



OIL SUPPLY/DEMAND REPORT YTD JUNE 2021 VS. YTD JUNE 2022

Department of Energy

Oil Industry Management Bureau/
Oil Industry Competition & Monitoring Division

One of the factors that continue to cause the increase in oil prices is the market worries from both the monetary and the oil sanctions by the U.S. and the European Union on Russia on its invasion of Ukraine, causing massive oil supply disruption. While the Philippines is not directly affected for there is not much crude oil imports sourced from Russia, still, there is an underlying impact on the country since bulk of its direct petroleum products imports come from countries that use Russian crude in their refineries.

Overall, this prevailing global supply-demand fundamentals and market sentiments are still supportive of global oil prices, and consequently in the local market in the first half of 2022.

Thus, given the enduring risks faced by the downstream oil industry sector, including logistics problems in areas affected by calamities such as typhoon, flood, earthquake, volcanic eruption, etc., the DOE continuously enforce the Minimum Inventory Requirement (MIR). As such, the DOE constantly coordinate with other government agency responders to ensure sufficient supply in those areas.

Current MIR for refiners stands at in-country stocks equivalent to 30 days of crude and finished products, while an equivalent of fifteen (15) days stock of finished products is required for the bulk marketers/importers and seven (7) days for LPG importers.

SUPPLY

▪ ***Inventory***

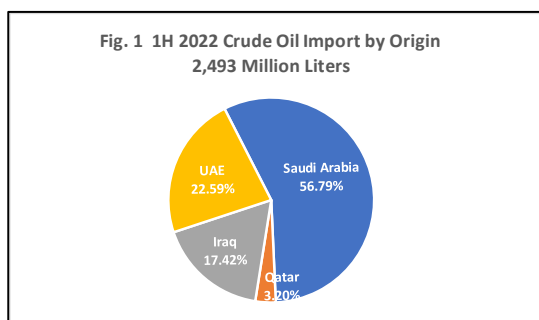
As of end-June 2022, the reported stock of crude oil was at 342 million liters (ML), while the reported finished petroleum products were at 2,077 ML, excluding biofuels. On a per-product basis, the stocks of major petroleum products were as follows: (a) gasoline at 520 ML (equivalent to 26 days supply); (b) diesel oil at 655 ML (equivalent to 21 days supply); (c) kerosene at 16 ML (equivalent to 76 days supply); (d) Jet A1/Avturbo at 104 ML (equivalent to 23 days supply); (e) fuel oil at 152 ML (equivalent to 44 days supply); (f) LPG at 173 ML (equivalent to 20 days supply), and other products at 456 ML (84 days).

▪ ***Crude Oil Supply***

YTD June 2022 crude oil imports totaled 2,493 Million Liters (ML), an increase of about one hundred five percent (105.5%) from 1,213 ML of YTD June 2021 (Table 1). This was attributed to nil imports of crude oil during the first quarter of 2021 because the refinery was on economic shutdown.

Table 1. Crude Imports in Million Liters, ML

Origin	YTD JUNE 2021		YTD JUNE 2022		% Change
	Volume	% Share	Volume	% Share	
Crude					
Middle East	1,122	92.5%	2,493	100.0%	122.3%
ASEAN/Local Production	91	7.5%	-	0.0%	-100.0%
Total	1,213	100.0%	2,493	100.0	105.5%
MLCD	3.3		27.7		



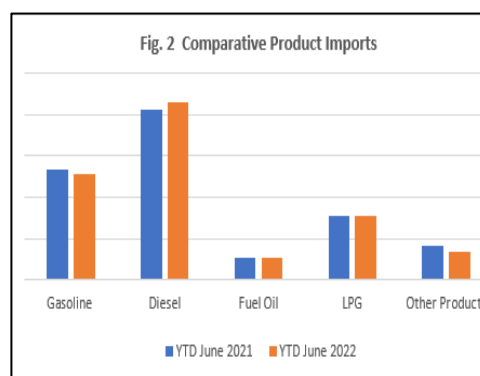
All crude oil imported for the first half of 2022 was 100.0 percent sourced from the Middle East, of which 56.79 percent came from Saudi Arabia (1,416 ML), the country's major supplier of crude oil. This was followed by UAE with a 22.59 percent share (563 ML). Next was crude oil imported from Iraq with a 17.42 percent share, while the remaining 3.2 percent was imported from Qatar (80 ML) (Fig. 1).

▪ **Petroleum Product Imports**

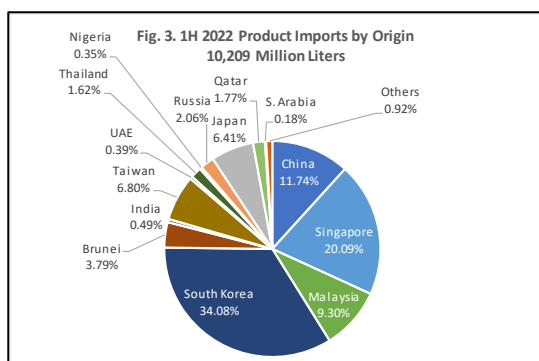
Various types of petroleum products were imported for the first half of 2022 totaling 10,209 ML. This was slightly higher by 1.01 percent from last year's level of 10,107 ML (Table 2).

Table 2. Product Imports in Million Liters, ML

Product	VOLUME		PERCENT MIX (%)		PERCENT CHANGE
	YTD June 2021	YTD June 2022	YTD June 2021	YTD June 2022	
Gasoline	2,683	2,552	26.5%	25.0%	-4.9%
Diesel	4,133	4,297	40.9%	42.1%	4.0%
Kerosene	34	18	0.3%	0.2%	-46.1%
Avturbo	343	563	3.4%	5.5%	64.0%
Fuel Oil	536	537	5.3%	5.3%	0.1%
LPG	1,536	1,544	15.2%	15.1%	0.5%
Other Products	842	698	8.3%	6.8%	-17.1%
Naphtha	675	446	6.7%	4.4%	-33.8%
Avgas	2.5	2.1	0.0%	0.0%	-16.7%
Asphalts	70	73	0.7%	0.7%	3.1%
Condensate	82	146	0.8%	1.4%	
Solvents	13	13	0.1%	0.1%	0.2%
Mixed Xylene	0.0004		0.0%	0.0%	100.0%
Propylene		18	0.0%	0.18%	100.0%
Total	10,107	10,209	100.0%	100.0%	1.01%
in MLCD	55.8	56.4			



The top imported product for the first half of 2022 was diesel oil which increased by 4.0 percent from 4,133 ML of ytd June 2021 to 4,297 ML. Next was gasoline which dropped by 4.9 percent from 2,683 ML to 2,552 ML. LPG followed with a growth of 0.5 percent from 1,536 ML last year to 1,544 ML this year. Fuel oil import rose by 0.1 percent vis-à-vis first half of 2021's 1,536 ML to 1,544 ML. Similarly, avturbo imports up surged by 64.0 percent from 343 ML of last year to 563 ML in the first half of 2022 due to less stringent travel restrictions in most parts of the country.



With China's prior plan to suspend oil export, it being the 2021 top supplier of finished petroleum products in the country, the local oil companies shifted most of their import sources from South Korea and Singapore with import shares of 34.08 percent and 20.09 percent, respectively. By contrast, China's import share was reduced to 11.74 percent, followed by Malaysia with an import share of 9.3 percent.

The country also imported products from Taiwan (6.8%), Japan (6.41%), Brunei (3.79%), Russia (2.06%), Qatar (1.77%), Thailand (1.62%), India (0.49%), UAE (0.39%), Nigeria (0.35%), Saudi Arabia (0.18%), and other countries (0.92%) (Fig. 3).

Product import mix comprised mostly of diesel oil at 42.1 percent, gasoline at 25.0 percent, LPG at 15.1 percent, avturbo at 5.5 percent, fuel oil at 5.3 percent, kerosene at 0.2 percent, and other products at 6.8 percent share (Table 2).

Total gasoline import met 70.8 percent of the gasoline demand while diesel oil import was 77.0 percent of diesel demand. LPG import, on the other hand, was 96.4 percent of LPG demand. Total product import was 77.0 percent of the total product demand.

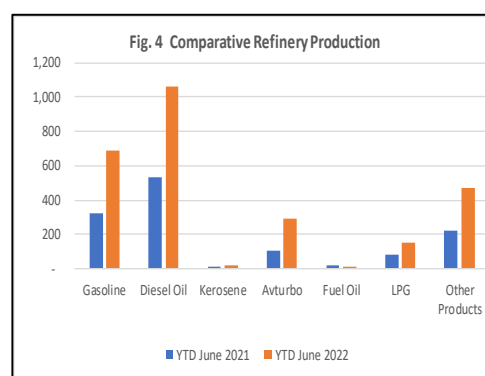
Ethanol imports dropped by 9.4 percent vis-à-vis YTD June 2021's 135.2 ML to 122.5 ML in 2022. Republic Act No. 9367 of 2006 mandated that all gasoline to be sold in the country should be E-10 (gasoline with 10% bioethanol content).

▪ **Refinery Production**

YTD June 2022 refinery production output was up by more than a hundred percent from 1,284 ML of ytd June 2021 to 2,686 ML. There was an upsurge in production output during the first half of 2022 because of low production output in 2021 due to economic shutdown of the refinery. The average refining output for the period was 14.8 ML per day (Table 3).

Table 3. Refinery Production in Million Liters, ML

Product	VOLUME		PERCENT MIX (%)		PERCENT CHANGE
	YTD June 2021	YTD June 2022	YTD June 2021	YTD June 2022	
Gasoline	321	685	25.0%	25.5%	113.8%
Diesel Oil	535	1,065	41.7%	39.7%	99.1%
Kerosene	9	16	0.7%	0.6%	73.9%
Avturbo	105	291	8.2%	10.8%	178.2%
Fuel Oil	18	3	1.4%	0.1%	-81.5%
LPG	78	152	6.1%	5.7%	95.8%
Other Products	219	472	17.0%	17.6%	116.1%
Asphalts		-	0.0%	0.0%	0.0%
Naphtha	-	28	0.0%	1.1%	100.0%
Mixed Xylene	27	43	2.1%	1.6%	60.8%
Propylene	69	155	5.4%	5.8%	123.6%
Benzene	5	7	0.4%	0.3%	29.7%
Toluene	19	28	1.5%	1.0%	100.0%
Petroleum Coke	89	191	6.9%	7.1%	100.0%
Sulphur	9	20	0.7%	0.7%	100.0%
Total	1,284	2,686	100.0	100.0	109.2%
in MLCD	7.1	14.8			



Compared with ytd June 2021, refinery production output increased by 99.1 percent for diesel, 113.8 percent for gasoline, 73.9 percent for kerosene, 178.2 percent for avturbo, and 95.8 percent for LPG. Meanwhile refinery production of fuel oil fell by 81.5 percent while production output of other products such as naphtha, propylene, mixed xylene, toluene, benzene, and petroleum coke showed an increase of 116.1 percent vis-a-vis ytd June 2021 volume (Table 3/ Fig. 4).

Diesel oil continued to dominate the production mix with a share of 39.7 percent, followed by gasoline and avturbo with 25.5 and 10.8 percent share, respectively. Meanwhile, LPG, kerosene, fuel oil, and other products (such as naphtha, mixed xylene, propylene, benzene, toluene, petroleum coke and sulphur) has 5.7, 0.6, 0.1 and 17.6 percent share, respectively in the production mix.

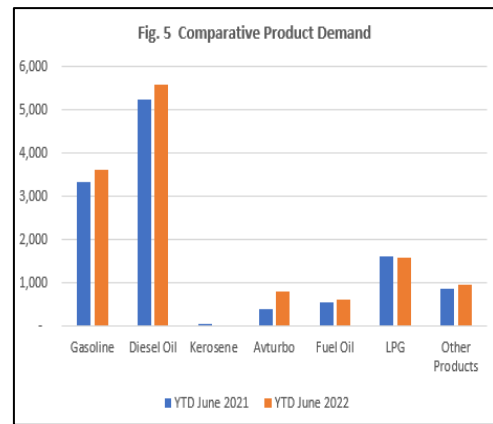
DEMAND

▪ **Petroleum Product Demand**

Year-to-date June 2022 total demand of petroleum products is 13,256 ML, an increase of 9.6 percent vis-à-vis last year's 12,092 ML. This can be translated to an average daily requirement of 73.2 ML vis-à-vis last year's 66.8 ML. The growth in demand was due to increased economic activity and less stringent travel restrictions implemented nationwide.

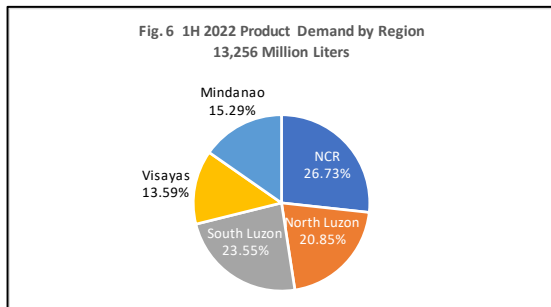
Table 4. Product Demand in Million Liters, ML

Product	VOLUME		PERCENT MIX (%)		PERCENT CHANGE
	YTD June 2021	YTD June 2022	YTD June 2021	YTD June 2022	
Gasoline	3,336	3,605	27.6%	27.2%	8.1%
Diesel Oil	5,239	5,580	43.3%	42.1%	6.5%
Kerosene	47	39	0.4%	0.3%	-17.5%
Avturbo	412	823	3.4%	6.2%	99.9%
Fuel Oil	562	628	4.6%	4.7%	11.7%
LPG	1,625	1,602	13.4%	12.1%	-1.4%
Other Products	872	979	7.2%	7.4%	12.2%
Asphalts	74	78	0.61%	0.58%	4.5%
Avgas	2	3	0.02%	0.02%	16.2%
Condensate	82	220	0.68%	1.66%	168.7%
Solvents	40	40	0.33%	0.30%	2.0%
Naphtha/Reformate	675	519	5.58%	3.91%	-23.1%
Petcoke		1	0.00%	0.00%	100.0%
Mixed Xylene	0	0.015	0.00%	0.00%	3650.0%
Pygas		120		0.90%	100.0%
Grand Total	12,092	13,256	100.00	100.00	9.6
in MLCD	66.8	73.2			



Compared with ytd June 2021 figures, diesel oil demand increased by 6.5 percent for the current period. Likewise, the demand of gasoline and fuel oil was up by 8.1 percent and 11.7 percent, respectively. With the ease in travel restrictions, avturbo demand surged by 99.9 percent. However, kerosene demand was down by 17.5 percent (Table 4).

Product demand mix still dominated by diesel oil at 42.1 percent followed by gasoline at 27.2 percent, LPG at 12.1 percent, avturbo at 6.2 percent, fuel oil at 4.7 percent, kerosene at 0.3 percent and other products at 7.4 percent share in the total product demand mix.



On a per region basis, the National Capital Region (NCR) has a highest share in the demand of petroleum products at 26.73 percent of the total market, while South Luzon and North Luzon got 23.55 and 20.85 percent shares, respectively. Mindanao region, on the other hand, captured 15.29 percent of the market. While the remaining 13.59 percent was in Visayas region (Fig. 6).

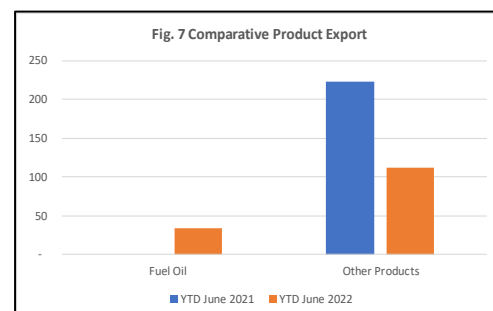
In terms of demand of petroleum products by Trade Classification, 34.06 percent of the total trade demand were distributed to Reseller Trade (volume sold to retail outlets) and 55.13 percent were sold to Industrial/Commercial Trade (volume sold directly to commercial, industrial, transport, power generation and agriculture sectors). The remaining volumes were distributed to International Trades, Independent Refillers, Philippine Government and Foreign Embassies at 5.42 percent, 4.97 percent, 0.43 and 0.0009 percent, respectively.

▪ **Petroleum Product Exports**

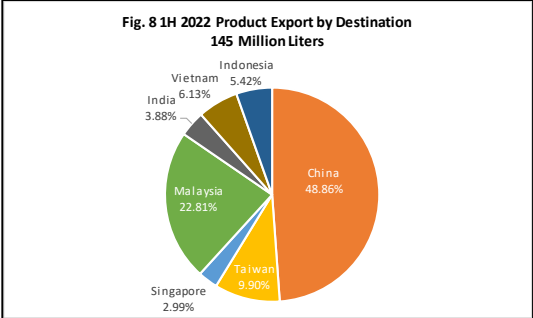
The total country’s petroleum product export as of ytd June 2022 decreased by 34.8 percent from 223 ML of ytd June 2021 to 145 ML this year (Table 5).

Table 5. Product Exports in Million Liters, ML

Product	VOLUME		PERCENT MIX (%)		PERCENT CHANGE
	YTD June 2021	YTD June 2022	YTD June 2021	YTD June 2022	
Fuel Oil	-	33.2	0.0%	22.8%	100.0%
Other Products	223	112	100.0%	77.2%	-49.7%
Mixed C4	26		11.7%	0.0%	-100.0%
Mixed Xylene	7	30	3.1%	20.5%	335.7%
Propylene	73	38	33.0%	26.0%	-48.6%
Benzene	10	7	4.6%	4.7%	-33.0%
Pygas	106		47.6%	0.0%	-100.0%
Toluene		19		13.4%	100.0%
Molten Sulfur		18		12.5%	100.0%
Total	223	145	100.0	100.0	(34.8)
in MLCD	1.2	0.8			



On a per product basis, product export mix comprised of 26.0 percent propylene, 22.8 percent fuel oil, 20.5 percent mixed xylene, 13.4 percent toluene, 12.5 percent molten sulfur, and 4.7 percent benzene.



Majority of the country’s product exports went to China with an export share of 48.86 percent, followed by Malaysia with an export share of 22.81 percent. Next were Taiwan and Vietnam with 9.9 and 6.13 percent export share, respectively. The country also exported products to Singapore (2.99%) and Indonesia (5.42%).

▪ **Crude Oil Exports**

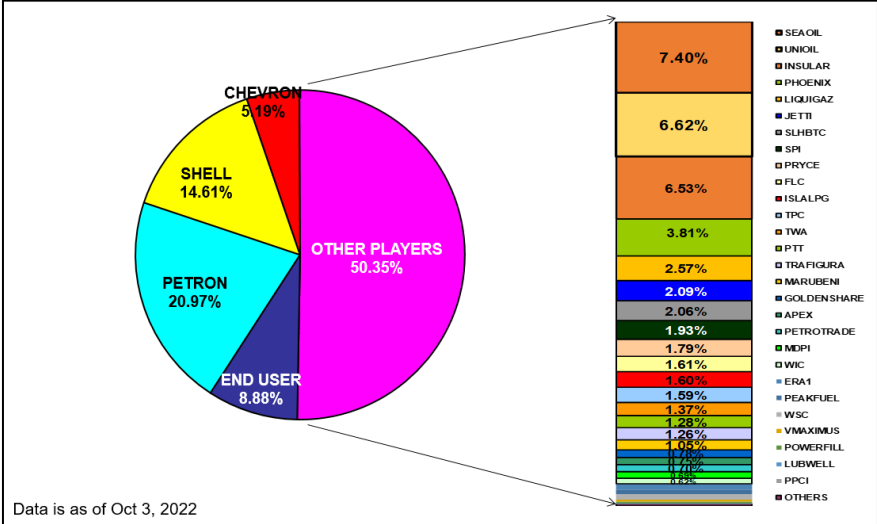
For the first half of 2022, a total of 46 ML crude oil was exported to Korea and Thailand, with an increase of 31.1 percent vis-à-vis 35 ML of ytd June 2021.

MARKET SHARE

▪ **Total Petroleum Products**

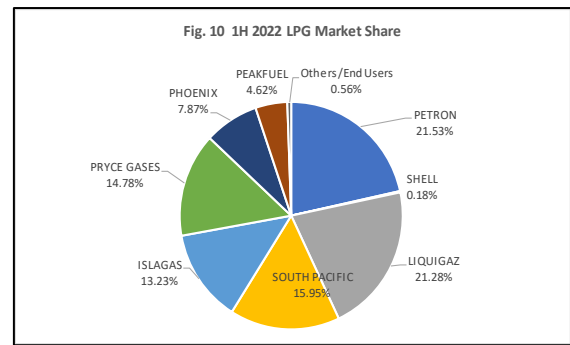
Major oil companies (Petron Corp., Chevron and Pilipinas Shell Petroleum Corp.) got the 40.77 percent market share of the total demand while other industry players including Seoil, Insular, Unioil, Phoenix, Liguigaz, SL Harbor, South Pacific, Jetti, Pryce Gas, FLC, TPC, Isla LPG, TWA, PTT, Trafigura, Marubeni, Apex, Golden Share, Peak Fuel, Petrotrade, Era1, Warbucks Industries, Micro Dragon, Warbucks Southern Corp., VMaximus, Power Fill, Lubwell, Eastern, Jadelink, and others, as well as the end-users who imported directly for own requirement, captured 59.23 percent of the market.

Fig. 9 1H 2022 TOTAL PETROLEUM PRODUCTS MARKET SHARE



▪ **LPG**

For LPG, 78.29 percent was the total market share of other industry players including end-users in the total LPG demand, while the remaining 21.71 percent were credited to Petron and Pilipinas Shell, with Petron’s share at 21.53 percent of the total LPG demand. Among the other LPG industry players, Liquigaz got the biggest market share with 21.28 percent share followed by South Pacific, Inc. (SPI) with a share of 15.95 percent. Next were Pryce Gases and Isla Gas with shares of 14.78 percent and 13.23 percent, respectively. Phoenix LPG on the other hand, got 7.87 percent share while Peak Fuel got 4.62 percent share.

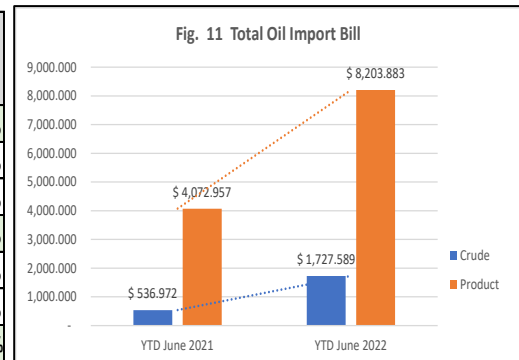


OIL IMPORT BILL

YTD June 2022 total oil import bill amounting to \$9,931.47 million gained by more than one hundred percent (115.4%) from ytd June 2021’s \$4,609.93 million. This was attributed to high import cost of crude and finished petroleum products in 2022 (Table 6/Fig. 11). Total oil import cost was made up of 82.6 percent finished petroleum products and 17.4 percent crude oil.

Table 6. Import Bill, In Million US\$

Details	Volume in Million Liters, ML		Total Cost In Million US\$		Percent Change in Cost
	Ytd June 2021	Ytd June 2022	Ytd June 2021	Ytd June 2022	
Total Imports Vol. and Bill	11,320	12,702	4,609.93	9,931.47	115.4%
i. Crudes	1,213	2,493	536.97	1,727.59	221.7%
ii. Products	10,107	10,209	4,072.96	8,203.88	101.4%
Total Pet. Export Earnings	258	192	443.51	226.57	-48.9%
i. Crudes	35	46	210.23	19.53	-90.7%
ii. Products	223	145	233.28	207.03	-11.3%
Net Oil Import Volume and Bill	11,062	12,510	4,166.42	9,704.90	132.9%



Import cost of crude oil amounted to \$1,727.59 million at an average CIF cost of \$692.956/kl. This was thrice more than last year’s level of \$536.97 million at an average CIF cost of \$442.615/kl.

Total product import cost, by contrast, doubled from last year’s level of \$4,072.96 million at an average CIF cost of \$402.97 million to \$8,203.88 million at an average CIF cost of \$805.09/kl. The rise was due to higher import costs of finished products in 2022.

Meanwhile, total export earnings dropped by 48.9 percent from \$443.51 million of last year’s level to \$226.57 million this year due to decreased product exports.

Overall, the country’s net oil import bill amounting to \$9,704.9 million was increased by 132.9 percent from last year’s \$4,166.42 million.

The average dollar rate for ytd June 2022, \$52.11, vis-a-vis ytd June 2021’s average rate of \$48.24 contributed to a higher import bill.