



**STANDING COMMITTEE ON  
PETROLEUM & NATURAL GAS  
(2023-24)**

**SEVENTEENTH LOK SABHA**

**MINISTRY OF PETROLEUM & NATURAL GAS**

**REVIEW OF POLICY ON IMPORT OF CRUDE OIL**

**TWENTY-THIRD REPORT**



**LOK SABHA SECRETARIAT  
NEW DELHI**

*December, 2023 /Agrahayana, 1945 (Saka)*

CP&NG NO.

**TWENTY-THIRD REPORT**  
**STANDING COMMITTEE ON**  
**PETROLEUM & NATURAL GAS**  
**(2023-24)**

**(SEVENTEENTH LOK SABHA)**

**MINISTRY OF PETROLEUM & NATURAL GAS**

**REVIEW OF POLICY ON IMPORT OF CRUDE OIL**

*Presented to Lok Sabha on 20.12.2023*

*Laid in Rajya Sabha on 20.12.2023*



**LOK SABHA SECRETARIAT**  
**NEW DELHI**

*December, 2023 /Agrahayana, 1945 (Saka)*

<b>CONTENTS</b>		
	COMPOSITION OF THE COMMITTEE (2023-24) .....	(iii)
	INTRODUCTION .....	(iv)
<b>REPORT</b>		
<b>PART - I</b>		
<b>A</b>	<b>INTRODUCTION</b>	1
<b>B</b>	<b>EVOLUTION IN POLICY FOR IMPORT OF CRUDE OIL</b>	1
<b>C</b>	<b>OUTLOOK FOR CRUDE OIL</b>	2
<b>D</b>	<b>TERM AND SPOT CONTRACTS</b>	6
<b>E</b>	<b>INDIAN CRUDE BASKET</b>	17
<b>F</b>	<b>OFFICIAL SELLING PRICE</b>	23
<b>G</b>	<b>ASIAN PREMIUM</b>	26
<b>H</b>	<b>RUPEE TRADE IN CRUDE OIL</b>	28
<b>I</b>	<b>IMPORT OF CRUDE OIL FROM RUSSIA</b>	29
<b>J</b>	<b>TRANSPORTATION OF CRUDE OIL</b>	31
<b>K</b>	<b>INFRASTRUCTURAL CONSTRAINTS IN INDIAN PORTS</b>	35
<b>L</b>	<b>CRUDE OIL PIPELINES</b>	37
<b>M</b>	<b>INVENTORY AND STRATEGIC RESERVES OF CRUDE OIL</b>	38
<b>N</b>	<b>REDUCE IMPORT DEPENDENCY OF FOSSIL FUEL</b>	41
<b>O</b>	<b>GAS PRICING FORMULA</b>	43
<b>PART – II</b>		
<b>Observations / Recommendations of the Committee</b>		<b>46</b>
<b>ANNEXURES</b>		
ANNEXURE I	Minutes of the Second sitting of the Committee (2021-22) held on 25.10.2021.	
ANNEXURE II	Minutes of the Seventh sitting of the Committee (2022-23) held on 05.01.2023.	
ANNEXURE III	Minutes of the Fourteenth sitting of the Committee (2022-23) held on 03.07.2023.	
ANNEXURE IV	Minutes of the Fourth sitting of the Committee (2023-24) held on 18.12.2023.	
APPENDIX I	Installed Capacity and Refinery Crude Throughput (Crude Oil Processed).	

(iii)

**COMPOSITION OF THE STANDING COMMITTEE ON PETROLEUM  
& NATURAL GAS (2023-24)**

Sl. No.	Name of Members
<b>LOK SABHA</b>	
<b>Shri Ramesh Bidhuri - Chairperson</b>	
2	Dr. Ramesh Chand Bind
3	Shri Pradyut Bordoloi
4	Shri Girish Chandra
5	Smt. Chinta Anuradha
6	Shri Dilip Saikia
7	Shri Topon Kumar Gogoi
8	Shri Naranbhai Bhikhabhai Kachhadiya
9	Dr. Kalanidhi Veeraswamy
10	Shri Santosh Kumar
11	Shri Rodmal Nagar
12	Shri Mitesh Rameshbhai Patel
13	Shri Unmesh Bhaiyyasaheb Patil
14	Shri M.K. Raghavan
15	Shri Chandra Sekhar Sahu
16	Shri Gajanan Chandrakant Kirtikar
17	Dr. Bharatiben Dhirubhai Shiyal
18	Shri Janardan Singh Sigiwal
19	Shri Lallu Singh
20	Shri Vinod Kumar Sonkar
21	Shri Ajay Tamta
<b>RAJYA SABHA</b>	
22	Shri Shaktisinh Gohil
23	Smt. Kanta Kardam
24	Shri Mithlesh Kumar
25	Shri Pabitra Margherita
26	Shri Rambhai Harjibhai Mokariya
27	Shri Surendra Singh Nagar
28	Dr. Sasmit Patra
29	Shri Subhas Chandra Bose Pilli
30	Dr. V. Sivadasan
31	Shri Ravichandra Vaddiraju

**SECRETARIAT**

1                      Shri Y.M. Kandpal                      Joint Secretary

2 Shri H. Ram Prakash Director  
3 Shri Brajesh Kumar Singh Deputy Secretary

(iv)

## **INTRODUCTION**

I, the Chairperson, Standing Committee on Petroleum & Natural Gas having been authorised by the Committee, to submit the Report on their behalf, present this Twenty-Third Report on the subject 'Review of Policy on Import of Crude Oil'.

2. The Committee took briefings by the representatives of the Ministry of Petroleum & Natural Gas/Oil PSUs in connection with examination of the subject at their sittings held on 25.10.2021, 05.01.2023 & 03.07.2023.

3. The Report was considered and adopted by the Standing Committee on Petroleum and Natural Gas on 18.12.2023.

4. The Committee wish to express their thanks to the representatives of the Ministry of Petroleum and Natural Gas/PSUs and Oil PSUs for placing their views before them and furnishing the information desired in connection with examination of the subject.

5. The Committee also place on record their appreciation for the valuable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

**New Delhi;**  
**18 December, 2023**  
**27 Agrahayana, 1945 (Saka)**

**RAMESH BIDHURI,**  
**Chairperson,**  
**Standing Committee on**  
**Petroleum & Natural Gas.**

## **REPORT PART-I**

### **A. INTRODUCTION**

1.0 India is amongst the world's leading energy consumer and is widely considered as the emerging energy superpower as a demand driver of both conventional and clean energy resources. As per the latest world energy statistics, India is currently third largest energy consumer, 3<sup>rd</sup> largest consumer of Oil, third largest LPG consumer, fourth largest LNG importer and 4<sup>th</sup> largest refiner of the world.

1.1 According to International Energy Agency's (IEA) World Energy Outlook 2022, India's energy consumption will double by 2040. As per IEA, India's energy demand is expected to grow at about 3 % per annum till 2040, compared to the global growth rate of 1 %. The outlook also forecasts that India's share in global energy demand will double to 11 % - the largest growth in that period of any country, from current 6 % and India will overtake the European Union in terms of total energy consumption 2030. OPEC also resonates this view in its World Oil Outlook 2022 and forecasts that India will have the highest energy demand growth in the outlook, where demand is projected to increase from 18.6 mb/d in 2021 to 37.7 mb/d in 2045.

### **B. EVOLUTION IN POLICY FOR IMPORT OF CRUDE OIL**

1.2 The domestic petroleum sector was under Administered Pricing Mechanism (APM) prior to 01.04.2002. Import of crude oil was fully canalized through the Indian Oil Corporation Limited (IOCL) on behalf of all Oil Public Sector Units (PSUs) and controlled by the Empowered Standing Committee (ESC) of the Government of India (GOI). IOCL was the single entity for all the contract signings and payments made to suppliers and ship owners. All other PSU refiners were reimbursing payments for crude oil procured for them to IOCL on back-to-back basis.

1.3 The Union Cabinet approved the dismantling of the APM for the petroleum sector w.e.f. 01.04.2002. Since then each Oil PSU is procuring crude on its own. One of the key objectives of dismantling APM was to create a vibrant and globally competitive oil industry with PSU refiners competing with global and domestic private refiners by improving their efficiency to global benchmarks. Since dismantling of APM, each Oil PSU started making their own arrangements for import of crude oil. However, the crude import arrangements were finalized through Empowered Standing Committee (ESC) of each company wherein representative of Government of India were members.

1.4 Since April 2016, with the approval of Union Cabinet, Public Sector Oil Companies have been empowered to evolve their own policies for import of crude oil, consistent with CVC guidelines and get them approved by the respective Boards. This measure, which is in keeping with the principle of Minimum Government Maximum

Governance, will increase the operational and commercial flexibility of the oil companies and enable them to adopt the most effective procurement practices for import of crude oil.

1.5 Empowered Standing Committees replacing the earlier ESC were constituted by all Oil PSUs with the approval of their respective Boards (with no representation from GOI).

**Elaborating about the about changes in policy for import of crude oil in the country, the representative of the PSU made the following submission during the oral evidence:**

“India imports about 85 per cent of its crude oil requirement and only 15 per cent is met through indigenous sources. Till 2002, the imports were done by only IOCL and it was the sole canalising agency for all the public sector companies. It was under the APM regime at that time. In 2002, the APM regime was dismantled and individual PSUs were given the freedom to import on their own following the guidelines which have been issued from Ministry of Petroleum and Natural Gas. Then further development after 14 years was that in 2016, MoP&NG vested power with the Board of PSUYs for crude import policy following CVC guidelines.”

### **C. OUTLOOK FOR CRUDE OIL**

1.6 **The Ministry furnished the following information regarding the medium term outlook of production, consumption and trade of crude oil in the world:**

“BP Outlook for the world Energy considers scenarios of Accelerated, Net Zero and New momentum for making projections. New Momentum scenario is designed to capture the broad trajectory along which the global energy system is currently progressing, while Accelerated and Net Zero scenarios explore how different elements of the energy system might change to achieve a substantial reduction in carbon emissions, assuming a significant tightening of climate policies leading to a sustained fall in CO2 emissions.

The demand for Oil is projected to remain at similar levels in 2025 with projection of 101 mb/d under the new momentum scenario, 99 mb/d under the Accelerated scenario & 98 mb/d under the Net zero scenario. The demand in 2030 remains same at 101 mb/d under the new momentum scenario, reduces to 96 mb/d under the Accelerated and 90 mb/d under the Net zero scenario driven by climate change policies reducing the oil demand.

BP outlook projects the global oil supplies dominated by trends in the US tight oil and OPEC production. As per the outlook US tight oil recovers to pre-COVID levels over the medium term up to 2030, after which it begins to fall and OPEC’s market share gradually increases. As per the projections, the total oil supply falls by 0.20 mb/d by

2030 driven by a fall of 0.30 mb/d OPEC supply offset by a 0.30 mb/d increase in US tight oil. Supply from other non-OPEC suppliers falls by 0.20 mb/d.”

1.7 **Details of proven reserve of crude oil of top 10 countries and India are as given below:**

Country	Rank	2020			
		Billions Barrels	Billion Tonnes	Share of Total	Reserve/Production Ratio
Venezuela	1	303.8	48.0	19.7%	1537.8
Saudi Arabia	2	297.5	40.9	16.7%	73.6
Canada	3	168.1	27.1	11.1%	89.4
Iran	4	157.8	21.7	8.9%	139.8
Iraq	5	145.0	19.6	8.0%	96.3
Russian Federation	6	107.8	14.8	6.0%	27.6
Kuwait	7	101.5	14.0	5.7%	103.2
United Arab Emirates	8	97.8	13.0	5.3%	73.1
US	9	68.8	8.2	3.4%	11.4
Libya	10	48.4	6.3	2.6%	339.2
India	22	4.5	0.6	0.2%	16.1
<b>Total World</b>		<b>1732.4</b>	<b>244.4</b>	<b>100.0%</b>	<b>53.5</b>

**Note:**

- a. Proved Oil Reserves are the quantities that geological and engineering information indicates with reasonable certainty that can be recovered in the future from known reservoirs under existing economic and operating conditions.
- b. Reserves include gas condensate and natural gas liquids (NGLs) as well as crude oil.
- c. The R/P ratio of global oil reserves to production, measured in years. In 2020, it was 53.5. This means that at the current level of production, global oil reserves will last another approximate 54 years before being depleted.”

1.8 **DOMESTIC CRUDE OIL PRODUCTION (TMT)**



**Table 2.5A: State wise Crude Oil Production (Including Condensate) in TMT**

(Thousand metric tonne)					
State	2018-19	2019-20	2020-21	2021-22	2022-23 (P)
<b>Onshore</b>					
Assam	4309	4093	3902	3991	4166
Arunachal Pradesh	43	56	53	48	47
Andhra Pradesh	296	243	195	202	236
Gujarat	4626	4707	4651	4626	4849
Rajasthan	7667	6653	5891	5885	5074
Tamil Nadu	395	415	410	367	324
West Bengal	0.00	0.00	0.13	0.05	0.01
<b>A. Onshore Total Production</b>	<b>17336</b>	<b>16167</b>	<b>15103</b>	<b>15120</b>	<b>14697</b>
<b>Offshore</b>					
Eastern Offshore	654	557	744	626	550
Western Offshore	15478	14857	14236	13604	13552
Gujarat Offshore	736	589	411	338	379
<b>B. Offshore Total Production</b>	<b>16868</b>	<b>16003</b>	<b>15391</b>	<b>14569</b>	<b>14482</b>
<b>Total Production (A+B)</b>	<b>34203</b>	<b>32170</b>	<b>30494</b>	<b>29688</b>	<b>29179</b>

Note: Source: ONGC, OIL & DGH  
(P) Provisional

**1.9 When the Committee asked about the proven reserves of crude oil of India and how long such reserves are expected to last as per the current consumption pattern, the Ministry in its reply stated as follows:**

“Exploration & Production (E&P) operators under both Nomination and Contract regimes report Oil & Gas Reserves and Resources at the end of financial year to Directorate General of Hydrocarbons (DGH) as per Petroleum Resources Management System (PRMS), an International Reporting Standard sponsored by Society of Petroleum Engineers and six other E&P professional societies.

As on 01.04.2022, E&P Companies under all regimes have reported 447.57 MMT of 2P Reserves (Proved + Probable) for Oil. At current annual production level, the Oil Reserves will last for about 15 years provided no new reserves are accreted. However, reserves addition is a dynamic process. The contingent resources, which are technically recoverable, and new discoveries coming from prospective resources, part of both components commercially get upgraded to reserves in due course of time. Thus, Oil Reserves are likely to last longer from the current estimate.

Reserves Replacement Ratio (RRR) is ‘Reserves added’ divided by ‘Production’ during a particular year. During 2021-22, with current rate of annual production, Reserves Replacement Ratio is 0.75.

**1.10 Percentages of crude oil consumption of the country met through import given below:**

FY/CATEGORY	2019-20	2020-21	2021 - 22 (P)	2022-23 (April - June) (P)
Imported Crude Oil processed (MMT)	225.1	193.8	214.7	58.7
Total Crude Oil Processed in Refineries (MMT)	254.4	221.8	241.7	65.8
% Age of Crude Consumption met through Import (MMT)	88.5	87.4	88.8	89.3

1.11 Quantities of crude oil imported during each of the last three years and their costs respectively in US\$(Billion) and Rs. (Cr) is given below:

Particulars	2019-20			2020-21			2021-22 (P)			2022-23 (Apr-June) (P)		
	Qty	Value		Qty	Value		Qty	Value		Qty	Value	
	MMT	USD (Bn)	Rs (Cr)	MMT	USD (Bn)	Rs (Cr)	MMT	USD (Bn)	Rs (Cr)	MMT	USD (Bn)	Rs (Cr)
Import of Crude oil	227.0	101.4	717001	196.5	62.2	459779	212.0	120.4	899312	60.3	48.0	369742

1.12 The quantity of crude oil imported by India in FY 2022-23 is as under:-

Region	Quantity (Thousand Metric Tonnes)
Middle East	128607
North America	17210
South America	6047
Oceania	0
Africa	17675
Australia	0
Asia	1627
Eurasia	61163
Europe	232
<b>Total</b>	<b>232561</b>

Elaborating India's role in the international market, the representative of the Ministry made the following submission:

“India’s consumption would be about 5.5-5.6 million barrels per day. Out of that, we import about 4.6 million barrels per day, which is about 10 per cent of the overall oil trade in the world. If you see, out of 100 million barrels per day of the overall crude oil consumption in the world, we consume about 5.5 million barrels per day, which is about 5.5 per cent. But if we look at the trade and import, we do 4.6 million barrels per day out of about 50 million barrels per day. So, only 50 to 60 per cent is traded because rest is consumed in the country where it is produced. Where there are five per cent consumers, we are 10 per cent importer of the overall trade, which makes us a very important importer in the world.

1.12.1 The Indian refining industry has established itself as a major player globally. India is emerging as a refinery hub and refining capacity exceeds the demand. The country’s refining capacity has increased from a modest 62.0 Million Metric Tonnes Per Annual (MMTPA) in 1998 to 251.216 MMTPA, comprising of 23 refineries – 19 under Public Sector, 3 under Private Sector and 1 in Joint venture (JV). The details are given in **Appendix-I**.

**1.13 When the Committee enquired about the procedure and format of negotiations followed by oil PSUs with NOCs of foreign countries for crude oil purchase, the Ministry stated the following in its written reply:**

“Each PSU is assigned one NOC for co-ordination purpose. Invitation is sent by respective PSU to the assigned NOC for Joint Negotiation meeting. Meeting is generally held in Delhi. Agenda is finalized by incorporating agenda points from both the parties. PSU delegation is headed by the concerned Joint Secretary, MoP&NG and team consists of senior officers from International Trade (IT) department of PSU oil refiners. Delegation from NOC is headed by their senior management representative and their team consists of officers from IT department. Meeting discussions take place as per agenda, with any additional points, if needed.”

**D. TERM AND SPOT CONTRACTS**

1.14 Over the years, PSU refiners have expanded their capacity with increased refinery complexity enabling them to process wide range of crude oil grades with focus on efficiency and profitability. Currently, every PSU refinery has its own optimized procedure for procurement, transportation, and processing of crude oil, including contract signings and payments to suppliers and shipowners. To fulfil their crude oil requirements, PSU refineries import crude oil from exporting countries through (i) Annual term contracts and (ii) Spot purchases.

The details of crude oil imports by Oil PSUs w.r.t Term & Spot contract are as under:-

Year	TERM	SPOT	TOTAL	TERM	SPOT	TOTAL
	(In MMT)			(% )		

2017-18	89.8	34.2	124.0	72.42	27.58	100
2018-19	101.2	28.0	129.2	78.33	21.67	100
2019-20	96.2	31.8	128.0	75.16	24.84	100
2020-21	70.5	39.6	110.1	64.03	35.97	100
2021-22	80.3	39.8	120.2	66.81	33.11	100
2022-23	91.6	49.6	141.2	64.87	35.13	100

**Explaining the mode of purchases of crude oil during the oral evidence, a representative of the PSU made the following submission:**

“Crude oil imports are mainly done in two forms. One is term contracts and the other is spot tenders. The term contracts are normally finalised on a yearly basis and this is done with majorly national oil companies. Whatever is the balance requirement which is not being covered in the term contracts, that is covered by spot tenders. So, the approving authority for the term contracts is the Board of Directors and for the spot tenders, it is the Empowered Standing Committee, that is, ESC.”

**(i) Annual Term Contracts**

Annual term contracts which are usually for one year are finalised considering major factors such as techno-economic analysis, supply security, international political and trade relations, geographical spread of supply sources etc. Imports under term contracts from National Oil Companies (NOCs) are done at Official Selling Prices (OSP) or at mutually agreed price formula. Mutually agreed price formulas are approved by Empowered Standing Committee (ESC). While NOCs typically sell crude oil at an Official Selling Price declared by them on a monthly basis; Oil Majors, Multi-national Trading Companies sell crude oil based on prevailing market prices at the time of cargo loading or discharge whether through term or spot contracts.

OMCs apply LP (Linear programming) based optimization model to ascertain the types of crude oils required by Refineries. The preference for such crudes is based on parameters like Refinery configuration(s), technical compatibility, consistent value creation, required product slate, etc. The outcome of the annual crude optimization exercise is the quantities of different crude oil(s) that can be procured.

**Explaining the term purchases made by oil PSUs for import of crude oil, the following submission was made during the oral evidence (VERB. Pg.5, 25.10.2021):**

“Term purchases as I already told is done with the national oil companies and select MNCs. In this also, the sequence which is followed is, it is done with NOCs where they declare an official selling prices for their crude oil. Secondly, if the quantities are not met through the first criteria, then it goes to NOCs which do not have the OSP. We go to them for quantities and then they select MNCs. Wherever there are no official selling prices, it is decided on a pricing formula which is agreed upon by the PSUs with the

NOCs or the oil majors, and for the pricing formula, the approval of ESC is taken. So, the primary reason for term contracts is to give energy security. We are assured of the volumes irrespective of whatever is the crisis situation. Normally, we get our full quota of the volumes which we have re tied up. It is usually for a one-year period and every year, it gets renewed either on a financial year basis or on a calendar year basis. Most of the contracts are on financial year basis but some of them are also on calendar year basis.”

**Explaining the contracts in purchase of crude oil and natural gas in the international market, the representative of oil PSU made the following submission:**

सभापति जी, आपने शुरू में यह सवाल किया था कि जो हम कूड ले रहे हैं, क्या इसे तीन-तीन महीने का ले रहे हैं या लंबे समय के लिए ले रहे हैं? आपका कहना बिल्कुल सही है कि जब हम गैस टर्म पर लेते हैं तो वह कई सालों का कांट्रैक्ट एक ही बार में होता है। कूड का अमूमन साल भर का कांट्रैक्ट होता है। यह इंटरनेशनल मार्केट की खासियत है कि गैस के ठेके अमूमन बहुत सालों के लिए दिए जाते हैं। गैस का ठेका 15 से 20 सालों तक का भी मिल सकता है। उसमें यह नहीं है कि दाम वही रहेगा। दाम तो हर महीने बदलता रहेगा या समय-समय पर बदलता रहेगा, लेकिन जो कूड का ठेका है, लंबी अवधि का ठेका जिसे हम कहते हैं, वह साल भर का ही होता है और वह हम साल भर का ही लेते हैं। आपने पूछा कि क्या हमारी कोई नीति है, जिसके तहत हम इसे लेते हैं? हम अपनी कंजंप्शन का हैंड्रेड पर्सेंट अनुमान कभी नहीं कर सकते हैं। आज मैं खड़े होकर यह नहीं कह सकता कि अगले एक साल में इतने लीटर पेट्रोल और डीजल बिकेगा। मुझे फ्लेक्सिबिलिटी रखनी पड़ेगी कि हो सकता है कि थोड़ा ज्यादा हो जाए, हो सकता है कि थोड़ा कम हो जाए। कोविड के बाद ही अगर हम देखें तो पेट्रोल और डीजल की डिमांड में काफी इनक्रीज आया है।

### **Spot contracts**

1.15 Spot purchases are done usually through tenders inviting all registered parties to participate and crude oil offering maximum value is finalised for imports. ESC is the approving authority for spot purchases. Spot purchase helps refineries to adjust their crude oil purchases to meet varying seasonal/market demand and to meet operational exigencies. Further, spot market offers opportunities to buy competitively priced crudes and explore new crude oil grades from diverse geographies.

1.16 Asked by the Committee as to whether purchases of crude oil from spot market are made directly from producers or other agencies are also involved, the Ministry furnished the following reply:

“Spot purchases are carried out through tenders. Offers are invited from all registered crude oil suppliers, which consists of crude oil producers / NOCs, MNCs and Traders. Award is placed on supplier basis best ranked margin derived from offers in the tender.”

Number of bids received in the tenders for crude oil procurement varies from tender to tender depending upon the timing of tender, type of crude oil sought in the tender, loading/delivery period of the crude oil, quantity of crude oil, availability of required crude oils with registered suppliers at the time of tender and prevailing market conditions.

Spot contract is approved by Crude Oil Procurement Committee (COPC)/Empowered Standing Committee (ESC) based on economic ranking of crude grades. Spot purchases of crude oil are finalised based on the objective function for individual crude oil grades available for spot purchases. Objective function is the maximum value that is estimated to accrue to the company by processing a particular crude oil grade.

#### **Level of Participation of NOCs in tenders for spot market**

1.17 Most NOCs do not participate in the tenders for spot crude oil procurement. However, some NOCs like Aramco, ADNOC, SOCA, etc have their trading arms which participate in spot tenders. Participation of any supplier in spot tender depends on availability of crude oil grades with them, requisitions from buyers and prevailing market conditions.

#### **1.18 Clarifying the need for spot purchases resorted by oil PSUs, the representative submitted the following before the Committee:**

“Spot purchases which we make gives us flexibility in crude oil purchases based on the seasonal market demand. Last year, when we had the COVID situation, though we had tied up the term contracts for about 67 per cent of the import requirement, since the demand had dropped drastically, we could manage because we were able to cancel a few of the term contract volumes, plus we entered the market for spot volumes on the basis of the bare requirements. There were, in fact, a few months where we did not do any spot purchases and managed with our oil crude imports finalised through term contracts. So, spot purchase gives us the option of exploring various new grades and there are lot many grades where people do not give term contracts. We get all those grades normally through the spot market and it is normally done through competitive tenders or trading desk, the methodology of finalising spot purchases. Then, the frequency of these spot purchases is depending on the requirement of the company. For example, Indian Oil Corporation typically does spot purchase once a week and at times even twice a week. But for smaller companies like BPC, HPC, they might be doing it only once in 10 days or so and typical purchases are done for two to three months in advance, that is, if I am doing in the month of October, it would be for the

month of December. The cargos which we uplifted in the month of December are delivered in January.”

Elaborating further for the need of spot purchases, the representative of oil PSU submitted the following before the Committee:

अनुमान से कहीं ज्यादा इन्क्रीज आया है, लेकिन कहीं समस्या नहीं आई कि लोग पेट्रोल पम्प गए हों और पेट्रोल या डीजल न मिला हो। यह इसलिए संभव हो पाया क्योंकि एक तरह से हमारी प्लानिंग रही थी। अगर हम टर्म्स पर रह रहे होते तो उसको बढ़ा नहीं सकते थे। हमेशा हमारी नीति रहती है कि कुछ मेन हिस्सा टर्म्स पर रहे और कुछ ऐसा स्पॉट हो जिसे हम अपनी डिमांड के अनुसार कम या ज्यादा कर सकें। इससे एक और फायदा होता है, जैसे टर्म तो ए ग्रेड पर मिला जबकि स्पॉट का रेट ऊपर नीचे हो सकता है। जिस दिन हम खरीदने गए, हो सकता है टर्म से ज्यादा हो या उस दिन मार्केट डाउन हो तो शायद टर्म से सस्ते दाम पर मिल जाए। यह रिस्क जरूर रहता है और हम इस रिस्क को एक्नॉलेज करते हैं। हम इस रिस्क के साथ आज से नहीं कई साल से जी रहे हैं, यही प्रैक्टिस हर देश में होती है और उसी हिसाब से प्लान करते हैं।

**1.19 Asked by the Committee about how the purchases of crude oil made from Multi National Companies and the eligibility criteria for registration of parties with Oil PSUs for import of crude oil, the Ministry furnished the following:**

“Company wise details are as under:

**IOCL**

Registration of interested parties is done on principal-to-principal basis and is open round-the-year. Minimum existence/ trading experience of three years is required from such parties. National Oil Companies (NOC) and their subsidiaries having minimum existence/ trading experience of three years (including step-down subsidiaries) are registered on request only.

**BPCL**

Crude oil is procured from spot market from time to time based on refinery requirement, economics etc from registered counterparties (which includes Multi-National Companies also). Multi-National Companies (MNCs) are registered for import of Crude Oil on meeting eligibility criteria as per the guidelines set by the Company. Broad Eligibility criteria includes trading experience, volume criteria, net worth criteria, profitability criteria, trade, and bank reference etc. and submission of required documents along with declaration and undertakings.

## **HPCL**

Major MNCs like BP, Shell, Total Energies, Exxon and Chevron are registered with HPCL for participation in crude oil tenders. Purchase of crude oil from these MNCs, whether on spot or long term contracts is finalized through tender route.

Eligibility criteria for registration of parties with HPCL for import of crude oil:

1. Registration criteria for National Oil Companies (NOCs)  
National Oil Companies (NOCs) and their Subsidiaries (incl. step-down subsidiaries) with 3 years trading operations are registered on request only.
2. Registration criteria for other suppliers
  - i. Trading experience for three years.
  - ii. Volume of trade in Crude Oil should be 750 TMT or more in each of the previous three years.
  - iii. Net profits of USD 1 million or more in each of the previous three years.
  - iv. Positive Net Worth in each of the previous three years.

## **MRPL**

MRPL is having "Term Contract" with majority of PG based NOC's. Other OMCs MNCs are registered as counter parties & participate in "Spot Tenders". Broad criteria for registering counterparties;

(1) Due diligence for counter parties is done on their request for registration subject to them fulfilling following criteria:

- a. In three consecutive years the party need to have positive "Net Worth".
- b. Quantitatively, in three consecutive years, the party should have minimum physical trading of 750 TMT Trade experience in trading of Crude Oil in physical market.
- c. In three consecutive years, the net profit in physical trade should be at least 1 million USD.

(2) Fulfilling above criteria, new counterparties are registered with Bid Bond. National Oil Company is exempted from Bid Bond submission.

## **RIL**

RIL deals with MNCs that have an established track record in crude oil trading business, are not sanctioned companies/individuals, Audited Financials, Bank References, Credit Rating, etc."

**Explaining the need for caution in dealing with purchases of crude oil in the international market, the representative of oil PSU made the following submission:**



इसलिए कूड सोर्सिंग में हमारे जो लिस्टेड वेंडर्स हैं, उसमें जो कॉशन है, वह चलना चाहिए बाकी चीजें, जैसा कि सेक्रेट्री साहब ने कहा, उसे हम देख लेंगे, लेकिन वहाँ क्रेडिबिलिटी का इश्यू रहना चाहिए।

उसी क्रेडिबिलिटी इश्यू को एड्रेस करते हुए मैं कहना चाहूंगा कि शेल और बीपी दुनिया की सबसे बड़ी ऑयल कम्पनीज मानी जाती हैं। इनका ट्रेडिंग में बोलबाला है। इसके दो कारण हैं। एक बात तो यह है कि उनके पास बहुत-से अपनी ऑयल-फील्ड्स हैं, जहाँ से वे प्रोड्यूस करते हैं। दूसरा, बेचने के मामले में उनका साम्राज्य पूरी दुनिया में है। तीसरा, विश्व के लगभग सभी देशों में उनकी रिफायनरीज हैं। उनकी क्रेडिबिलिटी बहुत ऊपर है। शेल और बीपी कोई भी वैसा काम नहीं करेंगे कि उनके शेयर प्राइस को एक सेंट का भी कोई बट्टा लगा दे। हम ऐसा मानकर चलते हैं।

चूँकि यह माना जाता है कि उनका रोबस्ट प्रॉसेस है और काफी इवॉल्व्ड प्रॉसेस है। बीपीसील ने उनसे बात करके उन्हें अपने ट्रेडिंग डेस्क में लाये क्योंकि शेल के साथ पहले से ही हमारे दो-तीन को-लैबोरेशंस हैं, जो बहुत दिनों से चले आ रहे हैं।

**The company-wise term and spot market crude oil imports are as under:-**

IOCL	Term	Spot	Total	Term	Spot	Total
	Nos. In MMT			% Share		
2020-21	37.5	22.6	60.1	62%	38%	100%
2021-22	41.1	23.9	65.0	63%	37%	100%
2022-23	52.3	24.9	77.2	68%	32%	100%

BPCL	Term	Spot	Total	Term	Spot	Total
	Nos. In MMT			% Share		
2020-21	16.64	12.69	29.33	56.7%	43.3%	100%
2021-22	20.43	13.54	33.97	60.1%	39.9%	100%
2022-23	17.48	17.93	35.41	49.4%	50.6%	100%

HPCL	Term	Spot	Total	Term	Spot	Total
	Nos. In MMT			% Share		
2020-21	8.59	3.08	11.67	74%	26%	100%

2021-22	8.73	1.38	10.11	86%	14%	100%
2022-23	9.91	5.06	14.97	66%	34%	100%

MRPL	Term	Spot	Total	Term	Spot	Total
	Nos. In MMT			% Share		
2020-21	7.83	1.27	9.1	86%	14%	100%
2021-22	10.1	0.99	11.09	91%	9%	100%
2022-23	11.01	2.63	13.64	81%	19%	100%

1.20 Elaborating the increase of spot market purchases and reduction in term contracts in purchase of crude oil, the representative of oil PSU submitted the following

“Crude oil imports by the PSUs and subsidiaries in terms of spot and term, if you see from 2017-18 to 2021-22, we have reduced our term values in terms of percentages and increased the spot percentage. This is basically to capture the spot market and also look out for new grades in the spot markets. That is the main reason why term volumes have been reduced and spot purchases have been increased.”

1.21 When asked about the details of the ESC along with the powers and functions, the Ministry in its written replies furnished the following:

“Vide circular reference P-24011/1/2013-Sup. (Vol. II) dated 26<sup>th</sup> April 2016, MoP&NG informed that in supersession of the then policy for import of crude oil by the Oil PSUs, the Government allowed Oil PSUs to formulate policies for import of crude oil in their best commercial interest and in accordance with the extant guidelines of the Central Vigilance Commission.

#### **ESC mechanism in PSUs is as under:**

##### **IOCL**

The ESC setup continues with Chairman, Functional directors of board and Executive Director, (International Trade) as members.

##### **HPCL**

HPCL developed its own crude oil import policy for import of crude oil. As per the policy, Crude Oil Procurement Committee (COPC) was constituted comprising of the Functional Directors. The approval authorities for import of crude oil are as follows:

- The requirement of crude oil on Term and Spot basis for the refineries is estimated annually, and Strategy Paper for import of crude oil is prepared and necessary approvals are obtained from the Board of Directors.
- Spot crude oil is imported by floating limited tenders to registered suppliers and necessary approvals are obtained from the COPC for awarding tenders.

##### **MRPL**

MRPL have constituted Empowered Standing Committee (ESC) in line with the Ministry guidelines. Basis approved strategy by Board, ESC is empowered with full powers with respect to procurement of Crude Oil on term / spot basis from International / Domestic suppliers.

### **Composition of Empowered Standing Committee (ESC) of PSU OMCs for crude oil purchases**

#### **IOCL**

The Board decided to constitute the Empowered Standing Committee (ESC) comprising of the following officials:

- i. Chairman (as Chairman of the Committee)
- ii. Director (Finance)
- iii. Director (Refineries)
- iv. Director (HR)
- v. Head of International Trade Department - Member Convenor

#### **BPCL**

Procurement under tenders for term crude oil is approved by Crude Oil Procurement Committee (COPC). Composition of COPC is as under:

- i. Chairman and Managing Director (as Chairman of the Committee)
- ii. Director (Finance)
- iii. Director (Refineries)
- iv. Executive Director (International Trade & Risk Management)

#### **HPCL**

The Empowered Standing Committee for crude oil procurement in HPCL is Crude Oil Procurement Committee (COPC). Composition of COPC is as under:

- v. Chairman and Managing Director (as Chairman of the Committee)
- vi. Director (Finance)
- vii. Director (Refineries)
- viii. Director (Marketing)
- ix. Director (Human Resources)

The status of crude oil purchased is submitted to Board of Directors on a quarterly basis for information.

#### **MRPL**

MRPL have constituted Empowered Standing Committee in line with the Ministry guidelines. MRPL's empowered standing committee comprising of:

- i. Managing Director
- ii. Director (Refinery)
- iii. Director (Finance)
- iv. Executive Director (Refinery).

ESC is empowered with full powers with respect to procurement of Crude Oil.

### **Mechanism of procurement of crude oil through trading desk**

1.22 In the trading desk mechanism, crude oil is procured from the Spot market from registered counterparties. Empowered Standing Committee (ESC) which is the approving authority for spot procurement has approved the detailed methodology for procurement of crude oil through the trading desk. Through trading desk, Oil PSUs traders negotiate on one-to-one basis with counterparties for getting offers of technically acceptable crude oil grades. Such received offers are evaluated and the grade which meets the evaluation criteria approved by ESC is finalised for procurement. Trading desk approach is a real time/short tender basis sourcing of crude oil where the buying decisions can be taken within 1-2 hours of receipt of offer to finalisation of order.

#### **Top 10 crude oil producers in 2021**

Sl.No	Production		Sl.No	Export	
	Country	Million barrels per day		Country	Million barrels per day
1	United States	11.16	1	Saudi Arabia	6.18
2	Russia	10.51	2	Russia	4.51
3	Saudi Arabia	9.11	3	Canada	3.77
4	Canada	4.74	4	Iraq	3.43
5	China	3.99	5	United States	3.00
6	Iraq	3.99	6	UAE	2.07
7	Iran	3.19	7	Kuwait	1.72
8	Brazil	2.91	8	Norway	1.51
9	UAE	2.70	9	Kazakhstan	1.44
10	Kuwait	2.41	10	Nigeria	1.41

Source: Energy Intelligence

**1.23 When the Committee sought as to whether any MOU for supply of crude oil for longer term has been attempted by India with any country , the Ministry submitted the following in its written submission:-**

“Entering into an MOU / Long Term Contract does not ensure any price advantage, as price of crude is based on the monthly declared prices. Oil PSUs are having term contract with National Oil Companies (NOCs) for import of crude oil on Official Selling Price(OSP)/Agreed pricing formula. These term contracts get renewed on annual basis based on the requirement of Refinery system.

IOCL has ever green term contracts (contract gets rolled over every year) with Saudi Aramco, (NOC of Saudi Arabia), KPC (NOC of Kuwait) and Sonangol (NOC of Angola) for import of crude oil. Apart from these three NOCs, IOCL has term contract with ADNOC, NOC of UAE with roll over plan for three(3) years and with Rosneft ( NOC of

Russia) with roll over plan for 5 years for import of crude oil. OSPs varies on month on month basis, which are being provided by the NOCS on monthly basis.

All term contracts now are for a period of 1 year. However Discussions are held with NOCs to explore any potential crude import opportunities by BPCL on a long term basis. BPCL is open to signing term contracts of longer duration if it gives some advantage.

In view of dynamic nature of crude oil market, HPCL prefers to enter into only annual term contracts with suppliers. Further, Saudi Aramco term contract is evergreen in nature wherein the contract has provision of automatic yearly extensions unless terminated at the option of either party. However, the crude price under the contract is dynamic.

MRPL has term contract for sourcing of Crude Oil from NOCs on firm / optional quantity mainly from PG region. These suppliers are located geographically in such a way that voyage time / transit time is minimum apart from having a security of supply. The term Contract is for a standard duration of one year. It is submitted that entering into Term Contract with NOCs require certain enablers, viz., suitability of Crude oil Grade, voyage time, quantum of desired Volume exposure & flexibility in Infrastructure to process the offered Crude Grade in addition to overall economics of supply in terms of pricing level, availability & other commercial terms / conditions. MRPL is always open to get engaged with NOCs where all the criteria are satisfied.”

#### Distress cargoes

(ii) Distress cargoes are cargoes available in the market due to some urgency of sale by supplier arising out of changing market conditions. Distress cargoes are expected to be offered at more competitive prices than regular traded prices. However these cargoes are normally available on prompt basis i.e. outside the normal trading cycle. Cargo can be “a distressed Cargo” owing to one of several reasons viz. Designated Buyer is unable to undertake delivery, Supplier is not being able to deliver the Cargo on time, Shipping arrangement is not done on time, Force Majure conditions at Buyer’s Country. Presently, due to Russia Ukraine war situation, there would be an opportunity to purchase distress cargoes of Russian crude oil. As there is no concrete definition for Distress Cargo, in all such cases the Cargo can be in distress category. OMCs may buy crude oils based on their technical acceptance and value during the natural trading cycles.

### **E. INDIAN CRUDE BASKET**

#### **1.24 Crude Oil Procurement details:**

(i) Indian refiners procure crude oil from all oil exporting countries (with maximum being from Middle East) in the process of diversifying the crude procurement. The details of year wise crude imports by Oil PSUs are as under:-

<b>Year</b>	<b>Total Imports in MMT</b>	<b>Imports from ME in MMT</b>	<b>Imports from ME in %</b>
2017-18	124.1	89.6	72.1%

2018-19	129.8	95.1	73.3%
2019-20	128.8	88.9	69.0%
2020-21	110.1	69.9	63.4%
2021-22	120.5	83.7	69%
2022-23	141.2	81.6	58%

(ii) For all PSU refineries i.e. IOCL, BPCL, HPCL and MRPL, common term contracts are with National Oil Companies from Saudi Arabia, Iraq, Kuwait and UAE. Out of total crude oil imported, term imports % from these four Middle East countries (ME-4) are in the range of 50-60% as tabulated below:

Year	Total imports (MMT)	Imports from ME-4 (MMT)	ME-4 (%)
2017-18	124.0	66.7	54%
2018-19	129.8	66.8	52%
2019-20	128.8	76.1	59%
2020-21	110.1	56.9	52%
2021-22	120.5	69.7	58%
2022-23	141.2	73.1	52%

(iii) Oil PSUs have started importing crude oil from the USA, Canada, Russia, Australia, Brazil, Guyana, Norway, Egypt, Gabon, Ghana, Congo, Equatorial Guinea, Libya, Nigeria, etc. and have diversified its crude supply.

1.25 The Indian basket of Crude Oil represents a derived basket comprising of Sour grade (Oman & Dubai average) and sweet grade (Brent Dated) of Crude oil processed (indigenous and imported) in Indian refineries during previous financial year. Presently, the same is being calculated based on a weightage of 75.62 per cent for the price of sour grades of crude oil (average of Oman & Dubai) and 24.38 per cent sweet grade of crude oil (Brent Dated).

**1.26 When the Committee asked as to how many types of crude are imported by India's oil companies, the Ministry in its written reply stated as under:**

“Crude oil is generally categorized based on their properties like Sulphur content, API, and Total Acid Number (TAN) number.

- Based on Sulphur content, Sweet crude oil grades have sulphur content of up to 0.5 weight % (wt%) and sour crude oil grades have sulphur content above 0.5% wt%.
- Based on API gravity, crude oil grades are generally classified as Heavy (<28 API), Medium (28 to 40 API) and Light (>40 API).
- Based on Total Acid Number (TAN) number, crude oil grades of normal TAN have TAN number of up to 0.5 mg KOH/g and High TAN crude oil grades have TAN number above 0.5 mg KOH/g.

More than 150 different grades of crude oil are available in the global crude oil markets. However, grades exported by oil producers in large quantities and regularly are approximately 50 grades.”

**1.27 The Committee sought to know the reasons for import of so many grades of crude oil by the oil PSUs to which the Ministry furnished the following in its written reply:**

“The number of crude oil grades imported are based on technical and economic competitiveness of individual crude oil grades. Besides this, different grades of crude oil have different properties like sulphur, density, etc which in turn produces different quantity and quality of products. These crudes are selected on the basis of refinery requirement, acceptability and economics. Moreover, crude grades which are beneficial to the Oil PSUs in terms of bettering of Refining Margins are sought in the market. Due to advancements in technical specifications of refineries, now broad varieties of crude can be process by Indian refineries.”

Elaborating about purchase of different types of crude by the oil PSUs, the representative of oil PSU during oral evidence made the following submission:

प्रकार के क्रूड्स इम्पोर्ट करते हैं? क्रूड के प्रकार तो 200 से भी अधिक हैं। क्रूड के जो अलग-अलग प्रकार हैं, उसमें सल्फर कंटेंट कितना है, उसमें हैवी क्रूड, कोलाइड क्रूड, सॉर क्रूड, स्वीट क्रूड आदि कई प्रकार की डेफिनेशन्स होती हैं। उसमें अलग-अलग जो उसकी कंपोजीशन होती है, उसके हिसाब से क्रूड के विभिन्न प्रकार बनते हैं। कुछ क्रूड ऐसे हैं, जिनमें पेट्रो कैमिकल्स अधिक निकलते हैं। कुछ क्रूड ऐसे हैं, जिनसे वैक्स बनता है और कुछ क्रूड ऐसे हैं, जिनमें पेटको, यानी अलग-अलग प्रोडक्ट्स अधिक मात्रा में बन पाते हैं। कंपनियों का प्रयास रहता है कि ऐसा क्रूड लिया जाए, जिनसे हाई वैल्यू आइटम्स अधिक बन पाए। उससे वैल्यू थोड़ी ज्यादा मिलती है। इस प्रकार के जो क्रूड होते हैं, वे कई बार थोड़े-से महंगे होते हैं। परन्तु, रिफाइनरीज का जो डिजाइन है वह इस प्रकार से होता है कि जो पुरानी रिफाइनरीज हैं, वे वैराइटी ऑफ क्रूड नहीं ले पाती हैं, उनके लिए कुछ ही क्रूड्स डिजाइन की गई हैं। अभी जो ज्यादा एडवांस्ड रिफाइनरीज बन रही हैं, वे अधिक प्रकार के क्रूड्स को डील कर पाती हैं। इसलिए, उनको कुछ फ्लेक्सिबिलिटी रहती है। डोमेस्टिक क्रूड हो या इंटरनेशनल क्रूड,

बेसिकली बहुत तरह के क्रूड होते हैं। कोई हल्का होता है, कोई भारी होता है। किसी में सल्फर की मात्रा कम होती है, किसी में सल्फर की मात्रा ज्यादा होती है। हरेक क्रूड का अपना-अपना एक स्ट्रक्चर होता है, जिसे हम अरसे कहते हैं। उसमें कौन प्रोडक्ट कितना निकलेगा, यह एक पार्टिकुलर क्रूड पर डिपेंड करता है। उस हिसाब से, हरेक मंथ में डिमांड और प्राइस की बेसिस पर उस मंथ का क्रूड स्पॉट कोई और निकलेगा क्योंकि यह उस बात पर डिपेंड करता है कि इंडिया में क्या डिमांड है और क्या प्राइस रियलाइज होगा। हमारे लिए जो कमर्शियली मोस्ट बेनिफिशियल क्रूड होता है, उसका ऑर्डर हम दो महीने पहले करते हैं। वह आता है, तो उसको प्रॉसेस करके हम कोशिश करते हैं कि जो बेस्ट क्रूड है, हम वही लें। इसे करने के लिए हमारा जो स्पॉट परचेज का करेंट प्रॉसेस है,

### **Gross Refining Margin on processing Sour crude**

Processing Sour Crude grades adds more value to the Refineries which are having Bottom upgradation facilities like delayed Coker and Petchem facilities. However, deriving margin on grade-wise is difficult as both Sour and Sweet crude are procured and processed as a mixture in Refineries.

The company wise GRMs are as under:-

<b>Gross Refining Margins (GRM) of PSU OMCs / refineries (\$/bbl)</b>		
<b>Company</b>	<b>2021-22</b>	<b>9M-2022-23 (P)</b>
IOCL	11.25	21.08
BPCL	9.09	20.08
HPCL	7.19	11.40
CPCL	8.85	11.70
MRPL	8.72	8.00
NRL	43.46	36.65
BORL	11.00	*

GRM of North Eastern refineries are including excise duty benefits  
\*BPCL figures effective 2022-23 includes BORL also after its merger with BPCL

### **Diversification of sources of crude oil for imports**

1.28 The Indian basket of Crude Oil represents a derived basket comprising of Sour grade (Oman & Dubai average) and sweet grade (Brent Dated) of Crude oil processed in Indian refineries during previous financial year. Presently, the same is being calculated based on a weightage of 75.62% for the price of sour grades of crude oil



(average of Oman & Dubai) and 24.38% sweet grade of crude oil (Brent Dated). The percentages of 75.62 and 24.38 was based on the ratio of low sulphur and high sulphur crude oil processed (indigenous and imported) by all the Indian refineries (PSU and Pvt.) during the financial year 2019-20.

**1.29 When the Committee enquired about the geopolitical risks and steps being taken to diversify the sourcing of crude oil import, the Ministry in its written reply stated as under:**

“Price of crude oil like any other commodity is dependent on demand and supply of crude oil. Any kind of disruption in any of the oil producing countries that lead to fall in production of crude oil may result into increase in prices. Further crude oil producing, and consuming countries are located across the globe and the crude oil is generally transported from one country to another either through oil tankers or pipelines. There could be various geopolitical risks which could have an adverse impact on smooth supply of crude oil and its prices such as:

- War in any oil producing country (Eg: Russia-Ukraine War)
- Political/Civil unrest/Strikes in any oil producing country adversely impacting the operation in production facilities and export terminals resulting in declaration of Force Majeure (Eg: Libya, Nigeria)
- Sanctions on any oil producing country (Eg: Iran, Venezuela, Russia)
- Planned/Unplanned maintenance in oil producing country
- Any bottleneck in transportation of crude oil (Eg: Delays in transit through Suez Canal, Panama Canal etc.)
- Attack on any oil production/storage facility or oil tanker
- Disruption in supply of other energy sources like natural gas, coal etc.

As a part of the crude oil import strategy to ensure security of supplies and cost optimisation, Oil PSUs look out for opportunities to increase its geographical spread of crude oil supply sources to enhance the crude oil basket.

**1.30 Asked by the Committee as to whether there is any policy to enlarge the crude sources of the country, the Ministry submitted the following reply:**

“Pursuant to the decision of the Cabinet on 06.04.2016, the Public Sector Oil Marketing Companies formulate policies for import of crude oil in their best commercial interest and in accordance with the extant guidelines of procurement. Further, to ensure security of crude supplies and to mitigate the risk of dependence on crude from single region, Oil Public Sector Undertakings (PSUs) already procure varied crude grades from different countries in various geographical locations viz. Middle East, Africa, North America, South America, etc.”

**1.31 Explaining the steps taken to diversify the sources for import of crude oil, the representative of oil PSU made the following submission before the Committee during the oral evidence:**

“Sir, the Middle East is the major contributor to the oil import being done by India and for the four PSUs put together, it is anywhere in the range of 55 to 60 per cent year on year, that is, 55 to 60 per cent of our total imports come from the Middle East only. The main reason for that is, most of our refineries are designed for Middle Eastern crudes, plus the proximity from the Middle East to India which gives a lot of freight advantage. That is the reason why, whenever we do the exercise of crude oil procurement and do the optimisation run, the numbers are mainly picked up from the Middle East. In the Middle East also, the four major suppliers are Iraq, Saudi Arabia, Kuwait and UAE.....

.....Since the Middle East is the major supply source for us, since 2016-17, all the four oil PSUs are having a joint negotiation with the three major suppliers, Saudi Arabia, Kuwait and UAE and this is done under the guidance of the Ministry of Petroleum and Natural Gas and lot of benefits have been got due to these negotiations. Earlier, none of these suppliers used to give us optional volumes, but now we are getting optional volumes from them and some suppliers even give us some additional credit period. The normal credit period given is 30 days. But few of them had given 60 days credit. For example, when we were doing negotiation with Iran, we got 60 days credit and freight discounts of 80 per cent to 100 per cent in the last two-three years when we had term contracts with Iran. This is an exercise which is done before finalising the term contracts. It is normally done in January/February for contracts which are to be finalised from April to March next year.

This is the crude oil imports by region. As you will see, in the Middle East, from 72 per cent it has now come to 63 per cent. In 2017-18, 72 per cent dependency was on the Middle East, now it has become 63 per cent. Higher imports have started coming from North America and other regions also.”

### **Share (in percentage) of different countries in export of Crude Oil to India**

Country-wise crude exported to India in FY 2021-22 (provisional) is as under:

<b>Country</b>	<b>Qty (MMT)</b>	<b>%share</b>
Iraq	31.85	26.20
Saudi Arabia	23.68	19.48
United Arab Emirates	14.52	11.94
Nigeria	14.39	11.84
Kuwait	10.43	8.58
United States of America	7.01	5.77
Angola	3.24	2.66
Mexico	2.01	1.66
Kazakhstan	1.92	1.58
Oman	1.77	1.45
Norway	1.44	1.19

Malaysia	1.29	1.06
Congo Republic	1.17	0.97
Qatar	0.80	0.66
Algeria	0.80	0.66
Azerbaijan	0.68	0.56
Cameroon	0.68	0.56
Equatorial Guinea	0.62	0.51
Brunei Darussalam	0.57	0.47
Russian Federation	0.56	0.46
Brazil	0.41	0.34
Gabon	0.40	0.33
Ghana	0.38	0.32
Libya	0.36	0.29
Canada	0.15	0.12
Ivory Cost	0.15	0.12
Guyana	0.14	0.12
Neutral Zone	0.08	0.06
Egypt	0.07	0.05
<b>Grand Total</b>	<b>121.57</b>	<b>100</b>

Source: Petroleum Planning & Analysis Cell;

#### **F. OFFICIAL SELLING PRICE (OSP)**

1.32 Official Selling Price (OSP) is the price of crude oil declared by National Oil Companies (NOCs) of oil producing countries, on monthly basis. Different OSPs are declared for different grades by NOCs. OSPs of crude oils vary basis quality of crude grade and prevailing market condition. NOCs of oil producing countries declare monthly OSPs either as flat price or as premium/discount to the marker crude oil. Majority of crude oils produced in Asia and Africa are having OSPs. Generally, OSPs are declared one month in advance (e.g. for sale of crude oil in Mar. 2023, OSPs are made available in Feb. 2023). Further, OSPs of low sulphur crude grades are declared basis Dated Brent as marker crude, whereas OSPs of high Sulphur crude grades are declared basis Platts Dubai and/or Oman / DME Oman as marker crude.

**1.33 When asked about the Quantum of Premium or discount to the marker crude oil and factors which determine premium/discount to the marker price, the Ministry in its reply furnished the following:**

“Quantum of premium / discount declared as Official Selling Price (OSP) for each crude oil grade varies month on month basis prevailing market conditions. Monthly OSP of any given crude grade depends on some of the factors mentioned below:

- Quality of Crude Oil: Sulphur content (Low Sulphur/High Sulphur), API (Light/Heavy), yield of products e.g., LPG, Gasoline (Petrol), Gasoil (Diesel), Jet Fuel/Kerosene, Fuel Oil etc.
- Forwards cracks of different products in international market
- Forward crude prices of marker crude oil like Dubai and Brent
- Forward spread between Dubai and Brent
- Demand and supply of crude oil

For example, variation in Premium and Marker Crude prices since April 2020 till date for Arab Light crude oil from Saudi Arabia is presented in below table:

OSP of Arab Light Crude Oil (USD/Bbl) – April 2020 – March 2023			
Premium		Marker (Average of Dubai/DME Oman)	
Max	Min	Max	Min
9.80	-7.30	113.09	22.02

1.34 National Oil companies of oil exporting countries from Middle-East generally sell their crude through term contracts. Crude oil sales are observed on region basis namely Asia, Europe, and US. The Official Selling Price (OSP) is either declared as a flat price or as a premium/discount to the marker crude oil like Dubai, Oman, Dubai Mercantile Exchange (DME) Oman, IFAD Murban, The Electronic Intercontinental Exchange (ICE) Brent etc. Some other National Oil companies like ADNOC (Abu Dhabi) use their traded exchange price (IFAD Murban) to fix OSP for their crude oils.

The marker crude oil applicable for the crude grade is mentioned in the term contract. Generally, for Asia pacific full month average of marker price during the loading month is considered.

Official Selling Price (OSP) is declared separately for each crude grade for each loading month and for various regions in the world. Generally, the OSP is declared by 5<sup>th</sup> of the M-1 (M Minus One) month, where M is the month of loading. For example, the OSP for the month of October 2022 will be declared by the 5<sup>th</sup> of September 2022.

Details of OSP declaration by major NOCs are given below:

Sr	Country	Declaring Authority	Marker	Approx. Date of publishing	Applicable For
1	Abu Dhabi	Adnoc	Absolute Value basis Murban IFAD exchange	2-3 <sup>rd</sup> of M-1	Global
2	Algeria	Sonatrach	Dtd. Brent	20 <sup>th</sup> of M	Global
3	Brunei	Brunei Petroleum Shell	Outright Value	20 <sup>th</sup> of M+1	Global

4	Dubai	Deptt. of Petroleum Affairs	DME Oman	5 <sup>th</sup> of M-2	Global
5	Iran	National Iranian Oil Co. (NIOC)	Platts Dubai/Oman Avg	10 <sup>th</sup> of M-1	Asia
			ICE Brent	10 <sup>th</sup> of M-1	Europe
6	Iraq	State Oil Marketing Organization (SOMO)	Platts Dubai/Oman Avg	10 <sup>th</sup> of M-1	Asia
			Dtd. Brent	10 <sup>th</sup> of M-1	Europe
			Argus Sour Crude Index (ASCI)	10 <sup>th</sup> of M-1	US
7	Kuwait	Kuwait Petroleum Corporation (KPC)	Platts Dubai/DME Oman Avg	10 <sup>th</sup> of M-1	Asia
			Dtd. Brent	10 <sup>th</sup> of M-1	Europe
			Argus Sour Crude Index (ASCI)	10 <sup>th</sup> of M-1	US
8	Libya	National Oil Company (NOC)	Dtd. Brent	20 <sup>th</sup> of M-1	Global
9	Malaysia	Petronas	Dtd. Brent	20 <sup>th</sup> of M-1	Global
10	Mexico	Pemex International (PMI)	Platts Dubai/Oman Avg	15 <sup>th</sup> of M-1	Asia
			ICE Brent	15 <sup>th</sup> of M-1	Europe
			Argus WTI Houston/ICE Brent	15 <sup>th</sup> of M-1	US
11	Nigeria	Nigerian National Petroleum Corporation (NNPC)	Dtd. Brent	20th of M-1	Global
12	Oman	Oil Ministry of Oman	Outright Value of DME Oman	1 <sup>st</sup> day of M-2	Global
13	Qatar	Oil Ministry of Qatar	Platts Dubai/Oman Avg	10 <sup>th</sup> of M-1	Global
14	Saudi Arabia	Saudi Aramco	Platts Dubai/DME Oman Avg	5th of M-1	Asia
			ICE Bwave	5th of M-1	Europe
			Argus Sour Crude Index (ASCI)	5th of M-1	US
15	Indonesia	Ministry of Energy and Mineral Resources	Outright Value	3rd of M+1	Global

**Explaining the Official Selling Price (OSP) to the Committee during the oral evidence, the representative of oil PSU made the following submission:**

एक प्वाइंट ऑफिशियल सेलिंग प्राइस का है। ऑफिशियल सेलिंग प्राइस, जो मिडिल-ईस्ट कंट्रीज हैं, कूड का एक दाम होता है, प्लैट्स एक कंपनी है जो हर दिन सारी दुनिया की सारी कूड ऑयल का एक दाम फिक्स करती है। उस दाम के ऊपर एक ऑफिशियल सेलिंग प्राइस होता है, जिसको सऊदी अरबिया, एडनॉक और कुवैत लगाता है। वह एक प्रीमियम होता है। कभी-कभी वह डिस्काउंट में भी आता है। अगर उनको लगता है कि हमारा ऑफिशियल सेलिंग प्राइस ज्यादा हो गया है, जैसे इराक देश प्लैट्स जो ऑफिशियल सेलिंग प्राइस देता है, उसके ऊपर डिस्काउंट देता है, उसके कारण ओएसपी हर महीना चेंज होता रहता है। Sometimes, it is plus. Sometimes, it is minus. Today, the OSP of Middle-Eastern premium crude is 6.5 dollar. यह एक डायनॉमिक सिचुएशन है। यह हर महीने चेंज होता है। हम जो डिस्काउंटेड कूड लेते हैं, जैसे कभी-कभी कोई कूड वीएलसीसी टैंकर भरा हुआ रहता है और उसका कोई डेस्टिनेशन नहीं मिल रहा होता है, आपने एक प्रश्न पूछा था कि क्या मीडिएटर्स को हटा सकते हैं, तो मीडिएटर्स से लेने के बावजूद भी जो प्लैट्स का पब्लिश प्राइस होता है, हम उसी प्राइस पर लेते हैं। ऐसा नहीं है कि मीडिएटर्स अपना प्राइस खुद लगाता है। मीडिएटर्स ज्यादातर हमें डिस्काउंट ही देते हैं। यदि उसका एक वीएलसीसी भरा हुआ है और उसको कहीं खाली करना है, यदि उस समय मेरा स्पॉट टेंडर आ गया तो वह मेरे तरफ डॉयवर्ट कर देता है। So, mediators are required. यह बहुत ही कॉम्प्लेक्स गेम है। Only national oil companies cannot survive. The mediators are required. So, we take spot purchases either from national oil companies या फिर बीच में जो मीडिएटर्स होते हैं, उनसे लेते हैं। But they are big players. ऐसा नहीं है कि वे छोटे-मोटे प्लेयर्स होते हैं।

**G. ASIAN PREMIUM**

**1.35 When the Committee asked about the Asian premium being levied on the purchase of crude oil inter-alia indicating the reasons and the countries which collect the premium, the Ministry gave the following reply:**

“Below mentioned National Oil Companies of Middle East region declares their Official Selling Price (OSP) or Premium / Discount over Marker Crude Price for different regions i.e. Asia, USA and Europe.

1. Saudi Arabian National Oil Company (Saudi Aramco) - Saudi Arabia
2. Oil Marketing Company (SOMO)-Iraq
3. Kuwait Petroleum Company (KPC)-Kuwait and
4. National Iranian Oil Company (NIOC)- Iran

Marker crude used for Asia, USA and Europe is given below:

	Asia	Europe	USA
Saudi Aramco	Platts Dubai/ DME Oman Avg.	ICE Brent	Argus Sour Crude Index
SOMO	Platts Dubai/Platts Oman Avg	Dtd. Brent	Argus Sour Crude Index
NIOC	Platts Dubai/Platts Oman Avg	ICE Brent	--
KPC	Platts Dubai/ DME Oman Avg.	ICE Brent	Argus Sour Crude Index

Asian Premiums are calculated based on the difference in settled FOB crude oil prices for three different regions i.e. Asia, USA and Europe.

Summary of FOB prices for representative grade of Saudi Arabia, Iraq, Iran and Kuwait is given below:

All prices in US\$/bbl

Crude Grade/ Country	Arab Light		Basrah Medium		Iran Lt	KEC	
	Saudi Arabia		Iraq		Iran	Kuwait	
Period	Asia Vs Europe	Asia Vs US	Asia Vs Europe	Asia Vs US	Asia Vs Europe	Asia Vs Europe	Asia Vs US
Current Year							
2023 Avg	0.86	0.84	6.00	6.55	1.70	2.58	-0.01
2022-23 Avg	0.87	5.34	3.97	8.31	3.05	2.81	4.66
2021-22 Avg	2.13	3.12	2.00	4.38	2.81	1.30	3.38

The lower OSP in US/Europe is primarily due to availability of competing grades at cheaper price. In contrast, pricing of Asian countries is governed by sourcing from nearby Middle East countries with lower freight.

1.36 Asked whether other exporting countries of crude oil also use premium pricing mechanism, the Ministry furnished the following reply:

“Many crude oil exporting countries use premium pricing mechanism and follow differential pricing for different regions by charging regional premium or allow regional discount over the benchmark crude grade like Saudi Arabia , Iran , Iraq, Kuwait, Mexico, etc. As stated above, lower OSP in US/ Europe is primarily due to availability of competing grades at cheaper price.”

Asian premium pricing mechanism is applicable on crude oil only.

**Supplementing about the Asian premium before the Committee during the oral evidence, the representative of the Ministry stated as follows:**

कि जैसे जो मिडिल ईस्ट कंट्रीज हैं, ये ऑफिशियल सेलिंग प्राइज डिक्लेयर करती हैं, जब आप क्रूड लेते हैं, दुबई, ओमान से इनका कितना ज्यादा होगा, उसे डिक्लेयर करती हैं। जब हम मेजर करते हैं या अपना अनुमान लगाते हैं कि कितने का क्रूड पड़ा, 80 डॉलर अगर दुबई, ओमान है या ब्रेंट है, उसके ऊपर इनको चार, पाँच डॉलर देना पड़ता है। इसके लिए मिनिस्ट्री ने भी कॉफी बार इनको लिखा, लेकिन इनका जीआरएम उतना ही कम हो जाता है। हमारी रेकनिंग तो 80 डॉलर है, लेकिन ओएसपी की वजह से चार या तीन डॉलर, डिपेंडिंग ऑन दी ग्रेड, दो डॉलर, तीन डॉलर, वह और ज्यादा इनको पड़ता है। जो इनकी लागत में जुड़ जाता है। ओएसपी के लिए सरकार ने कई बार ऑनरेबल मिनिस्टर के लेवल पर भी लिखा और इस समय जेएस भी उनसे मीटिंग करते हैं, जब भी यह बातचीत होती है तो इसमें कॉफी सुधार हुआ है।

#### **H. RUPEE TRADE IN CRUDE OIL**

**1.37 When the Committee asked about the payment for purchases of crude oil, the Ministry furnished the following in its written reply:**

“The default payment currency for all contracts for import of crude oil is USD as per the international trade practice.

Recently, Reserve Bank of India (RBI) vide circular RBI/2022-2023/90 dated July 11, 2022 on International Trade Settlement in Indian Rupees (INR), introduced additional arrangement for invoicing, payment, and settlement of exports / imports in INR. Authorised Dealer (AD) banks in India have been permitted to open Rupee Vostro Accounts of correspondent bank/s of the partner trading country with an approval from the RBI with details of the arrangement. Indian importers undertaking imports through this mechanism shall make payment in INR which shall be credited into the Special Vostro account of the correspondent bank of the partner country, against the invoices for the supply of goods or services from the overseas seller /supplier. Payments for crude oil can be made in INR, subject to the suppliers’ complying with regulatory guidelines in this regard. Currently, Reliance and Oil PSUs do not have an agreement with any crude oil supplier to make purchases in Indian currency for supply of crude oil.”

**1.38 When asked by the Committee as to whether state run oil companies have any mechanism to hedge the wide fluctuations in the prices of crude oil and USD, the Ministry in its written reply submitted the following:**



“PSU Oil Marketing Companies are impacted by the volatility in prices of crude but only to the extent of fuel & loss. The prices of crude oil and refined petroleum products generally move in tandem with each other. Thus, it’s the volatility in product cracks (price difference between that of product prices and benchmark crude oil), which impacts the refiners the most. To hedge against this volatility, OMCs has been hedging the various product cracks as and when the opportunity is presented in the forward market. All the hedge positions are undertaken through OTC (Over the Counter) market with registered international counterparties and details of the hedge is reported to Authorised Dealer bank on quarterly basis.

Further, OMCs are also hedging their forex risk in line with their Risk Management policies.”

**1.39 Asked about the current status of trade in Indian Rupee for import of crude oil and the percentage of crude oil imported and any difficulty in settlement of crude oil in Indian rupee, the Ministry gave the following reply :**

“During FY 2022-23, no crude oil imports by Oil PSUs was settled in Indian Rupee. Crude oil suppliers (including ADNOC) continue to express their concern on the repatriation of funds in the preferred currency and also highlighted high transactional costs associated with conversion of funds along with exchange fluctuation risks. IOCL has informed that it incurred high transactions cost as crude oil suppliers pass on the additional transactional costs to IOCL.”

In order to promote growth of global trade and to have invoicing, payment and settlement of exports/imports in INR, Reserve Bank of India (RBI) has issued Circular dated 11.07.2022 giving modalities to open Special Rupee Vostro Account.

However, suppliers have expressed their concern on the repatriation of funds in the preferred currency and also highlighted high transactional costs associated with conversion of funds along with exchange fluctuation risks.

## **I. IMPORT OF CRUDE OIL FROM RUSSIA**

**1.40 Asked by the Committee about the difficulties faced by Indian companies in importing crude oil from Russia, the Ministry furnished the following:**

“Due to economic sanctions announced by United Nations / US / UK / EU, crude oil buyers are facing challenges in making Logistics arrangement (Ships availability, Insurance for Ships), getting Insurance coverage for crude oil and making payments. Hence, Indian buyers like IOCL, etc arrange import of Russian origin crude oil grades from the counterparties on delivery basis, where the Seller takes responsibility in delivering crude oil (with suitable Insurance coverage) at discharge ports in India.

Oil PSUs face challenges related to payment for Russian crude oil cargoes. Not all Indian banks are smoothly process payments for crude oil imports in USD currency.”

G7 countries have put a price cap on Russia oil from Dec 2022 and placed sanctions on western services except for Russian-origin crude oil or petroleum products that are purchased at or below a specified maximum price. India is not a part of the mentioned agreement. Indian oil & gas companies have been sourcing crude oil keeping in view all the international laws/sanctions, etc.

**1.41 Explaining the strategy of buying crude oil from Russia, the representative of the Ministry during the oral evidence submitted as follows:**

“When they are getting Russian crude and they are able to follow rules, for the benefit of the companies and for the country, as the hon. Minister and the hon. EAM have been saying, they are importing without doing anything which is not within the rules, and complying with the rules. If they had not imported Russian oil into India, which may be a big number of 1.95 million barrels per day, that deficiency would have created a havoc in the crude oil market and the prices would have shot up by about \$ 30-40. The crude oil market is such that in the market of 100 million barrels per day, if the OPEC says that they are going to reduce it by one or two million barrels per day, prices increase by 10 to 20 per cent and reach up to dollar 125-130 dollars. If India does not absorb – I would call it absorption – 1.95 million barrels per day, these prices would have reached \$ 120-130. It would have created a havoc.

When the hon. Prime Minister went to the US on a State visit, I read many articles in the newspapers there. Even The Economist stated that in a way, this is so much good for the country and for the overall energy sector in the world. I have feeling that there is no problem in our importing Russian crude 1.95 million barrels per day or more than that. It actually helps in stabilising the market. Otherwise, the prices would have shot up tremendously.

Today, Russia has said, before we came here, that they will reduce the export by 0.5 million barrels per day. It is all delta function. Even if it fluctuates in small quantity, the impact is very much. The stability, which has been brought in because of this, is a much bigger gainer than any other issue.

Diplomatically, we are a sovereign country and could say that we have been doing what is good for the country as well as the world.

Sir, coming to Russia, as we have been mentioning, 2016 onwards, it is the commercial decision of the companies. The western world said that there is a price cap of \$ 60 FOB. These are transactions within the financial domain. We have to use SWIFT and other channels. There are banking channels and we have to make payments. They are following all the price caps and all the rules and regulations.”

**J. TRANSPORTATION OF CRUDE OIL**

**1.42 Asked about types of crude oil carriers hired by Indian oil companies and the costs of transportation, the Ministry in its written reply furnished as under:**

“The company wise details of shipping arrangements of Indian refiners are as under:

### **IOCL**

IOCL uses VLCC (very large crude carriers), Suezmax and Aframax sized vessels for import of crude oil. Average per barrel rate of imported crude oil transportation for the year 2021-22 was USD 0.95 per barrel. IOCL deals with internationally reputed shipowners offering ships that are technically compliant to the tender conditions. Shipowners not acceptable under guidelines of Govt. of India are not dealt with.

### **BPCL**

BPCL hires VLCC, Suez Max and Aframax vessels for import of Crude oil to Mumbai, Kochi and Bina Refinery. Average per barrel rate of imported crude oil transportation for the year 2021-22 was USD 0.67 per barrel.

All shipping companies whose vessels that comply with the BPCL tender clauses and conditions are eligible to participate in the BPCL ship chartering tenders.

Additionally following conditions are also to be met by the shipping companies:

1. The Vessel/ Flag/ Vessel Owners (Registered, Technical, commercial and Disponent owner) including freight/ Demurrage beneficiaries should not be featuring in OFAC SDN LIST (OFFICE OF FOREIGN ASSETS CONTROL SPECIALLY DESIGNATED NATIONALS AND BLOCKED PERSONS LIST) and also should not have featured in OFAC SDN LIST in the past.
2. The offered vessel / flag/ owner (Regd/Disponent/Commercial/Technical/ Freight beneficiary) should not belong to a country which shares a land border with India. If it belongs to such countries, then they should be registered with competent authority as required by Govt of India , Dept of Expenditure Office Memorandum dated 23.07.2020 on insertion of Rule 144 (xi) in the GFR 2017 and order (Public Procurement No 1) dated 23.07.2020 giving detailed guidelines on public procurement from countries which share a land border with India.
3. Indian flag vessels have Right of First Refusal in all the tenders as per DG shipping guidelines.

All Foreign shipping companies can quote for the tenders through Indian Brokers only. Indian ship owners can directly participate in the BPCL ship chartering tenders.

### **HPCL**

For the purposes of importing Crude Oil, HPCL employs VLCC, Suezmax and Aframax size carriers. Average per barrel rate of imported crude oil transportation for the year 2021-22 was USD 1.12 per barrel for FOB cargoes.

For the purpose of transportation of imported Crude Oil, HPCL has signed COA (Contract of Affreightment) with SCI and Wave Chartering Limited, Malta for transportation of Aframax and Suezmax cargoes respectively. For VLCC cargoes, vessels are chartered by HPCL by issuing tenders.

### **MRPL**

For FOB basis where MRPL is required to do transportation arrangement, the same is arranged either through Contract of Affreightment (COA) or hiring a ship from spot market on cases to case basis. Average per barrel rate of imported crude oil transportation for the year 2021-22 was USD 0.97 per barrel.

Basis volume to carry, parcel size / infrastructure at load port, Aframax, Suezmax or VLCC Ships are hired. Suezmax / VLCC load can be offloaded only when SPM is operational during non-monsoon season. Jetties can berth only upto Aframax volume of Ships.

For CFR / CIF / DES / DAP Cargos, shipping arrangement is done by the Seller of Crude Oil.

MRPL hires through Global Tender to empanelled Ship Broking firms. Also, tender is published at INSA website for Indian Owners to participate.

### **RIL**

The typical crude oil carriers used by RIL are VLCC ~ 280 KT, Suezmax vessels ~ 140 KT and Aframax vessels ~ 80-90 KT

Freight rates are published daily and are volatile like oil prices. Hence, providing a narrow range of transportation cost is not possible.

Selection criteria of Shipping companies is based on competitive freight rates, track record of satisfactory performance of voyages, high standards of safety, (iv) and Vessels owned by them being vetted by Oil Majors, etc.

Further, Indian Companies obtain a NOC from Directorate General of Ships, India if they charter foreign flag vessels.”

**Elaborating about hiring of ships either on FOB or CFR basis during the oral evidence, the representative of the PSU submitted the following:**

एक प्रश्न ट्रांसपोर्टेशन से संबंधित पूछा गया था। ट्रांसपोर्टेशन के लिए दो तरह की प्रक्रियाएं हैं। यदि हमारी रिक्वायरमेंट साल भर की है, तो हम शिप ले लेते हैं, यह सस्ता पड़ता है। दूसरा, कम्पनीज voyage chartering करती हैं। उसके लिए शिपिंग कम्पनी से कांट्रैक्ट किया जाता है। कूड FOB बेसिस पर आ सकता है और CFR बेसिस पर भी आ सकता है। जो कूड दूर देशों से, जैसे अमेरिका आदि देशों से आता है, फ्रेट कॉस्ट के वरिएशन के कारण नुकसान न हो जाए, इसलिए वह डेलिवर्ड बेसिस पर आता है। यदि कूड अफ्रीका या मिडिल ईस्ट कंट्रीज से आता है, तो वह FOB बेसिस पर आ जाता है।

**1.43 Asked about the percentage of imported crude oil transported by vessels registered in India, the following reply was forwarded by the Ministry:**

“During FY 2022-23, vessels registered in India have transported approx. 23.64% of imported crude oil for Oil PSUs.”

**Explaining about hiring of ships for transportation of the crude oil, the representative of oil PSU submitted the following during the oral evidence:**

दूसरा सवाल है कि हम किस तरह की शिप्स इस्तेमाल करते हैं। इसमें भी फ्लेक्सिबिलिटी होना बहुत जरूरी है। अगर हम सिर्फ अपनी ही शिप से करेंगे, जिस तरह से हमारी डिमांड बढ़ रही है तो और खर्च अपनी शिप्स खरीदने के लिए करना पड़ेगा। अगर कोई अपनी शिप अपने खर्च पर ला रहा है और जब हम कह रहे हैं, तब ला रहा है, क्योंकि उसे तेल बेचना है और वह अपनी शिप में लेकर आ रहा है तो हमें समस्या नहीं है। वह रिस्क उठा रहा है, हमारे दरवाजे पर आकर तेल दे रहा है और जिस दिन हम चाहते हैं उस दिन दे रहा है तो हमें एडवांटेज में फ्लेक्सिबिलिटी मिल जाती है। हम यह नहीं चाहते कि जब हमारी डिमांड कम हो तो हमारी शिप खाली खड़ी हो, हमें कोई दूसरा लाकर दे रहा है जबकि वह अपनी शिप से कहीं और भी सप्लाय कर सकता है।

1.44 When the Committee enquired about the costs of transportation of crude oil per barrel through VLCC and ULCC carriers and also the break-up of prices of crude oil i.e. price of crude, transportation cost, brokerage and insurance, etc. the Ministry in its written reply furnished the following:

“ULCC vessels are not used by the Indian oil industry for import of crude oil. OMCs utilize VLCC ships for crude oil liftings. IOCL has informed that average per barrel rate of imported crude oil transportation for the year 2021-22 was USD 0.95 per barrel. Brokerage is a part of the freight itself and is about 1.25% of the freight. For the year 2021-22, insurance cost was 0.00625% of crude price and average price of crude was \$ 79.518/ bbl.”

Import of crude oil from countries not sanctioned by India but facing western sanctions makes getting insurance challenging. GIC should have robust mechanism to provide Insurance to Indian companies in such cases.

1.45 Following ports/SPMs (Single Point Mooring) can berth VLCCs:

SI no	Name	Port/SPM
1	Vadinar	SPM
2	Sikka	SPM
3	Mundra	SPM
4	Mumbai	Port JD5 (Partly loaded VLCC)
5	Kochi	SPM
6	Mangalore	SPM
7	Chennai	Port (Partly loaded VLCC)
8	Paradip	SPM
9	Vizag	SPM

ULCC vessels are not used by the Indian oil industry for import of crude oil.

1.46 Average quantities of import of crude oil that can be handled at some major ports is as given below:

PSU	Port	Handling Capacity
IOCL	Vadinar SPM	0.7 MMB/Day
	Paradip SPM	1.1 MMB/Day
BPCL	Crude oil jetty JD5, Mumbai	52 TMT/DAY
	Sikka SBM	55 TMT/DAY
	Kochi SBM	69 TMT/DAY
HPCL	Mumbai Port, (Jawahar Dweep Jetty-5)	56 TMT/DAY
	Visakhapatnam Port (SPM)	80 TMT/DAY

## **K. INFRASTRUCTURAL CONSTRAINTS IN INDIAN PORTS**

**1.47 Asked about any infrastructure constraints for unloading the imported crude oil in the Indian ports, the Ministry furnished the following reply:**

“Oil Companies face draft restrictions at Mumbai Port and are unable to berth fully laden VLCC. During monsoon season, SPM is not available at Mangalore Port. At Vizag

Port, VLCC cannot berth at OSTT Jetty. Currently, dead freighted Suez Max with a max of 100 TMT can berth at OSTT Jetty.”

Details of demurrage paid by PSU OMCs during FY 2021-22 and FY 2022-23 are given below:

(in ₹ Crore)		
OMC	2021-22	2022-23
IOCL	333.6	221.3
BPCL	118.5	75.70
HPCL	89.9	83.3
MRPL	23.8	15.2

The demurrage on Crude Oil cargoes is primarily on the account of change in demand, Cyclones, rough weather conditions, bunching of tankers, uncertainty in loading of some of Russian crude oil tankers and unplanned shutdowns in Refineries/ Pipeline operations.

**1.48 Asked as to whether SBM method entails additional cost for transportation, the Ministry gave the following reply:**

Single Buoy Mooring (SBM) is required to be used while loading /unloading crude oil ships. SBM usage charges are in addition to freight and shipping charges and are paid to refineries owning the SBM. It may be noted that SBMs can handle large vessels and hence results in lower transportation cost. The SBM method does not entail any additional cost for transportation. The SBM method actually reduces the cost of transportation as the SBM can handle Very Large Crude Carriers (VLCC) which reduces the per ton transportation cost.

**1.49 When asked regarding the turnaround time of ULCC and VLCC carriers at different Indian ports and how the turnaround time is compared to the ports of developed countries, the Ministry in its written reply submitted the following:**

“ULCC vessels are not in usage by the Indian oil industry for import of crude oil. The company wise details for import of crude oil through VLCC at various ports is given below:

**IOCL**

At Indian Oil’s terminals, VLCCs have an average turnaround time of 48–60 hours approx. Turnaround time at ports of developed countries are around 24-36 hours.

**BPCL**

Average approximate turnaround Time for SPM/ports where BPCL Crude oil parcels are unloaded are:

1. Average Turnaround time for VLCC for Kochi SPM - 88 hrs
2. Average Turnaround time for VLCC for Bina Refinery Sikka SPM - 72 hrs

### 3. Average Turnaround time for VLCC [Part Loaded] for Mumbai Port - 96 hrs

Average Turnaround time for VLCC for Foreign ports [Iraq , Saudi Arabia, Kuwait] where BPCL Crude oil parcels are loaded is approximately 78 hrs.

#### **HPCL**

HPCL imports Crude Oil at Mumbai and Visakhapatnam ports. ULCCs cannot be accommodated at these ports. While Visakhapatnam port can handle fully loaded VLCCs at the Visakhapatnam SPM. Mumbai port can handle only dead freighted VLCC. The turnaround of VLCC at the Visakhapatnam SPM is approximately 60 hours.

Mumbai being a tidal port, the turnaround time for vessels is higher since vessels can be berthed or de-berthed only upon suitable high tidal conditions. HPCL have not imported crude oil through VLCC at Mumbai port.

#### **MRPL**

VLCC turn around time at MRPL SPM is around 75 Hrs. ULCC is not used by MRPL for crude transportation.

#### **RIL**

Turnaround time for VLCC is around 48 hrs. It is comparable to the ports of developed countries.”

**Explaining the port infrastructure constraints in the country with regard to utilising VLCC/ULCC for transportation of crude, the representative of the Ministry submitted the following to the Committee during the oral evidence:**

जहां तक अल्ट्रा लार्ज क्रूड कैरियर की बात है, शायद देश में किसी भी पोर्ट पर क्षमता नहीं है कि हम अल्ट्रा लार्ज क्रूड कैरियर को रिसीव कर सकें। अल्ट्रा लार्ज क्रूड कैरियर बहुत बड़े जहाज होते हैं, इसके लिए खास चैनल की डेप्थ होनी चाहिए। दुनिया भर में ऐसे बहुत कम पोर्ट्स हैं। जहां तक मुझे जानकारी है, हिंदुस्तान में ऐसे पोर्ट्स नहीं हैं इसलिए हम वीएलसीसी से ज्यादा लेते हैं, जो छोटे शिप्स होते हैं, उनसे लेते हैं।

## **L. CRUDE OIL PIPELINES**

**1.50 When the Committee enquired about the mode of transportation of imported crude oil within the country, the Ministry submitted the following reply:**

“In case of all the Oil PSUs, entire imported Crude Oil reaches the Dock Ports thru Crude Oil Carriers. Thereafter, the imported Crude Oil is further transported inland by Pipeline Network. Further, crude oil processed at the coastal refineries do not require



pipeline transfer because of location advantage wherein imported/indigenous crude is processed without involving pipeline movement. In case of NRL, the Crude Oil imported at Haldia is further transported by Railway Wagons to the Refinery at Numaligarh.

1.51 When asked as to what percentage of imported crude oil is transported in the country through the use of pipeline and the costs of such pipeline transport, the Ministry in its written reply furnished as under:

“Percentage of imported crude oil transported in the country through the use of pipeline:

<b>Total Crude Import (FY 2021-22) (P) in MMT</b>	<b>Total Crude transported through major Pipelines in MMT</b>	<b>% Of Crude import transported through pipelines</b>
212	103	48.6

In case of IOCL, operating cost of crude oil Pipelines is ₹0.43 MT-Km (including depreciation) and ₹0.34 MT-Km (excluding depreciation)”

**1.52 Ongoing crude oil transportation pipeline projects are as under:**

<b>Sr. No.</b>	<b>Project Name</b>	<b>Length (Km)</b>	<b>Approved Cost (₹ Crore)</b>	<b>Targeted Date of Completion</b>
1	IOCL Mundra-Panipat Crude Oil Pipeline	1,033	9,028	December-2024
2	IOCL Haldia-Barauni Pipeline	518.5	3,696	June-2023
3	HRRL Mangala-Rajasthan Refinery Pipeline	74	382.67	December-2023
4	HRRL Mundra-Rajasthan Refinery Pipeline	487	2082.13	March-2024
5	NRL Paradip- Numaligarh Pipeline	1640	9058	January-2025

## **M. INVENTORY AND STRATEGIC RESERVES OF CRUDE OIL**

**1.53 Asked about the total current inventory of crude oil in the Country in terms of number of days of its daily consumption, the Ministry gave the following reply:**

“Government of India, through a Special Purpose Vehicle called Indian Strategic Petroleum Reserve Limited (ISPRL), has established Strategic Petroleum Reserves (SPR) facilities with total capacity of 5.33 Million Metric Tonnes (MMT) of crude oil. It will provide for about 9.5 days of crude oil requirement. In addition, Oil Marketing Companies (OMCs) in the country have storage facilities for crude oil and petroleum products for 64.5 days. Hence, current total national capacity for storage of crude oil and petroleum products currently is 74 days.”

International Energy Agency (IEA) member countries like USA, France, Germany, Japan etc. are required to ensure oil stock (crude oil plus refined products) levels equivalent to no less than 90 days of their net imports.

Strategic crude oil reserves of the country are managed by Indian Strategic Petroleum Reserve Limited (ISPRL) which functions under the overall supervision of MoPNG. ISPRL was established on 16th June 2004 to construct and manage SPR facilities at three locations i.e. Vishakhapatnam, Mangalore and Padur as part of the Phase I of SPR programme.

Under Phase-I of SPR program, ISPRL completed the construction and filling of crude oil in underground rock caverns with 5.33 MMT capacity at three locations namely Visakhapatnam (1.33 MMT) in Andhra Pradesh and Mangalore (1.5 MMT) & Padur (2.5 MMT) in Karnataka, which is equivalent to 9.5 days of national demand of 2019-20. Presently, the estimated reserves of crude oil, and petroleum products in India, stored by both private and public companies, including those created under the Phase-I of SPR programme cover 74 days of national net imports.

The release / sale of strategic crude oil is carried out through an Inter-ministerial Empowered Committee chaired by Secretary, MoP&NG. The release of the commercial stock through leasing / renting up to 30% and sale / purchase of crude oil of up to 20% of capacity is handled by a Committee of Directors as determined by ISPRL Board from time to time comprising of Directors of ISPRL. The authority for release of stock in the strategic portion of 50% of crude storage will vest with the Inter-Ministerial Empowered Committee.

<b>Inventory level of Crude Oil (Refineries) as on 01.07.2023 (in TMT)</b>	
<b>Refineries</b>	
	<b>Gross Tankage</b>
BPCL	1532
NRL	176
CPCL	946
HPCL	876
IOC	2707
MRPL	802
ONGC	6
RIL (DTA + SEZ)	3018
NEL	1152
HMEL	141
<i>Sub Total Refinery (A)</i>	<b>11356</b>

<b>Other than Refineries</b>	
BPCL	626
IOCL	3796
HMEL	694
<i>Sub Total Other than Refinery (B)</i>	<b>5117</b>

OMCs maintain crude inventory as per their processing requirement for particular coverage days. With increase in refining capacity, inventory level of crude oil will also increase.

**1.54 When the Committee enquired regarding any decision of keeping a particular level of inventory of crude, the Ministry in its reply mentioned the following:**

“Currently Strategic Petroleum Reserves (SPR) are at three locations with a total capacity of 5.33 MMT at Vishakhapatnam, Andhra Pradesh (1.33 MMT), Mangalore, Karnataka (1.5 MMT) and Padur, Karnataka (2.5 MMT). The Union Cabinet on 8th July 2021 approved Indian Strategic Petroleum Reserves Limited (ISPRL) to maintain 50% storage capacity filled at all times, which would be in strategic in nature. ISPRL can lease upto 30% of its crude reserves and trade up to 20% of crude oil capacity under Phase I of SPR. In the event of any emergency, GoI will have the first right to take all the crude in the storages.”

1.55 The details of crude inventory and coverage days is as under:

<b>Oil PSU</b>	<b>Total Crude Stock (TMT)</b>	<b>Coverage Days</b>
<b>IOCL</b>	3106	14.9
<b>CPCL</b>	383	12.2
<b>BPCL</b>	1500-1600	15
<b>HPCL-Mumbai</b>	370	13
<b>HPCL-Visakh</b>	660	20
<b>MRPL</b>	388	8.25
Source: Oil PSUs		

**1.56 Asked whether the number of days for which such inventory is sufficient to cater to/meet domestic demand, the Ministry replied the following:**

“Current capacity of Strategic Petroleum Reserves (SPR) is estimated to provide for about 9.5 days of crude oil requirement. In addition, the storage capacity of crude oil and petroleum products available with Oil Marketing Companies (OMCs) can provide an estimated stock of 77 days (including the capacity of SPR), based on the net oil imports from April-December 2022.’

**1.57 When asked by the Committee regarding the minimum level of crude oil kept as strategic reserve at present and average storage capacity of major economies of world in terms of percentage of domestic demand, the Ministry have given the following reply:**

“The strategic stock level has to be maintained as 50% i.e. 2.515 MMT as per the partial commercialization policy.

The crude oil stored as strategic reserve presently is 3.5 MMT at ISPRL which includes Oil stored by ADNOC also on which Govt of India has first right in case of crude shortage event. Apart from this, on the oil stored by OMC’s also, GOI will have first right.

Country-wise largest strategic petroleum reserves owned by Govt. As well as Pvt. Entrepreneurs of some of the major countries in the world are furnished below:-

Sr No	Country	Storage Capacity (Million Barrels) (Govt.+Pvt.) Total	Refining Capacity (Million Barrels/Day)	Days Cover (Tentative)	Remarks
1	USA	(797+0) 797	18.76	43	Total underground
2	China	(500+200) 700	15.66	45	Existing aboveground. 130 Mbl U/G storage planned
3	Japan	(324+259) 583	3.343	174	Total above ground.

#### **N. REDUCE IMPORT DEPENDENCY OF FOSSIL FUEL**

1.58 MoP&NG had constituted a committee on “Preparing a roadmap to reduce the dependency on import in energy by 10% by 2021-22” under the Chairmanship of Additional Secretary, MoP&NG in 2016. The above Committee had suggested the following steps towards roadmap for reduction of import dependency:

I. Increasing domestic production of crude oil and natural gas  
ONGC, OIL and DGH on behalf of private/JVs companies have individually carried out detailed planning and analysis to arrive at the projected domestic production of oil and gas under their portfolios under three scenarios- firm (business as usual), firm-upside (optimistic) and firm-upside-additional (aggressive). Some of the critical action that needs to be taken to accelerate domestic production are:

- Operationalize the process for marginal and small field developments for both under bidding round and under nomination with NOCs
- Setting up of National Data Repository (NDR) at DGH
- Suitable policy initiatives for recycling of relinquished areas

- Development of suitable incentivizing mechanism for promoting IOR/EOR methods
- Accelerate the pace of multi-client geo-scientific survey/activities
- Natural gas sector reform- Infrastructure and pricing reforms
- Formulating a framework for fast-tracking requirement for CBM/ Shale projects
- Oil and gas price premium for difficult/challenging areas
- Resolving issues related to areas with high potential of producing oil and gas
- Creating enabling environment for identifying collaboration opportunity with international partners with advanced technology on the basis of sharing incremental production through production enhancement contracts
- Creating enabling environment for detailed reassessment of various forms/ resources of hydrocarbon
- Creating enabling environment for surveying un-surveyed areas (48%)
- Sponsoring/ more capital infusion for promoting R&D activities by involving international research institutions for in-house development of new technologies in the area of E&P activities

## II. Promote Biofuels and Renewables

While a roadmap for realizing bioethanol potential for up to 10% blending through molasses route and beyond 10% through lignocellulosic route has been set out, the policies and efforts that are required to be channelized in order to create an effective market for biodiesel are also highlighted. There are two plans suggested to materialize the potential of biodiesel which include:

- planning for long term programme implementation through tree borne oilseeds (TBO) cultivation; and
- planning for short term programme implementation through Waste Cooking Oil (WCO)/Used Cooking Oil (UCO), tapping potential of available non-oilseeds, and cultivation of short gestation non-edible oil seeds.

## III. Promote Energy Efficiency and Conservation Measures

Steps taken for conservation and energy efficiency efforts of petroleum products and natural gas across various sectors of the economy like transport, industry, domestic and agriculture etc. are captured in the roadmap. By the year 2021-22, it is estimated that by embracing current and planned measures for conservation and energy efficiency, conservative targets on net incremental oil and gas savings of 2 MTOE through Petroleum Conservation Research Association's (PCRA) efforts and 3.8 MTOE through Bureau of Energy Efficiency (BEE) could be achieved.

## IV. Reduction through improvement in refinery processes

The roadmap proposes that by adopting the following measures, substantial reduction in oil imports can be achieved.

- residue upgradation,
- proposed revision in diesel specifications,
- LNG/natural gas integration to refineries,

- efficiency improvement (replacing existing small Crude Distillation Units/Vacuum Distillation Units), and
- importing grid power.

#### V. Demand substitution

The roadmap proposes that by adopting the following demand substitution measures, substantial reduction in oil imports can be achieved:

- Augmenting gas to replace Petrol/Diesel/LPG: Replacing Petrol/ Diesel consumption with natural gas is envisaged as a part of the strategy to reduce import dependency on crude oil.
- Reducing Kerosene consumption: By increasing LPG penetration and village electrification, usage of Kerosene for cooking and lighting can be reduced.

During 2014-20, 20 nos. of policy initiatives in the areas of generation of quality geo-scientific data and providing easy access, finding future oil & gas by awarding new exploration acreage, expediting production from new development acreages and from existing production acreages, Development of Gas Infrastructure and Gas Market and ease of doing business (EODB)/Administrative ease were introduced by Government of India.

Many of these policy interventions and initiatives have been implemented however desired results in terms on reduction in imports are expected in coming years.

In addition to new discoveries, continuous efforts are undertaken to increase the production of crude oil & natural gas through:

- Enhancement of recovery factor of matured fields by inducting IOR and EOR Technologies.
- Redevelopment of existing matured fields and development of new fields / marginal fields. Small/marginal fields, which were not viable on standalone basis being developed through cluster development concept.

Consequently, six Working Groups for monitoring the progress on various initiatives, schemes, projects, and strategies under their respective domains taken with a view to augment supply of energy, savings in energy as a means to achieving oil import reduction were formed to take this forward. The working groups were tasked to study, analyze and quantify the impact of various initiatives taken by the concerned Ministries/Departments from FY 2016 to FY 2020 towards achievement of the roadmap of reducing import dependency of oil/gas/coal and in the overall energy sector. The strategies/initiatives will be further reassessed in terms of their impact on energy demand and savings due to changes in energy dynamics and transition to cleaner fuels.

A reassessed roadmap suggesting further various policy level interventions required giving a holistic and coordinated strategy highlighting action to be taken by all stakeholders towards reducing the import dependence of energy in medium term up to 2025 for transitioning towards a green energy economy, is under finalization.

**Explaining the role of oil PSUs in import of crude oil, the representative of IOC submitted the following during the oral evidence:**

“Actually, the mandate of the oil companies is to provide energy security to the country. Energy security of the country is paramount. As we have seen, and as the Secretary was mentioning, in the UK there was an energy crisis. In London, they were dried out of petrol. We have ensured the energy crisis does not hit the common man. Energy security was there right in the worst days of COVID-19. We have ensured 100 per cent supply. I think you will agree with me, during the COVID-19 period also, all our refineries, marketing locations, bottling plants, etc., were functioning. When people were scared to go to their relatives, our LPG delivery persons were delivering LPG to the houses. I can tell you that IOCL has delivered 33 lakh cylinders during COVID-19 times. So, the mandate of the oil companies is to provide energy security.

**O. GAS PRICING FORMULA**

**1.59 When the Committee enquired about the steps taken by the Ministry to incentivize domestic production of crude oil and natural gas, the Ministry gave the following written reply:**

“The issue of pricing and marketing freedom for domestic gas is under constant review in this Ministry. New Domestic Gas Pricing Guidelines (NDGPG), notified in October 2014, were based on the prices prevailing in major international gas hubs, to strike a balance between the requirements of both producing and consuming sectors. The prices are determined on pre-defined parameters in a transparent way without Government intervention. The Domestic Gas Price P (wellhead) is based on the weighted average price of the leading international benchmarks and is declared half yearly. The data used is last one year with one quarter lag and is based on the natural gas consumption data along with corresponding natural gas prices.

- $P = (V_{HH} * P_{HH} + V_{AC} * P_{AC} + V_{NBP} * P_{NBP} + V_R * P_R) / (V_{HH} + V_{AC} + V_{NBP} + V_R)$
- $V_{HH}$ ,  $V_{AC}$ ,  $V_{NBP}$  and  $V_R$  represent the total annual volume of natural gas consumed in USA & Mexico, Canada, EU & Former Soviet Union and Russia resp.
- $P_{HH}$ ,  $P_{AC}$ ,  $P_{NBP}$ , and  $P_R$  represent the annual average of prices at Henry Hub, Alberta Hub, National Balancing Point and Russia resp.
- Price (in US \$/MMBTU) calculated to nearest two decimal points

From the annual average price US\$0.50/MMBTU has been deducted towards transportation and treatment cost.

With the vision of moving towards a gas-based economy and increasing the share of natural gas in India’s energy mix, a slew of measures have been taken in this direction, which are summarized below:

- i. **Marketing and Pricing Freedom for Gas produced from High Pressure-High Temperature (HP-HT) & Deepwater areas with price ceiling, Under HELP Policy (DSF & OALP), CBM blocks, North-Eastern Region, New Gas Discoveries having FDP approved after 28.02.2019**

- ii. **Standard procedure to discover market price of gas** through a transparent and competitive process and permitting Affiliates to participate in bidding process. Empanelled agencies for carrying out e-bidding have been notified.
- iii. **Freedom to sell small quantity of gas through PNGRB authorized gas exchanges-** an additional mechanism has been provided to gas producers having pricing and marketing freedom, for selling small quantity of gas, upto 500 MMSCM or 10% of annual production from Contract Area, whichever is higher, per year through gas exchanges authorized by PNGRB.
- iv. **Detailed guidelines for monetization of Ad-hoc/Test Gas** - as a further momentum to gas reforms and saving the environment, Government issued detailed guidelines for monetization of Ad-hoc/Test Gas produced during the Testing of oil and gas well vide OM dated 22.11.2021.

Following steps have been taken to incentivize domestic production of crude oil and natural gas:

- i. **Policy Framework to Promote and Incentivize Enhanced Recovery Methods for Oil and Gas (October, 2018):** Under this policy, fiscal incentives are extended in the form of partial waiver of applicable Cess/ Royalty on incremental production. An Enhanced Recovery (ER) Committee has been constituted to oversee the implementation and facilitation of the policy.
- ii. **Policy Framework for Exploration & Exploitation of Unconventional Hydrocarbons (August 2018):** This has resulted in opening up area of around 77,296 sq. km. for simultaneous exploration and exploitation of conventional or unconventional hydrocarbons.
- iii. **Policy Reforms in Exploration and Licensing Policy for enhancing domestic exploration and production of oil and gas (28<sup>th</sup> February, 2019):** Major achievements are as under:
  - No Revenue Sharing with Government in Category- II & III sedimentary basins.
  - Shifting of focus from 'revenue' to 'production' maximisation: 70% weightage to Minimum Work Programme in Cat-I Basin and 100% weightage in Cat-II & III basins.
  - Shorter exploration period for early development.
  - Fiscal concessions for early monetization and commercial production.
  - Marketing and Pricing freedom for natural gas.”



**PART –II**  
**OBSERVATIONS / RECOMMENDATIONS**

**RECOMMENDATION NO.1**

**REVIEW OF POLICY ON IMPORT OF CRUDE OIL**

As per IEA's India Energy Outlook 2021, Energy use on a per capita basis is well under half the global average, and there are widespread differences in energy use and the quality of service across states and between rural and urban areas. Further, it states India's oil demand will rise by almost 4 million barrels per day (mb/d) to reach 8.7 (mb/d) in 2040, the largest increase of any country.

The Committee note that an expanding economy, population, urbanisation and industrialisation mean that India sees the largest increase in energy demand of any country, across all scenarios by 2040. Further, Indian PSU refineries have expanded their capacity to meet the increasing demand for auto fuel and also to meet the demand for other petroleum products like ATF, naphtha, etc.

The Committee note that import of crude by Oil PSUs during 2021-22 was 120.5 MMT out of total imports of 212.38 MMT and during the year 2022-23, the imports by oil PSUs totalled about 141.2 MMT. The Committee further note that the domestic production of crude oil was 30.49 MMT and 29.69 MMT during the years 2021-22 and 2022-23 respectively. Out of this, contribution of the PSUs accounted for 23.11 MMT and 22.44 MMT respectively. This shows that hardly, the domestic production is less than 15 per cent of the demand and more than 85 per cent of crude oil is imported. The Committee further note that Under the Administered Pricing mechanism (APM), the Import of crude oil was fully canalized through the Indian Oil Corporation Limited (IOCL) on behalf of all Oil PSUs and controlled by the Empowered Standing Committee (ESC) of the Government of India. The Union Cabinet dismantled the APM mechanism *w.e.f.* 01.04.2002 and since then each Oil PSU is procuring crude on its own. However, the crude oil import arrangements were finalized through ESC (Empowered Standing Committee) of each company wherein representative of Government of India was a member. Since April 2016, the Cabinet approved and empowered the Public Sector Oil Companies to evolve their own policies for import of crude oil, consistent with CVC guidelines and get them approved by the respective Boards.

**This is expected to increase the operational and commercial flexibility of the oil companies and help them in adoption of effective procurement practices for import of crude oil.**

**Hence, each PSU refinery has its own optimized procedure for procurement, transportation, and processing of crude oil, including contract signings and payments to suppliers and ship owners. The Committee note that at present the PSU refineries import crude oil through (i) Annual term contracts and (ii) Spot contracts.**

**The Committee observe that the import policy of PSUs for crude oil has undergone gradual changes in the last two decades and from a fully controlled regime to full autonomy to each company to plan and purchase the type of crude required for their operational requirements. This will hopefully give rise to quick decision making and improve the gross refining margins of the refineries thereby contributing to better financial performance of the Oil PSUs. The Committee, however, hope that even though the Government has given full operational autonomy to the PSUs, the Ministry of Petroleum and Natural Gas would monitor the procurement plan and execution of contracts by the PSUs by periodic audits to check the effectiveness of the current policy. The Committee therefore recommend to the Ministry that the Import policy of crude oil should be monitored periodically and necessary changes may be advised based on the shortcomings noticed in the policy.**

#### **RECOMMENDATION NO.2** **SPOT AND TERM CONTRACTS**

**The Committee note that crude oil imports are mainly done in two ways namely Term Contract and Spot Tenders. The oil PSUs normally resort to term contracts which are finalized on yearly basis. The primary reason for term contracts is to give energy security where the volumes are assured irrespective of the crisis situation. Most of the contracts are on financial year basis but some of them are also on calendar year basis.**

**Spot purchases are resorted by oil PSUs to meet out the balance requirement which is not covered under term contract. This gives flexibility to crude oil purchases based on seasonal market demand. Also, spot purchases**

give the option of exploring various new grades for which term contracts are not available. The frequency of spot purchases depends on requirement of the company. It is generally expected that the spot tenders are likely to be available at cheaper price than term contracts.

The purchases are done with National Oil Companies of (NOCs) at Official selling Price (OSP) of the country from which it is imported. Wherever the quantities are not available from such countries, then PSU's go to national oil companies who do not have OSP. The Committee note that during the year 2020-21, IOC had 62 per cent term contract and 38 per cent spot contract. In 2021-22, the term contract was 63 per cent and spot was 37 per cent. During the 2022-23, it is seen that the term contract was 68 per cent and the spot contract was 32 per cent for IOCL. In purchases of BPCL, it is seen that the term contracts was 56.7 per cent (2020-21), 60 per cent (2021-22) and 49 per cent (2022-23). The remaining quantity was purchased through spot tenders. The Committee observe that the purchases between term and spot is approximately 2/3<sup>rd</sup> and 1/3<sup>rd</sup> for IOCL and 60:40 for BPCL. The Committee observe that the overall spot purchases which was around 27.58 per cent in 2017-18 has increased to 35.13 per cent in 2022-23. The Committee acknowledge that oil PSUs have autonomy to decide their purchases of crude oil and are the best judges to decide on the type of purchase for crude oil from international markets.

However, keeping in view the significant increase in percentage of spot tenders in the last few years, the Committee would like to caution the oil PSUs to plan their crude purchases, so that the average cost of purchases in spot tenders should be at a lower cost than term contracts. The Committee recommend that the Ministry should conduct a study/audit to see whether the purchases in spot tenders are actually resulted in cheaper cost.

### **RECOMMENDATION NO.3**

#### **NEED TO STRENGTHEN DECISION MAKING PROCEDURES IN OIL PSUS GOVERNING CRUDE OIL PURCHASES**

The Committee note that since April 2006 the Government allowed oil PSUs to formulate policies for import of crude oil consistent with CVC guidelines and get them approved by the respective boards. This is in keeping with the principle of Minimum Government Maximum Governance and to increase operational and commercial flexibility and enable oil companies to adopt most effective procurement practices.

All the oil PSUs have created Empowered Standing Committee (ESC) for decision making mechanism in their companies for making crude oil purchases. However, the Committee note that there is no uniformity in the composition of the Empowered Standing Committee (ESC) of different PSUs. The Committee also observe that inclusion of Director (Human Resources) is a member of ESC of IOCL and HPCL whereas it is not so in the case of BPCL. Similarly, the Committee observed that the Head (International Trade Department) is the Member Convenor in IOCL and the Executive Director (International Trade and Risk Management) in BPCL find place in the ESC of their companies whereas the Crude Oil Procurement Committee (COPC) in HPCL does not have the ED(International Trade) as its Member. The Committee also find that the ESC only consists of officials of the respective companies and no outside official is found in the composition. The Committee desire that a representation of an official from other PSUs who have international trade experience of imports and exports of similar natural raw material could find a place in order to ensure transparency and credibility in the decision making.

The Committee desire that the Ministry should devise criteria for composition of ESCs in oil PSU keeping in mind the functions of the ESC and only members having experience and expertise in dealing with matters of crude oil purchases be included in ESCs. The Committee therefore recommend that the Ministry of Petroleum and Natural Gas may ensure uniformity in ESCs of oil PSUs and consider including representatives from other non-oil PSUs who have international trade experience.

#### **RECOMMENDATION NO.4**

#### **ENLARGING THE INDIAN CRUDE BASKET**

The Committee note that the Indian crude basket represents a derived basket comprising of Sour grade (Oman & Dubai average) and sweet grade (Brent Dated) of Crude oil processed (indigenous and imported) in Indian refineries during previous financial year. The same is presently calculated on the basis of a weightage of 75.62 per cent for the price of sour grades of crude oil (average of Oman & Dubai) and 24.38 per cent sweet grade of crude oil (Brent Dated). It is used as an indicator of the price of crude imports in India and Government of India watches the index while examining the domestic price issues. The Committee further note that since Middle East crude generally cost more due to levy of Asian premium by Middle East countries, the Indian crude basket is higher.

The Committee note that about 250 grades of crude oil are traded in world crude market. But, Indian refineries buy only about 50 grades of crude oil in a year. The purchase of crude by oil PSUs depend on parameters like refinery configuration, seasonable demand, price of crude, required product, operational exigencies, etc. The vintage refineries have constraints in processing different grades of crude while advanced refineries can process a variety of crude. Similarly, crudes having wax content and petro-chemical derivations also influence the decision to go for purchase of certain types of crudes.

The Committee would exhort the oil PSUs to modernize their vintage refineries so as to improve their capabilities to process wide variety of crude oil. The Committee, therefore, recommend to Ministry of Petroleum and Natural Gas / Oil PSUs to diversify their imports of crude oil and explore the feasibility of buying more grades of crude oil with the objective of reducing the cost of Indian crude basket of the country.

#### **RECOMMENDATION NO. 5**

#### **NEED FOR DIVERSIFICATION OF SOURCES OF CRUDE OIL**

The Committee note that India is a fast growing economy and consequently the energy demand in the country is increasing rapidly. The country consumed 204.72 Million Metric Tons (MMT) of petroleum products in 2021-22 and 223.02 MMT in 2022-23. As per International Energy Agency's World Energy Outlook 2022, the energy demand of the country is expected to grow at about 3 per cent per annum till 2040, compared to the global growth rate of 1 per cent. The Committee note that currently India is, 3<sup>rd</sup> largest consumer of Oil, 3<sup>rd</sup> largest LPG consumer, 3<sup>rd</sup> largest LNG consumer and 4<sup>th</sup> largest refiner of the world.

The Committee note that India is deficient in production of crude oil and natural gas and thereby has overwhelming dependence on their imports. The import dependency of the country in respect of crude oil, natural gas and LPG in FY 2021-22 were about 85 per cent, 48 per cent and 50 per cent respectively. In FY 2022-23, the dependency on imported crude oil increased further and reached 87.3 per cent.

The Committee note that over 60 per cent of the imports of crude oil of Oil PSUs come from countries situated in Persian Gulf region mainly from Iraq, Saudi Arabia, Kuwait and UAE. Further, about 85 – 90 per cent of LPG imports are sourced from Middle East countries situated around Persian Gulf.

The Committee note that majority of India's hydrocarbon imports are being sourced from the Middle East region wherein due to geo-political flashpoints, the supplies can face disruption. Even small skirmishes or conflicts in any region cast a cloud on the supply of crude oil and increase the price of crude oil significantly in the international market. In the recent past, the country witnessed supply disruptions and price volatility as a result of the Russia-Ukraine war.

The Committee further note that the Government of India has a stated policy of diversifying the sources of crude oil and gas imports of the country and it has also taken steps to achieve the same. As a result of efforts of the Government of India, the share of Middle East countries in the supply of crude oil to India had declined from 72 per cent in FY 2017-18 to 63 per cent in FY 2020-21.

Also, the share of Middle East countries declined marginally from 54 per cent in 2017-18 to 52 per cent in 2020-21.

The Committee view that over dependence of the country and Oil PSUs on any one region for crude oil and gas supplies can impact energy security of the country which entails getting uninterrupted supplies of crude oil and gas at reasonable prices to support the rapidly growing economy of the country. The Committee appreciate the positive steps taken by the Government of India so far to diversify the imports of crude oil and gas of the country. The Committee, therefore, recommend to the Ministry of Petroleum and Natural Gas to take more concrete steps for the diversification of imports of crude oil and gas of the country by exploring new partners.

#### **RECOMMENDATION NO.6** **OFFICIAL SELLING PRICE**

The Committee note that the Official Selling Price (OSP) is the price of crude oil declared by National Oil Companies (NOCs) of oil producing countries, on monthly basis. Different OSPs are declared for different grades by NOCs. OSPs of crude oils vary based on quality of crude grade and prevailing market condition. The Committee further note that NOCs of oil producing countries declare monthly OSPs either as flat price or as premium/discount to the marker crude oil. Majority of crude oils produced in Asia and Africa are having OSPs. Generally, OSPs are declared one month in advance (e.g. for sale of crude oil in Mar. 2023, OSPs are made available in Feb. 2023). Further, OSPs of low sulphur crude grades are declared based on Dated Brent as marker crude, whereas OSPs of high Sulphur crude grades are declared based on Platts Dubai and/or Oman / DME Oman as marker crude.

The Committee further note that National Oil companies of oil exporting countries from Middle-East generally sell their crude through term contracts. Crude oil sales are observed on region basis namely Asia, Europe, and US. Some other National Oil companies like ADNOC (Abu Dhabi) use their traded exchange price (IFAD Murban) to fix OSP for their crude oils.

The Committee note that the Official Selling Price decided by National Oil Companies in the Middle East needs better transparency. The oil PSUs along with other oil importing companies should try to impress upon the NOCs to fix OSPs based on certain formulae. The Committee would also like to observe that the price of crude oil has no relation with the production cost, etc. Since, the commodity is a natural resource endowed upon some countries the pricing should be reasonable in order to ensure energy access at affordable prices to citizens across the world. Since the oil producing countries to a large extent are acting in a concerted way, the price of crude oil is largely producer determined rather than market driven. The Committee, therefore, would recommend the Ministry to coordinate with other oil importing countries and approach multi-lateral institutions to bring reforms in the pricing of crude oil so as to ensure energy availability at reasonable price to the global community.

#### **RECOMMENDATION NO.7** **ASIAN PREMIUM**

The Committee note that the crude oil is purchased through Term Contracts and Spot Tenders and in the Term Contracts, the National Oil Companies of Middle East declare their Official Selling Price over marker crude price for different regions, namely, Asia, Europe and USA. Over and above this Official Selling Price, extra cost called Asian premium is also levied on purchase of crude oil for Asian countries like India and others in the region. The Committee note that the levy of Asian premium is on account of lower transportation cost due to the proximity of our country to the Middle East from where the country imports a big share of its crude oil requirement. The Asian Premium impacts the gross refining margins of the companies. The Committee note that the geographical location of a country is given and hence a country should not be made to pay a higher cost for such non-commercial reasons.

The Committee note that a few countries in addition to India also pay a higher cost in the form of Asian premium for crude oil which it feel is unreasonable and against any free market mechanism and normal business principles accepted in the market. Therefore, the Ministry /Oil PSUs should make



effort to do away with the premium. If required, they should seek the support of similar countries which bear the burden of Asian premium and utilize various multilateral institutional fora to do away with such unreasonable charges. The Committee, therefore, recommend that the Ministry and oil PSUs along with other nations to take up the issue of discontinuing of Asian premium.

#### **RECOMMENDATION NO. 8**

#### **NEED TO PROMOTE INDIAN RUPEE**

The Committee note that the bill for import of crude oil imports amount to about 25 per cent of all merchandise imports of the country and impacts the trade deficit of the country. Accordingly, the Government of India envisaged to promote settlement of crude oil imports in Indian rupee to save precious foreign exchange of the country.

The Committee further note that Reserve Bank of India (RBI) introduced additional arrangement for invoicing, payment, and settlement of exports / imports in INR. Authorised Dealer (AD) banks in India have been permitted to open Rupee Vostro Accounts of correspondent bank/s of the partner trading country with an approval from the RBI with details of the arrangement. Indian importers undertaking imports through this mechanism shall make payment in INR which shall be credited into the Special Vostro account of the correspondent bank of the partner country, against the invoices for the supply of goods or services from the overseas seller /supplier. Payments for crude oil can be made in INR, subject to the suppliers' complying with regulatory guidelines in this regard. Currently, Oil PSUs do not have an agreement with any crude oil supplier to make purchases in Indian currency for supply of crude oil.

The Committee, however, note that crude oil suppliers have expressed their concern on the repatriation of funds in the preferred currency and high transactional costs associated with conversion of funds along with exchange fluctuation risks. The Committee express concern over lack of momentum in settlement of crude oil import bills in Indian rupee and recommend the Ministry of Petroleum and Natural Gas to take up the issue with the Ministry of Finance and

Reserve Bank of India for removing bottlenecks in settlement of crude oil import bills in Indian rupee and promote the same.

**RECOMMENDATION NO.9**  
**IMPORT OF CRUDE OIL FROM RUSSIA**

The Committee note that the country imports crude oil across the globe including Middle East, Africa, North America, South America, etc. During the F.Y. 2021-22 it is seen that the top six countries accounted for 80 per cent of the total crude imported by oil PSUs. The import from Russia was very low in FY2021-22. However, ever since the war between Ukraine and Russia began and economic sanctions announced by UN/UK/EU/US with the price cap imposed on Russia, the country started importing more from Russia in order to diversify the crude basket. This has helped India to expand its basket of countries for sourcing crude oil and also helped in stabilising the crude oil market in global markets. The country also needs to look at other options across various geo political locations so as to reduce its dependence on one particular region. The recent geo-political conflict in the Middle East has cast turmoil in the region and similar conflicts elsewhere also causes volatility in crude oil prices on the upper side.

The Committee, therefore, expect the Ministry/oil PSUs to be alert and alive to emerging developments in the geo-political situation across the globe and tap newer sources of crude oil from different countries as a measure to diversify its purchases and also enhance and ensure energy security of the country. The Committee note that if India had not resorted to purchases from Russia, the oil market would have been highly volatile and oil prices would have flared up which would have been detrimental to many countries across the globe. The Committee appreciate the decision of the Government to purchase crude oil from Russia which not only resulted in stability in global market but also a cheaper crude and provided the economic impetus for many countries as they were reeling under economic issues related to Post covid phase period. The Committee recommend that the Government of India should keep the energy security of the country in mind while taking decisions on import of crude oil.

**RECOMMENDATION NO.10**  
**TRANSPORTATION OF CRUDE OIL**

The Committee note that the transportation cost for the crude oil is to be borne by the country which imports it and includes freight, insurance, shipping charges, leverages, etc. The Committee note that the transportation cost increases the landing cost of the crude oil into the country thereby contributing to the input cost. The country imports crude oil from very many different geographical locations including Europe, UK, USA, Middle East, etc. The Committee desire that the oil PSUs should explore newer and shorter routes which are different from the existing routes for transporting the crude from different locations. In this regard, the Ministry and PSUs should do some serious study and come out with possible options and discuss with the concerned countries. The purpose of alternative routes should be for reduction in time, lesser geo-political tensions in the route, safer passage and economical in cost, etc. The Committee, therefore, recommend that the Ministry and oil PSUs should explore newer transportation routes for crude oil import for a safer, secured, efficient and economic cost.

#### **RECOMMENDATION NO. 11**

#### **NEED TO IMPROVE PORT INFRASTRUCTURE**

The Committee note that good port infrastructure is a necessity for facilitating import of crude oil in the country. The Committee further note that turnaround time of crude oil tankers at Indian ports and jetties is generally higher in comparison to turnaround time at ports of developed countries. The higher turnaround time increases the cost of shipping charges and consequently impact the landing cost of crude oil. The Committee also note that Oil Companies face draft restrictions at Mumbai Port and are unable to berth fully laden VLCC. During monsoon season, SPM is not available at Mangalore Port. At Vizag Port, VLCC cannot berth at OSTT Jetty. Currently, dead freighted Suez Max with a max of 100 TMT can berth at OSTT Jetty. Accordingly, the Committee recommend to the Ministry of Petroleum and Natural Gas to take up the issue of infrastructural constraints at Indian ports and jetties including the constraints at Mumbai, Mangalore and Vizag ports with the Ministry of Port, Shipping and Waterways and

impress upon them to take effective steps for improvement of port infrastructure pertaining to docking of crude oil tankers. The Committee also desire that MOPNG/ Oil PSUs should explore new locations around the sea coast of the country without the infrastructural constraints and as well study ports of other developed countries for their experience.

#### **RECOMMENDATION NO. 12**

##### **NEED TO EXPAND CRUDE OIL PIPELINES**

The Committee note that only 48.6 per cent of crude oil is moved in the country through pipelines. The Committee further note that transportation of crude oil through pipelines is cheaper in comparison to transportation through other modes. The same is clearly manifested in the case of Numaligarh Refinery Limited (NRL). The Numaligarh Refinery incurs higher transportation charges @ Rs. 2/ MT/ Km due to transportation of crude oil through railway wagons which is substantially higher than average pipeline transportation cost of about Rs. 0.46/ MT/ Km.

The Committee note that there are five crude oil transportation pipeline projects that are underway in the country totalling 3750 km costing Rs.24,247 crores. The targeted completion dates ranges from June 2023 to January 2025. The Committee accordingly recommend to the Ministry of Petroleum and Natural Gas/ Oil PSUs to ensure that on-going pipeline projects are completed on time and to strengthen the crude oil pipeline network of Oil PSUs of the country and raise the share of pipeline transportation of crude oil.

#### **RECOMMENDATION NO.13**

##### **STRATEGIC STORAGE**

The Committee note that the country has created strategic storage caverns for storage of crude oil towards enhancing and ensuring energy security of the country. At present 5.33 MMT of capacity at three different

locations, namely , Vishakhapatnam (1.33 MMT), Mangalore (1.5 MMT) and Padur (2.5 MMT). The Committee note that the strategic storage will be a dynamic concept as the total demand of petroleum products like diesel, petrol and ATF, etc. keeps on changing more on the higher side as the economy grows. Therefore, the strategic storage capacity needs to be worked out with a future target in mind.

The Committee note that two additional strategic storage caverns one at Orissa and other at Rajasthan have been approved and work to be undertaken at these two storages. The total capacity of 5.33 MMT is around 2.6 per cent of annual domestic demand of 204.7 MMT F.Y. 2021-22. The Committee expect the Ministry to increase the strategic storage capacity in the country at a quicker pace and with the faster execution. The Committee are of the view that the existing refinery projects and the recently commissioned refineries may be asked to set up strategic storage capacity with a smaller capacity like 2 to 3 days at 5 to 6 locations which can bring up 15 to 20 days additional capacity in a definite time frame.

While standalone strategic storage caverns at different locations also helps, capacities near the existing refinery may encourage the oil PSUs to establish and maintain them which also gives them secured supplies. The Ministry may provide funds for creation of storage caverns to oil PSUs through ISPRL, while the oil PSUs can store and maintain the caverns for their usage. The Committee, therefore, recommend the Ministry to look at various options to increase the strategic storage capacity in the country with a future demand in 2040 and work progressively to achieve them.

**RECOMMENDATION NO.14**  
**STRATEGY TO REDUCE IMPORT DEPENDENCE OF CRUDE OIL**

The Committee note that the installed refining capacity in the country as on 1.4.2022 is around 250 MMT out of which 100 MMT is in private sector. The domestic production of crude oil in the country is around 30 MMT and the country imports almost 220 MMT out of which 120 MMT is

done by oil PSUs. The Committee further note that at present the import is closer to 87 per cent and unless major new discoveries of crude oil are made, the country will still continue to depend on crude oil imports. With the economic growth planned for the next few years, the demand for petroleum products including auto fuel is likely to increase over the year.

Government has set a target to raise the share of natural gas in energy mix to 15% by 2030. At present (in 2021), share of natural gas in primary energy mix is 6.3%. To meet the increased requirement of hydrocarbon fuel, major strategies adopted inter alia include: attracting investment in Exploration & Production to enhance domestic oil and gas production, shifting to gas based economy, technological upgradation to improve refinery processes, energy efficiency and productivity, accelerating bio-fuel economy, expanding overseas oil and gas portfolio, diversifying oil and gas supply sources, etc. Government has taken up development of National Gas Grid, City Gas Distribution Networks to cover major demand centres across the country to provide clean and green fuel.

The Committee note that the Government had prepared a road map to reduce the dependency on import in energy. The road map consist of five major steps including increasing domestic production, promotion of bio-fuel and renewable, promote energy efficiency and conservations methods, reduction through improvement in refinery process and demand substitution. The Committee further note that some of the steps mentioned in the road map had started showing result like bio-fuel and renewable energy. The Committee suggest that the refinery improvement process should be an ongoing programme and demand substitution can also be achieved in the near future by promotion of CNG and PNG for transport and domestic usage.

The Committee, however, would like to point out that the Ministry besides the measures taken on its domain should also promote green hydrogen, electric vehicles, renewable energy and bio-fuels. The Committee note that this exercise needs new policy initiatives involving several ministries and agencies. In addition, the Ministry should look at out of box suggestions like motivating people to use public transport, change in lifestyle habits, modification in work culture like work from home which reduce travel requirement, etc. are some of the issues which needs to be seriously looked at from a long term perspective. The Committee, therefore, recommend that the Ministry should set up an interdisciplinary group of experts belonging to various fields to come up with comprehensive set up policy measures so that the demand for fossil fuel can be minimized.

#### **RECOMMENDATION NO.15**

##### **GAS PRICING FORMULA**

The Committee note that the Government has notified the new domestic gas pricing guidelines in October, 2014 to strike a balance between producers and consumers. These guidelines envisaged determination of price on predefined parameters in a transparent way without government intervention. The Committee note that the government has a vision of moving towards a gas based economy and increasing the share of natural gas in the energy mix. It has taken a slew of measures in this direction. Also, in order to incentivise the domestic production of crude oil and natural gas, several policy frameworks and reforms have been put in place since August 2018.

The Committee observe that the domestic production of natural gas should be encouraged and incentivised in every possible way so that the share of natural gas in the energy mix goes up as targeted by the government. The Committee hope that the increase in natural gas usage may reduce our dependence on crude oil for the country and it may as well

lead to better bargaining position for the nation in the international market. The Committee, therefore, recommend that the MOPNG should review and consult stakeholders about the pricing related issues for natural gas and take suitable steps to produce more natural gas in the country.

**New Delhi**  
**18 December, 2023**  
**27 Agrahayana, 1945 (Saka)**

**RAMESH BIDHURI,**  
**Chairperson,**  
**Standing Committee on**  
**Petroleum & Natural Gas**

**ANNEXURE I**

**MINUTES**  
**STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS**  
**(2021-22)**  
**SECOND SITTING**  
**(25.10.2021)**

The Committee sat on Monday, the 25 October, 2021 from 1130 hrs. to 1330 hrs. in Main Committee Room, PHA, New Delhi.

**PRESENT**

**Shri Ramesh Bidhuri - Chairperson**

**MEMBERS**

**LOK SABHA**

- 2 Smt. Chinta Anuradha
- 3 Dr. Ramesh Chand Bind
- 4 Shri Girish Chandra
- 5 Shri Rodmal Nagar
- 6 Shri Mitesh Rameshbhai Patel
- 7 Shri Unmesh Bhaiyyasaheb Patil
- 8 Shri M.K. Raghavan
- 9 Shri Chandra Sekhar Sahu
- 10 Shri Dilip Saikia
- 11 Shri Janardan Singh Sigriwal
- 12 Shri Lallu Singh



13 Dr. Kalanidhi Veeraswamy

**RAJYA SABHA**

14 Shri Birendra Prasad Baishya

15 Smt. Kanta Kardam

16 Shri Om Prakash Mathur

17 Shri Subhas Chandra Bose Pilli

18 Dr. V. Sivadasan

19 Shri A. Vijayakumar

20 Ch. Sukhram Singh Yadav

**SECRETARIAT**

1 Shri H. Ram Prakash - Director

2 Shri Vinay Pradeep Barwa - Deputy Secretary

3 Shri Mohan Arumala - Under Secretary

**Representatives of Ministry of Petroleum and Natural Gas**

1 Shri Tarun Kapoor - Secretary

2 Shri Sunil Kumar - Joint Secretary (Refinery)

**Representatives of IOCL**

1 Shri S.M. Vaidya - Chairman

2 Shri Sandeep Kumar Gupta - Director (Finance)

3 Shri Vinod Kumar - ED (International Trade)

**Representatives of BPCL**

1 Shri Arun Kumar - C&MD

2 Shri D.V. Mamadapur - ED (International Trade)

**Representatives of HPCL**

1 Shri M.K. Surana - C&MD

2 Shri S. Paul - ED (International Trade and Supplies)

**Mangalore Refinery and Petrolchemicals Limited**

2. At the outset, the Hon'ble Chairperson welcomed Members of the Committee and representatives of the Ministry of Petroleum and Natural Gas/Oil PSUs to the sitting of the Committee to have briefing by the representatives of the Ministry of P&NG/Oil PSUs on the subject "**Policy on Import of Crude Oil**". Thereafter, the Secretary, Ministry of P&NG introduced his colleagues to the Committee. Then, the representative of IOCL made a presentation on the subject.

3. Subsequently, Members raised several issues related to the subject such as nomination of permanent members of Empowered Standing Committee (ESC) for import of crude oil, status of oil contracts by OMCs with Multi National Oil & Gas Companies, furnishing of central vigilance reports during the last five years, cartage of crude oil and contracts for the same, projections for import for the next five years and costs involved therein, reasons for increase in spot procurement, steps for increasing ethanol blending, rising prices of petrol and diesel, steps taken to enhance strategic crude oil storage capacity, policy initiatives for attracting more capital into E&P sector, etc.

4. The Committee further deliberated on safety hazards arising from illegal sale of petrol and diesel in open market, strategy to ensure long term energy security of the country, registration of bidders for spot and term purchase of crude oil, import/purchase from Middle East / North America based on differential prices and the existing refining capacity of the country alongwith the public and private sector data in this respect.

5. At the end of deliberations, the Committee authorized the Hon'ble Chairperson to undertake the first study visit of the Committee for the current term in the month of November, 2021.

6. Thereafter, the Hon'ble Chairperson thanked the representatives of the Ministry/OMCs for expressing their views and answering queries raised by Members of the Committee. Further, to the queries where replies were not readily available, the Ministry was instructed to furnish the same to the Secretariat within ten days.

7. A copy of the verbatim proceedings is kept in the Branch for record.

**The Committee then adjourned.**

\*\*\*\*

**MINUTES**  
**STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS**  
**(2022-23)**

**SEVENTH SITTING**  
**(05.01.2023)**

The Committee sat on Thursday, the 05<sup>th</sup> January, 2023 from 1130 hrs. to 1310 hrs. in Main Committee Room, PHA, New Delhi.

**PRESENT**

**Shri Ramesh Bidhuri - Chairperson**

**MEMBERS**

**LOK SABHA**

- 2 Shri Ramesh Chand Bind
- 3 Shri Girish Chandra
- 4 Shri Topon Kumar Gogoi
- 5 Shri Naranbhai Kachhadiya
- 6 Dr. Kalanidhi Veeraswamy
- 7 Shri Rodmal Nagar
- 8 Shri Chandra Sekhar Sahu
- 9 Dr. Bharatiben Dhirubhai Shiyal
- 10 Shri Janardan Singh Sigriwal
- 11 Shri Lallu Singh
- 12 Shri Ajay Tamta

**RAJYA SABHA**

- 13 Shri Shaktisinh Gohil
- 14 Shri Mithlesh Kumar
- 15 Shri Rambhai Mokariya
- 16 Shri Surendra Singh Nagar

**SECRETARIAT**

1. Shri Y.M. Kandpal - Joint Secretary
2. Shri H. Ram Prakash - Director

**Representatives of the Ministry of P&NG**

- |                              |   |                      |
|------------------------------|---|----------------------|
| 5. Smt. Esha Srivastava      | - | OSD (IC)             |
| 1. Shri Pankaj Jain          | - | Secretary            |
| 2. Shri Praveen Mal Khanooja | - | Additional Secretary |
| 3. Smt. N.M. Kothari         | - | Joint Secretary      |
| 4. Smt. Sujata Sharma        | - | Joint Secretary      |
| 6. Ms. Perin Devi            | - | Joint Secretary      |

**Representatives of IOCL**

- |                     |   |          |
|---------------------|---|----------|
| 1. Dr. S. M. Vaidya | - | Chairman |
|---------------------|---|----------|

**Representative of HPCL**

- |                        |   |     |
|------------------------|---|-----|
| 1. Shri Pushp K. Joshi | - | CMD |
|------------------------|---|-----|

**Representative of BPCL**

- |                                 |   |     |
|---------------------------------|---|-----|
| 1. Shri Vetsa Ramakrishna Gupta | - | CMD |
|---------------------------------|---|-----|

**Representative of MRPL**

- |                      |   |    |
|----------------------|---|----|
| 1. Shri M. Venkatesh | - | MD |
|----------------------|---|----|

2. At the outset, the Hon'ble Chairperson welcomed Members of the Committee and apprised them about the agenda of the sitting i.e. **“Policy on Import of Crude Oil”**.

3. Thereafter, the representatives of the Ministry of P&NG/Oil PSUs were called into the sitting of the Committee to brief the Committee on the subject. The Chairperson welcomed the representatives of the Ministry/PSUs and stated that India is the third largest energy consumer in the world with a share of 5.8 per cent of the world's primary energy consumption and its primary energy demand is also increasing at the fastest rate among the major economies of the world. Further, about 85 per cent of the nation's demand of the hydrocarbons is met

through imports. In such a scenario, ensuring unhindered supplies of crude oil at reasonable prices is crucial for safeguarding the energy security and ensuring economic growth of the country. Accordingly, the representatives of the Ministry were requested to apprise the Committee about various steps being taken by the Ministry and oil PSUs for diversifying the sources of supply of crude oil, increasing the share of supply of crude oil under long term contracts, minimizing the impact of volatility in crude oil prices, purchase of crude oil below the official selling prices of National Oil Companies of supplying countries, minimizing the transportation cost, import of crude oil in Indian rupee, functioning of ESCs of oil PSUs, process of decision making for import of crude oil under long term and spot contract, creation of additional capacity for import and storage of LNG, higher inventory levels, compilation and publication of daily inventory report for bringing about transparency in crude oil procurement and increasing the bargaining power of PSUs etc.

4. After customary introduction, the representatives of the Ministry of P&NG gave a power point presentation on the subject covering various issues *viz.* India's Crude Oil Procurement Journey, Crude Oil Imports, Term Purchases, Spot Purchases, Registration of Counterparties for Import of Crude Oil, Crude Oil Imports (PSUs & Subsidiaries), PSU Imports from Middle East, Annual Joint Negotiations etc. Thereafter, they briefed the Committee in detail about dismantling of administered price regime, the current mechanism of procurement of crude oil by oil PSUs, data pertaining to the imports of crude oil and its processing etc.

5. Subsequently, the Members of the Committee asked clarifications from the representatives on purchases of crude oil through long term contracts and spot markets, shipping of crude oil by ultra large crude carrier (ULCC), reduction in import of crude oil, storage of crude oil in underground caverns, diversification of imports of crude oil, role of registered parties in import of crude oil, facilities for docking of very large crude carrier (VLCC), Dhamara LNG terminal, status of construction of crude oil pipelines, annual consumption of crude oil in the country and its storage capacity, impact of

reduction in imports of crude oil on domestic economy, pricing of crude oil in international market.

6. The representatives of the Ministry/Oil PSUs furnished clarifications to some of the queries raised by the Members. On some of the points on which the information was not readily available with the representatives, the Chairperson asked them to furnish written replies on the same within ten days to the Lok Sabha Secretariat.

7. The Chairperson then thanked the representatives of the Ministry of P&NG/Oil PSUs for providing valuable information on the subject to the Committee.

8. The witness then withdrew.

9. A copy of the verbatim proceedings is kept in the Branch for record.

**The Committee then adjourned.**

\*\*\*\*\*

**MINUTES**

**STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS  
(2022-23)**

**FOURTEENTH SITTING  
(03.07.2023)**

The Committee sat on Monday, the 03<sup>rd</sup> July, 2023 from 1530 hrs. to 1700 hrs. in Committee Room 'D', PHA, New Delhi.

**PRESENT**

Shri Ramesh Bidhuri - Chairperson

**MEMBERS**

**LOK SABHA**

- 2 Dr. Ramesh Chand Bind
- 3 Shri Girish Chandra
- 4 Shri Topon Kumar Gogoi
- 5 Dr. Kalanidhi Veeraswamy
- 6 Shri Rodmal Nagar
- 7 Shri Chandra Sekhar Sahu
- 8 Shri Janardan Singh Sigriwal
- 9 Shri Lallu Singh
- 10 Shri Ajay Tamta

**RAJYA SABHA**

- 11 Shri Shaktisinh Gohil
- 12 Smt. Kanta Kardam
- 13 Shri Mithlesh Kumar
- 14 Shri Pabitra Margherita
- 15 Shri Rambhai Harjibhai Mokariya
- 16 Shri Surendra Singh Nagar
- 17 Shri Sasmit Patra
- 18 Dr. V. Sivadasan

**SECRETARIAT**

1. Shri Y.M. Kandpal - Joint Secretary
2. Shri H. Ram Prakash - Director
3. Shri Brajesh Kumar Singh - Deputy Secretary

**Representatives of the Ministry of P&NG**

1. Shri Praveen Mal Khanooja - Additional Secretary
2. Shri Sunil Kumar - Joint Secretary



3. Shri Asheesh Joshi - Director

**Representatives of IOCL**

1. Shri S.M. Vaidya - Chairman
2. Shri Vinod Kumar - ED

**Representatives of BPCL**

1. Shri G. Krishnakumar - C&MD
2. Shri V.R.K. Gupta - Director

**Representatives of HPCL**

1. Shri S.Bharathan - Director
2. Shri Anuj Mehrotra - ED

**Representatives of MRPL**

1. Shri Shyamprasad Kamath - ED
2. Shri Chander Mani - GGM

2. At the outset, the Hon'ble Chairperson welcomed Members of the Committee and apprised them about the agenda of the sitting *i.e.* Oral evidence by the representatives of the Ministry of Petroleum and Natural Gas / PSUs on the subject '**Review of Policy on Import of Crude Oil**'

3. Thereafter, the representatives of the Ministry of P&NG/Oil PSUs were called into the sitting of the Committee to brief on the subject. The Chairperson welcomed the representatives of the Ministry/Oil PSUs and reminded them about the clarion call given by the Honourable Prime Minister of India in 2015 to reduce import dependence of crude oil by 10 percent by 2022. He further noted that the Government had undertaken several steps like unveiling of a new Hydrocarbon exploration licensing policy for exploration activities, setting up of National Data Repository, promotion of Bio-fuels to substitute the demand with Natural Gas by increasing its share to 15% from the current level of 7% in the primary energy mix, Energy Efficiency and improvement in refinery process etc. to reduce the import of crude oil. He, thereafter, welcomed the concrete steps taken by the Ministry in this direction. However, he observed that the consumption of crude oil had increased thereby increasing the import dependence of crude oil for meeting the domestic demand. Accordingly, he requested the representatives to apprise the Committee about the outcome of the steps taken by the Government towards reducing the import dependence on crude oil. He also requested the representatives to apprise the Committee about the steps taken so far towards Energy Efficiency and Conservation, the nodal

agencies to coordinate and monitor the efforts, the targets specifically set for different activities, funds earmarked for these initiatives, role of PCRA in Petroleum conservation efforts and its achievements, the planned activities, steps suggested by the consultant appointed by the PPAC to re-assess the road map in reducing import dependence by the year 2024-25 and action taken thereon.

4. After customary introduction, the representative of the Ministry of P&NG gave a power point presentation on the subject covering various issues such as India's Energy Landscape Vision 2050, strategies being devised for increasing production of domestic crude oil, substitution of demand for crude oil by building gas based economy, development of bio-fuels & renewable, improvement in refinery processes and energy efficiency & energy conservation goals under transport, industrial, agricultural, domestic sectors, etc.

5. Subsequently, Members of the Committee sought clarifications on various issues such as steps taken for availability of CNG measuring unit at CNG stations so as to ensure customer satisfaction, status of exploration activities being undertaken by upstream oil companies in Krishna-Godavari Basin, Gujarat Basin and other areas in the country, steps taken by Petroleum Conservation Research Association(PCRA) for fuel conservation, performance of both public and private sector refineries in implementation of "Perform, Achieve and Trade" (PAT) scheme, challenges being faced in augmenting domestic production of crude oil and steps taken by the Ministry and the PSUs to address these challenges, current status of collaborations undertaken with international entities particularly with Conservation Centre of Japan which was emphasized earlier by the Committee in 2015 for reducing fuel consumption, status of implementation of SATAT initiative for promoting the use of Compressed Bio Gas and the number of Expression of Interests (EOIs) issued so far, steps taken for achieving 20 per cent blending of ethanol in petrol by 2025-2026 and status of ethanol blending in diesel programme, implementation of refinery process improvement projects, steps taken towards launching fuel conservation campaigns by all PSUs etc.

6. The representatives of the Ministry/Oil PSUs furnished clarifications on some of the queries raised by the Members. On some of the points on which the information was not readily available with the representatives, the Chairperson asked them to furnish written replies on the same within ten days to the Lok Sabha Secretariat. The Chairperson then thanked the representatives of the Ministry of P&NG/Oil PSUs for providing valuable information on the subject before the Committee.

**(The witnesses then withdrew)**

7. The Committee, thereafter, deliberated on the proposed study visit of the Committee to **Bengaluru, Madurai and Kodaikanal in July, 2023** in connection with examination of the subject selected by the Committee. The Committee also authorized the Chairperson of the Committee to finalize the programme of study visit.

8. A copy of the verbatim proceedings is kept in the Branch for record.

**The Committee then adjourned.**

\*\*\*\*\*

**MINUTES**  
**STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS**  
**(2023-24)**

**FOURTH SITTING**  
**(18.12.2023)**

The Committee sat on Monday, the 18<sup>th</sup> December, 2023 from 1530 hrs. to 1600 hrs. in Main Committee Room, PHA, New Delhi.

**PRESENT**

**Shri Ramesh Bidhuri - Chairperson**

**MEMBERS**  
**LOK SABHA**

- 2 Shri Girish Chandra
- 3 Smt. Chinta Anuradha
- 4 Shri Dilip Saikia
- 5 Shri Topon Kumar Gogoi
- 6 Shri Naranbhai Kachhadiya
- 7 Shri Mitesh Rameshbhai Patel
- 8 Shri Ajay Tamta

**RAJYA SABHA**

- 9 Smt. Kanta Kardam
- 10 Shri Mithlesh Kumar
- 11 Shri Pabitra Margherita
- 12 Shri Rambhai Mokariya
- 13 Shri Subhas Chandra Bose Pilli

**SECRETARIAT**

1. Shri Y.M. Kandpal - Joint Secretary

2. Shri H. Ram Prakash - Director
3. Shri Brajesh Kumar Singh - Deputy Secretary

- 2 -

2. At the outset, Hon'ble Chairperson welcomed the Members to the sitting of the Committee. The Committee then took up for consideration draft report on 'Review of Policy on Import of Crude Oil' and adopted the same without any modification.

3. The Committee then authorised the Chairperson to finalize the Report and present/lay the Report in both Houses of Parliament.

**The Committee then adjourned.**

## APPENDIX I

## Installed Capacity and Refinery Crude Throughput (Crude Oil Processed)

(Figures in TMT)

Refinery	Installed Capacity	Refinery Crude Throughput						
	01.04.2022	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23 (Apr-Dec) (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>(a) PUBLIC SECTOR</b>	<b>151716</b>	<b>143748</b>	<b>151942</b>	<b>156692</b>	<b>152629</b>	<b>133693</b>	<b>145491</b>	<b>118676</b>
1. IOCL, Guwahati, Assam-1962	1000	864	1024	863	892	849	730	803
2. IOCL, Barauni, Bihar-1964	6000	6526	5819	6661	6516	5469	5620	5060
3. IOCL, Koyali, Gujarat-1965	13700	13994	13811	13505	13075	11603	13474	11748
4. IOCL, Haldia, West Bengal-1975	8000	7689	7655	7965	6463	6759	7305	6394
5. IOCL Mathura, Uttar Pradesh-1982	8000	9230	9240	9737	8948	8926	9123	7129
6. IOCL, Digboi, Assam-1901	650	533	666	676	664	605	708	534
7. IOCL, Panipat, Haryana-1998	15000	15638	15654	15281	15038	13181	14849	9969
8. IOCL, Bongaigaon, Assam-1974	2700	2486	2402	2513	2045	2450	2639	2031
9. IOCL, Paradip, Odisha-2016	15000	8230	12730	14616	15778	12508	13217	9563
<b>Total IOCL</b>	<b>70050</b>	<b>65191</b>	<b>69001</b>	<b>71816</b>	<b>69419</b>	<b>62351</b>	<b>67665</b>	<b>53231</b>
10. BPCL, Mumbai, Maharashtra-1955	12000	13541	14054	14773	15017	12941	14437	10504
11. BPCL, Kochi, Kerala-1963	15500	11820	14095	16051	16515	13282	15402	11535
12. BOPCL, Bina, Madhya Pradesh-2011	7800	6360	6708	5716	7913	6190	7410	5770
<b>Total BPCL</b>	<b>35300</b>	<b>31722</b>	<b>34857</b>	<b>36539</b>	<b>39445</b>	<b>32412</b>	<b>37248</b>	<b>27810</b>
13. HPCL, Mumbai, Maharashtra-1954	9500	8510	8641	8671	8065	7374	5558	7289
14. HPCL, Visakh, Andhra Pradesh-1957	8300	9335	9635	9773	9115	9050	8410	6843
<b>Total HPCL</b>	<b>17800</b>	<b>17846</b>	<b>18276</b>	<b>18444</b>	<b>17180</b>	<b>16425</b>	<b>13968</b>	<b>14132</b>
15. CPCL, Manali, Tamil Nadu-1965	10500	9725	10289	10271	10161	8243	9040	8364
16. CPCL-CBR, Narimanam, Tamil Nadu-1993	0	531	500	423	0	0	0	0
<b>Total CPCL</b>	<b>10500</b>	<b>10256</b>	<b>10789</b>	<b>10695</b>	<b>10161</b>	<b>8243</b>	<b>9040</b>	<b>8364</b>
17. NRL, Numaligarh, Assam-1999	3000	2683	2809	2900	2383	2707	2624	2358
19. MRPL, Mangalore, Karnataka-1996	15000	15965	16130	16231	13953	11475	14871	12724
18. ONGC, Tatipaka, Andhra Pradesh-2001	66	86	80	66	87	81	75	56
<b>(b) Private &amp; JVs Sector</b>	<b>99500</b>	<b>101614</b>	<b>99993</b>	<b>100513</b>	<b>101757</b>	<b>88080</b>	<b>96212</b>	<b>69896</b>
20. RIL, Jamnagar, Gujarat - 1999	33000	32823	33153	31752	33019	34100	34757	26187
21. RIL, Jamnagar ( SEZ), Gujarat-2008	35200	37351	37317	37393	35876	26841	28264	20511
<b>Total RIL</b>	<b>68200</b>	<b>70174</b>	<b>70470</b>	<b>69145</b>	<b>68895</b>	<b>60941</b>	<b>63021</b>	<b>46699</b>
22. NEL, Vadinar, Gujarat - 2006	20000	20919	20693	18896	20620	17067	20164	13697
23. HMEI, Bhatinda, Punjab - 2012	11300	10521	8830	12473	12242	10072	13027	9500
<b>Grand Total</b>	<b>251216</b>	<b>245362</b>	<b>251935</b>	<b>257205</b>	<b>254386</b>	<b>221773</b>	<b>241703</b>	<b>188572</b>

Note: Totals may not tally due to rounding off figures.

P: Provisional.

