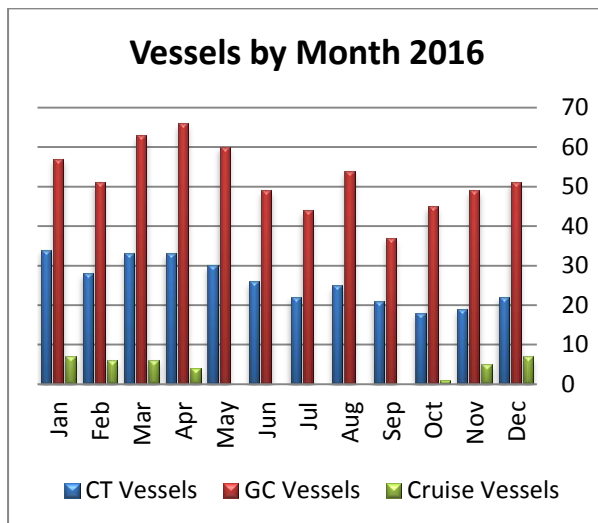
Ports and Maritime Affairs (PMA) is aware of the importance in serving commercial vessels efficiently and providing all services required on time. Thus, it is in APM Terminal's (APMT) interest to serve the vessels professionally in order to satisfy clients and ship owners.

Total number of vessels berthing at KBSP for the year 2016 has reached 973 resulting in a 2% decrease of total number of vessels calling KBSP in comparison to last year's 1100 vessels.

Table 1

Vessel Type	2015	2016
Container	352	311
General Cargo	719	626
Cruise	32	36
Total	1100	973

Figure 1



- In 2016, the number of general cargo vessels calling to KBSP has surpassed container vessels, reaching its peak in April with 66 vessels. Whereas, February recorded the lowest with 51 vessels.
- In 2016, container vessels have reached its peak in January with 34 container vessels calling KBSP. Whereas, October recorded the lowest with 18 vessels.
- In 2016, cruise vessels have grown 6% compared to 2015, reaching its peak in January with 7 cruise vessels calling KBSP. Whereas, October recorded the lowest with 1 vessel.

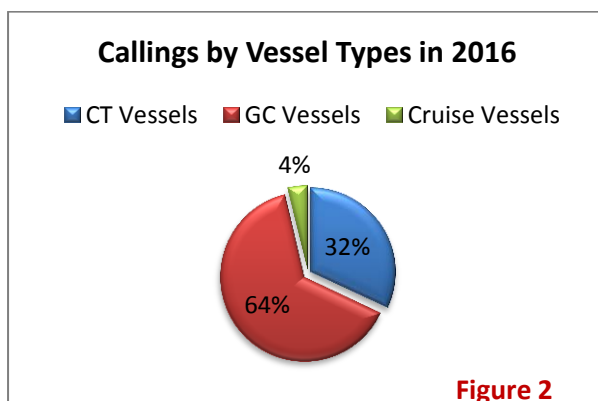


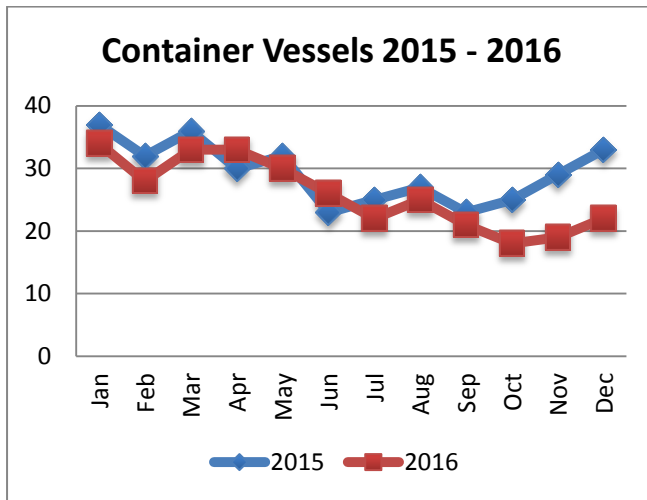
Figure 2

In reference to figure 2, it is evident that general cargo vessels are the majority of the total vessels calling KBSP in 2016. General cargo vessels make up 64% of the vessels calling KBSP, while container vessels make 32% and cruise ships make 4% out of a total of 973 vessels calling KBSP in 2016.



1.1.1 Container Vessels

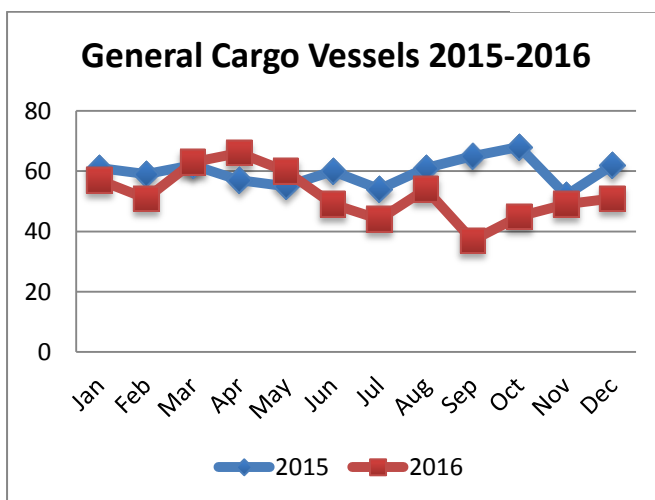
Figure 3



Based on figure 3, the number of container vessels in 2016 declined in comparison to 2015. The highest number of vessels in 2016 was in January with 34 as opposed to 37 vessels in the same month in 2015. In which the peak of 2016 was equivalent to 2015's average performance.

1.1.2 General Cargo Vessels

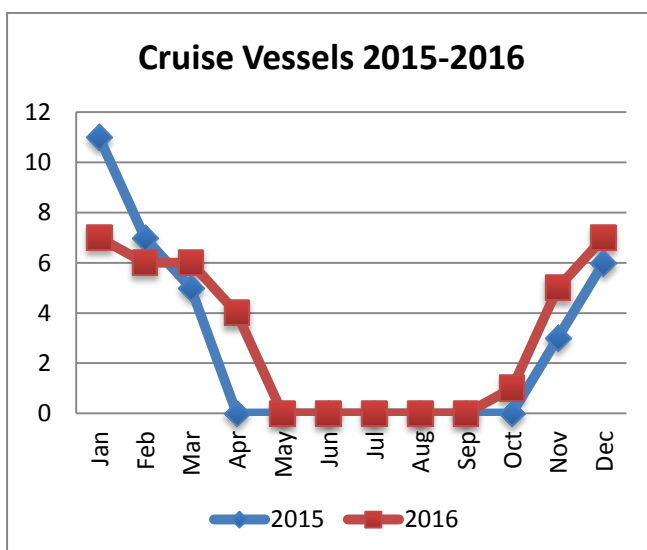
Figure 4



Based on figure 4 general cargo vessels in 2016 have declined in comparison to 2015. The highest number recorded in 2016 was 66 vessels. While the lowest was in September 2016 with 37 vessels, whereas the lowest in 2015 was recorded in November with 52 vessels. Therefore, 2016 has witnessed a decline in the movements of general cargo vessels within the Kingdom of Bahrain.

1.1.3 Cruise Vessels

Figure 5



- Cruiseships call KBSP during a 6 months cruise season, which starts in October and ends in April of the next year.
- As ports statistics are accumulated on annual basis, cruise vessels performance is tracked and measured based on a calendar year and not by season.
- In 2016, the number of cruise vessels calling KBSP have increased to a total of 36 vessels, whereas in 2015 32 cruise vessels called KBSP.



1.2 Throughputs:

1.2.1 Container Throughput

Ship to shore cranes installed in KBSP are capable of handling vessels up to 18 stacks across, and a throughput capacity of 1.1 million TEU's.

Figure 6

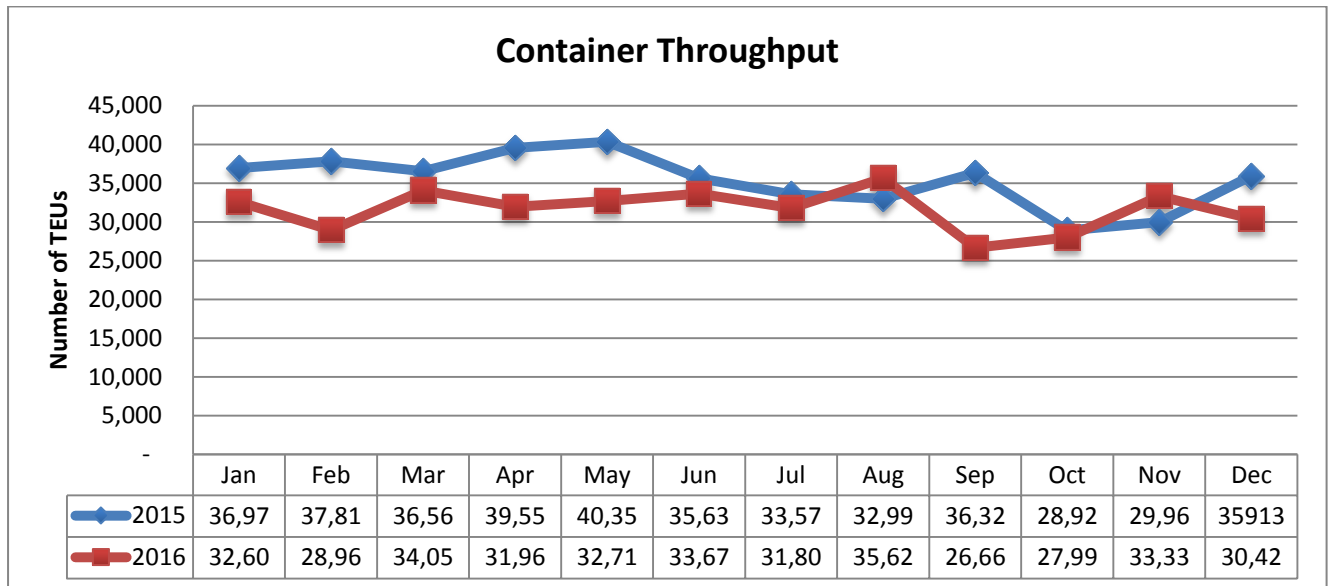
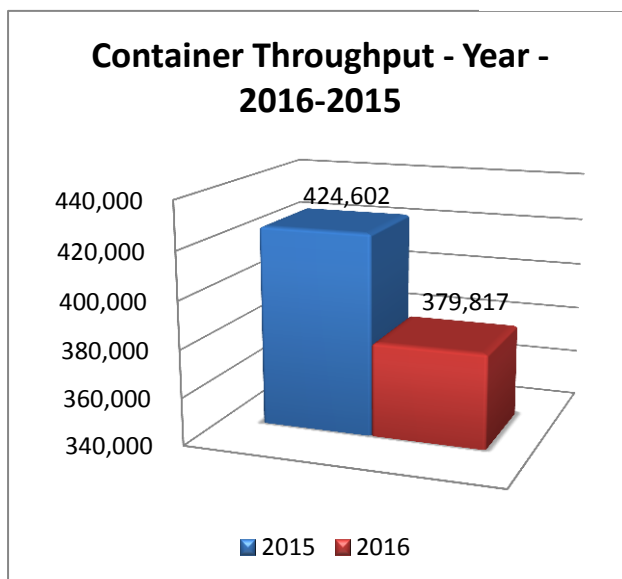


Figure 7



Container throughput TEU (Twenty foot equivalent units) has been fluctuating throughout the year. The average of monthly container throughput in 2016 was 31,651 TEU. Compared to the years 2015, a decrease of 14.5% was noted in 2016.

This is possibly caused by several factors such as the demand of the local market and a decline within the maritime economy. Therefore, PMA is expecting a better performance and higher numbers of container throughput from APMT in 2017.

In referred to figure 7 demonstrates a decline in the container throughput of 2016 in comparison to 2015. Nevertheless, the container performance did not raise a red flag as the numbers are within the average range and maintained a steady performance. The highest container volume in 2016 was in August (35,621 TEU) and the lowest was in September (26,662 TEU).



1.2.2 General Cargo Throughput

The General Cargo yard at KBSP is comprised of 77,030m² of open storage area.

SULB, Arabian Sugar Company and ALBA are the three biggest clients of APMT, and are of high influence in terms of general cargo handling in KBSP. General cargo volume was moderately well in 2016, which made 778,874 FT. However and in comparison with 2015, general cargo throughput in 2016 noted a 38% decline. On the other hand, 2016 witnessed a higher demand in handling construction material in KBSP. Hence, with the approval and close monitoring of the PMA, APMT is permitted to handle construction materials with emphasis on taking environmental precautions during the handling operations.

Figure 8

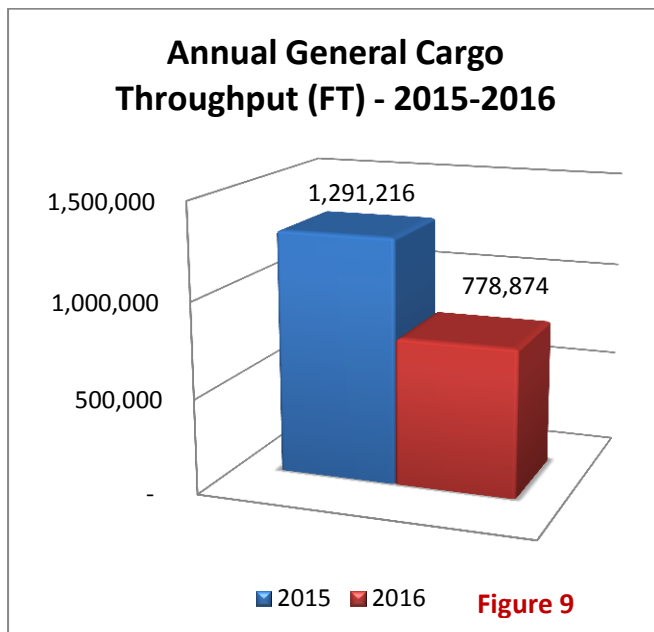
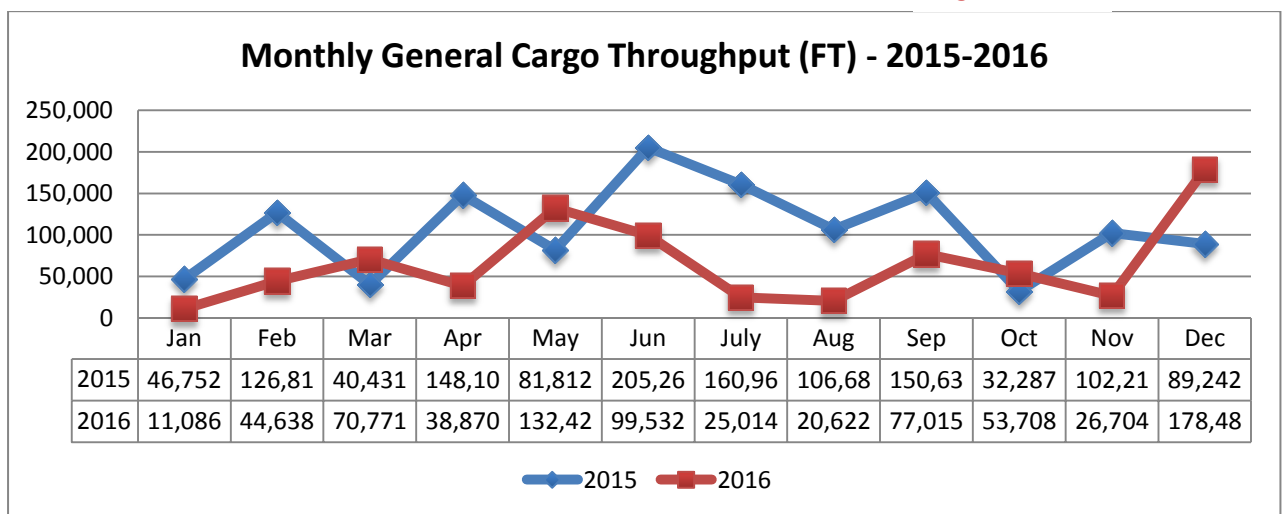


Figure 9 illustrates an evident decline in general cargo throughput. In 2016 APMT handled 778,874 FT compared to 1,291,216 FT in 2015.

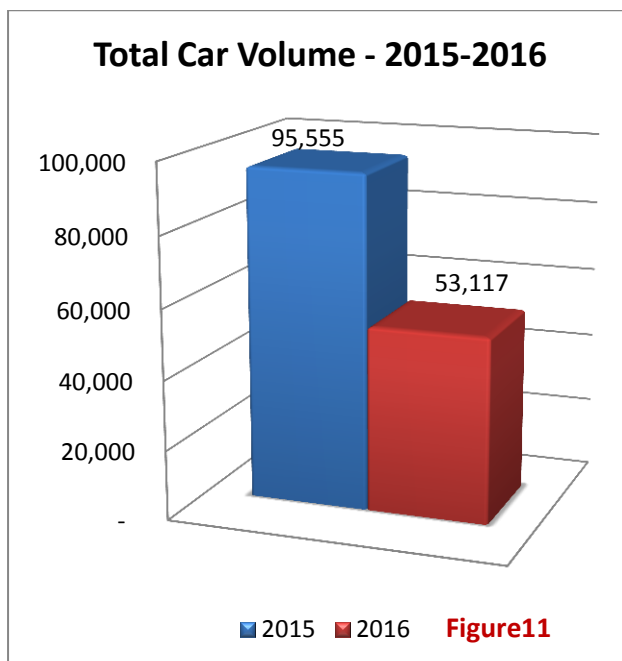
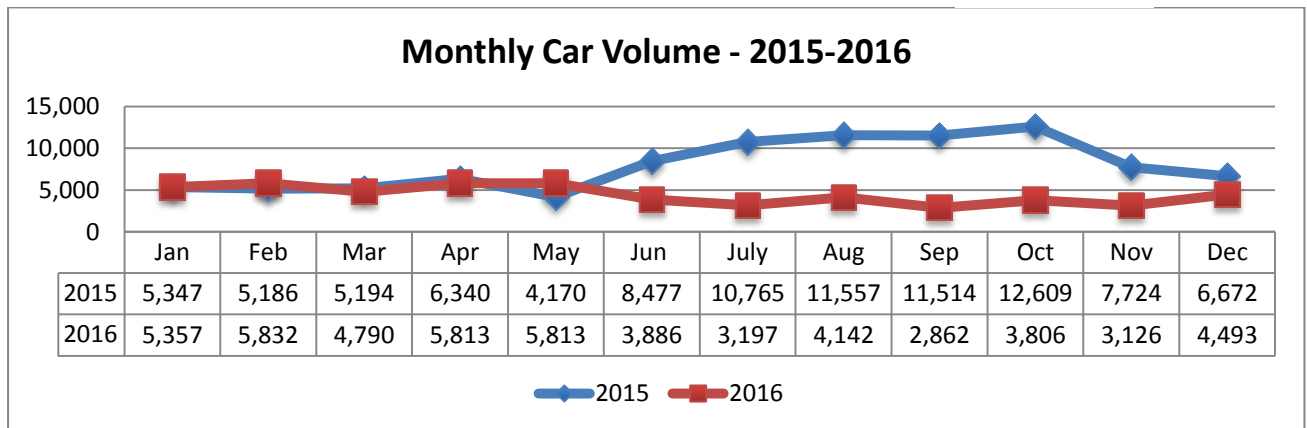
The monthly graph above shows that the highest figure recorded was in December 2016 at 178,485FT and the lowest was in January 2016 with 11,086 FT.



1.2.3 Vehicles Throughput

KBSP has an adequate staging of vehicles area of around 900,000m² ground space. Allowing, APMT to successfully sign a transshipment agreement with K-line, to further enhance the volume of vehicles handled in KBSP. However, the transshipment stated in the concession agreement is specific to containers and not vehicles.

Figure10



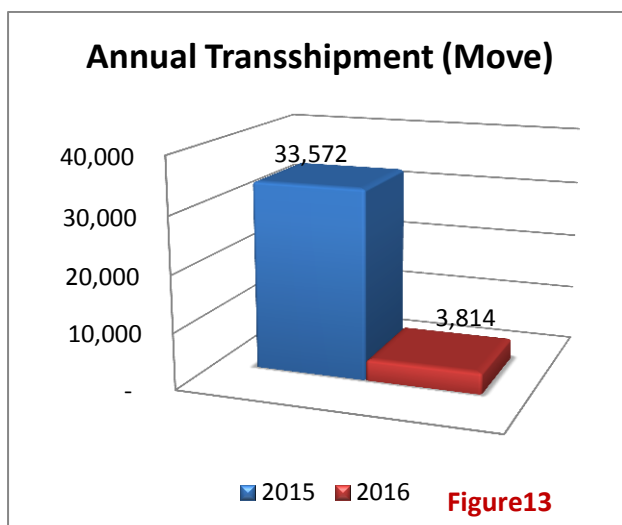
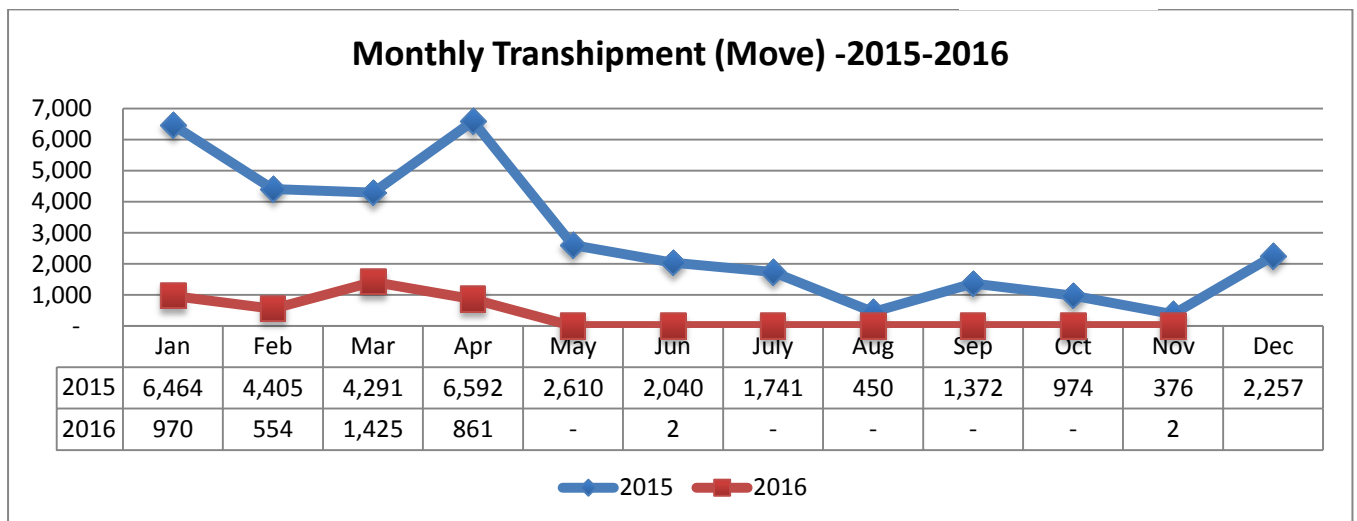
- The number of cars imported to Bahrain via sea has decreased 45% in 2016 in comparison to 2015.
- In reference to figure 11 a total of 53,117 vehicles were imported via KBSP in 2016 compared to 95,555 imported vehicles in 2015.
- The number of vehicles imported in 2016 was highest in the month of February with 5,832 vehicles as opposed to 12,609 vehicles in October 2015. Whereas September recorded the lowest with 2,862 vehicles as opposed to 4,170 in May 2015.



1.2.4 Transshipment

KBSP is a purpose built port and has been designed specifically to support the region’s need for a substantial efficient transshipment hub in the Northern Gulf. Unfortunately, APMT could not reach the target volume specified in the concession agreement. Hence, not fulfilling the port’s objective, nor succeed in attracting transshipment clients.

Figure12



- The total transshipment volume is lower than the agreed upon transshipment KPIs.
- According to figure 13, the 3,814 transshipment moves recorded in 2016 has declined 86% compared to 2015, which amounted to 33,572 transshipment moves.
- The transshipment volume started to drop in the second quarter and reaching zero (0) TEUs throughout the third and fourth quarter of 2016, which is an 86% decrease compared to 2015.
- There was zero (0) transshipment moves recorded for 6 months.

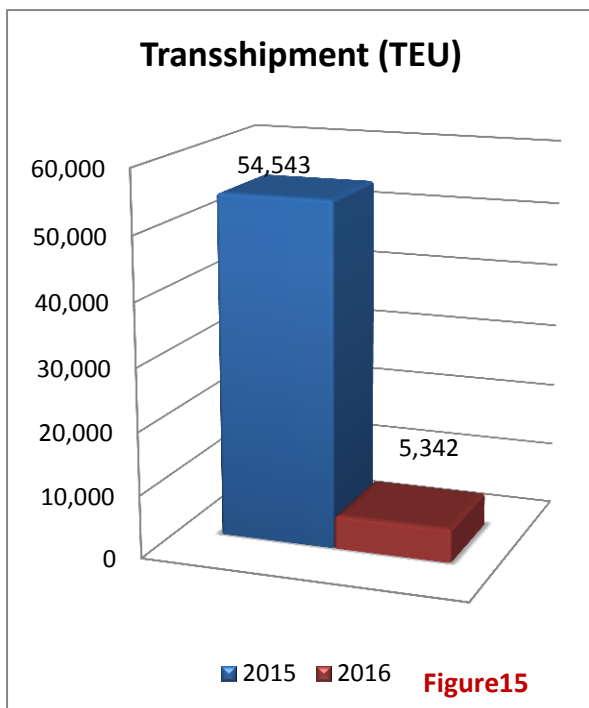
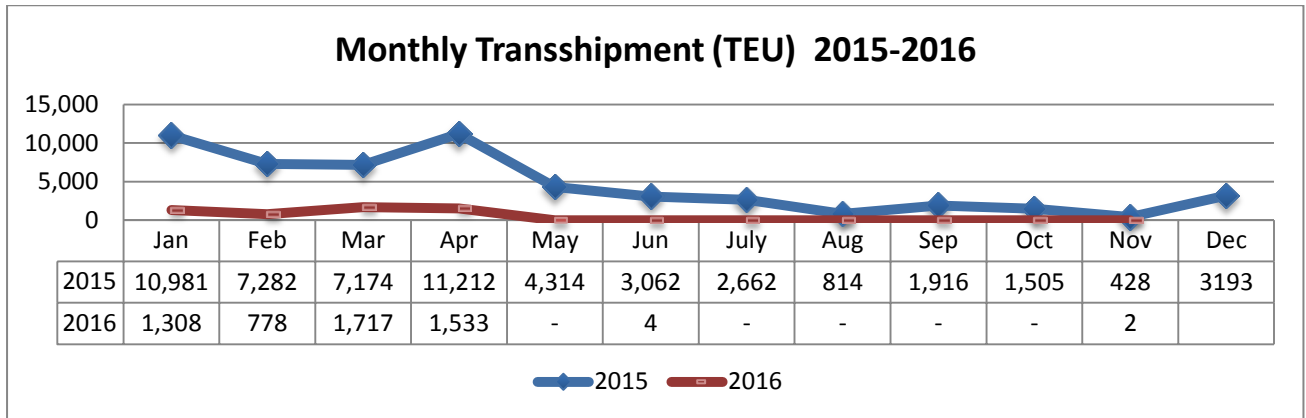
APMT was not able to fulfill agreed upon transshipment KPIs stated in the concession agreement of 2016, which was 389,009 TEUs, which is approximately 32,417 TEUs per month. In 2016, the lowest number of transshipment volume was recorded since the establishment of KBSP.

The transshipment volume started to drop in 2015 with the stop of APL callings to KBSP and continued to decrease reaching its low in May 2016, alongside the decline in the maritime economy and the bankruptcy of Hanjin shipping, which is a shipping line responsible for a large number of transshipments in KBSP.



The difference between transshipment by move and by TEU is counting one move of the 40' foot container as 2 TEUs.

Figure14



- The decrease in transshipment volume started in May.
- The graphs illustrate that 2015 transshipment performance was better than 2016.
- The volume started declining in April 2015 and continued with a low volume in 2016.

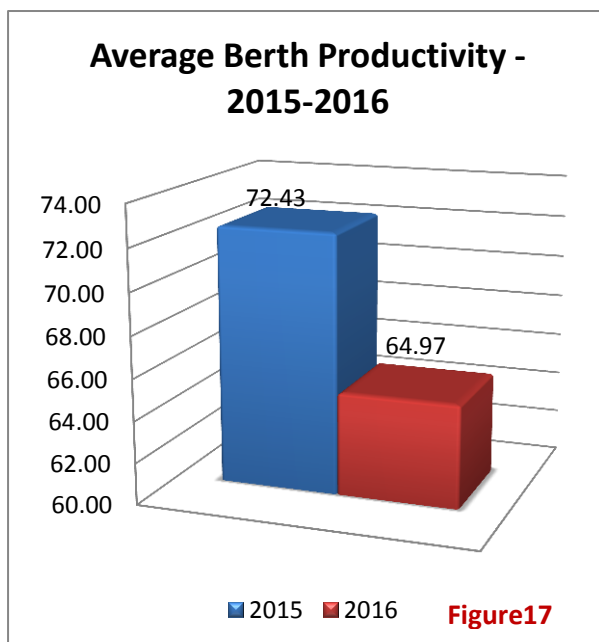
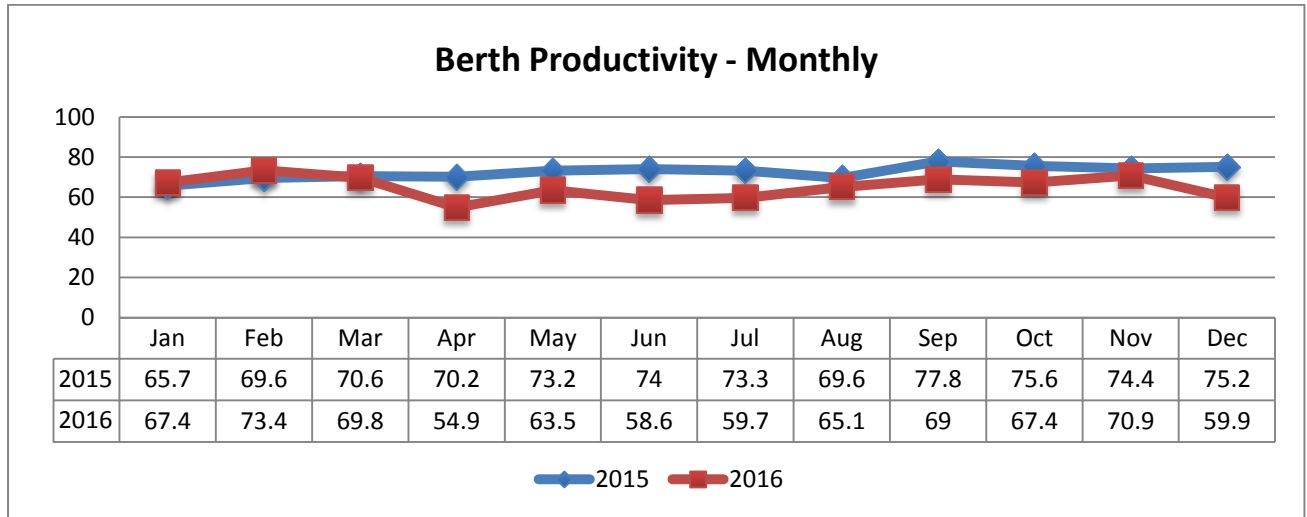


2. Khalifa Bin Salman Port (KBSP) Performance Operational Figures:

2.1 Berth Productivity (BP)

Berth productivity is essential for shipping lines, which allows them to be on route schedule and cut delay costs. PMA continuously monitors the berth productivity and discuss the findings with APMT on a monthly basis.

Figure16



- The berth productivity line shown in the above graph illustrates a decline in the berth productivity of KBSP.
- The more moves per hour the better performance of the berth productivity is. APMT's berth productivity has declined from an average of 72.43 in 2015 to 64.9 in 2016.
- KBSP berth productivity recorded an average of 64.9 moves per hours in 2016, which is a decrease of 8% compared with 2015.
- KBSP high berth productivity is one of the factors that are reflected on vessel turnaround time.



2.2 Gross Crane Productivity (GCP)

Gross Crane Productivity is one of the determining factors of the port's operations and performance efficiency. Cranes should be ready to serve vessels effectively starting from the berthing time.

Figure18

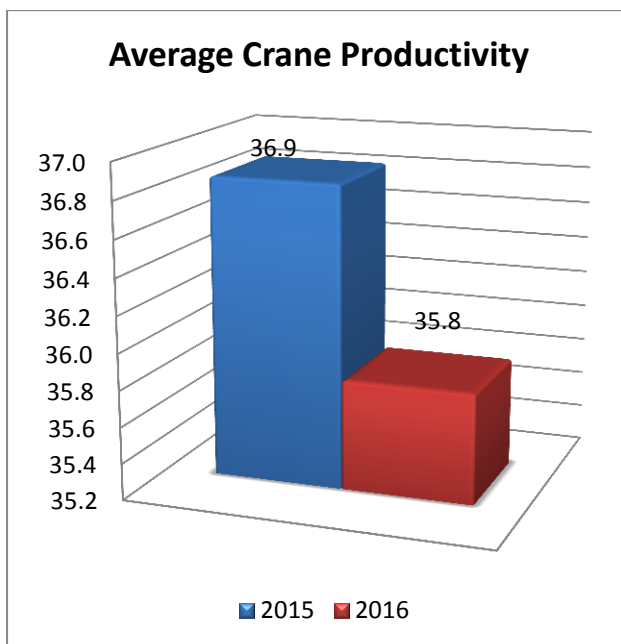
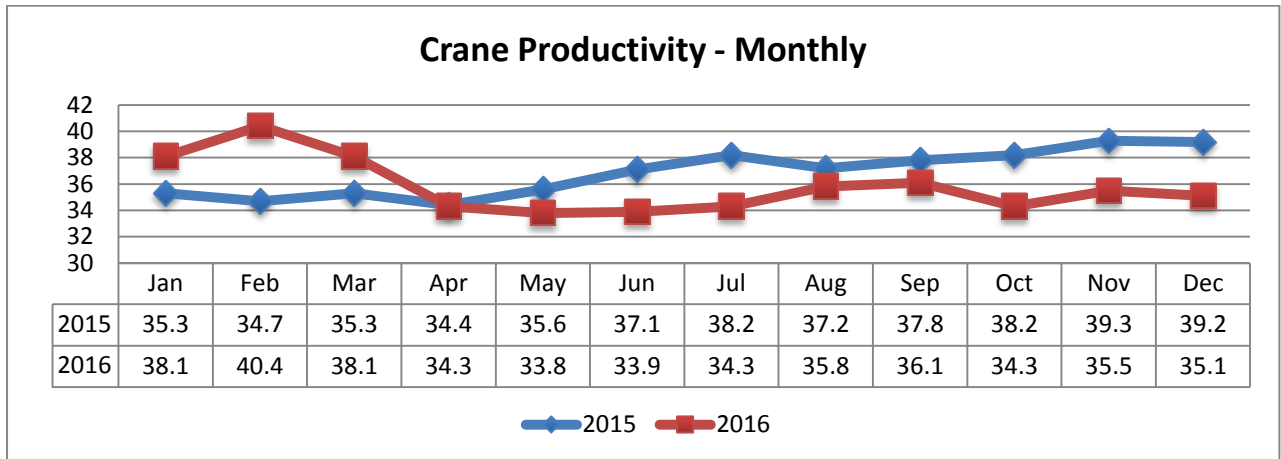


Figure19

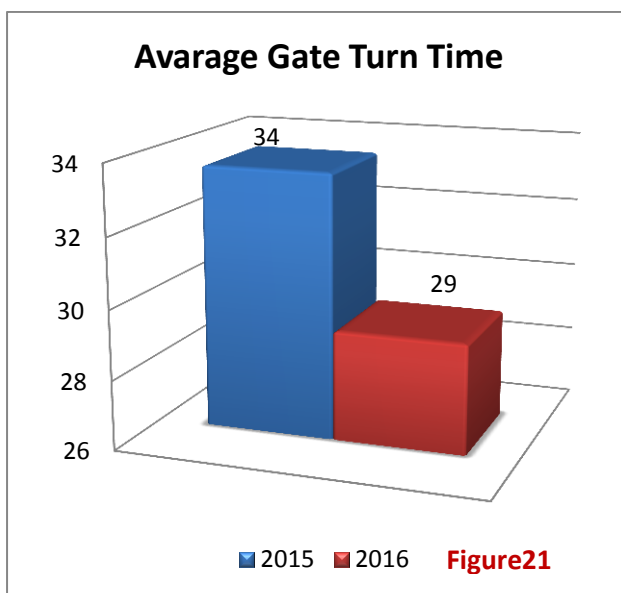
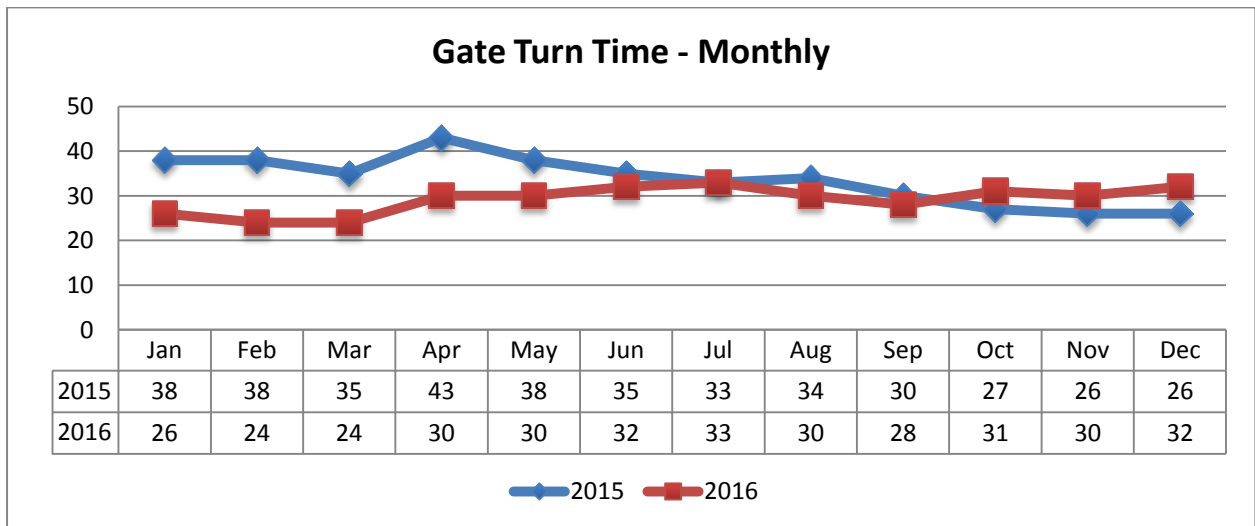
- It is evident that the crane productivity has declined in 2016 compared to 2015 as demonstrated in figure 19.
- KBSP's GCP average in 2016 was 35.8 moves per crane per hour, which is 3% lower than 2015.
- The highest number of moves was in February 2016 with 40.4 move per crane per hour and the lowest in the same year was in May with 33.8 moves per crane per hour.
- Despite the decline from the previous year's performance, KBSP's average of 35.8 moves per hour is still efficient.



2.3 Gate Turn Time (GTT)

The gate turn time reflects the truck turnaround time; and is calculated starting from the time the truck enters the terminals gate, to the yard and turning back to exit the port's gate. Port activities such as berth and crane productivity, customs and other factors could determine the GTT.

Figure20



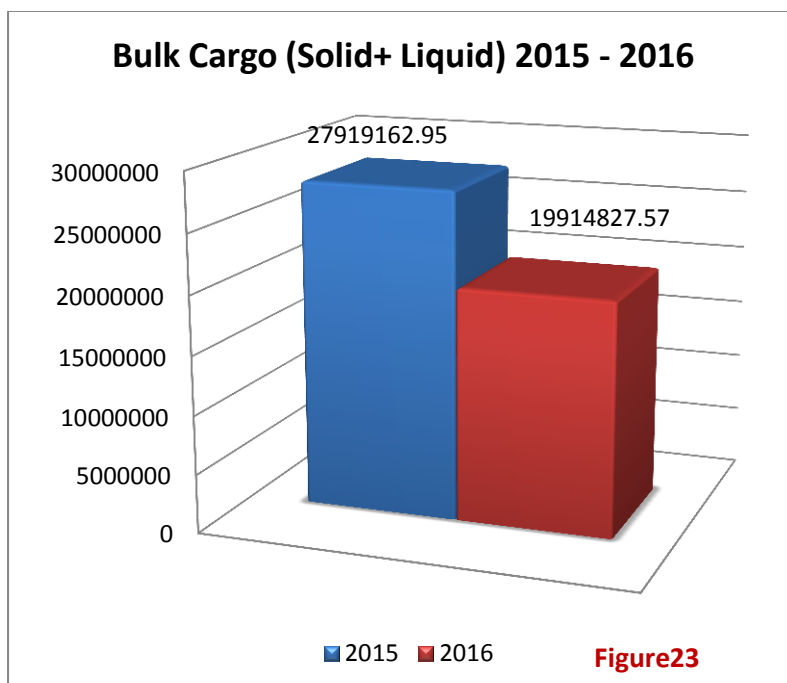
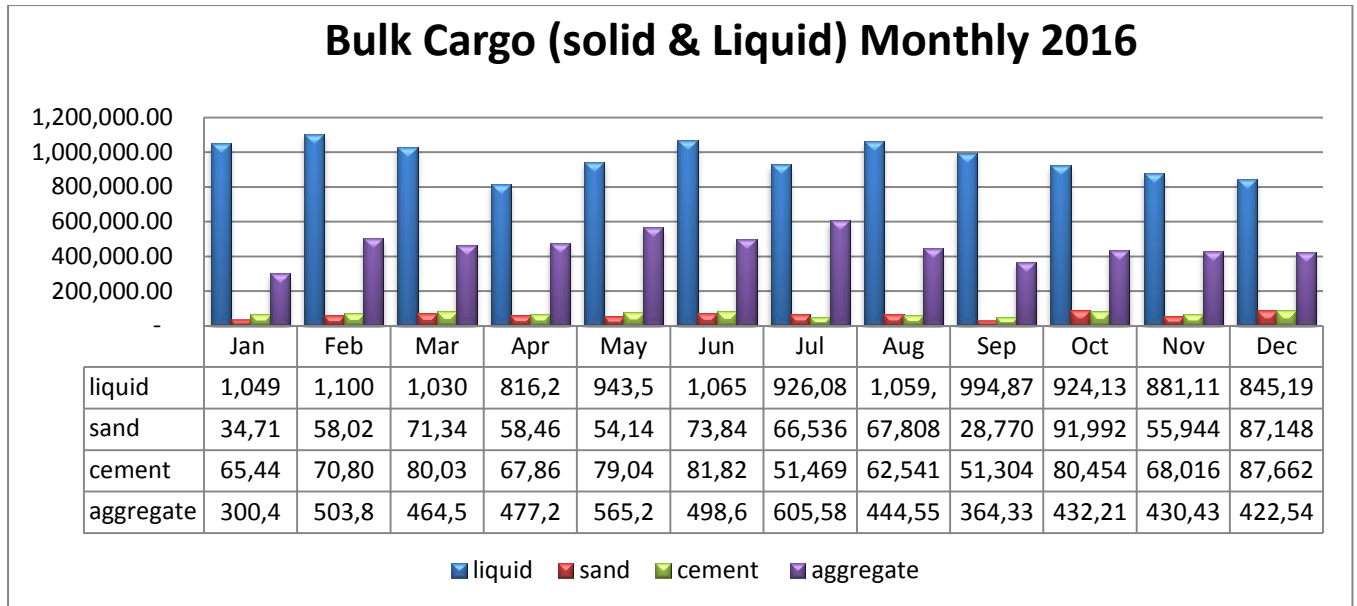
- KBSP's GTT for trucks dropping or picking up containers was 29 minutes per transaction on average in 2016.
- The GTT was reduced by 26% in 2016 compared to 2015, which enables consignee's trucks to deliver containers as quickly as possible.
- The decrease in GTT from 34 minutes in 2015 to 29 in 2016 is a notable improvement.



3. Private Jetties (Bulk Cargo):

Private jetties are owned by companies to handle their own cargo shipments. In reference to bulk cargo, it is usually classified into dry and liquid. Dry bulk cargo refers to (Aggregate, Cement and Sand), whereas liquid usually refers to oil and its by-products.

Figure22



- With regards to the performance of private jetties in 2016, the bulk cargo has declined in comparison to the year 2015.
- In 2016, the bulk volume recorded was 19914827.57 FT; 29% lower than 2015 where the bulk volume recorded was 27919162.95 FT.
- As illustrated the liquid volume is the highest commodity traded through private jetties in the Kingdom.
- The second highest commodity is aggregate.

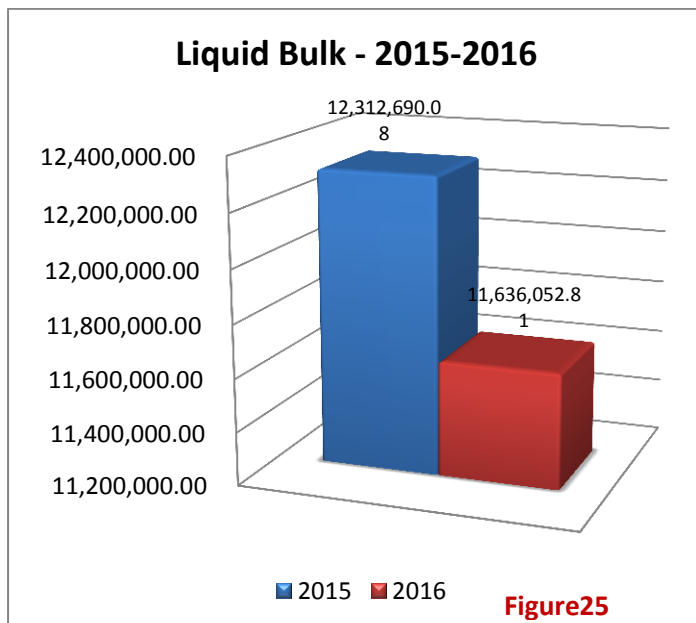
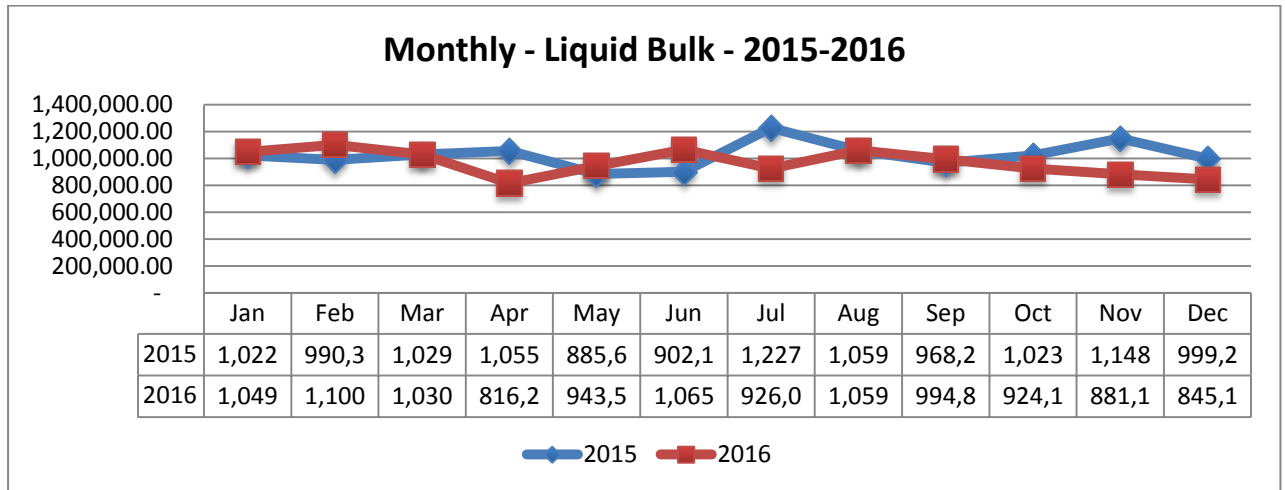


3.1 Liquid Bulk Cargo

BAPCO and GPIC are the main liquid exporters. Both have well equipped private jetties and high standard port operations. The main exported cargos are jet fuel, crude oil and NAFTA.

In 2015 private jetties exported more liquid cargo than 2016.

Figure24



- The volume of liquid bulk exported via oil terminals have declined 42% during 2016 where 11,636,052.81 MT was recorded compared to 19,943,513.40 MT in 2015.
- The highest was February with 1,100,176 FT and the lowest was April with 816,259FT.
- The liquid bulk export was unstable in 2016 ranging from 800,000FT to 1,200,000 FT.



3.2 Aggregate

Aggregate volumes imported to the Kingdom are determined by the demand of the local market. The handling charges for aggregate in the private jetties are BD0.500 per ton.

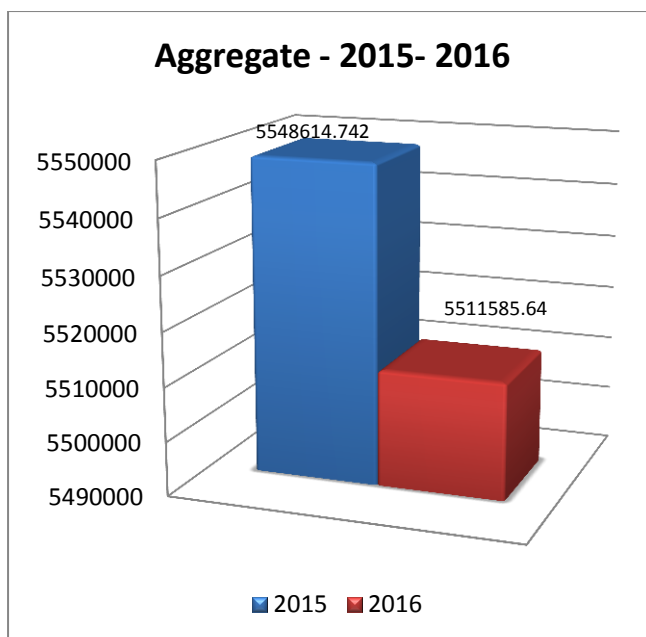
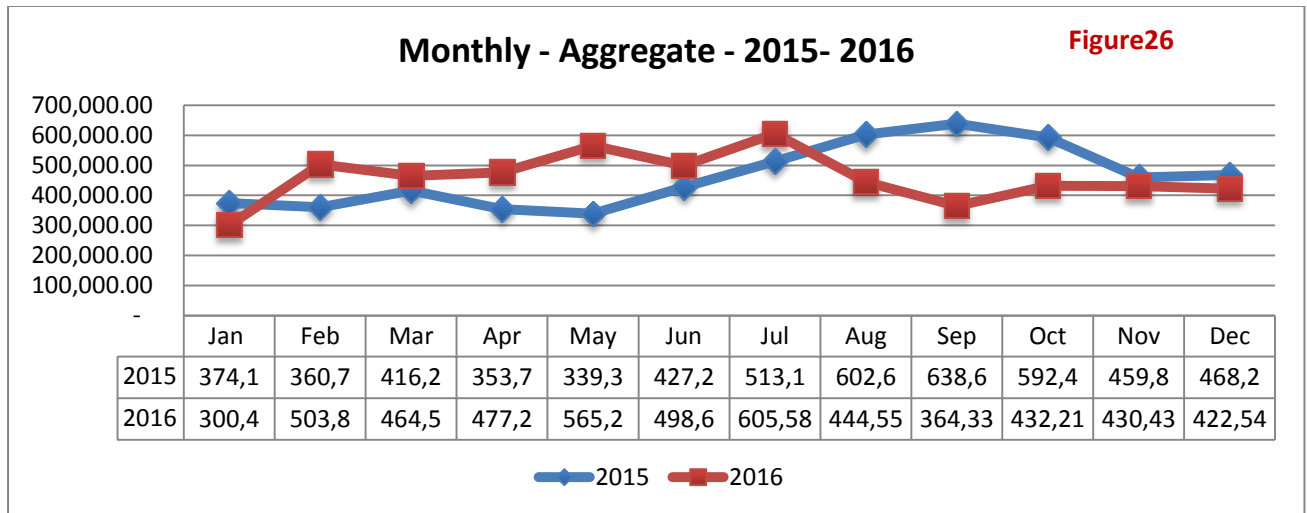


Figure27

- The amount of imported aggregate in the year 2016 was almost parallel to the year 2015, with a slight decrease in 2016.
- In 2016 the imported aggregate amounted to 550956 FT compared to 554659 FT in 2015.
- The highest aggregate volume was recorded in May 2016 with 565,202 FT, while the lowest was 300,452 FT in January.
- PMA is regulating the process of imported aggregate in cooperation with Customs Affairs. A Direct Delivery form is signed by both parties prior to the arraival of the bulk vessels. Other documents are required such as the Bill of Lading, custom declertion and the cargo manafist.



3.3 Sand

Sand imported to the Kingdom is determined by the growth and increase of construction projects in the Kingdom. The handling charges for sand imports range from BD0.200 to BD0.300 per ton.

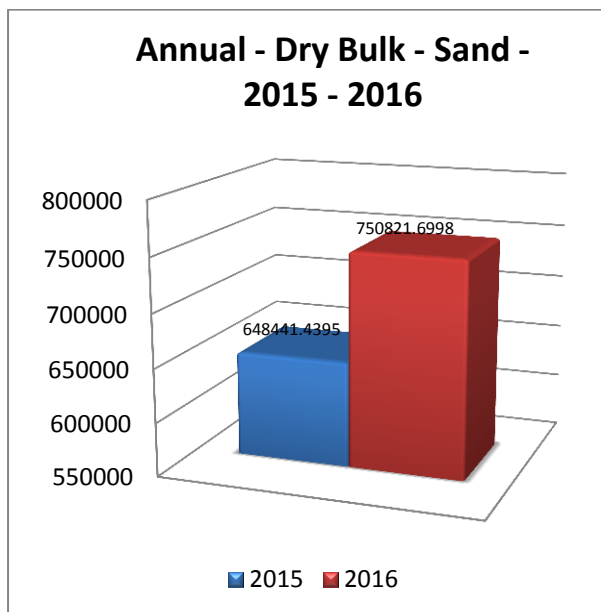
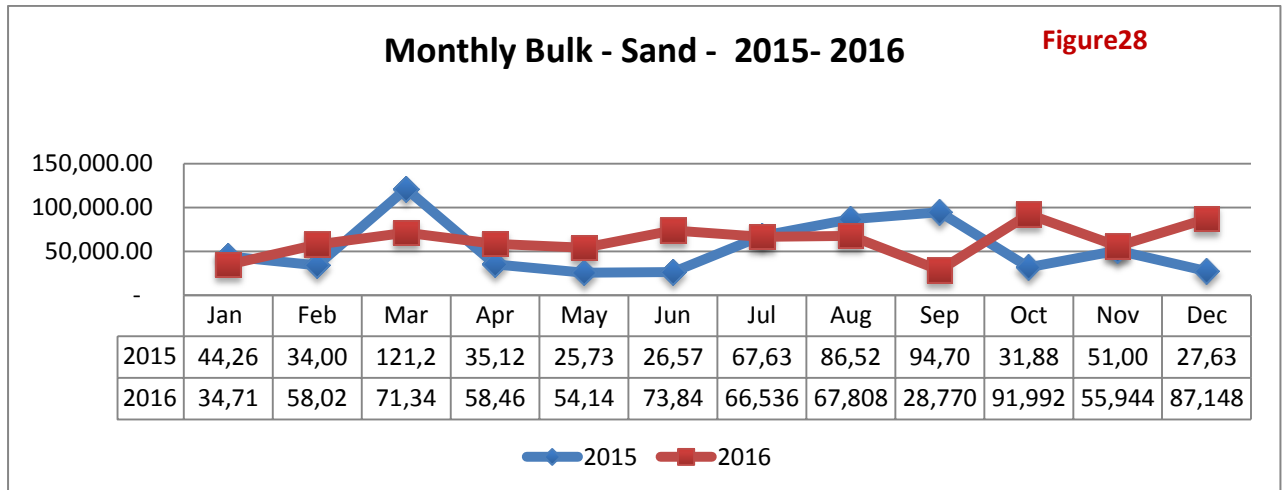


Figure29

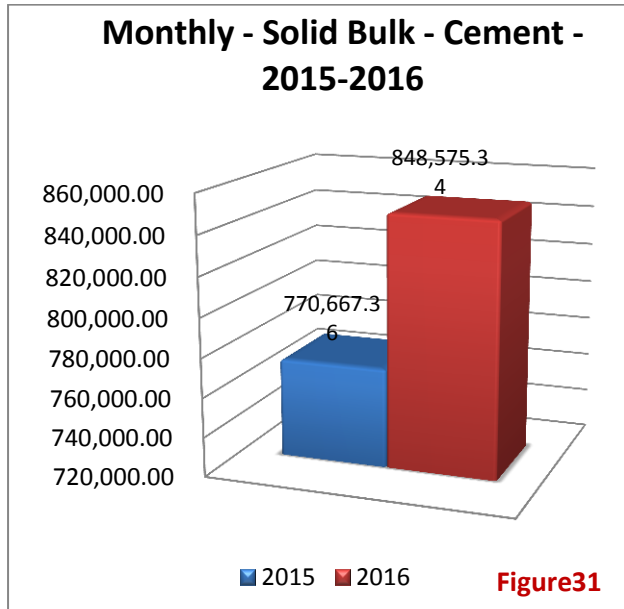
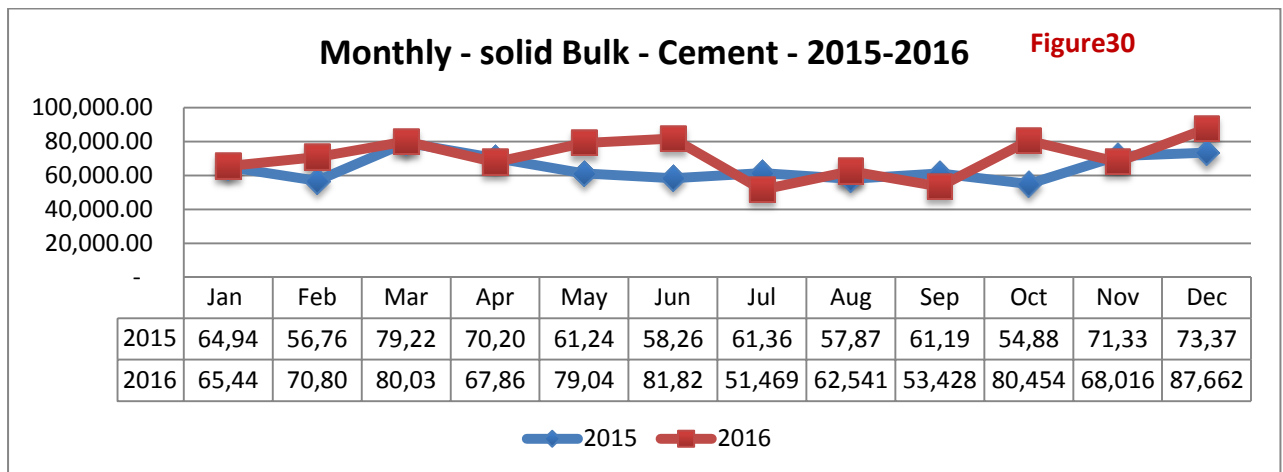
- The sand imported via private jetties has increased 14% in 2016 with 750821 FT.
- The volume of imported sand was fluctuating throughout 2016 reaching its peak in October with 91,992.48 FT, whereas the lowest was recorded in January with 34,714 FT.
- According to figure 28, there was an improvement in 2016's performance compared to 2015.



3.4 Cement

As most construction materials, the local demand is the main factor that determines the volume. KBSP received several cement shipments, most of which were direct delivery handling operations which are clean and dust free.

Grey cement is the most imported type of cement in the Kingdom. The major importers of cement in Bahrain are the Kingdom Group for ready mix and the United Cement Company.



- The cement imported via private jetties increased during 2016 with 445002.5 FT, recording a notable increase of 13% in comparison to 2015.
- The volume was inconsistent throughout 2016, reaching its low (51,469 FT) in July. Nevertheless, the volume of cement has raised to 87,662.36 FT as the years highest amount in December.