MONTHLY REPORT ON INDIGENOUS CRUDE OIL PRODUCTION, IMPORT AND PROCESSING

&

PRODUCTION, IMPORT AND EXPORT OF PETROLEUM PRODUCTS

November 2017

Analysis • Knowledge • Information

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 November 2017 was marginally higher by 0.2% than November, 2016. ONGC registered a de-growth of 1.5% while OIL registered a growth of 3.7%. during November 2017 as compared to November 2016 PSC fields also registered growth of 2.9% during the month as compared to November 2016.
- Total crude oil processed during November 2017 increased by 6.5% over November 2016, mainly due to increase in crude oil processed by PSU/JV refineries. On cumulative basis crude oil processed was higher by 2.1% over the period April - November, 2016-17.
- Production of petroleum products during November, 2017 saw a growth of 8.3% over November, 2016. On cumulative basis a growth of 3.4% was recorded in production over the period April - November, 2016-17.
- Crude oil imports increased by 1.6% during November 2017 as compared to November 2016. On cumulative basis crude oil imports marginally increased by 0.6% over the corresponding period of the previous year.
- Product imports increased by 7.7% during November 2017 as compared to November 2016 mainly due to increase in LPG imports for domestic consumption. On cumulative basis, product imports decreased by 4.9% over the corresponding period of previous year.
- Export of POL products increased by 3.1% during November 2017 as compared to November 2016 primarily due to higher surplus availability of MS, Naphtha and HSD. On cumulative basis, an increase of 1.0% was recorded in product exports over the period April - November, 2016-17.

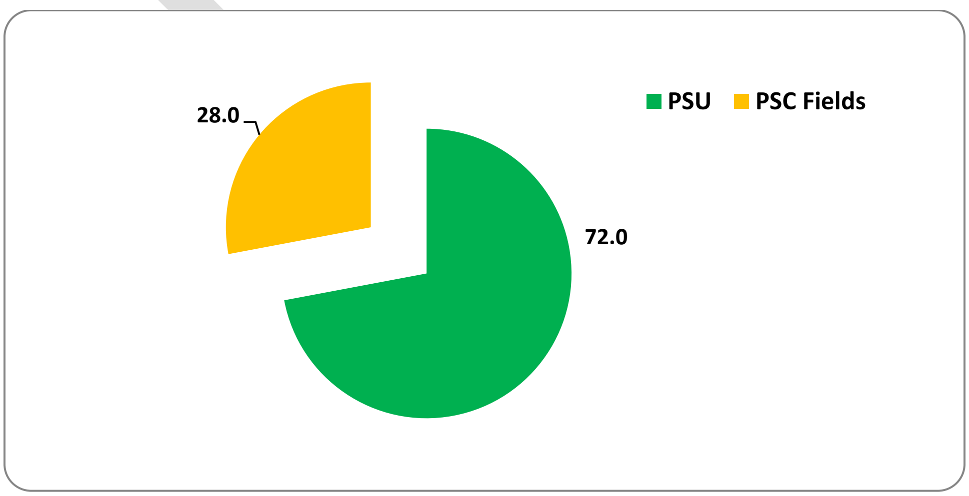
2. Indigenous crude oil and condensate production

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

- OIL's crude oil production in November 2017 was higher by 3.7% as compared to November 2016. On cumulative basis growth of 5.1% was recorded during April – November 2017 as compared to the corresponding period in 2016-17.
- In case of ONGC, crude oil and condensate production in November 2017 saw a de-growth of 1.5% as compared to November 2016. However on cumulative basis a growth of 1.8% was recorded in total crude oil and condensate production during April – November 2017 as compared to April – November 2016.
- Indigenous crude oil and condensate production under PSC fields recorded a growth of 2.9% during November 2017 over November 2016. However on cumulative basis de-growth of 5.9% was recorded during April - November 2017 as compared to the corresponding period in 2016-17.

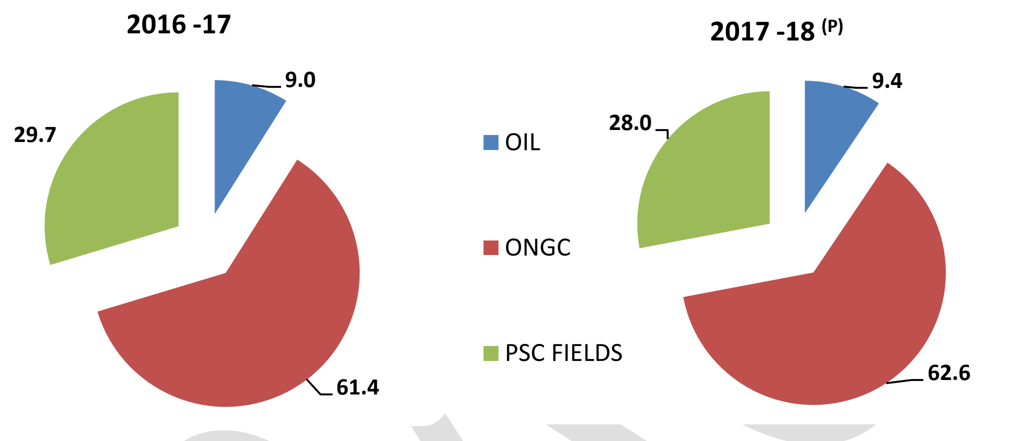
The percentage share of PSU upstream companies and PSC in overall crude oil production including condensate during April – November 2017 is shown in figure-1 below:

Figure-1; Percentage share in crude oil production: April - November 2017(P)



The percentage share of ONGC and OIL in overall crude oil production including condensate during April – November 2017 has increased as compared to April – November 2016, while PSC field's share has declined. The comparison is shown in figure-2 below:

Figure-2; Percentage share in crude oil production: April – November



3. Crude oil processing by Oil Companies

The total crude oil processed by Indian refineries was 21226 TMT during November 2017 and 165831 TMT during April - November 2017.

- Indigenous crude oil processed during April - November 2017 decreased by 1.1% over April - November 2016. However, an increase of 2.6% was observed in total imported crude oil processed during April - November 2017 over the corresponding period of last year.
- Indian refineries processed 76.3% of high sulphur crude during November 2017 as compared to 72.6% in November 2016. On cumulative basis 74.4% of high sulphur crude was processed during April - November 2017 as against 72.4% in the corresponding period of 2016-17.
- Self-sufficiency of petroleum products on consumption basis was 16.3% in November 2017 as against 17.6% during November 2016. On cumulative basis self-sufficiency was 17.4% during April - November 2017 as against 18.0% during April - November 2016.

4. Production of Petroleum Products

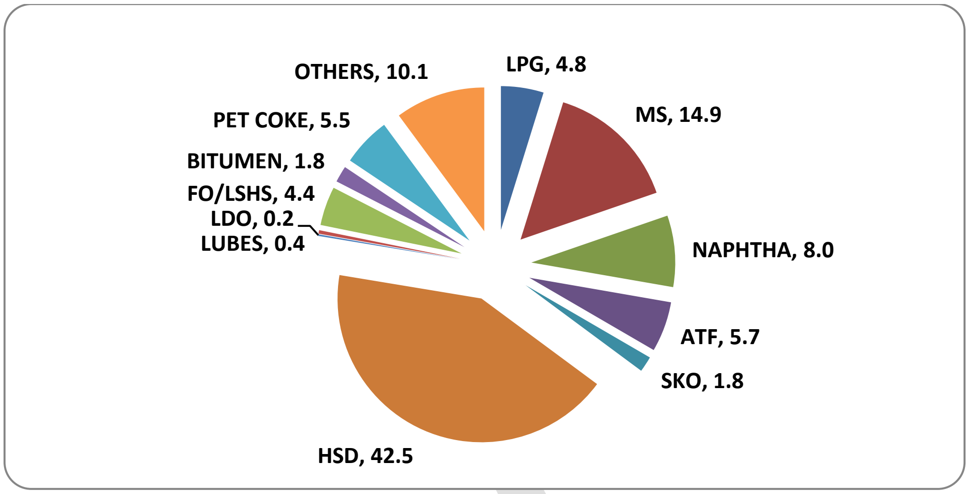
4.1. Details of production of Petroleum products are given in Table-1.

Table-1; Production of petroleum products		
		(Thousand Metric Tonnes)
PRODUCTS	**November 2017 (P)**	**April-November 2017 (P)**
LPG	1101	7976
NAPHTHA	1648	13302
MS BS-III	0	0
MS BS-IV	2003	15815
MS Others	1093	9020
ATF	1266	9402
SKO	269	2928
HSD BS-III	3	24
HSD BS-IV	5700	45466
HSD Others	3249	25196
LDO	37	303
LUBES	85	654
FO	765	7092
LSHS	48	191
BITUMEN	462	3063
RPC(Petcoke)	1171	9140
Others	2442	16830
TOTAL	**21343**	**166402**

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 8.3% in November 2017 as compared to November 2016. On cumulative basis an increase of 3.4% was registered during April - November 2017 over April - November 2016.
- SKO production registered de-growth of 31.9% during November, 2017 and 30.5% during April - November 2017 as compared to the corresponding period of the previous year.
- On cumulative basis production of FO decreased by 11.4% and petcoke increased by 7.5% as a result of operation of bottom upgradation units.
- The percentage share contribution of various products in the total POL production during April – November 2017 is shown in figure-3 below:

Figure-3; Percentage share of POL products in production: April - November 2017$^{(P)}$



LPG, MS, ATF, SKO and HSD accounted for 69.6% of total POL production during April – November 2017.

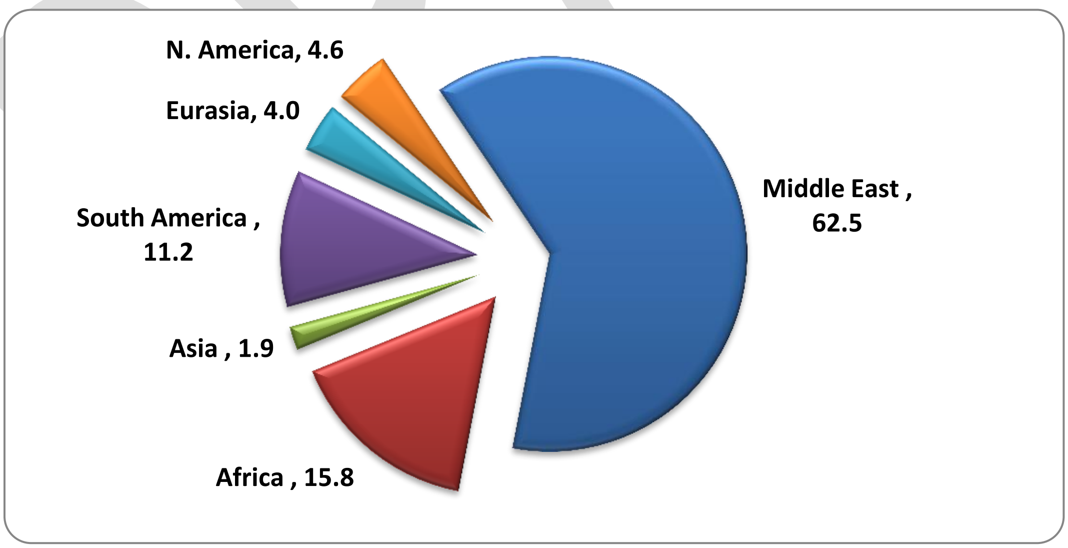
5. Import of Crude oil and Petroleum Products

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

Table-2 ; Import of Crude oil and Petroleum Products		
		(Thousand Metric Tonnes)
IMPORT	**November 2017 $^{(P)}$**	**April - November 2017 $^{(P)}$**
Crude oil	**19051**	**144721**
PRODUCT IMPORT #		
LPG	1246	7641
MS/ Petrol	0	174
Naphtha	162	1172
ATF	25	183
HSD	5	1250
LOBS/Lube oil	176	1530
Fuel Oil	121	676
Bitumen	78	538
Petcoke	1025	8966
Others$	139	1630
TOTAL	**2976**	**23761**
PSU/JV	1232	8976
Pvt.	1743	14784
Note: All figures are provisional. Source : Oil Companies		
# DGCI&S data is actual upto September 2017 and prorated for October and November 2017.		
$ Others include SKO, CBFS, Paraffin wax, Petroleum Jelly, LSWR , Aviation Gas etc.		

- Crude oil imports during November 2017 increased by 295 TMT as compared to November 2016. On cumulative basis crude oil imports increased by 908 TMT during April - November 2017 as against April - November 2016.
- Crude oil imports from OPEC countries reduced to 82.4% of total imports during April-November 2017 as compared to 87.9% of total imports during April- November 2016 with increased imports from non-OPEC countries like US, Canada, Russia, Kazakhstan and Sudan.
- Crude oil imports of PSU/JV oil companies during November 2017 decreased by 3.9% as compared to November 2016 and registered a decrease of 1.0% during April - November 2017 as compared to the corresponding period of the previous year due to planned shutdown in various PSU /JV refineries during the period.
- Crude oil imports of private oil companies increased by 10.6% during November 2017 as compared to November 2016 and registered an increase of 3.1% in April - November 2017 as compared to the corresponding period of the previous year.
- Region wise crude oil import share during April- November 2017 is given in figure-4.

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



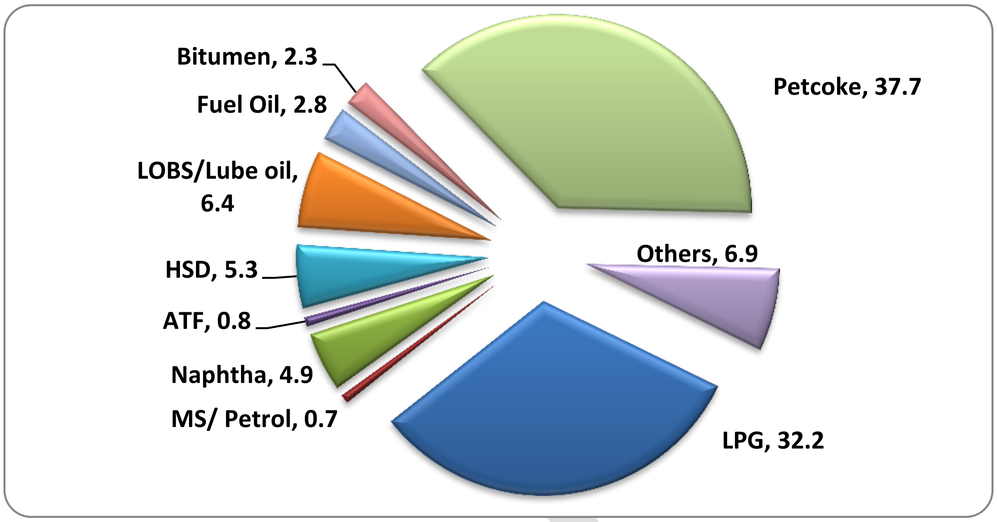
- Import of POL products increased by 7.7% during November 2017 mainly due to the increase in imports of LPG, FO, bitumen and petcoke. However, POL imports decreased by

4.9% during April - November 2017 as compared to the corresponding period of the previous year

- Saudi Arabia, UAE, USA and Qatar were the top countries from where 65.2% of total POL products were imported during April - November 2017. LPG was mainly imported from Saudi Arabia, UAE, Qatar and Kuwait during April - November 2017. Petcoke and CBFS were major components of import of POL from USA and Saudi Arabia.
- Import of LPG and petcoke accounted for 76.3% share of the total petroleum product imports during November 2017, while LPG alone accounted for 41.9% of total POL imports. Further, 98.4% of total LPG imports were from Middle Eastern region during the month.
- Petcoke imports, with a percentage share of 34.4% of total POL imports during November 2017, were mainly done by cement and steel industries as a cheap substitute of coal. However, the percentage share of import of petcoke is lower than its cumulative share of 37.7% during April - November 2017. Saudi Arabia and USA were the main supply source for petcoke.
- Import of naphtha reduced by 35.7% during November 2017 as compared to November 2016. On cumulative basis naphtha imports decreased by 41.6% during April - November 2017 as compared to the same period of last year due to decrease in demand of naphtha in fertilizer and petrochemical sectors.

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

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



6. Export of Petroleum Products

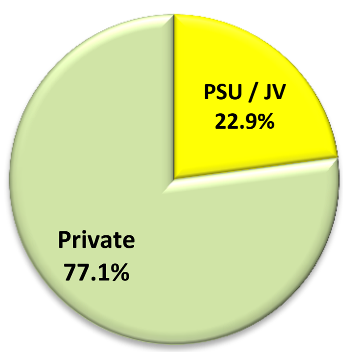
6.1 The details of export of petroleum products are given in Table-3 below:

Table-3 ; Export of major petroleum products		
		(Thousand Metric Tonnes)
EXPORT	**November 2017 (P)**	**April - November 2017 (P)**
LPG	34	231
MS	1137	9297
NAPHTHA	749	5999
ATF	558	4511
HSD	2521	19680
SKO	2	12
LDO	4	18
LOBS/ LUBE OIL	1	10
FUEL OIL	200	1913
BITUMEN	2	55
PET COKE	42	378
VGO	0	488
OTHERS#	251	1717
PRODUCT EXPORT	**5501**	**44310**
Note: All figures are provisional. Source : Oil Companies		
'# Others in export include CBFS, Hexane, Benzene, MTO, Paraffin wax, Sulphur etc.		

- Export of petroleum products increased by 3.1% during November 2017 as compared to November 2016 primarily due to surplus availability of POL products like MS, HSD and naphtha which constituted 80.1% of total POL exports. On cumulative basis export of petroleum products marginally increased by 1.0% during April - November 2017 as compared to April - November 2016. MS, Naphtha and HSD constituted 78.9% of POL exports during April - November 2017.

- HSD exports increased by 4.3% during November 2017 in comparison to November 2016. HSD share in exports of POL was 45.8% during November 2017 as compared to 45.3% during November 2016. On cumulative basis HSD exports increased by 4.2% during April - November 2017 as compared to April - November 2016. Singapore, Turkey, South Africa, Malaysia and Australia were the major export destinations of HSD during April - November 2017.
- MS exports showed a meager growth of 3.1% due to lower surplus availability of MS during November 2017. On cumulative basis MS exports dropped by 11.8% during April - November 2017 as compared to the corresponding period of the previous year. MS was mainly exported to UAE, Oman and USA (76.9% of total MS exports) during April - November 2017.
- Percentage share of POL exports by PSU/JV and private oil companies during April - November 2017 are given in figure-6.

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



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