

OIL SUPPLY/DEMAND REPORT 1H 2021 vs 1H 2020



Department of Energy

Oil Industry Management Bureau/
Oil Industry Competition & Monitoring Division

Since the outbreak of Coronavirus in 2020, the local oil industry, just like many other industries, was greatly affected by the pandemic. This resulted in a slowdown in demand and physical operations of the oil companies given the lockdown/quarantine measures implemented nationwide.

One of the country's local refiners, Pilipinas Shell, decided to close and convert its Tabangao Refinery into a world-class import terminal sometime last year. Petron on the other hand, conducted maintenance/economic shutdown of its Bataan Refinery from February until the 3rd week of May 2021.

The DOE continuously monitors the developments on these matters to ensure a stable supply of petroleum products in the country. Moreover, the government continued to enforce the Minimum Inventory Requirement (MIR) given the continuing risks faced by the downstream oil industry sector such as the pandemic, geopolitical instability, and supply delivery problems in areas affected by calamities (e.g., typhoon, flood, earthquake, volcanic eruption, etc.).

Current MIR for refiners is 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 the LPG importers.

SUPPLY

▪ ***Inventory***

Actual crudes and finished products closing inventory for June 30, 2021, reflected a crude oil equivalent to 13-day supply or 910 million liters (including in-transit volume) and finished products equivalent to 26.0-day supply or 1,726 million liters (ML). Total crude oil and finished product available day supply is 39.0 days equivalent to 2,636 ML. The June 2021 inventory was lower by 3.3 percent from June 2020's 2,303 ML.

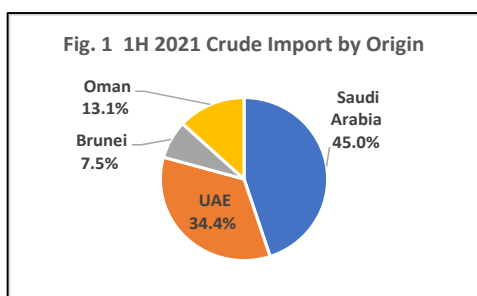
▪ ***Crude Oil Supply***

When the country's lone refinery bounced back into operation May of this year, a total of 1,213 ML crude oil was imported for the period. Yet, this was 65.3 percent lower from YTD June 2020's 3,493 ML (Table 1). The significant drop may be attributed to Pilipinas Shell's conversion of its refinery to an import terminal, thus, the company no longer imports crude oil for refining.

Table 1. Comparative Crude Oil Imports in Million Liters, ML

Origin	1H 2020		1H 2021		% Change 1H2020 vs 1H2021
	Volume	%	Volume	%	
Crude					
Middle East	2,078	59.5	1,122	92.5	(46.0)
ASEAN/Local Production	113	3.2	91	7.5	(18.9)
Other Asia	818	23.4	-	-	(100.0)
Others*	485	13.9	-	-	(100.0)
Total	3,493	100.0	1,213	100.0	(65.3)
MLCD	19.2		6.7		

* Nigeria, Brazil, USA



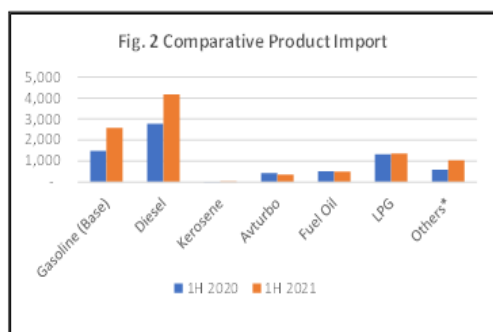
About ninety-two percent of the total crude mix (1,122 ML) originated from the Middle East, of which 45.0 percent (545 ML) was sourced from Saudi Arabia, the country's major supplier of crude oil, 417 ML of crude oil equivalent to 34.4 percent of the total crude mix was imported from the UAE, while 159 ML of crude oil (13.1 percent) came from Oman. The remaining 7.5 percent (91 ML) originated from Brunei.

▪ Petroleum Product Imports

YTD June 2021 finished product imports of 10,028 ML is a significant growth of 40.9 percent from the 7,116 ML of last year's level. Petron and Pilipinas Shell's shifting from refining to full importations of their finished product requirements while their refineries are in shutdown and on-going conversion to import terminal, respectively, prompted the rise in the country's imports for the first half of this year (Table 2).

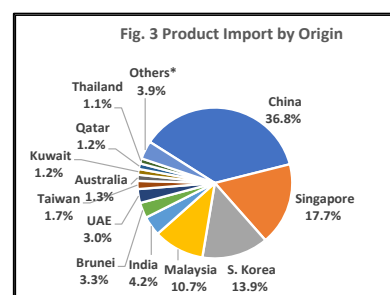
Product	VOLUME		MIX (%)		% CHANGE 1H2020 vs 1H2021
	1H 2020	1H 2021	1H 2020	1H 2021	
Gasoline (Base)	1,486	2,584	20.9	25.8	73.9
Diesel	2,775	4,166	39.0	41.5	50.1
Kerosene	13	37	0.2	0.4	181.3
Avturbo	418	356	5.9	3.6	(14.9)
Fuel Oil	511	501	7.2	5.0	(2.0)
LPG	1,327	1,356	18.6	13.5	2.2
Others*	586	1,029	8.2	10.3	75.5
Total	7,116	10,028	100.0	100.0	40.9
in MLCD	39.1	55.4			

* naphtha, asphalt, avgas



The top imported product for the period was diesel oil which was up by 50.1 percent from 2,775 ML of 1H 2020 to 4,166 ML this year. Next was gasoline which increased by 73.9 percent from 1,486 ML to 2,584 ML. LPG followed with a growth of 2.2 percent from 1,327 ML last year to 1,356 ML this year. On the other hand, avturbo imports were down by 14.9 percent, from 418 ML of 1H 2020 to 356 ML only in 1H 2021 due to the slump in demand because of travel restrictions. Likewise, fuel oil import dropped by 2.0 percent from 511 ML last year to 501 ML (Table 2/ Fig. 2).

Product imports were mostly sourced from China with an import share of 36.8 percent, followed by Singapore with an import share of 17.7 percent. Next was South Korea with a 13.9 percent import share, tailed by Malaysia with a 10.7 percent import share. The country also imported products from India (4.2%), Brunei (3.3%), UAE (3.0%), Taiwan (1.7%), Australia (1.3%), Kuwait (1.2%), Qatar (1.2%), Thailand (1.1%) and other countries (3.9%) (Fig. 3).



Product import mix comprised mostly of diesel oil at 41.5 percent, gasoline at 25.8 percent, LPG at 13.5 percent, fuel oil at 5.0 percent, avturbo at 3.6 percent, kerosene at 0.4 percent and other products at 10.3 percent share (Table 2).

Total gasoline import met 77.4 percent of the gasoline demand while diesel oil import was 79.9 percent of diesel demand. LPG import, on the other hand, was 83.5 percent of LPG demand. Total product import was 81.9 percent of the total product demand.

Consistent with the increase in gasoline demand, ethanol imports also rose by 11.8 percent vis-à-vis last year's level of 125 ML to 140 ML this year. 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).

▪ Crude Run/Refinery Production

The country is now left with only one refinery with a maximum working crude distillation capacity of 180 thousand barrels per stream day as Pilipinas Shell decided to permanently shut down its oil refinery operations in Tabangao, Batangas sometime in September last year. The refinery of Pilipinas Shell was converted to a full import terminal to optimize its asset portfolio.

It may be recalled that last year, both refineries Petron and Shell, notified the DOE-OIMB that they will be on a temporary economic/maintenance plant shutdown due to reduced fuel demand caused by the COVID-19 pandemic. This, with the assurance, that there will be no supply disruption and healthy inventory shall be maintained. The supply shall be replenished through importation of finished products.

With Pilipinas Shell no longer processing crude oil, the total volume processed for the first half of 2021 was reduced to 1,299 ML only, a big drop of 66.5 percent from last year's 3,978 ML. Refinery utilization during the period was only 25.4 percent vis-à-vis 2020's 56.5 percent.

Table 3. Comparative Refinery Production in Million Liters, ML

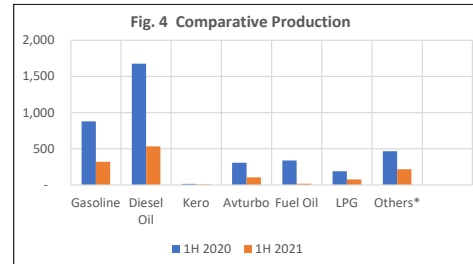
Product	VOLUME		MIX (%)		% CHANGE 1H2020 vs 1H2021
	1H 2020	1H 2021	1H 2020	1H 2021	
Gasoline	880	321	22.7	25.0	(63.6)
Diesel Oil	1,676	535	43.2	41.7	(68.1)
Kerosene	17	9	0.4	0.7	(44.7)
Avturbo	309	105	8.0	8.2	(66.1)
Fuel Oil	340	18	8.8	1.4	(94.7)
LPG	191	78	4.9	6.1	(59.2)
Others*	466	219	12.0	17.0	(53.1)
Total	3,878	1,284	100.0	100.0	(66.9)
in MLCD	21.3	7.1			

* naphtha, asphalts, petrochem products, petcoke

Consequently, first half 2021 refinery production output of 1,284 ML was significantly down by 66.9 percent from 3,878 ML of first half 2020. The average refining output for the period was 7.1 ML per day (Table 3).

All products output was down vis-à-vis last year's level. Diesel output fell by 68.1 percent, gasoline output dropped by 63.6 percent, fuel oil decreased by 94.7 percent, avturbo declined by 66.1 percent, LPG reduced by 59.2 percent and kerosene lessened by 44.7 percent (Table 3/ Fig. 4).

Diesel oil continued to dominate the production mix with a share of 41.7 percent, followed by gasoline and avturbo with 25.0 and 8.2 percent share, respectively. Meanwhile, LPG and fuel oil got 6.1 and 1.4 share, respectively.



DEMAND

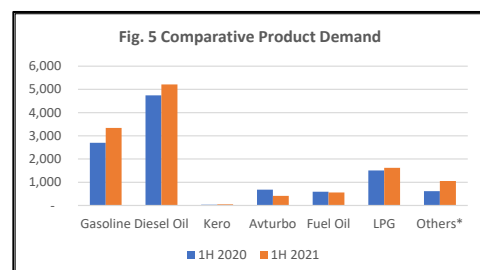
▪ Petroleum Product Demand

Total demand of petroleum products as of YTD June 2021 was 12,246 ML, an increase of 12.6 percent vis-à-vis last year's 10,872 ML. This can be translated to an average daily requirement of 67.7 ML vis-à-vis last year's 59.7 ML. The transition to less stringent travel restrictions implemented nationwide during the first half of 2021 has resulted to increased economic activity, hence the growth in demand.

Table 4. Comparative Product Demand in Million Liters, ML

Product	VOLUME		MIX (%)		PERCENT CHANGE (%) 1H2020 vs 1H2021
	1H 2020	1H 2021	1H 2020	1H 2021	
Gasoline	2,697	3,336	24.8	27.2	23.7
Diesel Oil	4,745	5,212	43.6	42.6	9.9
Kerosene	36	47	0.3	0.4	33.0
Avturbo	682	410	6.3	3.3	(39.9)
Fuel Oil	593	562	5.5	4.6	(5.2)
LPG	1,508	1,625	13.9	13.3	7.7
Others*	613	1,054	5.6	8.6	71.9
Total	10,872	12,246	100.0	100.0	12.6
in MLCD	59.7	67.7			

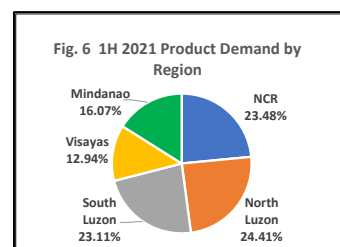
* naphtha, asphalts, petrochem products, petcoke



Compared with 1H 2020 figures, diesel oil demand increased by 9.9 percent for the current period. Likewise, the demand of gasoline and LPG grew by 23.7 percent and 7.7 percent, respectively. Kerosene also rose by 33.0 percent. However, demand of fuel oil fell by 5.2 percent. Avturbo also dropped by 39.9 percent (Table 4). Product demand mix comprises diesel oil at 42.6 percent, gasoline at 27.2 percent, LPG at 13.3 percent, fuel oil at

4.6 percent, avturbo at 3.3 percent, kerosene at 0.4 percent and other products at 8.6 percent share in the total product demand mix.

On a per region basis, the National Capital Region (NCR) captured 23.5 percent of the total market, while North Luzon and South Luzon got 24.4 and 23.1 percent shares, respectively. Mindanao region, on the other hand, captured 16.1 percent of the market. The remaining 12.9 percent was from the Visayas region (Fig. 6)



▪ **Petroleum Product Exports**

Table 5. Comparative Product Exports in Million Liters, ML

Product	VOLUME		MIX (%)		% CHANGE 1H2020 vs 1H2021
	1H 2020	1H 2021	1H 2020	1H 2021	
Gasoline	101	-	10.6	0.0	(100.0)
Diesel Oil	174	-	18.3	0.0	(100.0)
Kerosene	-	-	0.0	0.0	-
Avturbo	18	-	1.9	0.0	(100.0)
Fuel Oil	219	-	23.1	0.0	(100.0)
LPG	0.07	-	0.0	0.0	(100.0)
Naphtha	156	-	16.5	0.0	(100.0)
Condensate	99	198	10.4	48.3	100.2
Others*	181	212	19.1	51.7	16.7
Total	949	410	100.0	100.0	(56.8)
in MLCD	5.2	2.3			

asphalts, petrochem products, pygas, mixed C4

The total country's petroleum product export as of YTD June 2021 went down by 56.8 percent, from 949 ML of YTD June 2020 to 410 ML. This can be attributed to nil export of fuel oil and naphtha (Table 5).

First half 2021 product export mix comprised of 48.3 percent condensate and 51.7 percent other products (pygas, mixed c4 and petrochemical products)

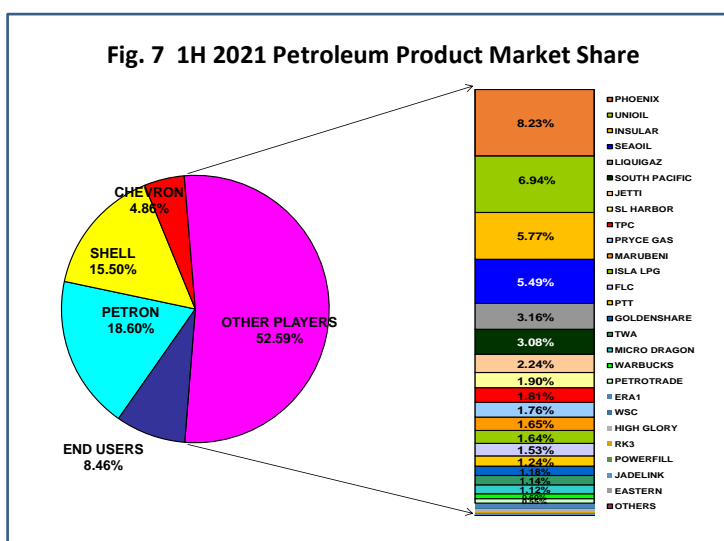
▪ **Crude Oil Exports**

The country has no crude export for the first half of 2021 vis-à-vis last year's level of 34 ML.

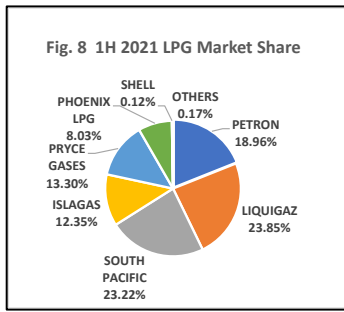
MARKET SHARE

▪ **Total Petroleum Products**

Major oil companies (Petron Corp., Chevron Phils. and Pilipinas Shell Petroleum Corp.) got 38.96 percent market share of the total demand while other industry players including Phoenix, Unioil, Seaoil, Insular, Liquigaz, South Pacific, TPC, Jeti, Pryce Gas, SL Harbor, Isla LPG, Marubeni, FLC, PTT, Microdragon, TWA, Petrotrade, Warbucks Industries, High Glory, Era 1, Jadelink, Golden Share, Eastern, Warbucks Southern Corp., Lubwell and Powerfill, as well as the endusers who imported directly for own requirement, captured 61.04 percent of the market.



▪ **LPG**



For LPG, other industry players' market share was at 80.92 percent while the remaining 19.08 percent was credited to Petron and Pilipinas Shell with Petron's share at 18.96 percent of the total LPG demand. Among the other LPG industry players, Liquigaz got the biggest market share with a 23.85 percent share and was followed by South Pacific, Inc. (SPI) with a share of 23.22 percent. Next were Pryce Gases and Isla Gas with shares of 13.3 percent and 12.35 percent, respectively. Phoenix LPG on the other hand, got 8.03 percent share.

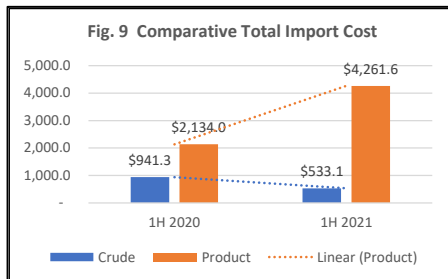
OIL IMPORT BILL

YTD June 2021 total oil import bill amounting to \$4,794.6 million went up by 55.9 percent from YTD June 2020's \$3,075.4 million. This may be attributed to increased product imports during the first half of this year as compared with last year's level (Table 6/ Fig. 9).

Total product import cost increased by about 99 percent from the first half of 2020s \$2,134.0 million at an average CIF cost of \$47.681/bbl to \$4,261.6 million at an average CIF cost of \$67.317/bbl. The rise was attributed to higher import costs and increased product import volume this year.

Table 6. Comparative Oil Import Bill, in Million US\$

Details	Volume in Million Liters, ML		Volume in Thousand Barrels, MB		Cost in Million US\$		PERCENT CHANGE IN VOLUME 1H 2020 VS 1H 2021	PERCENT CHANGE IN COST 1H 2020 VS 1H 2021
	1H 2020	1H 2021	1H 2020	1H 2021	1H 2020	1H 2021		
Total Imports Vol. and Bill	10,609	11,241	66,725	70,699	3,075.4	4,794.6	6.0	55.9
i. Crudes	3,493	1,213	21,969	7,630	941.3	533.1	(65.3)	(43.4)
ii. Products	7,116	10,028	44,756	63,069	2,134.0	4,261.6	40.9	99.7
Total Pet. Export Earnings	983	410	6,182	2,577	239.0	174.7	(58.3)	(26.9)
i. Crudes	34	0	214	0	7.7	-	(100.0)	(100.0)
ii. Products	949	410	5,968	2,577	231.3	174.7	(56.8)	(24.5)
Net Oil Import Vol. and Bill	9,626	10,831	60,543	68,122	2,836.4	4,619.9	12.5	62.9



Meanwhile, total export earnings in the first half of this year were down by 26.9 percent from \$239.0 million of 1H 2020 to \$174.7 million this year.

Overall, the country's net oil import bill amounting to \$4,619.9 million was an increase by 62.9 percent from last year's \$2,336.4 million.

The average dollar rate for YTD June 2021 is \$48.23 compared to YTD June 2020s average rate of \$50.64.