



(पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय, भारत सरकार)

#### Centre for High Technology

(Ministry of Petroleum & Natural Gas, Govt. of India)

स उ.प्री.के./प्रशा./3.17/ 1393

दिनांक 20.12.2018

अनुभाग अधिकारी (ओआर-II) पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय, भारत सरकार, शास्त्री भवन, नई दिल्ली - 110001

> विषय: दिनांक 31.12.2018 का लोकसभा प्रश्न डायरी सं.7451 (संदर्भ: कम्पनिज ऐंगेज्ड इन रिफाइनिंग)

महोदय,

कृपया आप अपने पत्र दिनांक 19.12.2018 का अवलोकन करें जो कि लोकसभा के पटल पर 31.12.2018 को रखा जाना तय हुआ है।

लोकसभा प्रश्न डायरी संख्या 7451 के प्रश्न का उत्तर देने हेतु अनुपूरक सामग्री उच्च प्रौदयोगिकी केन्द्र द्वारा प्रेषित की जा रही है।

धन्यवाद.

भवदीय

(सत्यवीर सिंह)

संयुक्त निदेशक (एच आर)

संलग्नक: यथा उपर्युक्त

का. प्रति:

- कार्यकारी निदेशक
- निदेशक

# Centre for High Technology

(Ministry of Petroleum & Natural Gas)
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December 20, 2018

- Ref: MoP&NG e-mail dated 19.12.2018 Lok Sabha Q No. 7451 on Companies engaged in Refining to be answered on 31.12.2018
- Q (a) The names of private and public sector oil companies engaged in refining of crude oil and blending of oil products;
- Ans.(a) The names of private and public sector oil companies engaged in refining of crude oil and blending of oil products are given below:

Sl. No.	Name of Oil Company & Refinery	Location
A)	Public Sector	
I.	Indian Oil Corporation Limited (IOCL)	111111 (days - 1111) because 11111 (days - 1111)
1.	Guwahati Refinery	
2.	Barauni Refinery	Assam
3.	Koyali Refinery	Bihar
4.	Haldia Refinery	Gujarat
5.	Mathura Refinery	West Bengal
6.	Digboi Refinery	Uttar Pradesh
7.	Panipat Refinery	Assam
8.	Bongaigaon Refinery	Haryana
9.	Paradip Refinery	Assam
II.	Bharat Petroleum Corporation Limited (BPCL)	Odhisha
10.	Mumbai Refinery	
11.	Kochi Refinery	Maharashtra
III.	Hindusthan Petroleum Corporation Limited (HPCL)	Kerala
12.	Mumbai Refinery	
13.	Visakh Refinery	Maharashtra
IV.	Chennai Petroleum Corporation Limited (CPCL)	Andhra Pradesh
14.	Manali Refinery	
15.	Cauvery Basin Refinery, Narimanam	Tamil Nadu
V.	Numaligarh Refinery Limited (NRL)	Tamil Nadu
16.	Numaligarh Refinery	
VI.	Oil & Natural Gas Corporation Limited (ONGC)	Assam
17.	Tatipaka Refinery	A 11
VII.	Mangalore Refinery & Petrochemicals Limited (MRPL)	Andhra Pradesh
18.	Mangalore Refinery	TV -
	PSU (Sub Total)	Karnataka
3)	Private/JV Sector	The state of the s
19.	HMEL Bathinda refinery	D
20.	BORL Bina Refinery	Punjab Madhya Pradash
21.	Nayara Energy Limited, Vadinar Refinery	Madhya Pradesh
22.	RIL-Jamnagar Refinery	Gujarat
	RIL-SEZ Refinery, Jamnagar	Gujarat
	The state of the s	Gujarat

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- Q (b) The name of the petroleum products produced by each refinery alongwith the procedure adopted for determining the cost of various petroleum products;
- Ans.(b). The products produced from a Refinery depend upon the technology employed and its configuration. All refineries produce products like LPG, Petrol, Naphtha, Kerosene/ATF, Diesel. The other products like Furnace Oil, Bitumen and Petroleum Coke are refinery specific and depend upon the type of crude processed and configuration. Refineries of HPCL and BPCL at Mumbai, CPCL-Manali and IOC's Haldia Refinery are designed to produce Lube Oil base Stocks also. Some refineries have integrated petrochemical units and produce Polymers, Linear Alkyl Benzene, Xylenes, Purified Terephthalic Acid and other Petrochemicals. The refinery-wise products are indicated in the attached table at Annexure-1...

All the above products are produced from Crude Oil, which is the major raw material. Therefore it is not possible to allocate cost to individual products. Also it is not necessary to determine cost of individual products as their pricing is done based on international prices and market dynamics.

- Q (c) whether the Government has compared oil refining cost with that of other countries/Oil companies; and
- Q (d) if so, the details thereof?

Ans.(c&d): The refinery-wise operating cost per MT of Crude processed, excluding cost of the crude, fuel, depreciation, miscellaneous income etc. is given in the **Annexure-2.** However, these are not comparable as the refining cost depends upon refinery complexity, type of crude processed and the product mix. In general, with increase in complexity, the value addition capability as well as operating cost increases. Refineries therefore optimise the operating cost while maximising net value addition.

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## Refinery-wise Products

( $\sqrt{\text{means}}$  product produced by the refinery and X means product not produced by the refinery)

Refinery	LPG	MS	Naphtha	ATF	Kerosene	Diesel	Furnace	product no Bitumen	Lube	Petcoke	Others
IOC-Guwahati	V	$\sqrt{}$	T 7	V			Oil		Oil		
IOC-Barauni	V	ij		X	7	<u> </u>	X	X	X	N I	
IOC-Koyali	T V	J	V	<del>\</del> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	V		<u> </u>	1 1	X	<b>√</b>	7
IOC-Haldia	1 1	ij	j	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		<u>V</u>	<u> </u>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	X	<b>V</b>	
IOC-Mathura		$\overline{\lambda}$		\\_\_\_\			V	1 1	<u> </u>	X	$\sqrt{}$
IOC-Digboi	$\forall$	$\overline{\lambda}$	x	X	<u> </u>		<u> </u>	V	X	X	
IOC-Panipat	T V	$\vec{\neg}$	Ĵ	$\frac{\lambda}{}$		<u> </u>	<u> </u>	X	X	1	V
IOC-Bongaigaon	ĦijĦ	$\overline{\downarrow}$		- V	<u> </u>	<del></del>	<u> </u>	ν	X	- V	V
IOC-Paradip	1 1	<del>- \</del>			Y	<u> </u>	<u> </u>	X	X	<b>√</b>	$\sqrt{}$
BPC-Mumbai	$\pm \dot{j}$	<del>\</del>	<u> </u>	7	Y		X,	X	X	V	V
BPC-Kochi	+i	J	<u> </u>	V		<u> </u>	Y	v		X	√
HPC-Mumbai	1	$-\sqrt{-}$			Y	<u> </u>	V,	V	X	V	<b>V</b>
HPC-Visakh	1 1	<del>-</del>		<u> </u>	- Y	<u> </u>	· · · · · · · · · · · · · · · · · · ·	V		X	<b>√</b>
CPCL-Manali				V	<u> </u>	<u> </u>		<u> </u>	X	X	√ V
CPCL-Narimanam		X	· · · · · · · · · · · · · · · · · · ·		<del>  </del> -		V	V	<b>√</b>	\ \ \	V
NRL-Numaligarh		$\frac{\lambda}{\sqrt{1}}$	X	$X \downarrow $	<del></del>	<u> </u>	X	X	X	X	V
MRPL-Mangalore	- $$	V		- 1	<u> </u>	<b>Y</b>	X	X	X	<b>√</b>	
ONGC-Tatipaka	X	X		X	<u> </u>	<u> </u>	V	V	X	V	V
RIL-Jamnagar	- <del>1</del>	7			V	<u> </u>	X	X	X	X	V
RIL-SEZ, Jamnagar	J	$-\frac{\sqrt{1}}{\sqrt{1}}$	<u> </u>	<u> </u>	X	1	<u> </u>	X	X	- V	√
Nayara Energy Ltd, Vadinar	-1-				X	<u> </u>	V	X	Χ	V	
BORL-Bina	7	- <del>V</del>			<u> </u>	<u> </u>	X		X	V	V
HMEL-Bathinda	- <del>\</del>	$-\frac{y}{2}+$	<u> </u>	<u> </u>	<u> </u>	1	X	X	Х	- V	V
Others include Sulphur, Solvents		V I	<u> </u>	<u> </u>			X	V	Х	T V	V

\*Others include Sulphur, Solvents, Speciality Products and Petrochemicals



### Refinery-wise Operating Cost

(Figs. in US Dollar per Barrel of Crude Processed)

Refinery	2014-15	2015-16	2016-17	2017-18
IOC-Guwahati	7.47	9.60	10.68	9.69
IOC-Barauni	2.43	1.89	2.12	2.55
IOC-Koyali	1.87	1.78	1.77	1.92
IOC-Haldia	2.07	2.11	2.27	2.37
IOC-Mathura	1.40	1.52	1.57	1.73
IOC-Digboi	17.87	19.46	21.93	19.09
IOC-Panipat	1.22	0.97	1.03	1.21
IOC-Bongaigaon	3.88	4.12	4.22	5.49
BPC-Mumbai	1.50	1.54	1.55	1.97
BPC-Kochi	1.38	1.15	1.16	2.00
HPC-Mumbai	3.04	2.60	2.65	2.68
HPC-Visakh	1.61	1.53	1.62	1.50
CPCL-Manali	1.54	1.85	2.00	7.31
NRL-Numaligarh	2.61	3.26	2.85	2.90
MRPL-Mangalore	0.88	1.15	1.05	2.04
Nayara Energy Ltd, Vadinar	0.66	0.73	0.70	2.09
BORL-Bina	3.64	3.55	2.29	2.19
HMEL-Bathinda	1.67	1.02	0.85	1.03

Note: Operating cost (\$/bbl) excluding cost of crude, fuel, depreciation, miscellaneous income and other costs

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#### LOK SABHA

D.No 7451

Ministry to which the day has been allotted: PETROLEUM AND NATURAL GAS

Sitting on the: 31/12/2018

Companies Engaged in Refining

Will the Minister of PETROLEUM AND NATURAL GAS

(a) the names of private and public sector oil companies engaged in

refining of crude oil and blending of oil products;

(b) the names of petroleum products produced by each refinery along with the procedure adopted for determining the cost of various petroleum

(c) whether the Government has compared oil refining cost with that of other countries/oil companies; and

(d) if so, the details thereof?

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<http://gandhi.gov.in>

**Parliament Question** Most Immediate

Government of India Refinery Branch Ministry of petroleum and Natural Gas

Please furnish inputs on the above mentioned parliament question along with note for supplementary by today.

> Email- shantanubandek@gmail.com Jain.ashish11300@gmail.com

ED,CHT DG,PPAC Chairman IOCL CMD HPCL/BPCL MD NRL/MRPL/CPCL