MONTHLY REPORT ON INDIGENOUS CRUDE OIL PRODUCTION, IMPORT AND PROCESSING

&

PRODUCTION, IMPORT AND EXPORT OF PETROLEUM PRODUCTS

September 2017

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

1. In this report, indigenous crude oil production, imports and processing as well as production and imports/exports of petroleum products by oil companies are analyzed on a monthly basis to assess the domestic availability of petroleum products in the country for consumption.

Highlights

- Indigenous crude oil production during September 2017 was marginally higher by 0.1% than September, 2016. PSU companies registered a growth of 2.7% during September 2017 as compared to September 2016. However PSC fields registered de-growth of 6.2% during September 2017 as compared to September 2016.
- Total crude oil processed during September 2017 increased by 3.9% over September 2016. On cumulative basis crude oil processed was higher by 0.7% over the period April-September, 2016-17. There was an increase in crude oil processed by PSU refineries. Indigenous crude oil processed by Indian refineries during April-September 2017 decreased by 1.9% over the corresponding period of last year.
- Production of petroleum products during September, 2017 saw a growth of 8.1% over September, 2016. On cumulative basis a growth of 2.1% was recorded in production over the period April- September, 2016-17.
- Crude oil imports decreased by 1.3% during September 2017 as compared to September 2016. On cumulative basis crude oil imports marginally decreased by 0.1% over the corresponding period of the previous year.
- Product imports decreased by 10.4% during September 2017 as compared to September 2016 mainly due to decrease in Petcoke imports by cement and steel industries. On cumulative basis, product imports decreased by 8.9% over the corresponding period of previous year.
- Export of POL products increased by 3.7% during September 2017 as compared to September 2016 primarily due to higher surplus availability of HSD and Fuel oil. On cumulative basis, an increase of 1.4% was recorded in product exports over the period April- September 2016-17.

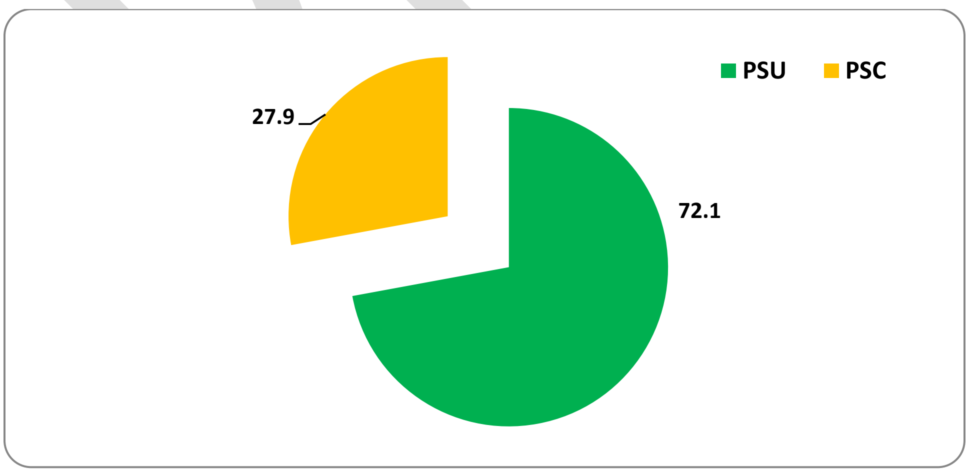
2. Indigenous crude oil and condensate production

2.1. Indigenous crude oil and condensate production marginally increased by 0.1% during September 2017 as compared to September 2016. On cumulative basis it marginally decreased by 0.2% as compared to April-September, 2016-17.

- OIL's crude oil production in September 2017 was higher by 5.7% as compared to September 2016. On cumulative basis growth of 5.5% was recorded during April-September 2017 as compared to the corresponding period in 2016-17.
- In case of ONGC, crude oil and condensate production in September 2017 was higher by 2.2% as compared to September 2016. During the month condensate production registered growth of 18.7% over September 2016.
- Indigenous crude oil and condensate production under PSC fields decreased by 6.2% during September 2017 and 7.4% during April-September 2017 as compared to the corresponding period in 2016-17.

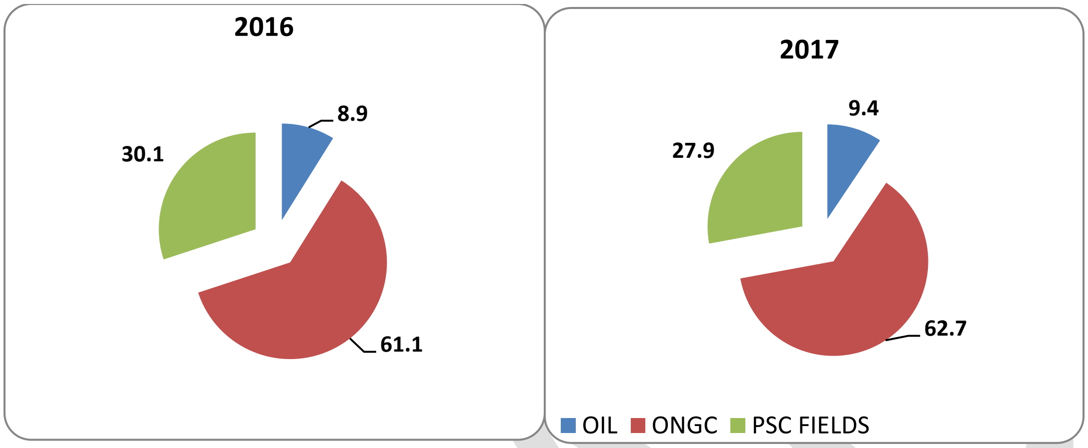
The percentage share of PSU upstream companies and PSC in overall crude oil production including condensate during April–September 2017 is shown in figure-1 below:

Figure-1; Percentage share in crude oil production: April-September (P)



The percentage share of ONGC, OIL and PSC in overall crude oil production including condensate during April–September 2017 vis-a-vis April-September 2016 is shown in figure-2 below. While ONGC and OIL's share has increased, PSC field's share has declined.

Figure-2; Percentage share in crude oil production: (April- September)



3. Crude oil processing by Oil Companies

3.1. The total crude oil processed by Indian refining companies during September 2017 was 20481 TMT. On cumulative basis Indian refining companies processed 122387 TMT crude oil during April- September 2017.

- Indigenous crude oil processed during April-September 2017 decreased by 1.9% over April-September 2016. On cumulative basis, an increase of 1.1% was observed in total imported crude oil processed during April-September 2017 over the corresponding period of last year.
- Indian refineries processed 76.0% of high sulphur crudes during September 2017 as compared to 73.9% in September 2016. On cumulative basis 73.8% of high sulphur crudes were processed during April-September 2017 as against 72.1% in the corresponding period of 2016-17.

- Self-sufficiency of petroleum products on consumption basis was 16.8% in September 2017 as against 17.6% during September 2016. On cumulative basis self-sufficiency was 17.7% during April-September 2017 as against 18.1% during April-September 2016.

4. Production of Petroleum Products

4.1. Petroleum products (grade-wise) production figures in September2017 and cumulative position in the current year are given in Table-1.

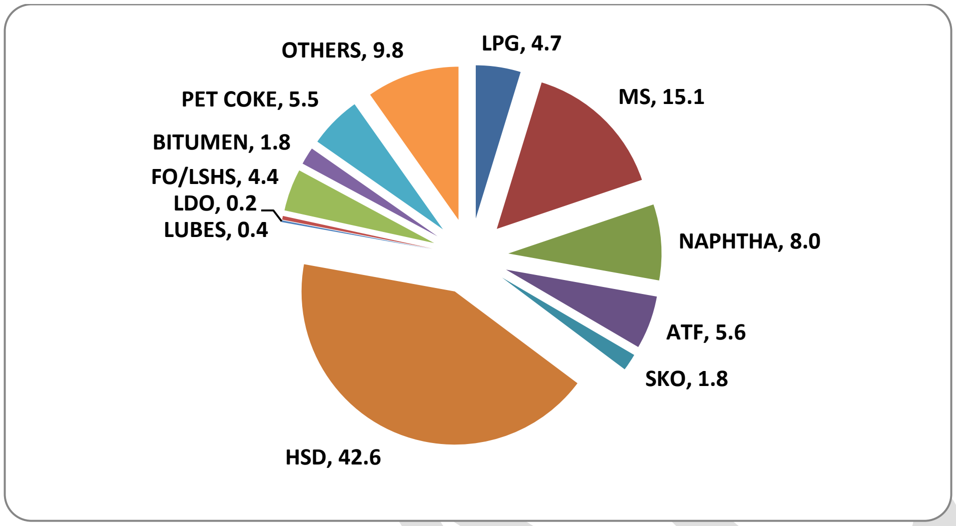
Table-1; Production of petroleum products		
		(Thousand Metric Tonnes)
PRODUCTS	**September 2017(P)**	**April-September 2017P)**
LPG	984	5802
NAPHTHA	1669	9820
MS BS-III	0	0
MS BS-IV	1929	11751
MS Others	1167	6748
ATF	1184	6893
SKO	358	2200
HSD BS-III	2	3
HSD BS-IV	5358	34031
HSD Others	3494	18244
LDO	40	225
LUBES	73	483
FO	898	5330
LSHS	10	118
BITUMEN	222	2258
RPC(Petcoke)	1134	6760
Others	2256	12001
TOTAL	**20780**	**122666**

Note: All figures are provisional. Source : Oil Companies
** Others include products like Propylene, solvents (Hexane, Benzene, Toluene, Xylene and Specialty solvents), Reformate, Mineral Turpentine Oil, Carbon Black Feeds Sock, Waxes, Sulphur etc.*

- Production of petroleum products from refineries and fractionators increased by 8.1% in September2017 as compared to September2016. On cumulative basis an increase of 2.1% was registered during April-September 2017 over April –September 2016.
- SKO production registered de-growth of 34.6% during September2017 and 34.4% during April–September 2017 as compared to the corresponding period of previous year mainly because of reduced allocation to states and also voluntary surrender of PDS SKO quota by a few states.
- On cumulative basis production of FO decreased by 10.9% and petcoke increased by 8.2% as a result of operation of bottom upgradation units.

- The percentage share contribution of various products in the total POL production during April-September2017 is shown in figure-3 below:

Figure-3; Percentage share of POL products in production: April-September 2017 (P)



LPG, MS, ATF, SKO and HSD accounted for 69.8% of total POL production during April–September 2017.

5.0 Import of Crude oil and Petroleum Products

5.1 Details of import of crude oil and petroleum products are given in Table-2:

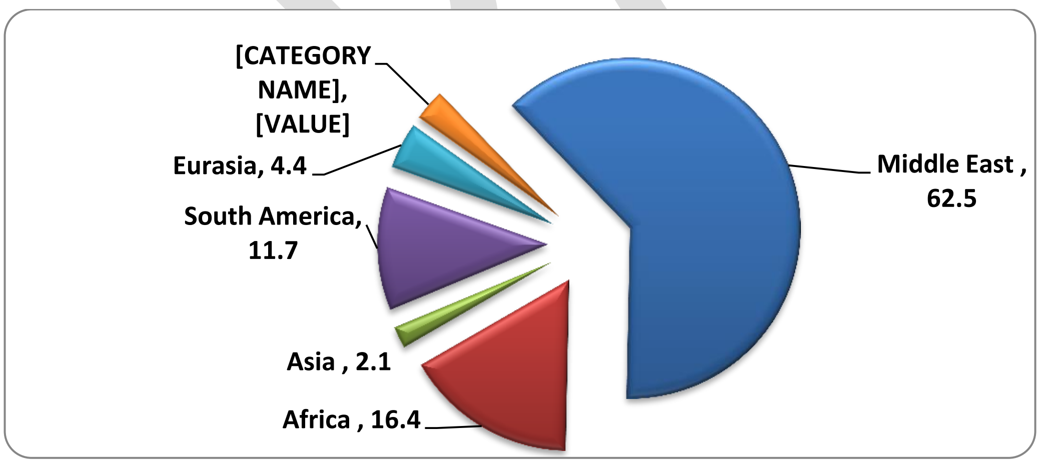
Table-2; Import of Crude oil and Petroleum Products		
		(Thousand Metric Tonnes)
Imports	**September 2017(P)**	**April-September 2017P)**
Crude oil	17529	106752
PRODUCT IMPORT #		
LPG	880	5202
MS/ Petrol	0	174
Naphtha	172	754
ATF	26	137
HSD	5	1239
LOBS/Lube oil	167	1096
Fuel Oil	92	480
Bitumen	71	415
Petcoke	1114	6686
Others*	142	1348
TOTAL	**2667**	**17532**

Note: All figures are provisional. Source: Oil Companies # DGCI&S data is estimated.
** Others include SKO, CBFS, Paraffin wax, Petroleum Jelly, LSWR , Aviation Gas etc.*

- Crude oil imports during September 2017 decreased by 1.3% as compared to September 2016. Middle East region continued to be the largest source of crude oil imports at 62.5% followed by Africa at 16.4% and South America at 11.7% during April-September2017.
- Crude oil imports from OPEC countries reduced to 84.2% of total imports during April-September 2017 as compared to 88.2% of total imports during April- September 2016 with increased imports from non-OPEC countries like Canada, Russia, Kazakhstan and Sudan.
- Crude oil imports of PSU/JV oil companies during September 2017 decreased by 1.7% as compared to September, 2016 and registered a decrease of 1.6% during April- September 2017 as compared to the corresponding period of the previous year mainly due to planned shutdown in various PSU /JV refineries during the period.
- Crude oil imports of private oil companies marginally decreased by 0.8% during September 2017 as compared to September 2016. However, it registered an increase of 2.1% in April-September 2017 as compared to the corresponding period of the previous year.

Region wise crude oil import share during April-September 2017 is given below.

Figure-4; Region wise percentage share of crude oil imports: April-September 2017 (P)



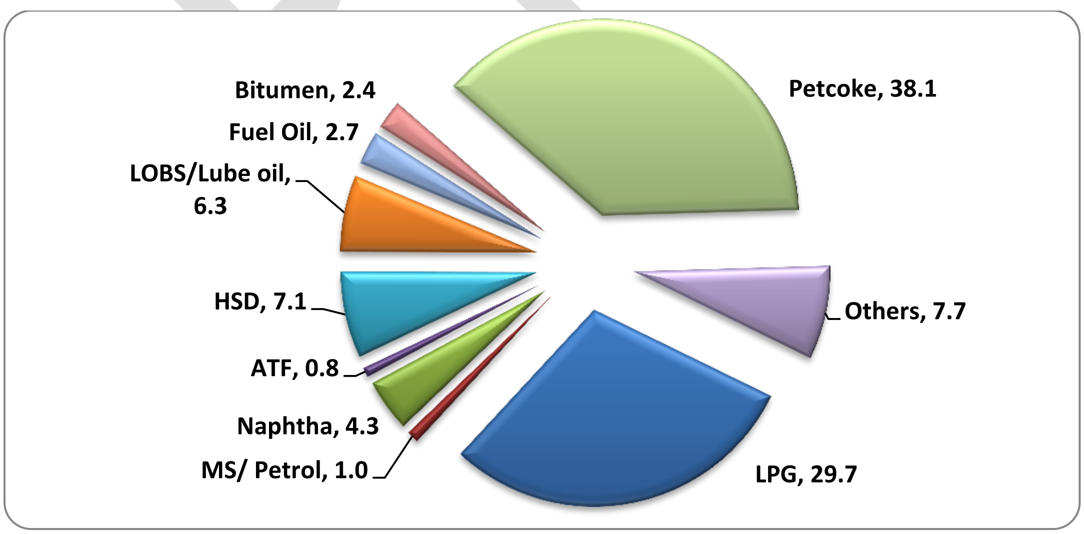
- Import of POL products decreased by 10.4% during September 2017 and 8.9% during April-September 2017 as compared to the corresponding period of the previous year mainly due to reduction in naphtha and petcoke imports.
- Saudi Arabia, UAE, USA and Qatar were the top countries from where 60.4% of total POL products were imported during April-September 2017. LPG was mainly imported from Saudi

Arabia and Qatar during April-September 2017. Petcoke and CBFS were major components of import of POL from USA.

- Import of LPG and petcoke accounted for 74.7% share of the total petroleum product imports during September 2017, while LPG alone accounted for 33.0% of total POL imports. LPG imports increased by 8.0% during April-September 2017 as compared to the corresponding period of the previous year due to increase in domestic consumption. Further, 96.2% of total LPG imports were from Middle Eastern region during the month.
- Petcoke imports, with a percentage share of 41.8% of total POL imports during September 2017, were mainly done by cement and steel industries as a cheap substitute of coal. Saudi Arabia and USA were the main supply source for petcoke.
- Import of FO decreased by 32.3% during September 2017 as compared to September 2016 due to decrease in consumption of FO in fertilizer and steel sectors.
- Import of naphtha decreased by 27.9% during September 2017 as compared to September 2016 due to decrease in domestic consumption in fertilizer and petrochemical sectors. On cumulative basis naphtha imports decreased by 51.0% during April- September 2017 as compared to the same period last year.

The percentage share of all major products in the cumulative imports of the country during April-September 2017 is shown in figure-5.

Figure-5; Percentage share of petroleum products in imports: April-September 2017(P)



6.0 **Export of Petroleum Products**

6.1 The details of export of petroleum products are given in Table-3 below:

Table-3; Export of major petroleum products		
		(Thousand Metric Tonnes)
Exports	**September 2017(P)**	**April-September 2017P)**
LPG	31	167
MS	1152	7165
NAPHTHA	642	4399
AVIA. TURBINE FUEL	578	3305
HSD	3040	14213
SKO	1	9
LDO	0	9
LOBS/ LUBE OIL	1	9
FUEL OIL	418	1441
BITUMEN	6	41
PET COKE	116	294
VGO	42	448
OTHERS*	235	1319
PRODUCT EXPORT	**6263**	**32819**
Note: All figures are provisional. Source : Oil Companies ** Others in export include CBFS, Hexane, Benzene, MTO, Paraffin wax, Sulphur etc.*		

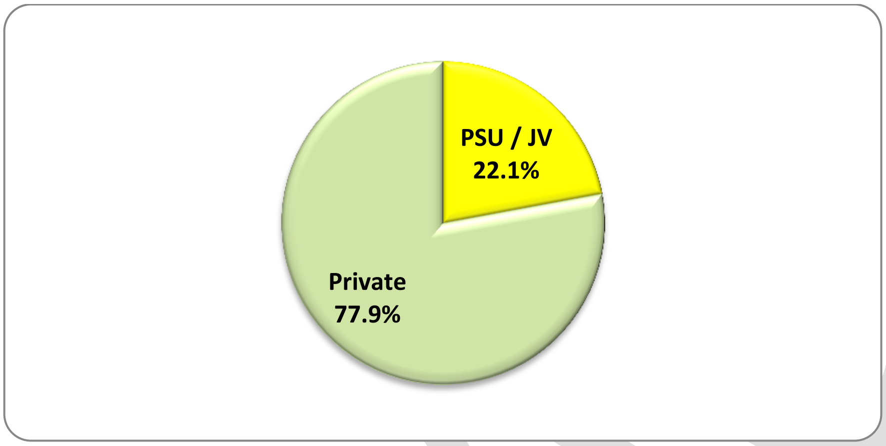
6.2 **Significant variations in export of petroleum products are analyzed below:**

- Export of petroleum products increased by 3.7 % during September 2017 as compared to September 2016 primarily due to increased surplus availability of POL products like HSD and fuel oil which constituted 55.2% of total POL exports. On cumulative basis export of petroleum products increased by 1.4% during April- September 2017 as compared to April- September 2016. MS, naphtha, ATF and HSD constituted 88.6% of POL exports during April-September 2017.
- HSD exports increased by 8.2% during September 2017 in comparison to September 2016. HSD share in exports of POL was 48.5% during September 2017 as compared to 46.5% during September 2016. On cumulative basis HSD exports increased by 3.2% during April-September 2017 as compared to April-September 2016. Singapore and Turkey were the major export destinations of HSD.
- MS exports showed de-growth of 7.3% due to lower surplus availability of MS during September 2017. On cumulative basis MS exports dropped by 12.5% during April-September 2017 as compared to the corresponding period of the previous year. MS

was mainly exported to UAE, Oman and USA (78% of total MS exports) during April-September 2017.

- Percentage share of POL exports by PSU/JV and private oil companies during April-September 2017 are given in figure-6.

Figure-6; Percentage share of PSU/JV and private oil companies in POL exports: April-September 2017(P)



-----------X-----------