PHILIPPINE DOWNSTREAM OIL INDUSTRY

Downstream Oil Industry (DOI) refers to the business of importing, exporting, re-exporting, shipping, transporting, processing, refining, storing, distributing, marketing, and/or selling crude oil, gasoline, diesel, liquefied petroleum gas (LPG), kerosene, and other petroleum products. 1

On the other hand, petroleum products refers to products formed in the process of refining crude petroleum through distillation, cracking, solvent refining and chemical treatment coming out as primary stocks from the refinery such as, but not limited to: LPG, naphtha, gasolines, solvent, kerosenes, aviation fuels, diesel oils, fuel oils, waxes and petrolatums, asphalt, bitumens, coke and refinery sludges, or such refinery fractions which have not undergone any process or treatment as to produce separate chemically-defined compounds in a pure or commercially pure state and to which various substances may have been added to render them suitable for particular uses: Provided, that the resultant product contains not less than fifty% (50%) by weight of such petroleum products.

The Philippines’ Downstream Oil industry, small but growing. Its growth is marked by an expected short – term increase in both liquid and gas production. The industry is currently dominated by two (2) major oil refining and marketing companies; Petron and Pilipinas Shell. A third oil refiner and marketer, Caltex Philippines Inc., converted its 86, 500 bbl/d refinery into an import terminal in 2003 and now operates as a plain marketing and distributing company under the name “Chevron”, but still maintains its Caltex brand. 2

I. CURRENT SITUATION OF THE DOWNSTREAM OIL INDUSTRY

The uncertainty and insecurity of the future of energy brought about by remarkable global oil demand, supply challenges in the oil market and drastic impact of global climate change heighten the vulnerability of the Philippines to global oil market while being a net importer of crude oil. With that being said, the government has put some extraordinary national measures and continues to formulate sustainable policies and strategies to mitigate the impacts or effects on the consuming public.

June 2017 actual crudes and petroleum products inventory closed at 24,854 thousand barrels (MB) or 56-day supply equivalent; 37 days for crude oil and products in country stocks and 19 days in transit. This was higher by 24.6% from June 2016 level of 19,953 MB. 1H 2017 average inventory was recorded at 47 days, 38 days in country stock and 9 days in transit.

The government continued to enforce the Minimum Inventory Requirement (MIR) given the continuing risks faced by the downstream oil industry sector such as geopolitical instability and supply delivery problems to areas affected by calamities (e.g. typhoon, flood, earthquake, etc.).

Current MIR for refiners is in-country stocks equivalent to 30 days while an equivalent of 15 days stock is required for the bulk marketers and 7 days for the LPG players.

2 http://www2.doe.gov.ph/DO/Downoil.htm
As such, the status of oil supply and facilities in Surigao and Batangas which was hit by more than 5.0-magnitude earthquake was monitored and reported to ensure continuous supply\(^3\).

II. OIL SUPPLY/DEMAND REPORT 1H 2017\(^4\)

A. Supply

1. Crude Oil

- Total crude imports reached 35,759 MB, a decrease of 5.7% from 2016’s level of 37,490 MB
  - Around 86% of the total crude mix (30,909 MB) was sourced from the Middle East, of which 34.9% (12,463 MB) came from Saudi Arabia, the top supplier of crude oil into the country. Next is Kuwait with a 28.4% share of the total crude mix, followed by UAE with a 15.6% share. On the other hand, 9.8% (3,504 MB) of crude oil was imported from Russia and Japan, while 2.8% (1,000 MB) was from Australia. The remaining 1.0% was sourced from the ASEAN (286 MB) and from local production (60 MB).

<table>
<thead>
<tr>
<th>Source Country</th>
<th>Volume (in MB)</th>
<th>%Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>12,463</td>
<td>34.9</td>
</tr>
<tr>
<td>Qatar</td>
<td>2,000</td>
<td>5.6</td>
</tr>
<tr>
<td>Kuwait</td>
<td>10,155</td>
<td>28.4</td>
</tr>
<tr>
<td>UAE</td>
<td>5,578</td>
<td>15.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>286</td>
<td>0.8</td>
</tr>
<tr>
<td>Japan</td>
<td>715</td>
<td>2.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>72</td>
<td>0.2</td>
</tr>
<tr>
<td>Russia</td>
<td>2,789</td>
<td>7.8</td>
</tr>
<tr>
<td>Australia</td>
<td>1,001</td>
<td>2.8</td>
</tr>
<tr>
<td>Oman</td>
<td>715</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35,759</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

2. Petroleum Product

- Petroleum Product/Ethanol Imports
  - 1H 2017 petroleum product imports totaled 48,592 MB, an increase of 9.6% from 1H 2016’s 44,352 MB.
  - Oil Imports of Industry Players

The other industry players accounted for majority of the product imports with 72.5% of the total imports volume, up by 11.7% to 35,230 MB from 1H 2016’s 31,544 MB. The oil majors (Petron, Chevron and Pilipinas Shell) accounted for the remaining 27.5% which increased by 4.3% from 2016’s 12,808 MB to 13,361 MB.

<table>
<thead>
<tr>
<th>Type of Player</th>
<th>1H 2016</th>
<th>1H 2017</th>
<th>YoY Growth (in%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume (in MB)</td>
<td>%Share</td>
<td>Volume (in MB)</td>
<td>%Share</td>
</tr>
</tbody>
</table>

\(^3\) [https://www.doe.gov.ph/downstream-oil](https://www.doe.gov.ph/downstream-oil)[accessed 28 December 2017]

\(^4\) ibid
<table>
<thead>
<tr>
<th>Major Players (Petron, Shell, Chevron)</th>
<th>12,808</th>
<th>31.8</th>
<th>13,361</th>
<th>27.5</th>
<th>4.3% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Players</td>
<td>31,544</td>
<td>60.8</td>
<td>35,230</td>
<td>72.5</td>
<td>11.7% increase</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44,352</strong></td>
<td><strong>48,592</strong></td>
<td><strong>9.6% increase</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Entries may not add up due to rounding

- Product import mix comprised mostly of diesel oil at 40.4%, gasoline at 17.9%, LPG at 13.9%, kerosene/avturbo at 10.2%, fuel oil at 6.8% and other products at 10.8% share in the total product mix.

<table>
<thead>
<tr>
<th>Type of Petroleum Product</th>
<th>1H 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume (MB)</td>
</tr>
<tr>
<td>Diesel oil</td>
<td>19,631</td>
</tr>
<tr>
<td>Unleaded gasoline</td>
<td>8,698</td>
</tr>
<tr>
<td>Fuel Oil</td>
<td>3,304</td>
</tr>
<tr>
<td>LPG</td>
<td>6,754</td>
</tr>
<tr>
<td>kerosene/avturbo</td>
<td>4,956</td>
</tr>
<tr>
<td>Other products</td>
<td>5,248</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48,592</strong></td>
</tr>
</tbody>
</table>

Share of Imported Products to Local Demand

- Total gasoline import reached 45.8% of gasoline demand while diesel oil import was 58.9% of diesel demand. LPG import on the other hand, was 76.2% of LPG demand. Total product import was 59.9% of the total products demand.

- A total of 788 MB ethanol was imported for fuel use during the 1H 2017 of the year which grew by 7.5% from 733 MB of 1H 2016. Republic Act No. 9367 of 2006 mandated that all gasoline to be sold in the country should be E-10 (gasoline with 10% bioethanol content).
- In terms of butane, (in canisters) a total of 90.1 MT was also imported during 1H 2017.

3. Crude Run and Refinery Production

- The country’s current maximum working crude distillation capacity is 285 thousand barrels per stream day (MBSD).
- Total crude processed as of 1H 2017 was down by 7.6% from 39,580 MB of 1H 2016 to 36,578 MB. Refinery utilization during the period also decreased from 2016’s 76.3% to 70.5% this quarter. The drop may be due to the extended maintenance shutdown and turn around schedule of the local refineries, sometime during the 1H of the year.

- Diesel oil continued to dominate the production mix with a share of 36.8%, followed by gasoline and kerosene/avturbo with 24.9 and 10.3% shares, respectively. Meanwhile, LPG and fuel oil got 7.0 and 6.1 shares, respectively (Fig. 2).

![Fig.2 1H 2017 Production/ Demand Mix](image)

B. Demand

- For the 1H of 2017 total demand of petroleum products was recorded at 81,061 MB or an increase of 2.6% from 1H 2016 at 78,898MB.

- Compared with YTD June of 2016 figures, Kerosene/avturbo demand posted an increase of 18.6%. LPG and gasoline demand were also up by 14.2 and 5.3%, respectively. However, fuel oil and diesel demand decreased by 31.3 and 0.9%, respectively.

- Product demand mix comprised mostly of diesel oil at 41.2%, gasoline at 23.4%, kerosene/avturbo at 11.3%, LPG at 11.0%, fuel oil at 6.5% and other products at 6.8% share in the total product mix (Fig. 2).
Petroleum Product Exports
- Total country’s petroleum products export as of 1H 2017 grew by 79.9% from 3,291 MB of 1H 2016 to 5,920 MB.
- Vis-à-vis 2016, condensate was the top exported products for the period, with a growth of 78.5%. Naphtha also rose by more than 200%. Likewise, other petrochem products such as propylene, mixed xylene, toluene and benzene export increased which may be due to higher international demand. On the other hand, gasoline export went down by 26.9%.
- The total export mix comprised of condensate (24.7%); naphtha (15.5%); propylene (15.1%); pygas (14.1%); gasoline (10.1%); mixed C4 (7.9%); mixed xylene (7.5%); toluene (2.9%); benzene (1.8%) and LPG (0.38%).
- The oil refiners’ exports accounted for 53.3% of the total export mix while the remaining 46.7% was accounted to export of other players.

Crude Oil Exports
- During the 1H of 2017, a total of 704 MB crude oil from Galoc (Palawan Light) was exported, however this is lower compared to the same period in 2016 by 37% which is at 1,117 MB.

III. MARKET SHARE

A. Total Petroleum Products
The major oil companies (Petron Corp., Chevron Phils. and Pilipinas Shell Petroleum Corp.) got 56.0% market share of the total demand while the other industry players which include PTT Philippine Corp. (PTTPC), Total Phils., Seaoil Phil. Inc., Phoenix, Liquigaz, Petronas, Prycegas, Micro Dragon, Unioil, Isla Gas, Jetti, Eastern Petroleum, JS Union, JS Phils. Corp., Petrotrade, South Pacific, Marubeni, SL Harbour, Perdido and Filoil Logistics Corp., as well as the end users who imported directly most of their requirement captured 44.0% of the market (Fig. 3). Meanwhile, the local refiners (Petron Corp. and Pilipinas Shell) captured 49.3% of the total market demand while 50.7% was credited to direct importers/end-users.

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5 https://www.doe.gov.ph/downstream-oil [accessed 10 January 2018]
B. LPG

The other players’ market share, with the inclusion of South Pacific in 2016, increased to 68.3%. The remaining 31.7% was credited to the oil refiners.

Among the other LPG players, Liquigaz got the biggest market share with a 23.6% share, followed by Pryce Gases with a share of 12.8%. Next were South Pacific, Inc. (SPI) and Isla Gas with equal share of 12.1%, respectively (Fig. 4).
OIL IMPORT BILL

- 1H 2017 estimated total oil import bill amounting to $4,689.6 million was up by 37.1% from 1H 2016’s $3,421.1 million. This was attributed to the combined effects of higher import cost and higher volume of imports.

- Total oil import cost was made up of 60.1% finished products and 39.9% crude oil.

- Total import of crude oil amounted to $1,871.3 million, grew by 30.3% from $1,435.6 million of 1H 2016 due to higher CIF price per barrel from 1H 2016’s $37.838/bbl to $52.330/bbl.

- Meanwhile, total product import cost was up by 41.9% to $2,818.4 million at an average CIF cost of $58.001/bbl vis-à-vis 1H 2016’s $1,985.5 million at an average CIF cost of $44.768/bbl. The increase was attributed to higher import cost this year and increased in the volume of product imports. Average dollar rate for 1H 2017 is $49.93 compared to 1H 2016’s average rate of $46.90.

- On the other hand, the country’s petroleum exports earnings for the period rose by 31.6% from $317.2 million of 1H 2016 to $417.4 million this year. This was due to increased FOB per barrel vis-à-vis 2016 figures from $38.460/bbl to $55.753/bbl.

- Overall, the country’s 1H 2017 net oil import bill amounting to $4,272.2 million was up by 37.6% from 1H 2016’s $3,103.9 million.

IV. REGULATORY FRAMEWORK

Republic Act No. 8479 which was signed in February 1998 defined the regulatory framework for the downstream oil industry, based primarily on the guiding principle of a truly competitive market under a regime of fair prices, adequate supply of environmentally clean and high quality petroleum products.

Pursuant to Department Circular Nos. 2002-08-005 and 2002-07-004 the following are the checklist of requirements for permitting applications of the oil and gas infrastructure projects, and supply of oil:

Applications for Permit in the Downstream Oil Sector Processing of Applications for Permit
• Submission of Application Permit Requirements to the Director of the Oil Industry Management Bureau (OIMB):
  a. Letter of Intent
  b. Project Proposal
  c. Business Plan
  d. Other documents required as listed below
• Evaluation for completeness and compliance of requirements
• Payment of Filing Fee (Fee to be determined)
• Order for Notice of Hearing and Publication

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6 https://www.doe.gov.ph/downstream-oil

7 https://www.doe.gov.ph/downstream-oil/339-regulatory-framework
• Publication of DOE Order
• Conduct of Public Hearing
• Site Visit
• Evaluation of Application for Technical, Financial, Legal, Completeness of Requirement
• Submission of Pertinent Documents (arising from technical, financial, legal requirements)
• Finalization of Permit to Supply Oil
• Endorsement for Approval of Permit
• Approval of Permit
• Releasing of Permit

BOI Registration and Incentives

2017 Investments Priorities Plan
Storage, marketing, and distribution of petroleum products is qualified for registration under the Mandatory List of the 2017 IPP as it is provided in RA 8479 or the Downstream Oil Industry Deregulation Act of 1998.

BOI-registered firms engaged in storage, marketing and distribution of petroleum products is entitled with the following fiscal and non-fiscal incentives:

1. Income tax holiday (5 years);
2. Additional deduction for labor expenses;
3. Minimum tax and duty of three% (3%) and value-added tax (VAT) on imported capital equipment;
4. Tax credit on domestic capital equipment;
5. Exemption from contractor’s tax;
6. Unrestricted use of consigned equipment;
7. Exemption from the real property tax on production equipment or machineries;
8. Exemption from taxes and duties on imported spare parts;
9. Such other applicable incentives under Article 39 of Executive Order No. 226.

V. INDUSTRY COMPETITIVENESS

Natural Resources
• Reserve estimates: Malampaya gas field, Batangas - 2.5 to 4.5 TCF (Trillion Cubic Feet)
• Malampaya gas field reserves expected to last until 2022
• Presence of formidable volume of possible gas available, larger than previously projected
• Petroleum resources in 16 sedimentary basins representing an area of over 700,000 sq-km.

Human Resources
• Availability
  - Graduates of around 500,000 per year wherein 51,000 of these are graduates of various Engineering courses\(^8\)
  - Around 2 million skilled workers

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\(^8\) Commission on Higher Education (CHED) Annual Statistics of graduate per course projection
Quality
- Filipino professionals/workers are good source of competitive labor force in terms of technical skills, fast learning curve, and long tradition of excellence coupled with strong work ethics and customer orientation.
- The country has one of the highest literacy rates in the world at 94.6% of its population (NSCB)
- Labor standards and employment relations are held with utmost regard with stable employment-oriented policies.
- Labor costs vary throughout the Philippines, depending on location, skills required, supply base, educational attainment, working hours and other factors.

VI. GOVERNMENT SUPPORT

Enabling laws/policies
- Republic Act (RA) No. 8479 or the Downstream Oil Industry Deregulation Act of 1998
- Republic Act (RA) No. 8180 or the Downstream Oil Industry Deregulation Act of 1996
- Department Circular No. 2002-07-004 Rules of Practice and Procedure before the Department of Energy
- Philippine Energy Plan issued periodically providing framework for development of the Oil Industry along with other energy sub-sectors
- Presidential Decree (PD) No. 87 Otherwise known as the Oil Exploration & Development Act of 1972, as amended
- Republic Act (RA) No. 387 Otherwise known as Petroleum Act of 1949

VII. CONTACTS

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